3410 8-Path Modbus Map

Reference Manual

ROSEMOUNT™

EMERSON™

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Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
1	DatabaseConfigVersion	Database configuration version Sequentially numbered major changes to the database. Normally incremented only when structural changes are performed such as adding or removal of fields. Minor changes such as adding records (database points) are indicated by the build number (DatabaseBuildNumber). When taken together the version and the build number (DatabaseBuildNumber) uniquely describe a particular version of the database. This is often described using a decimal point to separate the major and minor numbers as XXX.YYY where XXX is the version and YYY is the build number (DatabaseBuildNumber). When the version is changed the meter will cold start.	R				int	-	-	uint16	-				
2	DatabaseBuildNumber	Database configuration build number Sequentially numbered revisions between major changes to the database (DatabaseConfigVersion).	R				int	-	-	uint8	-				
3	DeviceNumber	Meter device number Changing this value requires warm-starting the meter. This value should only be changed at the factory or when replacing a CPU Module in the field.	RW	Y	Y	Y	int	-	-	uint16	-	3414 - Four-path SeniorSonic (3414) 3412 - Dual-path JuniorSonic (3412) 3411 - Single-path JuniorSonic (3411) 3418 - Eight-path (3418)	3418	3411	3418
4	ElectronicsPlatform	Electronics platform on which the meter is running Electronics platform on which the meter is running.	R				int	-	-	uint8	-	Mark III (0) 3410 Series (1)			
5	ChordalConfig	Chordal configuration The arrangement of the chords on meters with four or more sets of transducers. The chord arrangement is determined by the X dimensions (XA, XB, XC and XD). Meter with fewer than four sets of transducers, as defined by the device number (DeviceNumber), are set to a chordal configuration of N/A (0).	R	Y			int	-	-	uint8	-	N/A (0) Dual-X (1) BG (2)			
6	AreSwComponentsCompatible	Kernel, File System and Firmware are compatible versions When TRUE (1), the versions of the kernel (OSVer), file system (FileSysVer) and firmware (CPUBdSwVer), are compatible with each other. When FALSE (0), the appropriate software component(s) need to be updated.	R				int	-	-	boolean	-				
7	CPUBdFPGAVer	CPU Module FPGA version The CPU Module FPGA (field-programmable gate array) version that correlates to the firmware version number (CPUBdSwVer).	R				int	-	-	uint16	-				
8	CPUBdRevNum	CPU Module revision number The CPU Module hardware revision. The CPU Module and the I/O board (IOBdType) make up the CPU Module.	R				int	-	-	uint16	-				
9	AcquisitionBdFPGAVer	Acquisition Module FPGA version The Acquisition Module FPGA (field-programmable gate array) version that correlates to the firmware version number (CPUBdSwVer).	R				int	-	-	uint16	-				
10	DSPBdRevNum	DSP Board revision number The revision number of the DSP board. Along with the transducer interface board (XdcrIntBdRevNum), the DSP board is one of the two boards in the Acquisition Module.	R	Y			int	-	-	uint16	-				
11	XdcrIntBdRevNum	Transducer interface board revision number The revision number of the transducer interface board. Along with the DSP board (DSPBdRevNum), the transducer interface board is one of the two boards in the Acquisition Module.	R				int	-	-	uint16	-				
12	AcqBdType	Acquisition Module type Acquisition Module type indicator.	R				int	-	-	int8	-	Undefined (-128) Gas (0) Liquid (1)			
13	IOBdType	I/O board type number Type number of the I/O board. The I/O board and the CPU (CPUBdRevNum) make up the CPU Module.	R	Y			int	-	-	uint16	-				
14	OptIOModule1Type	Slot 1 Optional I/O Module type Optional I/O Module type present in slot 1 of the electronics backplane.	R				int	-	-	uint8	-	None (0) RS-232 (1) RS-485 (2) Expansion I/O (3)			
15	OptIOModule2Type	Slot 2 Optional I/O Module type Optional I/O Module type present in slot 2 of the electronics backplane. If meter does not have a second slot then module type is Slot not present (255).	R				int	-	-	uint8	-	None (0) RS-232 (1) RS-485 (2) Expansion I/O (3) Slot not present (255)			
16	IsConfigProtected	Indicates the state of the write protect switch This indicates the state of the write protect switch (CPU Module switch position 3). When CPU Module switch position 3 is in the "ON" position, data points protected by the switch (Write Protected by Switch=Yes) cannot be written to the meter and this data point is TRUE (1). This is also applied to write protecting HART parameters.	R	Y			int	-	-	boolean	-	Configuration not protected (FALSE) Configuration protected (TRUE)			
17	IsFODO1Avail	Frequency/Digital Output 1 available Frequency/Digital Output 1 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 1 source selector (FODO1Source) and the output levels by the Frequency/Digital Output 1 mode selector (FODO1Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
18	IsFODO2Avail	Frequency/Digital Output 2 available Frequency/Digital Output 2 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 2 source selector (FODO2Source) and the output levels by the Frequency/Digital Output 2 mode selector (FODO2Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
19	IsFODO3Avail	Frequency/Digital Output 3 available Frequency/Digital Output 3 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 3 source selector (FODO3Source) and the output levels by the Frequency/Digital Output 3 mode selector (FODO3Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
20	IsFODO4Avail	Frequency/Digital Output 4 available Frequency/Digital Output 4 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 4 source selector (FODO4Source) and the output levels by the Frequency/Digital Output 4 mode selector (FODO4Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
21	IsFODO5Avail	Frequency/Digital Output 5 available Frequency/Digital Output 5 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 5 source selector (FODO5Source) and the output levels by the Frequency/Digital Output 5 mode selector (FODO5Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
22	IsFODO6Avail	Frequency/Digital Output 6 available Frequency/Digital Output 6 available indicator based on the CPU Module's I/O board revision. The content is selected by the Frequency/Digital Output 6 source selector (FODO6Source) and the output levels by the Frequency/Digital Output 6 mode selector (FODO6Mode).	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
23	IsDI1Avail	Digital Input 1 available Digital Input 1 available indicator based on the CPU Module's I/O board revision.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			

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24	IsAI1Avail	Analog Input 1 (temperature) available Analog Input 1, live flow-condition temperature (LiveFlowTemperature), available indicator based on the CPU Module's I/O board revision. The connectors for this input are designated as ANALOG IN TT- and TT+.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
25	IsAI2Avail	Analog Input 2 (pressure) available Analog Input 2, live flow-condition pressure (LiveFlowPressure), available indicator based on the CPU Module's I/O board revision. The connectors for this input are designated as ANALOG IN PT- and PT+.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
26	IsAI3Avail	Analog input 3 available Analog input 3 available indicator based on the Optional I/O Module (OptIOModule1Type, OptIOModule2Type) configuration. The connectors for this input are designated as ANALOG IN AI3- and AI3+.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
27	IsAO1Avail	Analog Output 1 available Analog Output 1 available indicator based on the CPU Module's I/O board revision.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
28	IsAO1HARTAvail	Analog Output 1 HART functionality available Indicates whether HART functionality is available on Analog Output 1.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
29	IsAO2Avail	Analog Output 2 available Analog Output 2 available indicator based on the CPU Module's I/O board revision.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
30	IsAO2HARTAvail	Analog Output 2 HART functionality available Indicates whether HART functionality is available on Analog Output 2.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
31	IsEth1Avail	Ethernet port 1 available Ethernet port 1 available indicator based on the CPU Module's I/O Board revision.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
32	IsPortAAvail	Communication port A available Communication port A available indicator based on the CPU Module's I/O board revision.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
33	IsPortBAvail	Communication port B available Communication port B available indicator based on the optional I/O Module (OptIOModule1Type) configuration.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
34	IsPortCAvail	Communication port C available Communication port C available indicator based on the optional I/O Module (OptIOModule2Type) configuration.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
35	DhcpServerEnabledStatus	Is the DHCP Server enabled Shows the current status of the DHCP server switch (CPU Module switch position 2). When the switch is in the "ON" position, the meter has IP address 192.168.135.100 and is enabled to act as a DHCP server for DHCP clients connected to the Ethernet port. A maximum of 10 DHCP clients can connect to the meter and the range of client IP addresses assigned is 192.168.135.35 to 192.168.135.44. This can be used for direct or stand alone local network connections between the meter and client PCs.	R				int	-	-	boolean	-	DHCP disabled (FALSE) DHCP enabled (TRUE)			
36	IsClkInvalid	Clock is not set correctly The meter's real-time clock is set to a date in the past. Recommended Actions: 1. The real-time clock has a power backup of about 2 weeks. If the meter has been without power for more than 2 weeks, the real-time clock will first stop updating and later reset back to January 1, 2000. If this is the issue, use either the Field Setup Wizard or the Meter Monitor in MeterLink™ to set the correct date and time. If this does not correct the problem, the real-time clock or its backup power source may be damaged, and the CPU Module should be replaced. 2. The real-time clock has been set to a date that is older than the CPU Module's firmware, i.e. a date in the past. Use either the Field Setup Wizard or the Meter Monitor in MeterLink™ to set the correct date and time. 3. Contact your local area Emerson Flow service representative for assistance in getting a replacement CPU Module.	R				int	-	-	boolean	-	Clock is valid (FALSE) Clock is invalid (TRUE)			
37	Eth1ModbusID	Ethernet port Modbus address The Modbus address for Modbus TCP/IP on the Ethernet port. This is the "unit identifier" that is used if the Modbus TCP/IP network has a bridge to a serial Modbus network.	RW	Y	Y		int	-	-	uint8	-		255	1	255
38	DriverSelectionPortA	Hardware protocol on Port A Hardware protocol on Port A.	RW	Y	Y		int	-	-	uint8	-	RS-232 (0) RS-485 half-duplex (1) RS-485 full-duplex (2)	0	0	2
39	IsMasterPortA	Comm Port A communication master Communication Port A is set as a Modbus master to communicate with a GC.	R	Y			int	-	-	boolean	-	Communication slave (FALSE) Communication master (TRUE)			
40	ModbusIDPortA	Comm Port A Modbus address The Modbus address used by communication Port A. The Modbus address is also used as a basis for the meter's IP address in the form 172.16.17.ModbusID when the meter is running a PPP server on the serial port.	RW	Y	Y		int	-	-	uint8	-		32	1	247
41	CommRspDlyPortA	Comm Port A response delay Communication Port A response delay. The communication port will wait the specified amount of time before sending a response.	RW	Y	Y		int	ms	ms	uint8	ms		0	0	100
42	RTSOffDelayPortA	Comm Port A handshaking RTS off delay time Communication Port A handshaking RTS off delay time. The meter will hold RTS active for this amount of time after sending the reply.	RW	Y	Y		int	ms	ms	uint16	ms		0	0	1000
43	RTSOnDelayPortA	Comm Port A handshaking RTS on delay time Communication Port A handshaking RTS on delay time. The meter will activate RTS for this amount of time before sending out the message.	RW	Y	Y		int	ms	ms	uint16	ms		0	0	1000
44	DidWarmStart	Meter warm started, latched until acknowledged The meter has warm started due to a Program Download, configuration data point change requiring meter warm start or due to a user-initiated meter warm start (DoWarmStart). The Audit log in the meter will indicate the meter reset time (MeterResetTime). Recommended Actions: 1. If this is due to Program Download, configuration change requiring meter warm start or user-initiated meter warm start just acknowledge this alarm. 2. The alarm must be acknowledged to clear it from the list of alarms. 3. If this was an unexpected restart of the meter, collect a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	RW	Y	Y		int	-	-	boolean	-	Did not warm start or warm start acknowledged (FALSE) Did warm start (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
45	CommTimeoutPortA	Comm Port A communication timeout value The meter must respond to Modbus request messages within this time limit; if it cannot it will not respond at all.	RW	Y	Y		int	sec	sec	uint8	sec		4	0	255
46	IsHWFlowControlEnabledPortA	Enables comm port A hardware flow control When TRUE (1), enables communication Port A hardware flow control (RTS/CTS).	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)

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47	SetPortAToOverride	Comm Port A parameter override indicator Set to TRUE (1) when the CPU Module's switch position 1 is moved from "OFF" to "ON" position. The meter automatically sets Port A to an override configuration (hardware protocol RS-232, baud rate 19200, Modbus address 32). Port A's normal configuration is restored after 2 minutes unless a PPP connection, established while override mode is in progress, in which case Port A's normal configuration is restored after the PPP connection ends. The Port A override mode is effective regardless of the Port A's configuration as master or slave.	R	Y			int	-	-	boolean	-	Use normal parameters (FALSE) Use override parameters (TRUE)			
48	DriverSelectionPortB	Hardware protocol on Port B Hardware protocol on Port B. This configuration is ignored when RS-232 or RS-485 Module is connected and needed when Expansion I/O Module is connected.	RW	Y	Y		int	-	-	uint8	-	RS-232 (0) RS-485 half-duplex (1)	0	0	1
49	IsMasterPortB	Comm Port B communication master Communication Port B is set as a Modbus master to communicate with a GC.	R	Y			int	-	-	boolean	-	Communication slave (FALSE) Communication master (TRUE)			
50	ModbusIDPortB	Comm Port B Modbus address The Modbus address used by communication Port B. The Modbus address is also used as a basis for the meter's IP address in the form 172.16.17.ModbusID when the meter is running a PPP server on the serial port.	RW	Y	Y		int	-	-	uint8	-		32	1	247
51	CommRspDlyPortB	Comm Port B response delay Communication Port B response delay. The communication port will wait the specified amount of time before sending a response.	RW	Y	Y		int	ms	ms	uint8	ms		0	0	100
52	CommTimeoutPortB	Comm Port B communication timeout value The meter must respond to Modbus request messages within this time limit; if it cannot it will not respond at all.	RW	Y	Y		int	sec	sec	uint8	sec		4	0	255
53	DriverSelectionPortC	Hardware protocol on Port C Hardware protocol on Port C. This configuration is ignored when RS-232 or RS-485 Module is connected and needed when Expansion I/O Module is connected.	RW	Y	Y		int	-	-	uint8	-	RS-232 (0) RS-485 half-duplex (1)	0	0	1
54	IsMasterPortC	Comm Port C communication master Communication Port C is set as a Modbus master to communicate with a GC.	R	Y			int	-	-	boolean	-	Communication slave (FALSE) Communication master (TRUE)			
55	ModbusIDPortC	Comm Port C Slave mode Modbus address The Modbus address used by communication Port C. The Modbus address is also used as a basis for the meter's IP address in the form 172.16.17.ModbusID when the meter is running a PPP server on the serial port.	RW	Y	Y		int	-	-	uint8	-		32	1	247
56	CommRspDlyPortC	Comm Port C response delay Communication Port C response delay. The communication port will wait the specified amount of time before sending a response.	RW	Y	Y		int	ms	ms	uint8	ms		0	0	100
57	CommTimeoutPortC	Comm Port C communication timeout value The meter must respond to Modbus request messages within this time limit; if it cannot it will not respond at all.	RW	Y	Y		int	sec	sec	uint8	sec		4	0	255
58	UnitsSystem	Smart Meter Verification report, Modbus and local display unit system Selects the units for the Modbus communication, the local display, and the Smart Meter Verification report. Available options are U.S. Customary and Metric. For Modbus communication, the selected units system applies only to registers above 10000 and in the 2000-8999 range, other registers below 10000 are read in metric units only to maintain Mark II compatibility. Also, the selected units system is used by the Field Setup Wizard in MeterLink™. US customary units is the default setting. This configuration is different from the ISO 17089 Modbus units system (ISOModbusUnitsSystem) which determines units for the Modbus communication for the ISO 17089 Modbus registers block (32678 to 34112).	RW	Y	Y	Y	int	-	-	uint8	-	U.S. Customary (0) Metric (1)	0	0	1
59	VolFlowRateTimeUnit	Flow rate time unit for Modbus communication Selects the Modbus communication volumetric, energy or mass flow rate time unit for registers above 10000 and in the 2000-8999 range.	RW	Y	Y	Y	int	-	-	uint8	-	second (0) hour (1) day (2)	1	0	2
60	VolUnitUS	Modbus U.S. Customary volume unit Identifies the U.S. Customary volume unit used for Modbus communication for registers above 10000 and in the 2000-8999 range.	R	Y		Y	int	-	-	uint8	-	Cubic feet (0)			
61	VolUnitMetric	Modbus metric volume unit Identifies the metric volume unit used for Modbus communication for registers above 10000 and in the 2000-8999 range.	R	Y		Y	int	-	-	uint8	-	Cubic meters (0)			
62	RTCMonth	Real-time clock month This is used to read and write system time's month. The system time of the meter can be adjusted by writing to real-time clock day (RTCDate), year (RTCYear), hour (RTCHour), minute (RTCMinute) and second (RTCSecond). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-	Jan (1) Feb (2) Mar (3) Apr (4) May (5) Jun (6) Jul (7) Aug (8) Sep (9) Oct (10) Nov (11) Dec (12)	1	1	12
63	RTCDate	Real-time clock day This is used to read and write system time's day of the month. The system time of the meter can be adjusted by writing to real-time clock month (RTCMonth), year (RTCYear), hour (RTCHour), minute (RTCMinute) and second (RTCSecond). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-		1	1	31
64	RTCYear	Real-time clock year (2 digit) This is used to read and write system time's year. This specifies the last two digits of the year, which are added to 2000 to derive the four-digit year. The year may be set to a value within the range of the firmware release year to 38. The system time of the meter can be adjusted by writing to real-time clock month (RTCMonth), day (RTCDate), hour (RTCHour), minute (RTCMinute) and second (RTCSecond). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-		3	0	99
65	RTCHour	Real-time clock hour in 24-hour format This is used to read and write system time's hour (in military time). The system time of the meter can be adjusted by writing to real-time clock month (RTCMonth), day (RTCDate), year (RTCYear), minute (RTCMinute) and second (RTCSecond). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-		6	0	23
66	RTCMinute	Real-time clock minute This is used to read and write system time's minute. The system time of the meter can be adjusted by writing to real-time clock month (RTCMonth), day (RTCDate), year (RTCYear), hour (RTCHour) and second (RTCSecond). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-		0	0	59
67	RTCSecond	Real-time clock second This is used to read and write system time's second. The system time of the meter can be adjusted by writing to real-time clock month (RTCMonth), day (RTCDate), year (RTCYear), hour (RTCHour) and minute (RTCMinute). When the system time is set then the meter's real-time clock is also updated.	RW				int	-	-	uint8	-		0	0	59
68	ContractHour	Hour of day to log daily record in 24-hour format Hour of day to log the daily record. This is expressed using 24-hour format (military time): midnight is 0 hours, noon is 12 hours, 11PM is 23 hours.	RW	Y	Y	Y	int	hr	hr	uint8	-		0	0	23

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69	AlarmTurnOffHysterisisCount	Alarm log hysteresis filter number of occurrences Alarm log repetitive alarm filter count. This point, along with alarm log hysteresis filter time span (AlarmTurnOffHysterisisTimeSpan), is used to prevent the alarm log from filling up in the event of a very repetitive alarm (such as the flow temperature fluctuating around one of its alarm limits). If a data point being monitored for the alarm log has this number of alarms within a specified length of time (AlarmTurnOffHysterisisTimeSpan), then alarming is turned off for that point until no new alarms are received for that point within the specified length of time.	RW	Y	Y		int	-	-	uint16	-		4	2	20
70	AlarmTurnOffHysterisisTimeSpan	Alarm log hysteresis filter time span Alarm log repetitive alarm filter time. This point, along with alarm log hysteresis filter number of occurrences (AlarmTurnOffHysterisisCount), is used to prevent the alarm log from filling up in the event of a very repetitive alarm (such as the flow temperature fluctuating around one of its alarm limits). If a data point being monitored for the alarm log has alarm log hysteresis filter number of occurrences (AlarmTurnOffHysterisisCount) alarms within this specified length of time, then alarming is turned off for that point until no new alarms are received for that point for this length of time.	RW	Y	Y		int	sec	sec	uint16	sec		600	1	3600
71	DoOverwriteUnreadAlarmLog	Old unread alarm log records can be overwritten by new records when TRUE Old (unread) alarm log records can be overwritten by new records when TRUE (1). If FALSE (0) and the log becomes full, logging will stop until oldest log records are marked as read to make room for new records.	RW	Y	Y		int	-	-	boolean	-	Do not overwrite old records (FALSE) Overwrite old records (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
72	DoOverwriteUnreadAuditLog	Old unread audit log records can be overwritten by new records when TRUE Old (unread) audit log records can be overwritten by new records when TRUE (1). If FALSE (0) and the log becomes full, logging will stop until oldest log records are marked as read to make room for new records.	RW	Y	Y		int	-	-	boolean	-	Do not overwrite old records (FALSE) Overwrite old records (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
73	DoOverwriteUnreadHourlyLog	Old unread hourly log records can be overwritten by new records when TRUE Old (unread) hourly log records can be overwritten by new records when TRUE (1). If FALSE (0) and the log becomes full, logging will stop until oldest log records are marked as read to make room for new records.	RW	Y	Y		int	-	-	boolean	-	Do not overwrite old records (FALSE) Overwrite old records (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
74	DoOverwriteUnreadDailyLog	Old unread daily log records can be overwritten by new records when TRUE Old (unread) daily log records can be overwritten by new records when TRUE (1). If FALSE (0) and the log becomes full, logging will stop until oldest log records are marked as read to make room for new records.	RW	Y	Y		int	-	-	boolean	-	Do not overwrite old records (FALSE) Overwrite old records (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
75	DoOverwriteUnreadSystemLog	Old unread system log records can be overwritten by new records when TRUE Old (unread) system log records can be overwritten by new records when TRUE (1). If FALSE (0) and the log becomes full, logging will stop until oldest log records are marked as read to make room for new records.	RW	Y	Y		int	-	-	boolean	-	Do not overwrite old records (FALSE) Overwrite old records (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
76	VelHold	Number of batches to hold velocity constant when re-acquiring The number of batches the average flow velocity (AvgFlow) is held at the last measured value when meter is in acquisition mode (IsAcqMode).	RW	Y	Y	Y	int	-	-	uint8	-		0	0	255
77	BatchPercentSmoothing	Batch smoothing factor: specifies percentage total data to be taken from previous data Batch smoothing factor. This is used to "smooth" the velocity measurement by averaging "new" and "old" data. This specifies the percentage of a batch's total data to be taken from previous batch period(s). When set to zero, then only new data will be used for a batch update. For example, if the batch smoothing factor is set to 20% and there are 32 new data sequences (BatchNewSeq), then 8 sequences from the most recent batch(es) (BatchOldSeq) will also be used for the current batch (8=20% of (32+8)).	RW	Y	Y		int	-	-	uint8	%	0 (0) 20 (20) 40 (40) 60 (60) 80 (80)	0	0	80
78	MaxNoDataBatches	Maximum number of consecutive batches without new data Maximum number of consecutive batches without new data before no data received by batch System log is generated. This can be caused if the Acquisition Module is disconnected or not communicating with the CPU Module (!sAcqModuleError).	RW	Y	Y	Y	int	-	-	uint8	-		20	1	255
79	SpecBatchUpdtPeriod	Specified batch update period (may be overridden if stacking is selected) Specifies the minimum batch update period when there is no stacking (StackSize). The "Rapid" update period can be selected only when there is no bandpass filtering (Filter) and may cause greater uncertainty in the measured flow rate.	RW	Y	Y	Y	int	ms	ms	uint16	ms	Standard - 1000 ms (1000) Rapid - 250 ms (250)	1000	250	1000
80	StackSize	Stack size This indicates the number of transducer firings to be point-by-point averaged to generate a signal for a single transit time measurement. A value of 1 This indicates no stacking. When stacking is used, the batch period can differ from the user-specified value (SpecBatchUpdtPeriod). Stacking is primarily used to reduce random (white) noise on the received signal.	RW	Y	Y		int	-	-	uint8	-	None (1) 2 (2) 4 (4) 8 (8) 16 (16)	1	1	16
81	Filter	Bandpass filter switch Bandpass filter switch. When set to TRUE (1) the bandpass filter is used on the received transducer signal to remove unwanted frequencies.	RW	Y	Y	Y	int	-	-	boolean	-	Filter off (FALSE) Filter on (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
82	FireSeq	Transducer firing sequence selector The order in which the transducers fire. The meter fires at the fastest possible rate only when each chord's upstream/downstream transducers are not fired successively.	RW	Y	Y	Y	int	-	-	uint8	-	A1-B1-C1-D1-A2-B2-C2-D2-E1-F1-G1-H1-E2-F2-G2-H2 (2)	2	2	2
83	ChordInactvA	Chord A inactive control Chord A inactive control. When TRUE (1), Chord A is set to inactive and IsBatchInactiveA is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
84	ChordInactvB	Chord B inactive control Chord B inactive control. When TRUE (1), Chord B is set to inactive and IsBatchInactiveB is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
85	ChordInactvC	Chord C inactive control Chord C inactive control. When TRUE (1), Chord C is set to inactive and IsBatchInactiveC is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
86	ChordInactvD	Chord D inactive control Chord D inactive control. When TRUE (1), Chord D is set to inactive and IsBatchInactiveD is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
87	ChordInactvE	Chord E inactive control Chord E inactive control. When TRUE (1), Chord E is set to inactive and IsBatchInactiveE is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
88	ChordInactvF	Chord F inactive control Chord F inactive control. When TRUE (1), Chord F is set to inactive and IsBatchInactiveF is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
89	ChordInactvG	Chord G inactive control Chord G inactive control. When TRUE (1), Chord G is set to inactive and IsBatchInactiveG is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
90	ChordInactvH	Chord H inactive control Chord H inactive control. When TRUE (1), Chord H is set to inactive and IsBatchInactiveH is set to TRUE (1). The chord's transducers are not fired. When made active (TRUE (1) to FALSE (0) transition) the meter will re-acquire.	RW	Y	Y	Y	int	-	-	boolean	-	Chord active (FALSE) Chord inactive (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
91	MinChord	Minimum number of operating chords for valid measurement The minimum number of operating chords for a valid measurement. If the number of operating chords is less than this value, then the too few operating chords (IsTooFewOperChords) status is set. The range of values and default value are dependent upon the meter device number (DeviceNumber).	RW	Y	Y	Y	int	-	-	uint8	-		1	1	8

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
92	AlarmDef	Number of consecutive batches before an alarm is set active The number of consecutive batches with active alarm condition before an alarm is set to active. This is used to activate chord A hard failed alarm (IsHardFailedA), chord B hard failed alarm (IsHardFailedB), chord C hard failed alarm (IsHardFailedC), chord D hard failed alarm (IsHardFailedD), chord E hard failed alarm (IsHardFailedE), chord F hard failed alarm (IsHardFailedF), chord G hard failed alarm (IsHardFailedG), chord H hard failed alarm (IsHardFailedH) and transducer firing synchronization alarm (IsXdcrFiringSyncError).	RW	Y	Y	Y	int	-	-	uint16	-		100	1	1000
93	MinPctGood	Minimum percentage of good measurements for working chord The minimum percentage of good measurements for a working chord. A chord with a percentage of good measurements less than this threshold is considered failed and its corresponding IsFailedForBatchA, IsFailedForBatchB, IsFailedForBatchC, IsFailedForBatchD, IsFailedForBatchE, IsFailedForBatchF, IsFailedForBatchG, IsFailedForBatchH is set to TRUE (1). The percentage of good measurements for a chord may vary slightly from the individual path good measurements (PctGoodA1, PctGoodA2, PctGoodB1, PctGoodB2, PctGoodC1, PctGoodC2, PctGoodD1, PctGoodD2, PctGoodE1, PctGoodE2, PctGoodF1, PctGoodF2, PctGoodG1, PctGoodG2, PctGoodH1, PctGoodH2) since both the upstream and downstream paths must be good at the same time for a chord to be considered good.	RW	Y	Y	Y	int	%	%	uint8	%		65	0	90
94	NumVals	Chord proportion update factor Chord proportion update factor. This controls how quickly the chord proportions change relative to the current velocity proportion values. The lower the factor, the more quickly the proportions change.	RW	Y	Y	Y	int	-	-	uint16	-		10	1	1000
95	LowFlowLmt	Minimum velocity for updating chord proportions Minimum velocity for updating chord proportions. Chord proportions are not updated when the flow velocity is below this value.	RW	Y	Y	Y	int	m/s	ft/s	uint8	m/s		1	1	30
96	ResetProp	Resets chord proportions to default values when TRUE Forces the chord proportion bins (FwdPropABin1..FwdPropHBin10, RevPropABin1..RevPropHBin10, FwdPropVelABin1..FwdPropVelHBin10 and RevPropVelABin1..RevPropVelHBin10) to be reset to the default values when TRUE (1). The default values are based on the meter type, indicated by the device number (DeviceNumber). Once the chord proportion bin values are reset, the value of this data point is automatically reset to zero and proportion bin updates will not begin (IsPropUpdtActive) until the required amount of time without chord failures has elapsed (PropUpdtSeconds).	RW	Y			int	-	-	boolean	-	Do not reset proportions (FALSE) Do reset proportions (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
97	ResetTrkParam	Forces reset of tracking targets to defaults when TRUE Forces the signal tracking targets (TspfA1..TspfH2, TspeA1..TspeH2 and TampA1..TampH2) to be reset to the default values (Tspf, Tspe and Tamp) when TRUE (1). Once these values are reset, the value of this point is automatically reset to FALSE (0).	RW	Y			int	-	-	boolean	-	Do not reset tracking (FALSE) Do reset tracking (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
98	FODO1Source	Source for Frequency/Digital Output 1 Selects the source for Frequency/Digital Output 1 if Frequency/Digital Output 1 available (IsFODO1Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO1Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	0	0	7
99	FODO2Source	Source for Frequency/Digital Output 2 Selects the source for Frequency/Digital Output 2 if Frequency/Digital Output 2 available (IsFODO2Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO2Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	2	0	7
100	FODO3Source	Source for Frequency/Digital Output 3 Selects the source for Frequency/Digital Output 3 if Frequency/Digital Output 3 available (IsFODO3Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO3Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	3	0	7
101	FODO4Source	Source for Frequency/Digital Output 4 Selects the source for Frequency/Digital Output 4 if Frequency/Digital Output 4 available (IsFODO4Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO4Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	6	0	7

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
102	FODO5Source	Source for Frequency/Digital Output 5 Selects the source for Frequency/Digital Output 5 if Frequency/Digital Output 5 available (IsFODO5Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO5Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	7	0	7
103	FODO6Source	Source for Frequency/Digital Output 6 Selects the source for Frequency/Digital Output 6 if Frequency/Digital Output 6 available (IsFODO6Avail) is TRUE (1). The sources may be: Frequency Output 1A based on Freq1Content Frequency Output 1B based on Freq1Content and Freq1BPhase Frequency Output 2A based on Freq2Content Frequency Output 2B based on Freq2Content and Freq2BPhase Digital Output 1A based on DO1AContent Digital Output 1B based on DO1BContent Digital Output 2A based on DO2AContent Digital Output 2B based on DO2BContent The output levels are selected by FODO6Mode.	RW	Y	Y	Y	int	-	-	uint8	-	Frequency Output 1A (0) Frequency Output 1B (1) Frequency Output 2A (2) Frequency Output 2B (3) Digital Output 1A (4) Digital Output 1B (5) Digital Output 2A (6) Digital Output 2B (7)	4	0	7
104	FODO1Mode	Mode for Frequency/Digital Output 1 Selects the output levels for Frequency/Digital Output 1 (FODO1Source) when Frequency/Digital Output 1 available (IsFODO1Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
105	FODO2Mode	Mode for Frequency/Digital Output 2 Selects the output levels for Frequency/Digital Output 2 (FODO2Source) when Frequency/Digital Output 2 available (IsFODO2Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
106	FODO3Mode	Mode for Frequency/Digital Output 3 Selects the output levels for Frequency/Digital Output 3 (FODO3Source) when Frequency/Digital Output 3 available (IsFODO3Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
107	FODO4Mode	Mode for Frequency/Digital Output 4 Selects the output levels for Frequency/Digital Output 4 (FODO4Source) when Frequency/Digital Output 4 available (IsFODO4Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
108	FODO5Mode	Mode for Frequency/Digital Output 5 Selects the output levels for Frequency/Digital Output 5 (FODO5Source) when Frequency/Digital Output 5 available (IsFODO5Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
109	FODO6Mode	Mode for Frequency/Digital Output 6 Selects the output levels for Frequency/Digital Output 6 (FODO6Source) when Frequency/Digital Output 6 available (IsFODO6Avail) is TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-	TTL (0) Open Collector (1)	1	0	1
110	Freq1MaxFrequency	Frequency Output 1 pair maximum (full-scale) frequency Selects the Frequency Output 1 pair maximum (full-scale) frequency used in determining the K-factor and inverse K-factor.	RW	Y	Y	Y	int	Hz	Hz	uint16	Hz	1000 (1000) 5000 (5000)	1000	1000	5000
111	IsFreq1BZeroedOnErr	Frequency Output 1B forced to zero when invalid control When TRUE (1), forces the Frequency Output 1 channel B frequency to zero when the frequency pair's data is invalid.	RW	Y	Y	Y	int	-	-	boolean	-	Not forced to zero on error (FALSE) Forced to zero on error (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
112	Freq1FeedbackCorrectionPcnt	Frequency Output 1 pair volume feedback percentage Specifies the Frequency Output 1 pair percentage of error (determined by frequency feedback) to adjust for per batch. This only applies when the frequency pair content is selected to be a rate.	RW	Y	Y	Y	int	%	%	uint8	%		1	0	100
113	IsFreq1EnableTest	Frequency Output 1 pair test enable Frequency Output 1 is in test mode which means the pulses output do not reflect the process flow through the meter. Test mode allows the connection from this output to a flow computer to be verified. When the frequency output is in test mode, the frequency outputs are fixed at the percentage of full scale specified by the test mode output percentage configuration point (Freq1TestModeOutputPercent). If a frequency pair remains in test mode for the length of time configured by the normal mode timeout (NonNormalModeTimeout), the test mode is automatically exited and the frequency output returns to normal operation. Recommended Actions: 1. Use the Meter Outputs screen in MeterLink™ to disable the test mode for Frequency Output 1 to clear this alarm and return the meter back to its normal mode of operation. 2. Unless MeterLink™ or another application through Modbus is re-enabling the test mode, the output will revert back to the normal mode of operation in a user configured timeout period (NonNormalModeTimeout) which can be up to 30 minutes.	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
114	Freq1TestModeOutputPercent	Frequency Output 1 pair test mode percentage of full-scale Specifies the Frequency Output 1 pair test mode percentage of full-scale. This specifies the frequency (as a percentage of the full-scale frequency (Freq1MaxFrequency)) to force Freq1A (Freq1ChnlA) and Freq1B (Freq1ChnlB) when in the frequency test mode (IsFreq1EnableTest).	RW				int	%	%	uint8	%		50	0	150
115	DO1AIsInvPolarity	Digital Output 1A polarity control Selects the Digital Output 1A polarity as "Normal" or "Inverted". For "Normal" polarity, a high output indicates either valid frequency data or forward flow (depending upon the Digital Output 1A content selector (DO1AContent)). For "Inverted" polarity, a low output indicates either valid frequency data or forward flow.	RW	Y	Y	Y	int	-	-	boolean	-	Normal (FALSE) Inverted (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
116	DO1BIsInvPolarity	Digital Output 1B polarity control Selects the Digital Output 1B polarity as "Normal" or "Inverted". For "Normal" polarity, a high output indicates either valid frequency data or forward flow (depending upon the Digital Output 1B content selector (DO1BContent)). For "Inverted" polarity, a low output indicates either valid frequency data or forward flow.	RW	Y	Y	Y	int	-	-	boolean	-	Normal (FALSE) Inverted (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
117	Freq2MaxFrequency	Frequency Output 2 pair maximum (full-scale) frequency Selects the Frequency Output 2 pair maximum (full-scale) frequency used in determining the K-factor and inverse K-factor.	RW	Y	Y	Y	int	Hz	Hz	uint16	Hz	1000 (1000) 5000 (5000)	1000	1000	5000
118	IsFreq2BZeroedOnErr	Frequency Output 2B forced to zero when invalid control When TRUE (1), forces the Frequency Output 2 channel B frequency to zero when the frequency pair's data is invalid.	RW	Y	Y	Y	int	-	-	boolean	-	Not forced to zero on error (FALSE) Forced to zero on error (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
119	Freq2FeedbackCorrectionPcnt	Frequency Output 2 pair volume feedback percentage Specifies the Frequency Output 2 pair percentage of error (determined by frequency feedback) to adjust for per batch. This only applies when the frequency pair content is selected to be a rate.	RW	Y	Y	Y	int	%	%	uint8	%		1	0	100

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
120	IsFreq2EnableTest	Frequency Output 2 pair test enable Frequency Output 2 is in test mode which means the pulses output do not reflect the process flow through the meter. Test mode allows the connection from this output to a flow computer to be verified. When the frequency output is in test mode, the frequency outputs are fixed at the percentage of full scale specified by the test mode output percentage configuration point (Freq2TestModeOutputPercent). If a frequency pair remains in test mode for the length of time configured by the normal mode timeout (NonNormalModeTimeout), the test mode is automatically exited and the frequency output returns to normal operation. Recommended Actions: 1. Use the Meter Outputs screen in MeterLink™ to disable the test mode for Frequency Output 2 to clear this alarm and return the meter back to its normal mode of operation. 2. Unless MeterLink™ or another application through Modbus is re-enabling the test mode, the output will revert back to the normal mode of operation in a user configured timeout period (NonNormalModeTimeout) which can be up to 30 minutes.	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
121	Freq2TestModeOutputPercent	Frequency Output 2 pair test mode percentage of full-scale Specifies the Frequency Output 2 pair test mode percentage of full-scale. This specifies the frequency (as a percentage of the full-scale frequency (Freq2MaxFrequency)) to force Freq2A (Freq2ChnlA) and Freq2B (Freq2ChnlB) when in the frequency test mode (IsFreq2EnableTest).	RW				int	%	%	uint8	%		50	0	150
122	DO2AIsInvPolarity	Digital Output 2A polarity control Selects the Digital Output 2A polarity as "Normal" or "Inverted". For "Normal" polarity, a high output indicates either valid frequency data or forward flow (depending upon the content DO2AContent). For "Inverted" polarity, a low output indicates either valid frequency data or forward flow.	RW	Y	Y	Y	int	-	-	boolean	-	Normal (FALSE) Inverted (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
123	DO2BIsInvPolarity	Digital Output 2B polarity control Selects the Digital Output 2B polarity as "Normal" or "Inverted". For "Normal" polarity, a high output indicates either valid frequency data or forward flow (depending upon the content selected via the Digital Output 2B content (DO2BContent) data point). For "Inverted" polarity, a low output indicates either valid frequency data or forward flow.	RW	Y	Y	Y	int	-	-	boolean	-	Normal (FALSE) Inverted (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
124	DI1IsInvPolarity	Digital Input 1 polarity control This value sets the polarity of Digital Input 1 (DI1). A TRUE (1) value is normal polarity (default). A FALSE (0) value is inverted polarity.	RW	Y	Y	Y	int	-	-	boolean	-	Normal (FALSE) Inverted (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
125	DoUpdtPathDiag	Signal processing diagnostic data (path tracking) update control When set to TRUE (1), signal processing diagnostic data (path tracking information) is updated. The diagnostic data include following data points: Maximum signal quality value (MsqvA1..MsqvH2) Maximum signal quality position (MsqpA1..MsqpH2) Critical point value (PfvA1..PfvH2) Selected peak zero crossing position (P1A1..P1H2) Selected peak width (PwA1..PwH2) Energy arrival position (QpefA1..QpefH2) Critical point position (PfA1..PfH2) Peak 1 zero crossing position (Pp1A1..Pp1H2) Peak 2 zero crossing position (Pp2A1..Pp2H2) Peak 3 zero crossing position (Pp3A1..Pp3H2) Peak 4 zero crossing position (Pp4A1..Pp4H2) Peak 1 normalized amplitude (Ap1A1..Ap1H2) Peak 2 normalized amplitude (Ap2A1..Ap2H2) Peak 3 normalized amplitude (Ap3A1..Ap3H2) Peak 4 normalized amplitude (Ap4A1..Ap4H2) Peak 1 score (Ff1A1..Ff1H2) Peak 2 score (Ff2A1..Ff2H2) Peak 3 score (Ff3A1..Ff3H2) Peak 4 score (Ff4A1..Ff4H2) Peak 5 score (Ff5A1..Ff5H2) Selected peak (SelPkA1..SelPkH2) Energy arrival position (QpefA1..QpefH2)	RW				int	-	-	boolean	-	Do not update diagnostic data (FALSE) Do update diagnostic data (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
126	CalMethod	Flow calibration method selector Selects the flow calibration method to apply to the velocity measurement. If set to "None" then the flow calibration has the same value as the dry calibration. If set to "Polynomial Coefficients" then the "C" calibration coefficients are applied (FwdC0, FwdC1, FwdC2, FwdC3, RevC0, RevC1, RevC2 and RevC3). If set to "Piecewise Linear" then the piecewise linearization flow rate and meter factor parameters (FwdFlwRt1..FwdFlwRt12, RevFlwRt1..RevFlwRt12, FwdMtrFctr1..FwdMtrFctr12 and RevMtrFctr1..RevMtrFctr12) are used to calculate the meter factor to be applied, readable via piecewise linearization meter factor (LinearMtrFctr).	RW	Y	Y	Y	int	-	-	uint8	-	None (0) Polynomial (1) Piecewise linear (2)	0	0	2
127	EnablePressureInput	Flow-condition pressure input selector Selects the flow-condition pressure input. When set to "Live", the flow-condition pressure is read from an analog input signal. When set to "Fixed", the flow-condition pressure is specified (fixed) via the SpecFlowPressure data point, via a Modbus register or via the HART Command-132. An external source can update the flow-condition pressure through Modbus either by writing to the ISO 17089 Modbus register (34050) or by writing to a non-ISO 17089 Modbus register. The flow-condition pressure written via the ISO 17089 Modbus register is always absolute pressure. When set to "Transmitter Head 1", the flow-condition pressure is read from Transmitter Head 1 of a Dual-Configuration meter (ColocMeterIPAddress). The flow-condition pressure input selector can be "Transmitter Head 1" only on Transmitter Head 2 (ColocMeterMode) of a data sharing Dual-Configuration meter. The flow-condition pressure is used for pressure expansion correction (if enabled). This value cannot be set to "None" if pressure expansion correction is enabled (EnableExpCorrPress) or if AGA8 method (HCH_Method) is not "None".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) Live (1) Fixed (2) Transmitter Head 1 (3)	0	0	3
128	InputPressureUnit	Input pressure absolute/gage selector Specifies whether the input pressure is "Absolute" or "Gage" . If the input pressure is gage, then the absolute pressure is calculated as the sum of the input gage pressure and the atmospheric pressure (AtmosphericPress). When writing the flow-condition absolute pressure values via the ISO 17089 Modbus register then the input pressure unit has no effect and value is always considered as absolute pressure.	RW	Y	Y	Y	int	-	-	boolean	-	Gage (FALSE) Absolute (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
129	EnableExpCorrPress	Enable pressure expansion correction Enables volumetric flow rate pressure expansion correction when set to TRUE (1). This requires the flow-condition pressure to be "Fixed" or "Live" or "Transmitter Head 1" (EnablePressureInput and SpecFlowPressure) and the pipe outside diameter (PipeOutsideDiameter), Young's Modulus (YoungsModulus) and Poisson's Ratio (PoissonsRatio) to be specified.	RW	Y	Y	Y	int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
130	EnableTemperatureInput	Flow-condition temperature input selector Selects the flow-condition temperature input. When set to "Live", the flow-condition temperature is read from an analog input signal. When set to "Fixed", the flow-condition temperature is specified (fixed) via the SpecFlowTemperature data point, via a Modbus register or via the HART Command-134. An external source can update the flow-condition temperature through Modbus either by writing to the ISO 17089 Modbus register (34052) or by writing to a non-ISO 17089 Modbus register. When set to "Transmitter Head 1", the flow-condition temperature is read from Transmitter Head 1 of a Dual-Configuration meter (ColocMeterIPAddress). The flow-condition temperature input selector can be "Transmitter Head 1" only on Transmitter Head 2 (ColocMeterMode) of a data sharing Dual-Configuration meter. The flow-condition temperature is used for temperature expansion correction (if enabled), AGA8 calculations (if enabled) and AGA10 calculations (if enabled). This value cannot be set to "None" if temperature expansion correction (EnableExpCorrTemp) is enabled or if AGA8 method (HCH_Method) is not "None".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) Live (1) Fixed (2) Transmitter Head 1 (3)	0	0	3
131	EnableExpCorrTemp	Enable temperature expansion correction Enables volumetric flow rate temperature expansion correction when set to TRUE (1). This requires the flow-condition temperature to be "Fixed" or "Live" or "Transmitter Head 1" (EnableTemperatureInput and SpecFlowTemperature) and the pipe material linear expansion coefficient with reference temperature (LinearExpansionCoef and RefTempLinearExpCoef) to be specified.	RW	Y	Y	Y	int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
132	NonNormalModeTimeout	Non-normal operation timeout Non-normal operation timeout. The maximum length of time that a frequency output pair, digital output pair, analog output or calibration can remain in the test mode. In the event communications are lost between the Ultrasonic meter software and the meter (before a test mode is stopped), the meter will automatically end the test mode after the non-normal operation timeout has expired. This can be from 1 to 30 minutes depending on its settings. By default, the timeout is set to two minutes.	RW	Y	Y	Y	int	min	min	uint8	min		2	1	30
133	BatchSize	Sequences between gain/hold time/tracking updates Number of completed firing sequences between updating the signal gain, hold time and tracking values. The default value is 20 firing sequences (minimum is 5 and maximum is 120).	RW	Y	Y	Y	int	-	-	uint8	-		20	5	120
134	Pk1Thrsh	First peak amplitude threshold The minimum amplitude of first peak of the signal required for it to be used.	RW	Y	Y	Y	int	-	-	uint8	-		10	0	30
135	TspfMatch	Track parameter auto reset threshold: 0=always reset, 100=disable auto reset When the differences between the magnitudes of the computed upstream and downstream TSPF to exceed this percentage, they are reset to the default tracking target Pf distance (Tspf). When the differences between signal tracking targets (TspfA1..TspfH2) and target Tspf (Tspf) value exceeds this percentage, then the tracking targets are reset to the default tracking target Pf distance (Tspf). A value of 100 forces the calculated values to never reset to the defaults. A value of zero forces them to remain at the defaults.	RW	Y	Y	Y	int	%	%	uint8	%		30	0	100
136	Pk1Pct	Parameter used to locate the signal start The percentage of the maximum signal amplitude used as a threshold to find the first peak which is then used to determine the starting position of the sampled waveform. If conditions exist that make the start of the signal difficult to detect (peak switching) this level may be adjusted to get a stable signal.	RW	Y	Y	Y	int	%	%	uint8	%		60	40	100
137	SNRatio	Minimum signal-to-noise threshold The minimum signal-to-noise threshold. Conversion of this value to decibels is 10 * log10 (SNRatio). If the ratio of the signal energy to the noise energy is below this threshold, then the measurement is discarded. Discarded measurement data may cause a chord to be considered failed if the percentage of good measurements falls below the minimum percentage good threshold (MinPctGood). If, in a batch, a chord has at least one signal discarded due to too low SNR, the chord's signal-to-noise low alarm, IsSNRTooLowA, IsSNRTooLowB, IsSNRTooLowC, IsSNRTooLowD, IsSNRTooLowE, IsSNRTooLowF, IsSNRTooLowG, IsSNRTooLowH, is set to TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-		10	5	30
138	MinSigQlty	Minimum acceptable signal quality The minimum acceptable signal quality based on signal and noise energies. When either path in a chord's signal quality (as measured by signal to noise ratios) is below this threshold, the chord's signal quality status, IsSigQltyBadA, IsSigQltyBadB, IsSigQltyBadC, IsSigQltyBadD, IsSigQltyBadE, IsSigQltyBadF, IsSigQltyBadG, IsSigQltyBadH is set to TRUE (1).	RW	Y	Y	Y	int	-	-	uint8	-		13	5	30
139	SetXdcrType	Set transducer type Sets the type of transducer installed. Changing this data point will overwrite transducer configuration parameters (XdcrFreq, XdcrNumDriveCycles, DltChk, NegSpan, Pk1Wdth, PosSpan, SampPerCycle, SampInterval, TmDevLow1, Tspf, TspfLo, TspfHi, Tspe and Tamp) with default values. The band pass filter (Filter) will be enabled if required by the selected transducer type. Once these transducer configuration values are written, the value of this data point is saved in the transducer type data point (XdcrType), and then set transducer type is set to zero.	RW	Y		Y	int	-	-	uint8	-	Automatically reset by the meter (0) T-11/T-21/T-41 (2) T-12/T-22 (3) T-32 (4) T-200 (5)	0	0	5
140	XdcrNumDriveCycles	Number of cycles for transducer Number of cycles for transducer. Will be overwritten when transducer type (SetXdcrType) changes.	RW	Y	Y	Y	int	-	-	uint8	-		1	1	2
141	SampPerCycle	Samples per cycle The number of times the waveform is sampled between two zero crossings with the same slope (one cycle). Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	-	-	uint8	-	10 (10)	10	10	10
142	DltChkSI	Maximum delta time check in sample intervals It is computed from the maximum amount of time allowed for delta times in usec (DltChk) using the duration of a sample interval (SampInterval).	R				int	sample intervals	sample intervals	uint16	sample intervals				
143	NegSpanSI	Minimum negative pulse width in sample intervals Minimum negative pulse width derived from the micro second version (NegSpan). This parameter is used to detect distorted waveforms and incorrect measurements.	R				int	sample intervals	sample intervals	uint16	sample intervals				
144	PosSpanSI	Minimum positive pulse width in sample intervals Minimum positive pulse width in sample intervals derived from the micro second version (PosSpan). This parameter is used to detect distorted waveforms and incorrect measurements.	R				int	sample intervals	sample intervals	uint16	sample intervals				
145	PkPlsWdthSI	Maximum selected peak pulse width in sample intervals Maximum selected peak pulse width in sample interval units. This is computed internally by meter from the maximum selected peak pulse width in usec (Pk1Wdth) using the duration of a sample interval (SampInterval).	R				int	sample intervals	sample intervals	uint16	sample intervals				
146	Tspf	Default tracking target Pf distance The default for the targeted SPF which is the time in sample intervals (SI) or distance between the first motion (Pf) and the signal the zero crossing detection point (P1). When the meter is first started or when ResetTrkParam is set TRUE (1) this value is used as the initial value used to compute TspfA1, TspfA2, TspfB1, TspfB2, TspfC1, TspfC2, TspfD1, TspfD2, TspfE1, TspfE2, TspfF1, TspfF2, TspfG1, TspfG2, TspfH1, TspfH2. It is also the value used for inactive paths. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support. See also (TspfLo) and (TspfHi).	RW	Y	Y	Y	int	sample intervals	sample intervals	uint8	sample intervals		15	0	37

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
147	TspfLo	Tracking target Pf distance low limit The lower limit or floor for the default (Tspf) and the individual path (TspfA1, TspfA2, TspfB1, TspfB2, TspfC1, TspfC2, TspfD1, TspfD2, TspfE1, TspfE2, TspfF1, TspfF2, TspfG1, TspfG2, TspfH1, TspfH2) computed values. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	uint8	sample intervals		8	0	37
148	TspfHi	Tracking target Pf distance high limit The upper limit or ceiling for the default (Tspf) and the individual path (TspfA1, TspfA2, TspfB1, TspfB2, TspfC1, TspfC2, TspfD1, TspfD2, TspfE1, TspfE2, TspfF1, TspfF2, TspfG1, TspfG2, TspfH1, TspfH2) computed values. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	uint8	sample intervals		25	0	37
149	TspfSen	Tracking target Pf sensitivity The sensitivity applied to the comparison of the individual peaks SPF to the paths targeted SPF, TspfA1, TspfA2, TspfB1, TspfB2, TspfC1, TspfC2, TspfD1, TspfD2, TspfE1, TspfE2, TspfF1, TspfF2, TspfG1, TspfG2, TspfH1, TspfH2. The sensitivity is used to generate similar magnitudes to the SPE and Amp comparisons used to score peaks in the process of selecting P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	uint8	sample intervals		10	6	37
150	Tspe	Default tracking target Pe distance The default for the targeted SPE which is the time in sample intervals (SI) or distance between the first energy position (Pe) and the signal the zero crossing detection point (P1). When the meter is first started or when ResetTrkParam is set TRUE (1) this value is used as the initial value used to compute TspeA1, TspeA2, TspeB1, TspeB2, TspeC1, TspeC2, TspeD1, TspeD2, TspeE1, TspeE2, TspeF1, TspeF2, TspeG1, TspeG2, TspeH1, TspeH2. It is also the value used for inactive paths. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support. See also (TspeLo) and (TspeHi).	RW	Y	Y	Y	int	sample intervals	sample intervals	int8	sample intervals		8	-25	25
151	TspeLo	Tracking target Pe distance low limit The lower limit or floor for the default (Tspe) and the individual path (TspeA1, TspeA2, TspeB1, TspeB2, TspeC1, TspeC2, TspeD1, TspeD2, TspeE1, TspeE2, TspeF1, TspeF2, TspeG1, TspeG2, TspeH1, TspeH2) computed values. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	int8	sample intervals		-8	-25	25
152	TspeHi	Tracking target Pe distance high limit The upper limit or ceiling for the default (Tspe) and the individual path (TspeA1, TspeA2, TspeB1, TspeB2, TspeC1, TspeC2, TspeD1, TspeD2, TspeE1, TspeE2, TspeF1, TspeF2, TspeG1, TspeG2, TspeH1, TspeH2) computed values. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	int8	sample intervals		20	-25	25
153	TspeSen	Tracking target Pe sensitivity The sensitivity applied to the comparison of the individual peaks SPE to the paths targeted SPE, TspeA1, TspeA2, TspeB1, TspeB2, TspeC1, TspeC2, TspeD1, TspeD2, TspeE1, TspeE2, TspeF1, TspeF2, TspeG1, TspeG2, TspeH1, TspeH2. The sensitivity is used to generate similar magnitudes to the SPF and Amp comparisons used to score peaks in the process of selecting P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	uint8	sample intervals		18	6	37
154	TspeLmt	Tracking target abs(Pe-Pf) limit The Tspf and Tspe calculations are not performed if the distance (in SI) between Pe and Pf exceed this amount. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	sample intervals	sample intervals	uint16	sample intervals		25	0	30
155	Tamp	Default tracking target normalized amplitude The default for the targeted Amp which is the value of the peak following the zero crossing detection point (P1). When the meter is first started or when ResetTrkParam is set TRUE (1) this value is used as the initial value used to compute TampA1, TampA2, TampB1, TampB2, TampC1, TampC2, TampD1, TampD2, TampE1, TampE2, TampF1, TampF2, TampG1, TampG2, TampH1, TampH2. It is also the value used for inactive paths. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support. See also (TampLo) and (TampHi).	RW	Y	Y	Y	int	%	%	int8	%		-70	-100	100
156	TampLo	Tracking target normalized amplitude low limit The lower limit or floor for the magnitude (absolute value of) the default (Tamp) and the individual path (TampA1, TampA2, TampB1, TampB2, TampC1, TampC2, TampD1, TampD2, TampE1, TampE2, TampF1, TampF2, TampG1, TampG2, TampH1, TampH2) computed values. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	%	%	uint8	%		30	0	100
157	TampHi	Tracking target normalized amplitude high limit The upper limit or ceiling for the magnitude (absolute value of) the default (Tamp) and the individual path (TampA1, TampA2, TampB1, TampB2, TampC1, TampC2, TampD1, TampE1, TampE2, TampF1, TampF2, TampG1, TampG2, TampH1, TampH2) computed values. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	%	%	uint8	%		100	0	100
158	TampSen	Tracking target normalized amplitude sensitivity The sensitivity applied to the comparison of the individual peaks Amp to the paths targeted Amp, TampA1, TampA2, TampB1, TampB2, TampC1, TampC2, TampD1, TampE1, TampE2, TampF1, TampF2, TampG1, TampG2, TampH1, TampH2. The sensitivity is used to generate similar magnitudes to the SPE and SPF comparisons used to score peaks in the process of selecting P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	int	%	%	uint8	%		30	5	100
159	CalFlag	Flow calibration switch: calibration started on FALSE-to-TRUE transition and stopped on TRUE-to-FALSE transition Calibration function switch. When changed from FALSE (0) to TRUE (1), the calibration accumulated uncorrected volume CalVol and calibration elapsed time CalTime data points are reset. While TRUE (1), the flow volume and time are accumulated into the CalVol and CalTime data points.	RW				int	-	-	boolean	-	Stop calibration (FALSE) Start calibration (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
160	FlowDir	Meter installed backwards control The meter installed backwards control used in setting the current flow direction indicator (FlowDirection). Set the meter installed backwards control to TRUE (1) if the meter is installed backwards from the normal (forward) flow direction.	RW	Y	Y	Y	int	-	-	boolean	-	Meter in normal direction (FALSE) Meter in reverse direction (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
161	DidColdStart	Meter cold started, latched until acknowledged The meter has performed a cold start. The meter configuration has reset to default values, meter archive logs are erased, user database is reset, and Smart Meter Verification reports are deleted. The meter is not configured correctly to measure flow. The user database has been reset to a single user "administrator" with the privilege to perform user management and default password is "Administrator-<CPUBdSerialNumber>". The default password is based on CPU Module serial number (CPUBdSerialNumber) mentioned on the label on the CPU Module. Recommended Actions: 1. If the cold start occurred unexpectedly, i.e. not due to firmware upgrade/downgrade or user-initiated in meter reset mode, we recommend replacing the CPU Module. Contact your local area Emerson Flow service representative. 2. If the cold start occurred after a firmware upgrade or is done using MeterLink™ to cold start the CPU Module, you must fully re-configure the meter from a previously saved configuration using Edit/Compare Configuration in MeterLink™ and reconfigure the meter's users using Manage Users in MeterLink™. 3. The alarm must be acknowledged to clear it from the list of alarms. 4. If the issue is unresolved, contact your local area Emerson Flow service representative.	RW	Y	Y		int	-	-	boolean	-	Cold start cleared (FALSE) Cold start indicated (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
162	DidCnfgChksumChg	Configuration changed, latched until acknowledged The configuration checksum value (CnfgChksumValue) has changed. This indicates that one or more parameters have been modified in the meter's configuration. The timestamp of the most recent change is in the configuration checksum date (CnfgChksumDate). Recommended Actions: 1. Collect an Audit log using MeterLink™ to see what configuration parameters changed and when they changed. 2. The alarm must be acknowledged to clear it from the list of alarms.	RW	Y	Y		int	-	-	boolean	-	Unchanged or change acknowledged (FALSE) Changed (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
163	IsCorePresent	Diagnostic core file generated, latched until acknowledged A diagnostic core file has been generated which may indicate a problem with the meter. Recommended Actions: 1. The alarm must be acknowledged to clear it from the list of alarms. 2. Collect an Archive Log using MeterLink™ and contact your local area Emerson Flow service representative.	RW	Y	Y		int	-	-	boolean	-	No diagnostic file (FALSE) Diagnostic file present (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
164	WatchDogReset	Watchdog reset, latched until acknowledged The software watchdog initiated a meter warm start. The watchdog keeps track of the performance of all metrology processes in the meter to ensure reliable measurement. When a process stops responding, the watchdog forces the meter to restart. The Audit log in the meter will indicate the meter reset time (MeterResetTime). Recommended Actions: 1. Collect a complete Archive Log using MeterLink™ and contact your local area Emerson Flow service representative. 2. The alarm must be acknowledged to clear it from the list of alarms.	RW	Y	Y		int	-	-	boolean	-		FALSE (0)	FALSE (0)	TRUE (1)
165	DoWarmStart	Forces the system to perform a warm-start This selection forces the system to perform a warm-start. A warm start differs from a cold start (DidColdStart) in that the nonvolatile configuration points retain their values. A warm start is required (IsWarmStartReq) when changes are made to the transducer characteristics, sample rates, the device number . See also: XdcrFreq SetXdcrType XdcrNumDriveCycles SampInterval SampPerCycle DeviceNumber ColocMeterMode IsDiagnosticChordEnabled	RW				int	-	-	boolean	-	Do not warm start (FALSE) Do warm start (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
166	SeqPerUpdateNew	Expected number of new sequences per update Expected number of new sequences per batch update period (BatchUpdatePeriod). This value is determined from the (actual) emission rate (EmRateActual), (actual) stack emission rate (StackEmRateActual), stack size (StackSize) and active chords.	R	Y			int	-	-	uint16	-				
167	SeqPerUpdateTotal	Expected number of total sequences (new+old) per update Expected number of total sequences per batch update period (BatchUpdatePeriod). It is the sum of new sequences (BatchNewSeq) and number of old sequences (BatchOldSeq) in a batch.	R	Y			int	-	-	uint16	-				
168	PressureValidity	Flow pressure invalid Pressure is invalid if the flow pressure (FlowPressure) is outside the limits defined by the low and high pressure alarm limits (LowPressureAlarm, HighPressureAlarm). Pressure is invalid if the meter is configured to read the flow-condition pressure from Transmitter Head 1 of a Dual-Configuration meter and Dual-Configuration meters are not communicating (IsColocMeterCommErr), either due to incorrect configuration or the Transmitter Head 1 is not reachable. Pressure is invalid if the meter is configured to receive the flow-condition pressure value from an external source such as flow computer by writing to the ISO 17089 Modbus register (34050) and the meter has either lost communication with the external source or is not receiving updates on the ISO Modbus register within the ISO 17089 Modbus process data timeout (ISOModbusProcessDataTimeout). Recommended Actions: First Time Startup Issues: 1. Verify that there is voltage to the pressure sensor, either from the terminal on the meter's power supply board or from an external power supply. 2. If using an analog pressure device, verify that the pressure sensor is properly wired to the connector TB2-B pins 1 & 2 (ANALOG IN PT- & PT+). 3. Run the Field Setup Wizard in MeterLink™ to properly configure the input including: Source (Live Analog or Fixed), Min and Max input limits corresponding to 4 mA and 20 mA respectively and the Low and High alarm limits. 4. If using an external source to write pressure to the meter, verify that it is properly writing to fixed flow pressure (SpecFlowPressure) in the proper units. If flow-condition pressure value is updated through the ISO 17089 Modbus register, then the pressure unit is determined by the ISO 17089 Modbus units system (ISOModbusUnitsSystem) else it is determined by the units system (UnitsSystem) and volumetric flow rate time unit (VolFlowRateTimeUnit). The current value will be displayed as Fixed pressure in the Field Setup Wizard in MeterLink™. 5. If the meter is configured to read flow-condition pressure from Transmitter Head 1 of a Dual-Configuration meter, make sure that Ethernet connection between the Dual-Configuration meters is setup correctly and the Dual-Configuration meter IP address (ColocMeterIPAddress) on head 1 is same as the Ethernet IP address (Eth1IPAddr) of head 2 and vice versa. Check if flow-condition pressure is invalid on Transmitter Head 1 of a Dual-Configuration meter. 6. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative. Run Time Issues: 1. Adjust the pressure of the process fluid to within alarm limits. 2. If using an analog pressure device and the input reading is 0, check if IsAI2Avail is equal to 1 in the Meter Information dialog in MeterLink™. If it is not 1, either the I/O Board has been removed or is damaged. Reinstall or replace the board if this value is 0. 3. If using an analog pressure device, verify that the pressure sensor is working properly. 4. If using an analog pressure device, recheck wiring and switch settings as noted above under First Time Setup Issues. 5. If the external source is writing values to the fixed flow pressure (SpecFlowPressure), verify that the external source is still writing valid	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
169	TemperatureValidity	Flow temperature invalid Temperature is invalid if the flow-condition temperature (FlowTemperature) is outside the limits defined by the low and high temperature alarm limits (LowTemperatureAlarm, HighTemperatureAlarm). Temperature is invalid if the meter is configured to read the flow-condition temperature from Transmitter Head 1 of a Dual-Configuration meter and Dual-Configuration meters are not communicating (IsColocMeterCommErr), either due to incorrect configuration or the Transmitter Head 1 is not reachable. Temperature is invalid if the meter is configured to receive the flow-condition temperature value from an external source such as flow computer by writing to the ISO 17089 Modbus register (34052) and the meter has either lost communication with the external source or is not receiving updates on the ISO Modbus register within the ISO 17089 Modbus process data timeout (ISOModbusProcessDataTimeout). Recommended Actions: First Time Startup Issues: 1. Verify that there is voltage to the temperature sensor, either from the terminal on the meter's power supply board or from an external power supply. 2. If using an analog temperature device, verify that the temperature sensor is properly wired to connector TB2-B pins 3 & 4 (ANALOG IN TT- & TT+). 3. Run the Field Setup Wizard in MeterLink™ to properly configure the input including: Source (Live Analog or Fixed), Min and Max input limits corresponding to 4 mA and 20 mA respectively and the Low and High alarm limits. 4. If using an external source to write temperature to the meter, verify that it is properly writing the fixed flow temperature (SpecFlowTemperature) in the proper units. If flow-condition temperature value is updated through the ISO 17089 Modbus register, then the temperature unit is determined by the ISO 17089 Modbus units system (ISOModbusUnitsSystem) else it is determined by the units system (UnitsSystem) and volumetric flow rate time unit (VolFlowRateTimeUnit). The current value will be displayed as Fixed temperature in the Field Setup Wizard in MeterLink™. 5. If the meter is configured to read the flow-condition temperature from Transmitter Head 1 of a Dual-Configuration meter, make sure that the Ethernet connection between the Dual-Configuration meters is setup correctly and the Dual-Configuration meter IP address (ColocMeterIPAddress) on head 1 is same as the Ethernet IP address (Eth1IPAddr) of head 2 and vice versa. Check if the flow-condition temperature is invalid on Transmitter Head 1 of a Dual-Configuration meter. 6. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative. Run Time Issues: 1. Adjust the temperature of the process fluid to within alarm limits. 2. If using an analog temperature device and input reading is 0, check if IsAI1Avail is equal to 1 in the Meter Information dialog in MeterLink™. If it is not 1, either the I/O Board has been removed or it is damaged. Reinstall or replace I/O board if this value is 0. 3. If using an analog temperature device, verify that the temperature sensor is working properly. 4. If using an analog temperature device, recheck the wiring and switch settings as noted above under First Time Setup Issues.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
170	FlowPressureIsOutOfLimits	Flow-condition pressure out-of-limits The flow-condition pressure (FlowPressure) is outside the limits (MinInputPressure to MaxInputPressure). Recommended Actions: 1. If connected to a pressure transducer, verify that the transducer is functioning properly. Verify that the wiring is correctly connected to TB2-B pins 1 & 2 (ANALOG IN PT- and PT+). Verify that the current is between 4 mA and 20 mA. 2. Run the Field Setup Wizard in MeterLink™ to properly configure the input including: Source (Live Analog or Fixed), Min and Max input limits (MinInputPressure and MaxInputPressure) corresponding to 4 mA and 20 mA respectively and the Low and High alarm limits. 3. Adjust the gain and offset (LiveFlowPressureGain and LiveFlowPressureOffset) so the flow-condition pressure (FlowPressure) is correct. 4. If the issue is unresolved, collect a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Within limits (FALSE) Out of limits (TRUE)			
171	FlowTemperatureIsOutOfLimits	Flow-condition temperature out-of-limits The flow-condition temperature (FlowTemperature) is outside the limits (MinInputTemperature to MaxInputTemperature). Recommended Actions: 1. If connected to a temperature transducer, verify that the transducer is functioning properly. Verify that the wiring is correctly connected to TB2-B pins 3 & 4 (ANALOG IN TT- and TT+). Verify that the current is between 4 mA and 20 mA. 2. Run the Field Setup Wizard in MeterLink™ to properly configure the input including: Source (Live Analog or Fixed), Min and Max input limits (MinInputTemperature and MaxInputTemperature) corresponding to 4 mA and 20 mA respectively and the Low and High alarm limits. 3. Adjust the gain and offset (LiveFlowTemperatureGain and LiveFlowTemperatureOffset) so the flow-condition temperature (FlowTemperature) is correct. 4. If the issue is unresolved, collect a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Within limits (FALSE) Out of limits (TRUE)			
172	ExpCorrPressValidity	Pressure expansion correction invalid This indicates the validity of the pressure expansion correction equation used to correct the internal diameter of the meter for changes in pressure.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
173	ExpCorrTempValidity	Temperature expansion correction invalid This indicates the validity of the temperature expansion correction equation used to correct the internal diameter of the meter for changes in temperature.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
174	BatchNewSeq	Number of new sequences in a batch The number of firing sequences since the previous Batch.	R				int	-	-	uint16	-				
175	BatchOldSeq	Number of old sequences in a batch The number of firing sequences from previous Batches used by (BatchPercentSmoothing).	R				int	-	-	uint16	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
176	IsAcqModuleError	Acquisition Module error An Acquisition Module-related error has been detected. The CPU Module's measurement LED (MEAS) will flash green when proper communications with the Acquisition Module are restored. Recommended Actions: 1. If the CPU Module's measurement LED (MEAS) is not flashing green, check the acquisition cable between the Acquisition Module and the CPU Module. This is the cable that runs from the CPU Module up in the cylindrical enclosure down to the Acquisition Module in the lower enclosure to which all the transducer cables attach. Use a screwdriver to verify all the connections are secure. 2. If the CPU Module's measurement LED (MEAS) is still not flashing green, check the Acquisition Module error reasons (AcqModuleErrorReasons). 3. Replace the Acquisition Module. Contact your local area Emerson Flow service representative for a replacement module if a spare is not available. 4. If the issue is unresolved, collect a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	No Acquisition Module error (FALSE) Acquisition Module error detected (TRUE)			
177	IsAcqModuleErrorLatched	Acquisition Module error, latched until acknowledged The alarm value for Acquisition Module errors (IsAcqModuleError) that remains set until manually cleared.	RW	Y			int	-	-	boolean	-		FALSE (0)	FALSE (0)	TRUE (1)
178	IsFwdPropADfltBin1	Fwd chord A bin 1 default proportion indicator Forward direction chord A bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
179	IsFwdPropADfltBin2	Fwd chord A bin 2 default proportion indicator Forward direction chord A bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
180	IsFwdPropADfltBin3	Fwd chord A bin 3 default proportion indicator Forward direction chord A bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
181	IsFwdPropADfltBin4	Fwd chord A bin 4 default proportion indicator Forward direction chord A bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
182	IsFwdPropADfltBin5	Fwd chord A bin 5 default proportion indicator Forward direction chord A bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
183	IsFwdPropADfltBin6	Fwd chord A bin 6 default proportion indicator Forward direction chord A bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
184	IsFwdPropADfltBin7	Fwd chord A bin 7 default proportion indicator Forward direction chord A bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
185	IsFwdPropADfltBin8	Fwd chord A bin 8 default proportion indicator Forward direction chord A bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
186	IsFwdPropADfltBin9	Fwd chord A bin 9 default proportion indicator Forward direction chord A bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
187	IsFwdPropADfltBin10	Fwd chord A bin 10 default proportion indicator Forward direction chord A bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
188	IsFwdPropBDfltBin1	Fwd chord B bin 1 default proportion indicator Forward direction chord B bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
189	IsFwdPropBDfltBin2	Fwd chord B bin 2 default proportion indicator Forward direction chord B bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
190	IsFwdPropBDfltBin3	Fwd chord B bin 3 default proportion indicator Forward direction chord B bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
191	IsFwdPropBDfltBin4	Fwd chord B bin 4 default proportion indicator Forward direction chord B bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
192	IsFwdPropBDfltBin5	Fwd chord B bin 5 default proportion indicator Forward direction chord B bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
193	IsFwdPropBDfltBin6	Fwd chord B bin 6 default proportion indicator Forward direction chord B bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
194	IsFwdPropBDfltBin7	Fwd chord B bin 7 default proportion indicator Forward direction chord B bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
195	IsFwdPropBDfltBin8	Fwd chord B bin 8 default proportion indicator Forward direction chord B bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
196	IsFwdPropBDfltBin9	Fwd chord B bin 9 default proportion indicator Forward direction chord B bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
197	IsFwdPropBDfltBin10	Fwd chord B bin 10 default proportion indicator Forward direction chord B bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
198	IsFwdPropCDfltBin1	Fwd chord C bin 1 default proportion indicator Forward direction chord C bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
199	IsFwdPropCDfltBin2	Fwd chord C bin 2 default proportion indicator Forward direction chord C bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
200	IsFwdPropCDfltBin3	Fwd chord C bin 3 default proportion indicator Forward direction chord C bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
201	IsFwdPropCDfltBin4	Fwd chord C bin 4 default proportion indicator Forward direction chord C bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
202	IsFwdPropCDfltBin5	Fwd chord C bin 5 default proportion indicator Forward direction chord C bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
203	IsFwdPropCDfltBin6	Fwd chord C bin 6 default proportion indicator Forward direction chord C bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
204	IsFwdPropCDfltBin7	Fwd chord C bin 7 default proportion indicator Forward direction chord C bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
205	IsFwdPropCDfltBin8	Fwd chord C bin 8 default proportion indicator Forward direction chord C bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
206	IsFwdPropCDfltBin9	Fwd chord C bin 9 default proportion indicator Forward direction chord C bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
207	IsFwdPropCDfltBin10	Fwd chord C bin 10 default proportion indicator Forward direction chord C bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
208	IsFwdPropDDfltBin1	Fwd chord D bin 1 default proportion indicator Forward direction chord D bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
209	IsFwdPropDDfltBin2	Fwd chord D bin 2 default proportion indicator Forward direction chord D bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
210	IsFwdPropDDfltBin3	Fwd chord D bin 3 default proportion indicator Forward direction chord D bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
211	IsFwdPropDDfltBin4	Fwd chord D bin 4 default proportion indicator Forward direction chord D bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
212	IsFwdPropDDfltBin5	Fwd chord D bin 5 default proportion indicator Forward direction chord D bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
213	IsFwdPropDDfltBin6	Fwd chord D bin 6 default proportion indicator Forward direction chord D bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
214	IsFwdPropDDfltBin7	Fwd chord D bin 7 default proportion indicator Forward direction chord D bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
215	IsFwdPropDDfltBin8	Fwd chord D bin 8 default proportion indicator Forward direction chord D bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
216	IsFwdPropDDfltBin9	Fwd chord D bin 9 default proportion indicator Forward direction chord D bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
217	IsFwdPropDDfltBin10	Fwd chord D bin 10 default proportion indicator Forward direction chord D bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
218	IsFwdPropEDfltBin1	Fwd chord E bin 1 default proportion indicator Forward direction chord E bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
219	IsFwdPropEDfltBin2	Fwd chord E bin 2 default proportion indicator Forward direction chord E bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
220	IsFwdPropEDfltBin3	Fwd chord E bin 3 default proportion indicator Forward direction chord E bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
221	IsFwdPropEDfltBin4	Fwd chord E bin 4 default proportion indicator Forward direction chord E bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
222	IsFwdPropEDfltBin5	Fwd chord E bin 5 default proportion indicator Forward direction chord E bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
223	IsFwdPropEDfltBin6	Fwd chord E bin 6 default proportion indicator Forward direction chord E bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
224	IsFwdPropEDfltBin7	Fwd chord E bin 7 default proportion indicator Forward direction chord E bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
225	IsFwdPropEDfltBin8	Fwd chord E bin 8 default proportion indicator Forward direction chord E bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
226	IsFwdPropEDfltBin9	Fwd chord E bin 9 default proportion indicator Forward direction chord E bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
227	IsFwdPropEDfltBin10	Fwd chord E bin 10 default proportion indicator Forward direction chord E bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
228	IsFwdPropFDfltBin1	Fwd chord F bin 1 default proportion indicator Forward direction chord F bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
229	IsFwdPropFDfltBin2	Fwd chord F bin 2 default proportion indicator Forward direction chord F bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
230	IsFwdPropFDfltBin3	Fwd chord F bin 3 default proportion indicator Forward direction chord F bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
231	IsFwdPropFDfltBin4	Fwd chord F bin 4 default proportion indicator Forward direction chord F bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
232	IsFwdPropFDfltBin5	Fwd chord F bin 5 default proportion indicator Forward direction chord F bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
233	IsFwdPropFDfltBin6	Fwd chord F bin 6 default proportion indicator Forward direction chord F bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
234	IsFwdPropFDfltBin7	Fwd chord F bin 7 default proportion indicator Forward direction chord F bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
235	IsFwdPropFDfltBin8	Fwd chord F bin 8 default proportion indicator Forward direction chord F bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
236	IsFwdPropFDfltBin9	Fwd chord F bin 9 default proportion indicator Forward direction chord F bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
237	IsFwdPropFDfltBin10	Fwd chord F bin 10 default proportion indicator Forward direction chord F bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
238	IsFwdPropGDfltBin1	Fwd chord G bin 1 default proportion indicator Forward direction chord G bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
239	IsFwdPropGDfltBin2	Fwd chord G bin 2 default proportion indicator Forward direction chord G bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
240	IsFwdPropGDfltBin3	Fwd chord G bin 3 default proportion indicator Forward direction chord G bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
241	IsFwdPropGDfltBin4	Fwd chord G bin 4 default proportion indicator Forward direction chord G bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
242	IsFwdPropGDfltBin5	Fwd chord G bin 5 default proportion indicator Forward direction chord G bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
243	IsFwdPropGDfltBin6	Fwd chord G bin 6 default proportion indicator Forward direction chord G bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
244	IsFwdPropGDfltBin7	Fwd chord G bin 7 default proportion indicator Forward direction chord G bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
245	IsFwdPropGDfltBin8	Fwd chord G bin 8 default proportion indicator Forward direction chord G bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
246	IsFwdPropGDfltBin9	Fwd chord G bin 9 default proportion indicator Forward direction chord G bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
247	IsFwdPropGDfltBin10	Fwd chord G bin 10 default proportion indicator Forward direction chord G bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
248	IsFwdPropHDfltBin1	Fwd chord H bin 1 default proportion indicator Forward direction chord H bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
249	IsFwdPropHDfltBin2	Fwd chord H bin 2 default proportion indicator Forward direction chord H bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
250	IsFwdPropHDfltBin3	Fwd chord H bin 3 default proportion indicator Forward direction chord H bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
251	IsFwdPropHDfltBin4	Fwd chord H bin 4 default proportion indicator Forward direction chord H bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
252	IsFwdPropHDfltBin5	Fwd chord H bin 5 default proportion indicator Forward direction chord H bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
253	IsFwdPropHDfltBin6	Fwd chord H bin 6 default proportion indicator Forward direction chord H bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
254	IsFwdPropHDfltBin7	Fwd chord H bin 7 default proportion indicator Forward direction chord H bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
255	IsFwdPropHDfltBin8	Fwd chord H bin 8 default proportion indicator Forward direction chord H bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
256	IsFwdPropHDfltBin9	Fwd chord H bin 9 default proportion indicator Forward direction chord H bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
257	IsFwdPropHDfltBin10	Fwd chord H bin 10 default proportion indicator Forward direction chord H bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
258	IsRevPropADfltBin1	Rev chord A bin 1 default proportion indicator Reverse direction chord A bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
259	IsRevPropADfltBin2	Rev chord A bin 2 default proportion indicator Reverse direction chord A bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
260	IsRevPropADfltBin3	Rev chord A bin 3 default proportion indicator Reverse direction chord A bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
261	IsRevPropADfltBin4	Rev chord A bin 4 default proportion indicator Reverse direction chord A bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
262	IsRevPropADfltBin5	Rev chord A bin 5 default proportion indicator Reverse direction chord A bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
263	IsRevPropADfltBin6	Rev chord A bin 6 default proportion indicator Reverse direction chord A bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
264	IsRevPropADfltBin7	Rev chord A bin 7 default proportion indicator Reverse direction chord A bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
265	IsRevPropADfltBin8	Rev chord A bin 8 default proportion indicator Reverse direction chord A bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
266	IsRevPropADfltBin9	Rev chord A bin 9 default proportion indicator Reverse direction chord A bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
267	IsRevPropADfltBin10	Rev chord A bin 10 default proportion indicator Reverse direction chord A bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
268	IsRevPropBDfltBin1	Rev chord B bin 1 default proportion indicator Reverse direction chord B bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
269	IsRevPropBDfltBin2	Rev chord B bin 2 default proportion indicator Reverse direction chord B bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
270	IsRevPropBDfltBin3	Rev chord B bin 3 default proportion indicator Reverse direction chord B bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
271	IsRevPropBDfltBin4	Rev chord B bin 4 default proportion indicator Reverse direction chord B bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
272	IsRevPropBDfltBin5	Rev chord B bin 5 default proportion indicator Reverse direction chord B bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
273	IsRevPropBDfltBin6	Rev chord B bin 6 default proportion indicator Reverse direction chord B bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
274	IsRevPropBDfltBin7	Rev chord B bin 7 default proportion indicator Reverse direction chord B bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
275	IsRevPropBDfltBin8	Rev chord B bin 8 default proportion indicator Reverse direction chord B bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
276	IsRevPropBDfltBin9	Rev chord B bin 9 default proportion indicator Reverse direction chord B bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
277	IsRevPropBDfltBin10	Rev chord B bin 10 default proportion indicator Reverse direction chord B bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
278	IsRevPropCDfltBin1	Rev chord C bin 1 default proportion indicator Reverse direction chord C bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
279	IsRevPropCDfltBin2	Rev chord C bin 2 default proportion indicator Reverse direction chord C bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
280	IsRevPropCDfltBin3	Rev chord C bin 3 default proportion indicator Reverse direction chord C bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
281	IsRevPropCDfltBin4	Rev chord C bin 4 default proportion indicator Reverse direction chord C bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
282	IsRevPropCDfltBin5	Rev chord C bin 5 default proportion indicator Reverse direction chord C bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
283	IsRevPropCDfltBin6	Rev chord C bin 6 default proportion indicator Reverse direction chord C bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
284	IsRevPropCDfltBin7	Rev chord C bin 7 default proportion indicator Reverse direction chord C bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
285	IsRevPropCDfltBin8	Rev chord C bin 8 default proportion indicator Reverse direction chord C bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
286	IsRevPropCDfltBin9	Rev chord C bin 9 default proportion indicator Reverse direction chord C bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
287	IsRevPropCDfltBin10	Rev chord C bin 10 default proportion indicator Reverse direction chord C bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
288	IsRevPropDDfltBin1	Rev chord D bin 1 default proportion indicator Reverse direction chord D bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
289	IsRevPropDDfltBin2	Rev chord D bin 2 default proportion indicator Reverse direction chord D bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
290	IsRevPropDDfltBin3	Rev chord D bin 3 default proportion indicator Reverse direction chord D bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
291	IsRevPropDDfltBin4	Rev chord D bin 4 default proportion indicator Reverse direction chord D bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
292	IsRevPropDDfltBin5	Rev chord D bin 5 default proportion indicator Reverse direction chord D bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
293	IsRevPropDDfltBin6	Rev chord D bin 6 default proportion indicator Reverse direction chord D bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
294	IsRevPropDDfltBin7	Rev chord D bin 7 default proportion indicator Reverse direction chord D bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
295	IsRevPropDDfltBin8	Rev chord D bin 8 default proportion indicator Reverse direction chord D bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
296	IsRevPropDDfltBin9	Rev chord D bin 9 default proportion indicator Reverse direction chord D bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
297	IsRevPropDDfltBin10	Rev chord D bin 10 default proportion indicator Reverse direction chord D bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
298	IsRevPropEDfltBin1	Rev chord E bin 1 default proportion indicator Reverse direction chord E bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
299	IsRevPropEDfltBin2	Rev chord E bin 2 default proportion indicator Reverse direction chord E bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
300	IsRevPropEDfltBin3	Rev chord E bin 3 default proportion indicator Reverse direction chord E bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
301	IsRevPropEDfltBin4	Rev chord E bin 4 default proportion indicator Reverse direction chord E bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
302	IsRevPropEDfltBin5	Rev chord E bin 5 default proportion indicator Reverse direction chord E bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
303	IsRevPropEDfltBin6	Rev chord E bin 6 default proportion indicator Reverse direction chord E bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
304	IsRevPropEDfltBin7	Rev chord E bin 7 default proportion indicator Reverse direction chord E bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
305	IsRevPropEDfltBin8	Rev chord E bin 8 default proportion indicator Reverse direction chord E bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
306	IsRevPropEDfltBin9	Rev chord E bin 9 default proportion indicator Reverse direction chord E bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
307	IsRevPropEDfltBin10	Rev chord E bin 10 default proportion indicator Reverse direction chord E bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
308	IsRevPropFDfltBin1	Rev chord F bin 1 default proportion indicator Reverse direction chord F bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
309	IsRevPropFDfltBin2	Rev chord F bin 2 default proportion indicator Reverse direction chord F bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
310	IsRevPropFDfltBin3	Rev chord F bin 3 default proportion indicator Reverse direction chord F bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
311	IsRevPropFDfltBin4	Rev chord F bin 4 default proportion indicator Reverse direction chord F bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
312	IsRevPropFDfltBin5	Rev chord F bin 5 default proportion indicator Reverse direction chord F bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
313	IsRevPropFDfltBin6	Rev chord F bin 6 default proportion indicator Reverse direction chord F bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
314	IsRevPropFDfltBin7	Rev chord F bin 7 default proportion indicator Reverse direction chord F bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
315	IsRevPropFDfltBin8	Rev chord F bin 8 default proportion indicator Reverse direction chord F bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
316	IsRevPropFDfltBin9	Rev chord F bin 9 default proportion indicator Reverse direction chord F bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
317	IsRevPropFDfltBin10	Rev chord F bin 10 default proportion indicator Reverse direction chord F bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
318	IsRevPropGDfltBin1	Rev chord G bin 1 default proportion indicator Reverse direction chord G bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
319	IsRevPropGDfltBin2	Rev chord G bin 2 default proportion indicator Reverse direction chord G bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
320	IsRevPropGDfltBin3	Rev chord G bin 3 default proportion indicator Reverse direction chord G bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
321	IsRevPropGDfltBin4	Rev chord G bin 4 default proportion indicator Reverse direction chord G bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
322	IsRevPropGDfltBin5	Rev chord G bin 5 default proportion indicator Reverse direction chord G bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
323	IsRevPropGDfltBin6	Rev chord G bin 6 default proportion indicator Reverse direction chord G bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
324	IsRevPropGDfltBin7	Rev chord G bin 7 default proportion indicator Reverse direction chord G bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
325	IsRevPropGDfltBin8	Rev chord G bin 8 default proportion indicator Reverse direction chord G bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
326	IsRevPropGDfltBin9	Rev chord G bin 9 default proportion indicator Reverse direction chord G bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
327	IsRevPropGDfltBin10	Rev chord G bin 10 default proportion indicator Reverse direction chord G bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
328	IsRevPropHDfltBin1	Rev chord H bin 1 default proportion indicator Reverse direction chord H bin 1 default proportion indicator.	R	Y			int	-	-	boolean	-				
329	IsRevPropHDfltBin2	Rev chord H bin 2 default proportion indicator Reverse direction chord H bin 2 default proportion indicator.	R	Y			int	-	-	boolean	-				
330	IsRevPropHDfltBin3	Rev chord H bin 3 default proportion indicator Reverse direction chord H bin 3 default proportion indicator.	R	Y			int	-	-	boolean	-				
331	IsRevPropHDfltBin4	Rev chord H bin 4 default proportion indicator Reverse direction chord H bin 4 default proportion indicator.	R	Y			int	-	-	boolean	-				
332	IsRevPropHDfltBin5	Rev chord H bin 5 default proportion indicator Reverse direction chord H bin 5 default proportion indicator.	R	Y			int	-	-	boolean	-				
333	IsRevPropHDfltBin6	Rev chord H bin 6 default proportion indicator Reverse direction chord H bin 6 default proportion indicator.	R	Y			int	-	-	boolean	-				
334	IsRevPropHDfltBin7	Rev chord H bin 7 default proportion indicator Reverse direction chord H bin 7 default proportion indicator.	R	Y			int	-	-	boolean	-				
335	IsRevPropHDfltBin8	Rev chord H bin 8 default proportion indicator Reverse direction chord H bin 8 default proportion indicator.	R	Y			int	-	-	boolean	-				
336	IsRevPropHDfltBin9	Rev chord H bin 9 default proportion indicator Reverse direction chord H bin 9 default proportion indicator.	R	Y			int	-	-	boolean	-				
337	IsRevPropHDfltBin10	Rev chord H bin 10 default proportion indicator Reverse direction chord H bin 10 default proportion indicator.	R	Y			int	-	-	boolean	-				
338	FlowDirection	Flow direction Flow direction indicator.	R				int	-	-	boolean	-	Reverse (FALSE) Forward (TRUE)			
339	IsAvgSoundVelRangeErrLatched	Average speed of sound out of limits, latched until acknowledged The latch for the average speed of sound out of limits alarm (IsAvgSoundVelRangeErr) that remains set until manually cleared	RW	Y			int	-	-	boolean	-		FALSE (0)	FALSE (0)	TRUE (1)
340	QMeterValidity	Uncorrected flow-condition volumetric flow rate invalid The volumetric flow rate (no expansion correction) is invalid. The meter is either not in measurement mode (i.e. no chords acquired) or the number of operating chords is below the minimum number required (MinChord) or the diagnostic chord speed of sound is out of range (IsDiagnosticSndSpdRangeErr) or, for a measurement chord, the in-use chord length does not match the calculated chord length (IsChordLengthMismatched). Recommended Actions: 1. From the alarm list, determine which chords are failed and resolve these alarm(s) first. Resolving the chord failures will clear this alarm. 2. If the diagnostic chord speed of sound out of range error is active then resolving it will clear this alarm. 3. If the issue is unresolved, collect a Maintenance Log with MeterLink™ and contact your local area Emerson Flow service representative. See also: IsAcqMode, IsTooFewOperChords, IsDiagnosticSndSpdDetectionFeatureActive	R	Y			int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
341	QFlowValidity	Flow-condition volumetric flow rate invalid The meter either has not collected enough information from the chords to make an accurate measurement or the pressure and/or temperature are invalid and the meter is performing pressure or temperature expansion corrections on the meter's internal diameter. This is an alarm condition that shows the validity of the flow-condition volumetric flow rate (QFlow). The flow-condition volumetric flow rate (QFlow) becomes invalid if the uncorrected flow-condition volumetric flow rate validity (QMeterValidity), temperature expansion correction validity (ExpCorrTempValidity), pressure expansion correction validity (ExpCorrPressValidity), and/or flow profile correction validity (FlowProfileCorrValidity) is invalid. Recommended Actions: 1. If the pressure expansion correction validity alarm is present, correcting it may clear this alarm. 2. If the temperature expansion correction validity alarm is present, correcting it may clear this alarm. 3. If the uncorrected flow-condition volumetric flow rate validity alarm is present, correcting it may clear this alarm. 4. If the flow profile correction validity alarm is present, correcting it may clear this alarm. 5. If the issue is unresolved, collect a Maintenance Log with MeterLink™ and contact your local area Emerson Flow service representative.	R	Y			int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
342	QBaseValidity	Base-condition volumetric flow rate invalid AGA8 base-condition volumetric flow rate (QBase) is invalid if the flow-condition volumetric flow rate is invalid (QFlowValidity), the in-use gas properties are invalid (AreGasPropertiesInvalidInUse), the flow-condition pressure is invalid (PressureValidity) and/or the flow-condition temperature is invalid (TemperatureValidity). Recommended Actions: 1. Verify that the in-use gas properties, flow-condition pressure, flow-condition temperature and flow-condition volumetric flow rate are valid. If invalid, resolve those issues first and this alarm will clear. 2. If the issue is unresolved, collect a Maintenance Log and a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R	Y			int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
343	IsSNRTooLow	Logical OR of SNR of active chords This alarm indicates Signal-to-noise ratio is below the minimum threshold for at least one chord. See also IsSNRTooLowA, IsSNRTooLowB, IsSNRTooLowC, IsSNRTooLowD, IsSNRTooLowE, IsSNRTooLowF, IsSNRTooLowG, IsSNRTooLowH.	R				int	-	-	boolean	-	SNR is acceptable (FALSE) SNR is too low (TRUE)			
344	IsMeasSndSpdRange	Logical OR of active chords SOS out of range errors Logical ORing of measurement speed of sound out of range error for chords A, B, C, D, E, F, G, H. See also: IsMeasSndSpdRangeA, IsMeasSndSpdRangeB, IsMeasSndSpdRangeC, IsMeasSndSpdRangeD, IsMeasSndSpdRangeE, IsMeasSndSpdRangeF, IsMeasSndSpdRangeG, IsMeasSndSpdRangeH.	R				int	-	-	boolean	-	Chords SOS in range (FALSE) Chord SOS out of range (TRUE)			
345	IsAcqModeLatched	Acquisition mode, latched until acknowledged The latched alarm for acquisition mode (IsAcqMode) that remains set until manually cleared.	RW	Y			int	-	-	boolean	-		FALSE (0)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
346	PctGoodA1	Performance of path A1 The performance of path A1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
347	PctGoodA2	Performance of path A2 The performance of path A2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
348	PctGoodB1	Performance of path B1 The performance of path B1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
349	PctGoodB2	Performance of path B2 The performance of path B2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
350	PctGoodC1	Performance of path C1 The performance of path C1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
351	PctGoodC2	Performance of path C2 The performance of path C2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
352	PctGoodD1	Performance of path D1 The performance of path D1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
353	PctGoodD2	Performance of path D2 The performance of path D2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
354	PctGoodE1	Performance of path E1 The performance of path E1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
355	PctGoodE2	Performance of path E2 The performance of path E2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
356	PctGoodF1	Performance of path F1 The performance of path F1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
357	PctGoodF2	Performance of path F2 The performance of path F2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
358	PctGoodG1	Performance of path G1 The performance of path G1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
359	PctGoodG2	Performance of path G2 The performance of path G2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
360	PctGoodH1	Performance of path H1 The performance of path H1 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
361	PctGoodH2	Performance of path H2 The performance of path H2 indicated as the percentage of good signals in those received from that transducer in a batch. See also the minimum percentage of good measurements for working chord (MinPctGood).	R				int	%	%	uint8	%				
362	Freq1FeedbackStatus	Frequency Output 1 pair feedback status Frequency Output 1 pair feedback status.	R				int	-	-	uint8	-	Forward (0) Reverse (1)			
363	Freq2FeedbackStatus	Frequency Output 2 pair feedback status Frequency Output 2 pair feedback status.	R				int	-	-	uint8	-	Forward (0) Reverse (1)			
364	Freq1FeedbackPulseCnt	Frequency Output 1 pair feedback pulse count Frequency Output 1 pair feedback pulse count.	R				int	Time pulses	Time pulses	uint16	Time pulses				
365	Freq2FeedbackPulseCnt	Frequency Output 2 pair feedback pulse count Frequency Output 2 pair feedback pulse count.	R				int	Time pulses	Time pulses	uint16	Time pulses				
366	Freq1DataValidity	Frequency Output 1 data invalid The parameter which the Frequency Output 1 is configured to represent is invalid or the output is currently in test mode. Recommended Actions: 1. You can determine whether the output is in test mode by using Meter Outputs in MeterLink™. 2. If the parameter for which Frequency Output 1 is configured is invalid, other alarms will be present that will help you resolve the issue. 3. If the issue is unresolved, collect a Maintenance Log and Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
367	Freq2DataValidity	Frequency Output 2 data invalid The parameter which the Frequency Output 2 is configured to represent is invalid or the output is currently in test mode. Recommended Actions: 1. You can determine whether the output is in test mode by using Meter Outputs in MeterLink™. 2. If the parameter for which Frequency Output 2 is configured is invalid, other alarms will be present that will help you resolve the issue. 3. If the issue is unresolved, collect a Maintenance Log and Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
368	DO1A	Digital Output 1A value Digital Output 1A value. This value is based on the selected content (DO1AContent) and polarity (DO1AIsInvPolarity).	R				int	-	-	uint8	-				
369	DO1B	Digital Output 1B value Digital Output 1B value. This value is based on the selected content (DO1BContent) and polarity (DO1BIsInvPolarity).	R				int	-	-	uint8	-				
370	DO2A	Digital Output 2A value Digital Output 2A value. This value is based on the selected content (DO2AContent) and polarity (DO2AIsInvPolarity).	R				int	-	-	uint8	-				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
371	DO2B	Digital Output 2B value Digital Output 2B value. This value is based on the selected content (DO2BContent) and polarity (DO2BIsInvPolarity).	R				int	-	-	uint8	-				
372	DI1	Digital Input 1 value Digital Input 1 value.	R				int	-	-	boolean	-				
373	MsqpA1	Maximum signal quality position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
374	MsqpA2	Maximum signal quality position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
375	MsqpB1	Maximum signal quality position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
376	MsqpB2	Maximum signal quality position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
377	MsqpC1	Maximum signal quality position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
378	MsqpC2	Maximum signal quality position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
379	MsqpD1	Maximum signal quality position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
380	MsqpD2	Maximum signal quality position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
381	MsqpE1	Maximum signal quality position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
382	MsqpE2	Maximum signal quality position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
383	MsqpF1	Maximum signal quality position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
384	MsqpF2	Maximum signal quality position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
385	MsqpG1	Maximum signal quality position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
386	MsqpG2	Maximum signal quality position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
387	MsqpH1	Maximum signal quality position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
388	MsqpH2	Maximum signal quality position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
389	QpefA1	Energy arrival position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
390	QpefA2	Energy arrival position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
391	QpefB1	Energy arrival position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
392	QpefB2	Energy arrival position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
393	QpefC1	Energy arrival position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
394	QpefC2	Energy arrival position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
395	QpefD1	Energy arrival position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
396	QpefD2	Energy arrival position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
397	QpefE1	Energy arrival position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
398	QpefE2	Energy arrival position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
399	QpefF1	Energy arrival position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
400	QpefF2	Energy arrival position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
401	QpefG1	Energy arrival position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
402	QpefG2	Energy arrival position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
403	QpefH1	Energy arrival position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
404	QpefH2	Energy arrival position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
405	PfA1	Critical point position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
406	PfA2	Critical point position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
407	PfB1	Critical point position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
408	PfB2	Critical point position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
409	PfC1	Critical point position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
410	PfC2	Critical point position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
411	PfD1	Critical point position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
412	PfD2	Critical point position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
413	PfE1	Critical point position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
414	PfE2	Critical point position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
415	PfF1	Critical point position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
416	PfF2	Critical point position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
417	PfG1	Critical point position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
418	PfG2	Critical point position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
419	PfH1	Critical point position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
420	PfH2	Critical point position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
421	P1A1	Selected peak zero crossing position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
422	P1A2	Selected peak zero crossing position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
423	P1B1	Selected peak zero crossing position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
424	P1B2	Selected peak zero crossing position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
425	P1C1	Selected peak zero crossing position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
426	P1C2	Selected peak zero crossing position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
427	P1D1	Selected peak zero crossing position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
428	P1D2	Selected peak zero crossing position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
429	P1E1	Selected peak zero crossing position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
430	P1E2	Selected peak zero crossing position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
431	P1F1	Selected peak zero crossing position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
432	P1F2	Selected peak zero crossing position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
433	P1G1	Selected peak zero crossing position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
434	P1G2	Selected peak zero crossing position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
435	P1H1	Selected peak zero crossing position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
436	P1H2	Selected peak zero crossing position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
437	PwA1	Selected peak width (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
438	PwA2	Selected peak width (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
439	PwB1	Selected peak width (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
440	PwB2	Selected peak width (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
441	PwC1	Selected peak width (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
442	PwC2	Selected peak width (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
443	PwD1	Selected peak width (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
444	PwD2	Selected peak width (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
445	PwE1	Selected peak width (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
446	PwE2	Selected peak width (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
447	PwF1	Selected peak width (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
448	PwF2	Selected peak width (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
449	PwG1	Selected peak width (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
450	PwG2	Selected peak width (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
451	PwH1	Selected peak width (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
452	PwH2	Selected peak width (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
453	Pp1A1	Peak 1 zero crossing position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
454	Pp1A2	Peak 1 zero crossing position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
455	Pp1B1	Peak 1 zero crossing position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
456	Pp1B2	Peak 1 zero crossing position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
457	Pp1C1	Peak 1 zero crossing position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
458	Pp1C2	Peak 1 zero crossing position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
459	Pp1D1	Peak 1 zero crossing position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
460	Pp1D2	Peak 1 zero crossing position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
461	Pp1E1	Peak 1 zero crossing position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
462	Pp1E2	Peak 1 zero crossing position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
463	Pp1F1	Peak 1 zero crossing position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
464	Pp1F2	Peak 1 zero crossing position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
465	Pp1G1	Peak 1 zero crossing position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
466	Pp1G2	Peak 1 zero crossing position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
467	Pp1H1	Peak 1 zero crossing position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
468	Pp1H2	Peak 1 zero crossing position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
469	Pp2A1	Peak 2 zero crossing position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
470	Pp2A2	Peak 2 zero crossing position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
471	Pp2B1	Peak 2 zero crossing position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
472	Pp2B2	Peak 2 zero crossing position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
473	Pp2C1	Peak 2 zero crossing position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
474	Pp2C2	Peak 2 zero crossing position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
475	Pp2D1	Peak 2 zero crossing position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
476	Pp2D2	Peak 2 zero crossing position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
477	Pp2E1	Peak 2 zero crossing position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
478	Pp2E2	Peak 2 zero crossing position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
479	Pp2F1	Peak 2 zero crossing position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
480	Pp2F2	Peak 2 zero crossing position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
481	Pp2G1	Peak 2 zero crossing position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
482	Pp2G2	Peak 2 zero crossing position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
483	Pp2H1	Peak 2 zero crossing position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
484	Pp2H2	Peak 2 zero crossing position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
485	Pp3A1	Peak 3 zero crossing position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
486	Pp3A2	Peak 3 zero crossing position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
487	Pp3B1	Peak 3 zero crossing position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
488	Pp3B2	Peak 3 zero crossing position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
489	Pp3C1	Peak 3 zero crossing position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
490	Pp3C2	Peak 3 zero crossing position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
491	Pp3D1	Peak 3 zero crossing position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
492	Pp3D2	Peak 3 zero crossing position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
493	Pp3E1	Peak 3 zero crossing position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
494	Pp3E2	Peak 3 zero crossing position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
495	Pp3F1	Peak 3 zero crossing position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
496	Pp3F2	Peak 3 zero crossing position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
497	Pp3G1	Peak 3 zero crossing position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
498	Pp3G2	Peak 3 zero crossing position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
499	Pp3H1	Peak 3 zero crossing position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
500	Pp3H2	Peak 3 zero crossing position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
501	Pp4A1	Peak 4 zero crossing position (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
502	Pp4A2	Peak 4 zero crossing position (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
503	Pp4B1	Peak 4 zero crossing position (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
504	Pp4B2	Peak 4 zero crossing position (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
505	Pp4C1	Peak 4 zero crossing position (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
506	Pp4C2	Peak 4 zero crossing position (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
507	Pp4D1	Peak 4 zero crossing position (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
508	Pp4D2	Peak 4 zero crossing position (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
509	Pp4E1	Peak 4 zero crossing position (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
510	Pp4E2	Peak 4 zero crossing position (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
511	Pp4F1	Peak 4 zero crossing position (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
512	Pp4F2	Peak 4 zero crossing position (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
513	Pp4G1	Peak 4 zero crossing position (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
514	Pp4G2	Peak 4 zero crossing position (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
515	Pp4H1	Peak 4 zero crossing position (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
516	Pp4H2	Peak 4 zero crossing position (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	sample intervals	sample intervals	uint16	sample intervals				
517	Ff1A1	Peak 1 score (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
518	Ff1A2	Peak 1 score (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
519	Ff1B1	Peak 1 score (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
520	Ff1B2	Peak 1 score (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
521	Ff1C1	Peak 1 score (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
522	Ff1C2	Peak 1 score (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
523	Ff1D1	Peak 1 score (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
524	Ff1D2	Peak 1 score (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
525	Ff1E1	Peak 1 score (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
526	Ff1E2	Peak 1 score (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
527	Ff1F1	Peak 1 score (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
528	Ff1F2	Peak 1 score (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
529	Ff1G1	Peak 1 score (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
530	Ff1G2	Peak 1 score (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
531	Ff1H1	Peak 1 score (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
532	Ff1H2	Peak 1 score (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
533	Ff2A1	Peak 2 score (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
534	Ff2A2	Peak 2 score (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
535	Ff2B1	Peak 2 score (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
536	Ff2B2	Peak 2 score (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
537	Ff2C1	Peak 2 score (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
538	Ff2C2	Peak 2 score (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
539	Ff2D1	Peak 2 score (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
540	Ff2D2	Peak 2 score (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
541	Ff2E1	Peak 2 score (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
542	Ff2E2	Peak 2 score (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
543	Ff2F1	Peak 2 score (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
544	Ff2F2	Peak 2 score (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
545	Ff2G1	Peak 2 score (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
546	Ff2G2	Peak 2 score (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
547	Ff2H1	Peak 2 score (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
548	Ff2H2	Peak 2 score (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
549	Ff3A1	Peak 3 score (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
550	Ff3A2	Peak 3 score (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
551	Ff3B1	Peak 3 score (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
552	Ff3B2	Peak 3 score (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
553	Ff3C1	Peak 3 score (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
554	Ff3C2	Peak 3 score (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
555	Ff3D1	Peak 3 score (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
556	Ff3D2	Peak 3 score (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
557	Ff3E1	Peak 3 score (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
558	Ff3E2	Peak 3 score (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
559	Ff3F1	Peak 3 score (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
560	Ff3F2	Peak 3 score (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
561	Ff3G1	Peak 3 score (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
562	Ff3G2	Peak 3 score (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
563	Ff3H1	Peak 3 score (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
564	Ff3H2	Peak 3 score (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
565	Ff4A1	Peak 4 score (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
566	Ff4A2	Peak 4 score (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
567	Ff4B1	Peak 4 score (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
568	Ff4B2	Peak 4 score (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
569	Ff4C1	Peak 4 score (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
570	Ff4C2	Peak 4 score (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
571	Ff4D1	Peak 4 score (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
572	Ff4D2	Peak 4 score (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
573	Ff4E1	Peak 4 score (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
574	Ff4E2	Peak 4 score (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
575	Ff4F1	Peak 4 score (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
576	Ff4F2	Peak 4 score (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
577	Ff4G1	Peak 4 score (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
578	Ff4G2	Peak 4 score (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
579	Ff4H1	Peak 4 score (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
580	Ff4H2	Peak 4 score (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
581	Ff5A1	Peak 5 score (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
582	Ff5A2	Peak 5 score (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
583	Ff5B1	Peak 5 score (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
584	Ff5B2	Peak 5 score (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
585	Ff5C1	Peak 5 score (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
586	Ff5C2	Peak 5 score (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
587	Ff5D1	Peak 5 score (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
588	Ff5D2	Peak 5 score (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
589	Ff5E1	Peak 5 score (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
590	Ff5E2	Peak 5 score (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
591	Ff5F1	Peak 5 score (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
592	Ff5F2	Peak 5 score (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
593	Ff5G1	Peak 5 score (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
594	Ff5G2	Peak 5 score (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
595	Ff5H1	Peak 5 score (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
596	Ff5H2	Peak 5 score (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	int16	-				
597	SelPkA1	Selected peak (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
598	SelPkA2	Selected peak (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
599	SelPkB1	Selected peak (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
600	SelPkB2	Selected peak (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
601	SelPkC1	Selected peak (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
602	SelPkC2	Selected peak (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
603	SelPkD1	Selected peak (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
604	SelPkD2	Selected peak (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
605	SelPkE1	Selected peak (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
606	SelPkE2	Selected peak (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
607	SelPkF1	Selected peak (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
608	SelPkF2	Selected peak (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
609	SelPkG1	Selected peak (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
610	SelPkG2	Selected peak (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
611	SelPkH1	Selected peak (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
612	SelPkH2	Selected peak (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				int	-	-	uint8	-				
613	IsElecTempOutOfRange	Electronics temperature is out of nominal range The temperature of the electronics is out of its nominal operating range. There are separate limits for the CPU and Acquisition Modules. For the CPU Module, the range is from the CPU temperature low limit (SysTempLoLmt) to the CPU temperature high limit (SysTempHiLmt). For the Acquisition Module, the range is from the Acquisition Module temperature low limit (SysTempAcqModuleLoLmt) to the Acquisition Module temperature high limit (SysTempAcqModuleHiLmt). Operating outside the nominal operating range could lead to a system failure. Recommended Actions: 1. Attempt to warm or cool the meter electronics housing. 2. If the electronics is mounted to the meter and the process fluid in the meter is over 65 °C, you must remote mount the electronics off from the meter body. 3. Collect a Maintenance Log using MeterLink™ while the meter is experiencing the issue, collect an Archive Log (Daily/Hourly/Alarm/Audit/System) using MeterLink™ from the meter and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Electronics temperature within range (FALSE) Electronics temperature out of range (TRUE)			
614	IsElecVoltOutOfRange	Electronics voltage out of range The CPU Module system voltages or the Acquisition Module system voltages are out-of-range. Valid CPU Module voltages are SysVoltage1V, SysVoltage1V2, SysVoltage2V5, SysVoltage3V3 and valid Acquisition Module System voltages are SysVoltageAcqModule1V2, SysVoltageAcqModule2V5, SysVoltageAcqModule3V3. Recommended Actions: 1. Replace the CPU Module if one or more of the CPU voltages (SysVoltage1V, SysVoltage1V2, SysVoltage2V5 or SysVoltage3V3) is out-of-range. 2. Replace the Acquisition Module if one or more of the Acquisition Module voltages (SysVoltageAcqModule1V2, SysVoltageAcqModule2V5 or SysVoltageAcqModule3V3) is out-of-range. 3. If the issue is unresolved, contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	All electronics voltages within range (FALSE) One or more electronics voltages out of range (TRUE)			
615	IsAnyLogFull	At least one archive log is full This indicates if any log (System, Audit, Alarm, Hourly or Daily) is full.	R	Y			int	-	-	boolean	-	No full logs (FALSE) At least one log full (TRUE)			
616	IsHourlyLogFull	Hourly archive log is full The hourly archive log is full and the log is not configured to be overwritten automatically. This feature is configured using DoOverwriteUnreadHourlyLog. Recommended Actions: 1. Collect the hourly archive log records using MeterLink™ and allow MeterLink™ to mark them as read which will allow them to be overwritten. 2. If it is desirable to let the meter automatically overwrite the oldest log record once the log is full, use the Edit/Compare configuration in MeterLink™ to change DoOverwriteUnreadHourlyLog to overwrite old records.	R				int	-	-	boolean	-	Log not full (FALSE) Log full (TRUE)			
617	IsDailyLogFull	Daily archive log is full The daily archive log is full and the log is not configured to be overwritten automatically. This feature is configured using DoOverwriteUnreadDailyLog. Recommended Actions: 1. Collect the daily archive log records using MeterLink™ and allow MeterLink™ to mark them as read which will allow them to be overwritten. 2. If it is desirable to let the meter automatically overwrite the oldest log record once the log is full, use the Edit/Compare configuration in MeterLink™ to change DoOverwriteUnreadDailyLog to overwrite old records.	R				int	-	-	boolean	-	Log not full (FALSE) Log full (TRUE)			
618	IsAuditLogFull	Audit archive log is full The audit archive log is full and the log is not configured to be overwritten automatically. This feature is configured using DoOverwriteUnreadAuditLog. Recommended Actions: 1. Collect the audit archive log records using MeterLink™ and allow MeterLink™ to mark them as read which will allow them to be overwritten. 2. If it is desirable to let the meter automatically overwrite the oldest log record once the log is full, use the Edit/Compare configuration in MeterLink™ to change DoOverwriteUnreadAuditLog to overwrite old records.	R				int	-	-	boolean	-	Log not full (FALSE) Log full (TRUE)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
619	IsAlarmLogFull	Alarm archive log is full The alarm archive log is full and the log is not configured to be overwritten automatically. This feature is configured using DoOverwriteUnreadAlarmLog. Recommended Actions: 1. Collect the alarm archive log records using MeterLink™ and allow MeterLink™ to mark them as read which will allow them to be overwritten. 2. If it is desirable to let the meter automatically overwrite the oldest log record once the log is full, use the Edit/Compare configuration in MeterLink™ to change DoOverwriteUnreadAlarmLog to overwrite old records.	R				int	-	-	boolean	-	Log not full (FALSE) Log full (TRUE)			
620	IsSystemLogFull	System archive log is full The system archive log is full and the log is not configured to be overwritten automatically. This feature is configured using DoOverwriteUnreadSystemLog. Recommended Actions: 1. Collect the system archive log records using MeterLink™ and allow MeterLink™ to mark them as read which will allow them to be overwritten. 2. If it is desirable to let the meter automatically overwrite the oldest log record once the log is full, use the Edit/Compare configuration in MeterLink™ to change DoOverwriteUnreadSystemLog to overwrite old records.	R				int	-	-	boolean	-	Log not full (FALSE) Log full (TRUE)			
621	IsWarmStartReq	Meter warm start (restart) required The meter configuration has changed and requires a restart for the change to take effect. Recommended Actions: 1. If you are unaware of changes made to the meter's configuration, collect the Audit log using Archive Logs in MeterLink™ to review the configuration changes. If the changes are valid, momentarily remove power from the meter to allow it to restart which will clear this alarm. 2. If the Audit log shows no changes, contact your local area Emerson Flow service representative for assistance.	R				int	-	-	boolean	-	No warm start required (FALSE) Warm start required (TRUE)			
622	AbsMaxPeakMinA1	Smallest absolute maximum peak (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
623	AbsMaxPeakMinA2	Smallest absolute maximum peak (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
624	AbsMaxPeakMinB1	Smallest absolute maximum peak (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
625	AbsMaxPeakMinB2	Smallest absolute maximum peak (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
626	AbsMaxPeakMinC1	Smallest absolute maximum peak (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
627	AbsMaxPeakMinC2	Smallest absolute maximum peak (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
628	AbsMaxPeakMinD1	Smallest absolute maximum peak (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
629	AbsMaxPeakMinD2	Smallest absolute maximum peak (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
630	AbsMaxPeakMinE1	Smallest absolute maximum peak (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
631	AbsMaxPeakMinE2	Smallest absolute maximum peak (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
632	AbsMaxPeakMinF1	Smallest absolute maximum peak (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
633	AbsMaxPeakMinF2	Smallest absolute maximum peak (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
634	AbsMaxPeakMinG1	Smallest absolute maximum peak (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
635	AbsMaxPeakMinG2	Smallest absolute maximum peak (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
636	AbsMaxPeakMinH1	Smallest absolute maximum peak (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
637	AbsMaxPeakMinH2	Smallest absolute maximum peak (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
638	AbsMaxPeakMaxA1	Largest absolute maximum peak (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
639	AbsMaxPeakMaxA2	Largest absolute maximum peak (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
640	AbsMaxPeakMaxB1	Largest absolute maximum peak (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
641	AbsMaxPeakMaxB2	Largest absolute maximum peak (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
642	AbsMaxPeakMaxC1	Largest absolute maximum peak (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
643	AbsMaxPeakMaxC2	Largest absolute maximum peak (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
644	AbsMaxPeakMaxD1	Largest absolute maximum peak (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
645	AbsMaxPeakMaxD2	Largest absolute maximum peak (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
646	AbsMaxPeakMaxE1	Largest absolute maximum peak (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
647	AbsMaxPeakMaxE2	Largest absolute maximum peak (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
648	AbsMaxPeakMaxF1	Largest absolute maximum peak (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
649	AbsMaxPeakMaxF2	Largest absolute maximum peak (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
650	AbsMaxPeakMaxG1	Largest absolute maximum peak (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
651	AbsMaxPeakMaxG2	Largest absolute maximum peak (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
652	AbsMaxPeakMaxH1	Largest absolute maximum peak (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
653	AbsMaxPeakMaxH2	Largest absolute maximum peak (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				int	-	-	uint16	-				
654	DoUpdtChordDiag	Signal processing diagnostic data (chord diagnostic) update control When set to TRUE (1), signal processing diagnostic data (chord diagnostic data) is updated in the database. The diagnostic data include following data points: Minimum Tspf value (TspfMinA1..TspfMinH2) Maximum Tspf value (TspfMaxA1..TspfMaxH2) Mean Tspf value (TspfMeanA1..TspfMeanH2) Minimum signal quality value (SigQltyMinA1..SigQltyMinH2) Maximum signal quality value (SigQltyMaxA1..SigQltyMaxH2) Mean signal quality value (SigQltyMeanA1..SigQltyMeanH2) Gain value last used by transducer (GainPrevA1..GainPrevH2) Smallest absolute maximum peak (AbsMaxPeakMinA1..AbsMaxPeakMinH2) Largest absolute maximum peak (AbsMaxPeakMaxA1..AbsMaxPeakMaxH2) Mean value of absolute maximum peak (AbsMaxPeakMeanA1..AbsMaxPeakMeanH2).	RW				int	-	-	boolean	-	Do not update (FALSE) Do update (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
655	DoUpdtTrigDeltaVols	Trigger for updating "triggered" delta volumes Trigger for updating "triggered" delta volumes. When set to TRUE (1), the triggered delta volume points, TrigDeltaPosVolFlow, TrigDeltaNegVolFlow, TrigDeltaPosVolBase, TrigDeltaNegVolBase, TrigPrevPosVolFlow, TrigPrevNegVolFlow, TrigPrevPosVolBase and TrigPrevNegVolBase are updated with the appropriate volume since the previous trigger. The meter clears this point to FALSE (0) when the triggered delta volume points have been updated.	RW				int	-	-	boolean	-	Do not update (FALSE) Do update (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
656	DO1PairTestEnable	Enables test mode for Digital Output 1 pair Used to enable the test mode for Digital Output 1 pair (DO1A and DO1B). When set to TRUE (1), the test mode is enabled and digital outputs 1A and 1B are set to the levels specified by DO1A test mode value (DO1ATestVal) and DO1B test mode value (DO1BTestVal). When this point is set to TRUE (1), the digital output pair remains in the test mode for a period of time set by non-normal operation timeout (NonNormalModeTimeout) unless the test mode is explicitly exited by setting this point to FALSE (0).	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
657	DO2PairTestEnable	Enables test mode for Digital Output 2 pair Used to enable the test mode for Digital Output 2 pair (DO2A and DO2B). When set to TRUE, the test mode is enabled and digital outputs 2A and 2B are set to the levels specified by DO2A test mode value (DO2ATestVal) and DO2B test mode value (DO2BTestVal). When this point is set to TRUE (1), the digital output pair remains in the test mode for a period of time set by non-normal operation timeout (NonNormalModeTimeout) unless the test mode is explicitly exited by setting this point to FALSE (0).	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
658	DO1ATestVal	Digital Output 1A test mode value Specifies the value (state) of Digital Output 1A when in the test mode (DO1PairTestEnable).	RW				int	-	-	uint8	-	Test low (0) Test high (1)	0	0	1
659	DO1BTestVal	Digital Output 1B test mode value Specifies the value (state) of Digital Output 1B when in the test mode (DO1PairTestEnable).	RW				int	-	-	uint8	-	Test low (0) Test high (1)	0	0	1
660	DO2ATestVal	Digital Output 2A test mode value Specifies the value (state) of Digital Output 2A when in the test mode (DO2PairTestEnable).	RW				int	-	-	uint8	-	Test low (0) Test high (1)	0	0	1
661	DO2BTestVal	Digital Output 2B test mode value Specifies the value (state) of Digital Output 2B when in the test mode (DO2PairTestEnable).	RW				int	-	-	uint8	-	Test low (0) Test high (1)	0	0	1
662	LiveFlowPressureCalCtrl	Selects the value to use when calibrating the live pressure input source This turns the live pressure input calibration mode on or off. This point also specifies which pressure value to use when calibrating (FlowPressureWhileCal) by either choosing the source to be the last live input value prior to entering the calibration mode (freezing) or using a specified (fixed) flow-condition pressure (SpecFlowPressure). When the pressure value source is selected, the meter remains in the calibration mode for a period of time set by non-normal operation timeout (NonNormalModeTimeout) unless the mode is explicitly exited by setting this point to Off (0).	RW				int	-	-	uint8	-	Off (0) Cal - Freeze input (1) Cal - Use fixed (2)	0	0	2
663	LiveFlowTemperatureCalCtrl	Selects the value to use when calibrating the live temperature input source This turns the live temperature input calibration mode on or off. This point also specifies which temperature value to use when calibrating (FlowTemperatureWhileCal) by either choosing the source to be the last live input value prior to entering the calibration mode (freezing) or using a specified (fixed) flow-condition temperature (SpecFlowTemperature). When the temperature value source is selected, the meter remains in the calibration mode for a period of time set by non-normal operation timeout (NonNormalModeTimeout) unless the mode is explicitly exited by setting this point to Off (0).	RW				int	-	-	uint8	-	Off (0) Cal - Freeze input (1) Cal - Use fixed (2)	0	0	2
664	FlowPOrTSrcUponAlarm	Flow pressure and/or temperature source when in alarm Selects the flow-condition pressure and/or temperature source when the corresponding input is in alarm. Either the last good (i.e., non-alarm) value or a fixed (specified) value is used. To fix (specify) a value, use the appropriate data point: SpecFlowPressure or SpecFlowTemperature.	RW	Y	Y	Y	int	-	-	uint8	-	Use last good value (0) Use fixed value (1)	0	0	1
665	AO1DataValidity	Analog Output 1 data invalid Analog Output 1 (AO1) is invalid. The analog output is considered invalid if the analog output is in test mode or the content the analog output is trying to drive is invalid or the loop current mode is disabled via HART. The content of AO1 is specified by AO1Content. Recommended Actions: 1. If an alarm exists for the content selected to be output on Analog Output 1 (AO1Content), resolving that issue should clear this alarm. 2. If the content selected for Analog Output 1 is not in alarm, then verify that the output is not fixed or set in test mode or the loop current mode has been not been disabled via HART. 3. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
666	IsAO1EnableTest	Analog Output 1 test enable Enables the Analog Output Test mode for Analog Output 1. When in the Analog Output Test mode, Analog Output 1 is fixed at the percentage of full scale specified via the Analog Output 1 test mode output percent configuration point (AO1TestModeOutputPercent) (regardless of the actual data content value). If Analog Output 1 remains in Analog Output Test mode for longer than the non-normal mode timeout (NonNormalModeTimeout), Analog Output 1 automatically exits Analog Output Test mode and returns to normal operation.	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
667	AO1TestModeOutputPercent	Analog Output 1 test mode percentage of full-scale Specifies the Analog Output 1 Test mode percentage of full-scale. This specifies the analog current (as a percentage of the current output range, 4-20 mA) to force Analog Output 1 when in the Analog Output Test mode enabled via the IsAO1EnableTest data point.	RW				int	%	%	uint8	%		50	0	105
668	AO1IsFixed	Analog Output 1 (HART PV) is fixed Analog Output 1 current is in test mode and fixed. The current can be fixed by using the Outputs Test dialog of MeterLink™ by placing the output in test mode. Recommended Actions: 1. Once the Analog Output 1 is removed from test mode, this alarm will clear. See also IsAO1EnableTest data point.	R				int	-	-	boolean	-	Current not fixed (FALSE) Current fixed (TRUE)			
669	AO1IsSaturated	Analog Output 1 (HART PV) is saturated Analog Output 1 is saturated (i.e. the loop current has reached its upper or lower endpoint and cannot increase or decrease any further). Recommended Actions: 1. The analog output may need to be rescaled to prevent it from saturating. Use the Field Setup Wizard in MeterLink™ to configure Analog Output 1.	R				int	-	-	boolean	-	Current not saturated (FALSE) Current saturated (TRUE)			
670	AO1ActionUponInvalidContent	Analog Output 1 current action upon invalid content Specifies the action for Analog Output 1 current when the content is invalid. No special action is taken when set to None.	RW	Y	Y	Y	int	-	-	uint8	-	High - 20 mA (0) Low - 4 mA (1) Hold last value (239) Very low - 3.5 mA (240) Very high - 20.5 mA (241) None (251)	240	0	251
671	AO2DataValidity	Analog Output 2 data invalid Analog Output 2 (AO2) is invalid. The analog output is considered invalid if the analog output is in test mode or the content the analog output is trying to drive is invalid. The content of AO2 is specified by AO2Content. Recommended Actions: 1. If an alarm exists for the content selected to be output on Analog Output 2 (AO2Content), resolving that issue should clear this alarm. 2. If the content selected for Analog Output 2 is not in alarm, then verify that the output is not fixed or set in test mode. 3. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
672	IsAO2EnableTest	Analog Output 2 test enable Enables the Analog Output Test mode for Analog Output 2. When in the Analog Output Test mode, Analog Output 2 is fixed at the percentage of full scale specified via the Analog Output 2 test mode output percent configuration point (AO2TestModeOutputPercent) (regardless of the actual data content value). If Analog Output 2 remains in Analog Output Test mode for longer than the non-normal mode timeout (NonNormalModeTimeout), Analog Output 2 automatically exits Analog Output Test mode and returns to normal operation.	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
673	AO2TestModeOutputPercent	Analog Output 2 test mode percentage of full-scale Specifies the Analog Output 2 test mode percentage of full-scale. This specifies the analog current (as a percentage of the current output range, 4-20 mA) to force Analog Output 2 when in the Analog Output Test mode (enabled via the IsAO2EnableTest data point).	RW				int	%	%	uint8	%		50	0	105
674	AO2IsFixed	Analog Output 2 (HART SV) is fixed Analog Output 2 current is in test mode and fixed. The current can be fixed by using the Outputs Test dialog of MeterLink™ by placing the output in test mode. Recommended Actions: 1. Once the Analog Output 2 is removed from test mode, this alarm will clear. See also IsAO2EnableTest data point.	R				int	-	-	boolean	-	Current not fixed (FALSE) Current fixed (TRUE)			
675	AO2IsSaturated	Analog Output 2 (HART SV) is saturated Analog Output 2 is saturated (i.e. the loop current has reached its upper or lower endpoint and cannot increase or decrease any further). Recommended Actions: 1. The analog output may need to be rescaled to prevent it from saturating. Use the Field Setup Wizard in MeterLink™ to configure Analog Output 2.	R				int	-	-	boolean	-	Current not saturated (FALSE) Current saturated (TRUE)			
676	AO2ActionUponInvalidContent	Analog Output 2 current action upon invalid content Specifies the action for Analog Output 2 current when the content is invalid. No special action is taken when set to None.	RW	Y	Y	Y	int	-	-	uint8	-	High - 20 mA (0) Low - 4 mA (1) Hold last value (239) Very low - 3.5 mA (240) Very high - 20.5 mA (241) None (251)	240	0	251
677	FlowPressureSrc	Indicates the current source for the flow pressure value (FlowPressure) This indicates the current source for the flow pressure value (FlowPressure)	R				int	-	-	uint8	-	Not used (0) Live (1) Fixed (2) Frozen (3)			
678	FlowTemperatureSrc	Indicates the current source for the flow temperature value (FlowTemperature) This indicates the current data source for the flow temperature value (FlowTemperature).	R				int	-	-	uint8	-	Not used (0) Live (1) Fixed (2) Frozen (3)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
679	DitherEnable	Enables dithering (progressive jitter after each transducer firing) Turns dithering on when set to TRUE (1) which minutely alters the firing time to prevent problems associated with resonance from building up.	RW	Y	Y	Y	int	-	-	uint8	-	Disable (0) Enable (1)	1	0	1
680	AsyncEnable	Enables asynchronous firing sequences (progressive jitter after each firing sequence) Enables asynchronous firing sequences (progressive jitter after each firing sequence).	RW	Y		Y	int	-	-	uint8	-	Disable (0) Enable (1)	0	0	1
681	DampEnable	Enables firing transducer dampening Enables firing transducer dampening.	RW	Y		Y	int	-	-	uint8	-	Disable (0) Enable (1)	0	0	1
682	DI1Mode	Digital Input 1 mode Specifies the Digital Input 1 (DI1) operating mode. If Digital Input/Calibration Input is selected, general input or calibration is determined by the Digital Input 1 calibration control flag (IsDI1UsedForCal). I/O board type (IOBdType) 4 and above is required to select Frequency/Digital Output 6.	RW	Y	Y	Y	int	-	-	uint8	-	Digital Input/Calibration Input (0) Frequency/Digital Output 6 (2)	2	0	2
683	IsDI1UsedForCal	Determines digital input 1 functionality Specifies whether digital input 1 (DI1) is used for general purpose when set to FALSE (0) or for synchronizing calibration when set to TRUE (1). If used for calibration, the polarity is determined by the IsDI1ForCalActiveLow data point and the gating edge is determined by the IsDI1ForCalStateGated data point.	RW				int	-	-	boolean	-	General purpose (FALSE) Used for calibration (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
684	IsDI1ForCalActiveLow	Determines digital input 1 polarity for calibration use This point specifies the polarity for digital input 1 (DI1) when it is configured via IsDI1UsedForCal for use in synchronizing a calibration. See also IsDI1ForCalStateGated.	RW	Y	Y		int	-	-	boolean	-	Digital Input 1 calibrate active high (FALSE) Digital Input 1 calibrate active low (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
685	IsDI1ForCalStateGated	Determines digital input 1 gating for calibration use This point specifies the calibration gating for digital input 1 (DI1) when it is configured via IsDI1UsedForCal for use in synchronizing a calibration. When FALSE (0), the calibration is started/stopped via an inactive->active edge; when TRUE (1), the calibration is started via an inactive->active state change and stopped via an active->inactive state change. The active edge/state is specified via IsDI1ForCalActiveLow.	RW	Y	Y		int	-	-	boolean	-	Digital Input 1 calibrate edge gated (FALSE) Digital Input 1 calibrate state gated (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
686	IsCalOn	Identifies when the meter is in the calibration mode Identifies when the meter is in the calibration mode.	R				int	-	-	boolean	-	Off (FALSE) On (TRUE)			
687	IsCalOnBatch	Identifies when the CalVol and CalTime data points are being updated Identifies when the CalVol and CalTime data points are being updated.	R				int	-	-	boolean	-	Batch calibration off (FALSE) Batch calibration on (TRUE)			
688	IsPPPSupported	PPP connections are supported Boolean that indicates if PPP is supported or not. If variable does not exist on a meter, assumed that PPP is not supported.	R				int	-	-	boolean	-				
689	CommTCPTimeoutPortA	Inactivity timeout for PPP connections, port A Specifies the inactivity timeout (no TCP/IP packets) before the meter automatically disconnects a PPP connection (direct serial or modem connection) on Port A.	RW	Y	Y		int	sec	sec	uint8	sec		15	1	60
690	CommTCPTimeoutPortB	Inactivity timeout for PPP connections, port B Specifies the inactivity timeout (no TCP/IP packets) before the meter automatically disconnects a PPP connection (direct serial or modem connection) on Port B.	RW	Y	Y		int	sec	sec	uint8	sec		15	1	60
691	CommTCPTimeoutPortC	Inactivity timeout for PPP connections, port C Specifies the inactivity timeout (no TCP/IP packets) before the meter automatically disconnects a PPP connection (direct serial or modem connection) on Port C.	RW	Y	Y		int	sec	sec	uint8	sec		15	1	60
692	CommTCPMaxDatagramSizePortA	Max datagram size port A The maximum MTU and MRU bytes in a datagram on serial port A.	RW	Y	Y		int	-	-	uint16	-		576	128	16384
693	CommTCPMaxDatagramSizePortB	Max datagram size port B The maximum MTU and MRU bytes in a datagram on serial port B.	RW	Y	Y		int	-	-	uint16	-		576	128	16384
694	CommTCPMaxDatagramSizePortC	Max datagram size port C The maximum MTU and MRU bytes in a datagram on serial port C.	RW	Y	Y		int	-	-	uint16	-		576	128	16384
695	IsRunningAvgValid	One minute average validity Are the values in the one minute averages valid for use with the baseline	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
696	RunningAvgSwirlAngle	Swirl angle one minute average A running average of swirl angle (SwirlAngle) over one minute when the running averages are valid (IsRunningAvgValid).	R				int	deg	deg	int8	deg				
697	IsReverseFlowDetectionEnabled	Enables or disables reverse flow detection Disables reverse flow detection (IsReverseFlowDetected) when set FALSE (0). Setting this to TRUE (1) will enable reverse flow detection.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
698	FlowProfileCorrValidity	Flow profile correction invalid Flow profile correction factor (CorrectionFactor) is invalid if the AGA8 flow-condition calculations (AGA8FlowCalcValidity) and uncorrected flow-condition volumetric flow rate (QMeterValidity) are invalid. Recommended Actions: 1. Verify that AGA8 flow-condition calculations and uncorrected flow-condition volumetric flow rate are valid. If invalid, resolve those issues first and this alarm will clear. 2. If the issue is unresolved, collect a Maintenance Log and a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
699	AGA8BaseCalcValidity	AGA8 base-condition calculation invalid AGA8 base-condition calculations are invalid if the in-use gas composition, specific gravity and/or heating value are invalid (AreGasPropertiesInvalidInUse) or the AGA8 base calculation status (AGA8BaseCalcStatus) is a non-zero value. Recommended Actions: 1. Verify that the in-use gas properties are valid. If invalid, resolve issue which is causing the in-use gas properties invalid and this alarm will clear. 2. If the issue is unresolved, collect a Maintenance Log and a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
700	AGA8FlowCalcValidity	AGA8 flow-condition calculation invalid AGA8 flow-condition calculations are invalid if the AGA8 base-condition calculations are invalid (AGA8BaseCalcValidity), the flow-condition pressure is invalid (PressureValidity), the flow-condition temperature is invalid (TemperatureValidity) and/or the AGA8 flow calculation status (AGA8FlowCalcStatus) is a non-zero value. Recommended Actions: 1. Verify that the AGA8 base-condition calculations, flow-condition pressure, flow-condition temperature and flow-condition volumetric flow rate are valid. If invalid, resolve those issues first and this alarm will clear. 2. If the issue is unresolved, collect a Maintenance Log and a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
701	IsAGA8ConvValid	AGA8 flow- to base-condition conversion validity AGA8 flow- to base-condition conversion validity.	R				int	-	-	boolean	-				
702	IsAvgSoundVelRangeErr	Average speed of sound out of limits The average speed of sound (AvgSndVel) measured by the meter is outside the user determined high or low speed of sound limits (AvgSoundVelLoLmt, AvgSoundVelHiLmt). For HART applications, the HART average speed of sound out of limits alarm (AvgSndVelIsOutOfLimits) is used. Recommended Actions: 1. Compare the average speed of sound of the meter to the speed of sound calculated from gas composition. If the values match, it is recommended that you move the limits to position the average speed of sound within the limits. Use the Edit/Compare Configuration in MeterLink™ to modify AvgSoundVelHiLmt and AvgSoundVelLoLmt. 2. If the issue is unresolved, collect a Maintenance Log with MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	SOS within range (FALSE) SOS out of range (TRUE)			
703	EnergyRateValidity	Energy flow rate invalid The calculated energy flow rate (EnergyRate) is invalid. A problem has occurred with the flow-condition pressure and/or temperature inputs, AGA8 calculations or heating value. The energy rate (EnergyRate) becomes invalid if either the base-condition volumetric flow rate is invalid (QBaseValidity) or if an invalid gas heating value (AreGasPropertiesInvalidInUse) is used. Recommended Actions: 1. If the base-condition volumetric flow rate is invalid, resolve this issue first before trying to resolve this alarm. 2. Verify using MeterLink™ that a valid heating value (MeasVolGrossHeatingVal) is specified in the meter or a live gas chromatograph is configured and the meter reports no invalid GC alarms. Resolve these alarms if present. 3. If the issue is unresolved, collect a Maintenance Log with MeterLink™ and contact your local area Emerson Flow service representative.	R	Y			int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
704	IsEnergyRateInvalid	Energy flow rate invalid This indicates when the energy rate (EnergyRate) is invalid. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			int	-	-	boolean	-	Invalid (TRUE) Valid (FALSE)			
705	MassRateValidity	Mass flow rate invalid The calculated mass flow rate (MassRate) is invalid. A problem has occurred with flow-condition pressure and/or temperature inputs or AGA8 calculations (HCH_Method). Mass rate (MassRate) becomes invalid if either the flow-condition volumetric flow rate is invalid (QFlowValidity) or the AGA8 flow calculation is invalid (AGA8FlowCalcValidity). This is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Recommended Actions: 1. Other primary cause alarms will be present in the alarm list. Resolve those alarms first and this alarm will clear. 2. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative.	R	Y			int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
706	AvgSndVelIsOutOfLimits	Average speed of sound out of limits (HART-specific) The meter's measured average speed of sound (AvgSndVel) is out of limits (SSMin, SSMax). This alarm is used for HART applications. The non-HART average speed of sound out of limits alarm (IsAvgSoundVelRangeErr) is used for other applications. Recommended Actions: 1. Verify that all the chords are measuring the same Speed of Sound within about 0.15%. Look for alarms that indicate transducer problems and resolve any of these issues. This could include failing transducers, debris buildup on transducers or incorrectly entered path lengths in the configuration. 2. If the chords agree well, it is recommended to compare the meter's average speed of sound with the speed of sound calculated from gas composition. If they agree within 0.3%, it is recommended that the minimum (SSMin) or maximum (SSMax) speed of sound be adjusted so the meter's average speed of sound falls within these limits. 3. If the issue is unresolved, collect a Maintenance Log using MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-	Within limits (FALSE) Out of limits (TRUE)			
707	IsAcqMode	Acquisition mode The meter is trying to acquire measurement data, but it is not measuring. Possible causes include transducer failures, miswired transducers, operating below minimum process pressure for the meter, invalid chord length, malfunctioning Acquisition Module and fluid type not supported by meter such as high levels of Carbon Dioxide. Recommended Actions: 1. Verify that the meter is operating above the minimum process pressure indicated on the meter nameplate. If not, increase the operating pressure. 2. Verify that the process fluid rate has not exceeded the maximum rate indicated on the meter nameplate. Lower the flow rate if necessary. 3. If this is a new meter or an upgraded meter, verify the chord lengths (LA, LB, LC, LD, LE, LF, LG and LH) and correct if needed. If these parameters are incorrect, check all meter parameters against the meter Zero Flow Calibration report. This report can be requested from your local area Emerson Flow service representative. 4. Check the transducer wiring for all pairs of transdcers. Verify that all connections are secure and that wires are connected to the correct terminals on the Acquisition Module. 5. Replace the Acquisition Module with a spare to see if this corrects the issue. If it does and the meter is still under warranty, you may request a replacement module from your local area Emerson Flow service representative. 6. If the issue is unresolved, collect a Maintenance Log, Waveform stream file and Configuration file using MeterLink™ while the meter is experiencing the issue and contact your local area Emerson Flow service representative. See also: (SSMin), (SSMax), (MinSigQlty), (SNRatio) and (MaxNoise).	R				int	-	-	boolean	-	Measurement (FALSE) Acquisition (TRUE)			
708	EtaStatusBA	Peak switch detection status - BA (BG meters only) Peak switch detection status - BA (BG meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
709	EtaStatusCA	Peak switch detection status - CA (BG meters only) Peak switch detection status - CA (BG meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
710	EtaStatusBD	Peak switch detection status - BD (BG meters only) Peak switch detection status - BD (BG meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
711	EtaStatusCD	Peak switch detection status - CD (BG meters only) Peak switch detection status - CD (BG meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
712	EtaStatusFE	Peak switch detection status - FE (BG meters only) Peak switch detection status - FE (BG meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
713	EtaStatusFH	Peak switch detection status - FH (BG meters only) Peak switch detection status - FH (meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
714	EtaStatusGE	Peak switch detection status - GE (BG meters only) Peak switch detection status - GE (meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
715	EtaStatusGH	Peak switch detection status - GH (BG meters only) Peak switch detection status - GH (meters only).	R				int	-	-	uint8	-	Success (0) Not a BG style meter (1) Invalid chord lengths (2) Chord inactive (3) Speed of sound unusable (4) No valid sequences (5)			
716	AGA10SndVelStatus	Status of calculation of speed of sound from gas composition Status of optional calculation of speed of sound from gas composition. Value Description 0 Calculations successful. 1 Calculations not performed as the feature is not enabled (IsOptionalAGA10CalcEnabled). 2 Calculations not performed as the AGA8 method is not the Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017). 3 Calculations not performed as the AGA8 calculations are invalid (AGA8BaseCalcValidity, AGA8FlowCalcValidity). 4 Calculations not performed due to encountered division by zero.	R				int	-	-	uint8	-				
717	IsSndVelCompEnabled	Enable or disable comparison of SOS from gas composition with meter SOS Disables comparison of speed of sound calculated from the gas composition by the meter-calculated speed of sound (IsSndVelCompFeatureActive) when set to FALSE (0). Setting this to TRUE (1) will enable the comparison if the Continuous Flow Analysis feature (IsOptionalContinuousFlowAnalysisEnabled) is enabled and the AGA8 method (HCH_Method) is set to Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017).	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
718	IsSndVelCompFeatureActive	Comparison of SOS from gas composition to meter SOS feature is active TRUE (1) if the comparison of speed of sound from the gas composition by the meter-calculated speed of sound is enabled (IsSndVelCompEnabled), the Continuous Flow Analysis feature (IsOptionalContinuousFlowAnalysisEnabled) is enabled and the AGA8 method (HCH_Method) is set to Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017).	R	Y			int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
719	IsOptionalGCInterfaceEnabled	GC interface feature is enabled This indicates whether the GC interface feature is enabled. Enabled if TRUE (1).	R				int	-	-	boolean	-	No (FALSE) Yes (TRUE)			
720	IsOptionalAGA10CalcEnabled	Calculation of speed of sound from gas composition is enabled This indicates whether the optional calculation of speed of sound from gas composition feature is enabled. Enabled if TRUE (1).	R				int	-	-	boolean	-	No (FALSE) Yes (TRUE)			
721	IsOptionalContinuousFlowAnalysisEnabled	Flow analysis features are enabled This indicates whether the optional flow analysis features are enabled. Enabled if TRUE (1).	R	Y			int	-	-	boolean	-	No (FALSE) Yes (TRUE)			
722	SwirlAngleHighLmt	Swirl angle high limit The flow swirl angle limit above the baseline (FwdBaselineSwirlAngle, RevBaselineSwirlAngle) beyond which there is increased uncertainty in flow measurement. It is set internally when the swirl angle limit (SwirlAngleLmt) is set.	R	Y			int	deg	deg	int8	deg				
723	SwirlAngleLowLmt	Swirl angle low limit The flow swirl angle limit below the baseline (FwdBaselineSwirlAngle, RevBaselineSwirlAngle) beyond which there is increased uncertainty in flow measurement. It is set internally when the swirl angle limit (SwirlAngleLmt) is set.	R				int	deg	deg	int8	deg				
724	SwirlAngle	Swirl angle measurement The arctangent of the ratio of the tangential velocity, computed from the individual chordal velocities (FlowVelA, FlowVelB, FlowVelC , FlowVelD, FlowVelE, FlowVelF, FlowVelG and FlowVelH) to the average flow velocity (AvgFlow). This is only applicable when meter device number (DeviceNumber) is 3414 or 3418. See also CrossFlow, Symmetry and ProfileFactor.	R				int	deg	deg	int8	deg				
725	GasPropertiesSrcSel	Selects gas composition source for AGA8 and AGA10 calcs Selects the gas composition source for the base corrections (AGA8) and speed of sound calculation. The settings are "Fixed" or "Live - GC" or "Transmitter Head 1". To read the gas composition from a GC the interface to GC (IsOptionalGCInterfaceEnabled) must be enabled. The gas composition can be read from Transmitter Head 1 of a Dual-Configuration meter only on Transmitter Head 2 (ColocMeterMode) of a data sharing Dual-Configuration meter. The indication of the source for gas composition data is the GasPropertiesSrc data point.	RW	Y	Y	Y	int	-	-	uint8	-	Fixed (0) Live - GC (1) Transmitter Head 1 (2)	0	0	2

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
726	C6PlusGCComponentID	Automatically detected C6+ gas component identifier This is automatically detected C6+ gas component identifier used to divide C6+ gas component concentration (C6PlusGC) into appropriate standard gas component(s). If this value is 108 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.47466, 0.3534, 0.17194, 0.00 and 0.00 respectively. If this value is 109 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.50, 0.50, 0.00, 0.00 and 0.00 respectively. If this value is 110 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.60, 0.30, 0.10, 0.00 and 0.00 respectively. If this value is 111 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.57143, 0.28572, 0.14285, 0.00 and 0.00 respectively. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is enabled.	R	Y			int	-	-	uint8	-				
727	AreGasPropertiesInvalidGC	Gas composition, specific gravity and/or heating value from the GC invalid The gas composition (N2GC, CO2GC, H2GC, COGC, MethaneGC, EthaneGC, PropaneGC, IsoButaneGC, NButaneGC, IsoPentaneGC, NPentaneGC, NHexaneGC, NHeptaneGC, NOctaneGC, NNonaneGC, NDecaneGC, H2SGC, HeliumGC, WaterGC, OxygenGC, ArgonGC), the specific gravity (SpecificGravityGC) and/or the heating value (HeatingValueGC) read from the GC are invalid. Recommended Actions: 1. Verify that no GC alarms (IsGCCommErr, IsGCDataErr and IsGCAlarmPresent) are active. If present, then resolving those issues will fix this issue. 2. If the issue is unresolved, collect a Maintenance Log and a complete Archive Log from the meter using MeterLink™ and contact your local area Emerson Flow service representative.	R	Y			int	-	-	boolean	-	Gas properties valid (FALSE) Gas properties invalid (TRUE)			
728	GCCommStatus	GC communication status value This signifies the status of communication between the meter and GC. Zero value indicates successful communication with no errors. A non-zero value indicates gas composition update failure and the meter shall set communication error with GC alarm (IsGCCommErr). The value indicates the reason for gas composition update failure. Value Description 0 - No error. 1 - Desired stream not found. 2 - GC controller is busy (error defined by Modbus protocol). 3 - GC detected an illegal Modbus function code from the meter. 4 - GC detected an illegal Modbus data address from the meter. 5 - GC detected an illegal data value from the meter. 6 - Failure in associated device (Modbus defined error). 7 - GC has accepted request from the meter but is still processing. 8 - A firmware logic error was detected. 9 - Modbus address mismatch. 10 - Modbus function code mismatch. 11 - GC reports an exception code that is unrecognized. 12 - Modbus request message from the meter is too long (exceeds the maximum allowable length). 13 - GC Modbus response message is too long (exceeds the maximum allowable length). 14 - GC response message has incorrect number of registers. 15 - GC does not support the requested message data type. 16 - GC does not support the requested data protocol. 17 - Modbus message either from the meter or the GC exceeds the maximum length allowable. 18 - GC response not received within the communication timeout. 19 - GC response message (ASCII protocol) incomplete. 20 - GC response message (RTU protocol) incomplete. 21 - GC gas property data spans more than one update. 22 - Server port not open. Gateway path not available or target device failed to respond. 23 - GC IP address incorrect.	R				int	-	-	uint8	-				
729	GCAlarm1	GC alarm 1 register value GC Status register as read from the GC. (Alarm1 register in the GC). Bits 14 and 15 are checked and if set, the GC reading is marked as invalid.	R				int	-	-	uint16	-				
730	GCAlarm2	GC alarm 2 register value GC Error register as read from the GC (Alarm2 register in the GC). Bits 0, 1, 2 and 3 are checked and if set, the GC reading is marked as invalid.	R				int	-	-	uint16	-				
731	GasPropertiesSrcSelGCAlarm	Selects the gas property data source to use when the GC is in alarm Selects the gas property data source to use when the GC is in an alarm condition. If Fixed value is selected, the meter will start using the fixed gas composition stored in the meter, the in-use gas property data is updated with the fixed gas property data. If Last good value is selected, the meter will use the last gas composition collected from the GC before the GC started to report alarms, the in-use gas property data is not updated with the invalid GC-read gas property data.	RW	Y	Y	Y	int	-	-	uint8	-	Use last good value (0) Use fixed value (1)	0	0	1
732	GCHeatingValueUnit	Specifies the unit for reading the heating value from the GC The heating (measurement) unit used for reading the heating value from the GC.	RW	Y	Y	Y	int	-	-	uint8	-	Btu/ft3 (0) kJ/m3 (1) kJ/dm3 (2) MJ/m3 (3) kCal/m3 (4) kWh/m3 (5)	0	0	5
733	GCStreamNumber	Selects the stream for the data read from the GC Selects the stream for the data read from the GC.	RW	Y	Y	Y	int	-	-	uint8	-		1	1	30
734	GCModbusID	GC Modbus address This signifies the Modbus address of GC. When the meter connects to GC on serial line then this is set as the Modbus ID of GC on the serial network. When the meter connects to GC on the Ethernet network, then this is the unit identifier in the TCP header of Modbus TCP communication that depends on the type of Ethernet connection as follows: 1. If GC is connected to the meter on the Ethernet network then Modbus protocol specification recommends that unit identifier should be set as 255 (unsignificant value), though this is not a mandate. 2. If GC is connected to the meter via a gateway/bridge then unit identifier is set as the Modbus ID of GC on its network. Please note that for successful communication, it is a mandate that GC Modbus ID should be configured same as the GC device Modbus ID. This applies for all the above mentioned network connection types.	RW	Y	Y	Y	int	-	-	uint8	-		1	1	255

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
735	GCSerialPort	Communication port for the GC Port B (2) is available when the slot 1 Optional I/O Module (OptIOModule1Type) is installed. Port C (3) is available when the slot 2 Optional I/O Module (OptIOModule2Type) is installed. Ethernet (128) is used for meter to communicate with GC over Modbus TCP.	RW	Y	Y	Y	int	-	-	uint8	-	Disabled (0) Port A (1) Port B (2) Port C (3) Ethernet (128)	0	0	128
736	GasPropertiesSrc	Indicates the current source for the in-use gas properties This indicates the current data source for the in-use gas properties (gas composition, heating value, specific gravity).	R				int	-	-	uint8	-	Not used (0) Live (1) Fixed (2) Frozen (3)			
737	GCCommTimeout	GC communication timeout value This is the amount of time the meter will wait for message responses from the GC.	RW	Y	Y	Y	int	sec	sec	uint8	sec		4	0	255
738	GCHeatingValueType	GC communication heating value type selector Selects GC heating value type.	RW	Y	Y	Y	int	-	-	uint8	-	Btu-Dry (0) Btu-Saturated (1) Btu-Actual (2)	0	0	2
739	GCDesiredStreamTimeout	GC communication desired stream timeout value When communicating with a GC, this specifies the length of time to wait for the desired stream to be updated before declaring an error.	RW	Y	Y	Y	int	min	min	uint8	min		100	6	255
740	N2ComponentIndex	Nitrogen gas component index The index that identifies the Nitrogen gas component in the GC (N2GC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Nitrogen gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		14	0	65535
741	CO2ComponentIndex	Carbon dioxide gas component index The index that identifies the Carbon dioxide gas component in the GC (CO2GC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Carbon dioxide gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		17	0	65535
742	H2ComponentIndex	Hydrogen gas component index The index that identifies the Hydrogen gas component in the GC (H2GC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Hydrogen gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		12	0	65535
743	COComponentIndex	Carbon monoxide gas component index The index that identifies the Carbon monoxide gas component in the GC (COGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Carbon monoxide gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		15	0	65535
744	MethaneComponentIndex	Methane gas component index The index that identifies the Methane gas component in the GC (MethaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Methane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		0	0	65535
745	EthaneComponentIndex	Ethane gas component index The index that identifies the Ethane gas component in the GC (EthaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Ethane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		1	0	65535
746	PropaneComponentIndex	Propane gas component index The index that identifies the Propane gas component in the GC (PropaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Propane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		2	0	65535
747	IsoButaneComponentIndex	Isobutane gas component index The index that identifies the Isobutane gas component in the GC (IsoButaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Isobutane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		3	0	65535
748	NButaneComponentIndex	N-Butane gas component index The index that identifies the N-Butane gas component in the GC (NButaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Butane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		4	0	65535
749	IsoPentaneComponentIndex	Isopentane gas component index The index that identifies the Isopentane gas component in the GC (IsoPentaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Isopentane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		5	0	65535
750	NPentaneComponentIndex	N-Pentane gas component index The index that identifies the N-Pentane gas component in the GC (NPentaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Pentane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		6	0	65535
751	NHexaneComponentIndex	N-Hexane gas component index The index that identifies the N-Hexane gas component in the GC (NHexaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Hexane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		39	0	65535
752	NHeptaneComponentIndex	N-Heptane gas component index The index that identifies the N-Heptane gas component in the GC (NHeptaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Heptane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		45	0	65535
753	NOctaneComponentIndex	N-Octane gas component index The index that identifies the N-Octane gas component in the GC (NOctaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Octane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		52	0	65535
754	NNonaneComponentIndex	N-Nonane gas component index The index that identifies the N-Nonane gas component in the GC (NNonaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Nonane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		51	0	65535
755	NDecaneComponentIndex	N-Decane gas component index The index that identifies the N-Decane gas component in the GC (NDecaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in N-Decane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		50	0	65535
756	H2SComponentIndex	Hydrogen sulfide gas component index The index that identifies the Hydrogen sulfide gas component in the GC (H2SGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Hydrogen sulfide gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		40	0	65535
757	HeliumComponentIndex	Helium gas component index The index that identifies the Helium gas component in the GC (HeliumGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Helium gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		13	0	65535
758	WaterComponentIndex	Water gas component index The index that identifies the Water gas component in the GC (WaterGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Water gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		44	0	65535
759	OxygenComponentIndex	Oxygen gas component index The index that identifies the Oxygen gas component in the GC (OxygenGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Oxygen gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		16	0	65535
760	ArgonComponentIndex	Argon gas component index The index that identifies the Argon gas component in the GC (ArgonGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Argon gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		46	0	65535

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
761	NeoPentaneComponentIndex	Neo-pentane component index The index that identifies the Neo-pentane gas component in the GC (NeoPentaneGC). Setting this value equal to GC disabled component index (GCDisabledComponentIndex) results in Neo-pentane gas component being ignored.	RW	Y	Y	Y	int	-	-	uint16	-		7	0	65535
762	GCDisabledComponentIndex	GC disabled component index Component index value used to disable particular gas component. If any gas component index is set to this value, corresponding gas component value is ignored.	RW	Y	Y	Y	int	-	-	uint16	-		255	0	65535
763	C6PlusComponentIndex	C6+ gas component index C6+ gas component index value used to determine C6+ gas component so that its concentration (C6PlusGC) can be divided into appropriate standard gas component(s). If this value is 8 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.47466, 0.3534, 0.17194, 0.00 and 0.00 respectively. If this value is 9 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.50, 0.50, 0.00, 0.00 and 0.00 respectively. If this value is 10 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.60, 0.30, 0.10, 0.00 and 0.00 respectively. If this value is 11 then Hexane, Heptane, Octane, Nonane and Decane distribution is 0.57143, 0.28572, 0.14285, 0.00 and 0.00 respectively. If this value is other than 8, 9, 10 or 11 then C6+ gas component distribution is as configured by C6+ Hexane (C6PlusHexaneFrac), C6+ Heptane (C6PlusHeptaneFrac), C6+ Octane (C6PlusOctaneFrac), C6+ Nonane (C6PlusNonaneFrac) and C6+ Decane (C6PlusDecaneFrac) gas component mole fraction values. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	int	-	-	uint16	-		8	0	65535
764	IsC6PlusAutoDetectionEnabled	Enable C6+ gas component index automatic detection Selects C6+ gas component index source. When set to "Enable", automatically detects C6+ gas component identifier (C6PlusGCComponentID) and C6+ gas component index (C6PlusComponentIndex) is ignored. When set to "Disable", automatically detected C6+ gas component identifier (C6PlusGCComponentID) is ignored and C6+ gas component index (C6PlusComponentIndex) is used.	RW	Y	Y	Y	int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
765	FwdBaselineSwirlAngle	Forward flow swirl angle baseline The swirl angle value when the baseline is taken in the forward direction. Normally taken from RunningAvgSwirlAngle.	R	Y	Y	Y	int	deg	deg	int8	deg		0	-128	127
766	RevBaselineSwirlAngle	Reverse flow swirl angle baseline The swirl angle value when the baseline is taken in the reverse direction. Normally taken from RunningAvgSwirlAngle.	R	Y	Y	Y	int	deg	deg	int8	deg		0	-128	127
767	IsBlockageDetectionEnabled	Enables or disables blockage detection Disables blockage detection (IsBlockageDetected) when set FALSE (0). Setting this to TRUE (1) will enable blockage detection if optional flow analysis features are enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
768	IsBlockageDetectionFeatureActive	Blockage detection feature active This is TRUE (1) when blockage detection (IsBlockageDetectionEnabled) is TRUE (1), Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	R	Y			int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
769	BlockageTurbulenceLmtA	Blockage alarm turbulence limit for chord A The percentage from the baseline value (FwdBaselineTurbulenceA or RevBaselineTurbulenceA) that the turbulence of chord A (TurbulenceA) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		5	0	100
770	BlockageTurbulenceLmtB	Blockage alarm turbulence limit for chord B The percentage from the baseline value (FwdBaselineTurbulenceB or RevBaselineTurbulenceB) that the turbulence of chord B (TurbulenceB) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		3	0	100
771	BlockageTurbulenceLmtC	Blockage alarm turbulence limit for chord C The percentage from the baseline value (FwdBaselineTurbulenceC or RevBaselineTurbulenceC) that the turbulence of chord C (TurbulenceC) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		3	0	100
772	BlockageTurbulenceLmtD	Blockage alarm turbulence limit for chord D The percentage from the baseline value (FwdBaselineTurbulenceD or RevBaselineTurbulenceD) that the turbulence of chord D (TurbulenceD) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		5	0	100
773	BlockageTurbulenceLmtE	Blockage alarm turbulence limit for chord E The percentage from the baseline value (FwdBaselineTurbulenceE or RevBaselineTurbulenceE) that the turbulence of chord E (TurbulenceE) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		5	0	100
774	BlockageTurbulenceLmtF	Blockage alarm turbulence limit for chord F The percentage from the baseline value (FwdBaselineTurbulenceF or RevBaselineTurbulenceF) that the turbulence of chord F (TurbulenceF) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		3	0	100
775	BlockageTurbulenceLmtG	Blockage alarm turbulence limit for chord G The percentage from the baseline value (FwdBaselineTurbulenceG or RevBaselineTurbulenceG) that the turbulence of chord G (TurbulenceG) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		3	0	100
776	BlockageTurbulenceLmtH	Blockage alarm turbulence limit for chord H The percentage from the baseline value (FwdBaselineTurbulenceH or RevBaselineTurbulenceH) that the turbulence of chord H (TurbulenceH) is allowed to vary before there is an indication of potential blockage (IsBlockageDetected).	RW	Y	Y	Y	int	%	%	uint8	%		5	0	100
777	BlockageCrossFlowLmt	Blockage alarm cross-flow limit The percentage from the baseline value (FwdBaselineCrossFlow or RevBaselineCrossFlow) the cross-flow (CrossFlow) is allowed to vary before there is an indication of potential blockage.	RW	Y	Y		int	%	%	uint8	%		3	0	100
778	BlockageSymmetryLmt	Blockage alarm symmetry limit The percentage from the baseline value (FwdBaselineSymmetry or RevBaselineSymmetry) the chord symmetry (Symmetry) is allowed to vary before there is an indication of potential blockage.	RW	Y	Y		int	%	%	uint8	%		5	0	100
779	IsBoreBuildupDetectionEnabled	Enables or disables bore buildup detection Disables bore buildup detection diagnostic when set FALSE (0).	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
780	IsBoreBuildupDetectionFeatureActive	Bore buildup detection feature active This is TRUE (1) when bore buildup detection (IsBoreBuildupDetectionEnabled) is TRUE (1), Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	R	Y			int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
781	IsLiquidDetectionEnabled	Enables or disables liquid detection Disables liquid present detection (IsLiquidDetected) when set FALSE (0). Setting this to TRUE (1) will enable liquid present detection if the Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
782	IsLiquidDetectionFeatureActive	Liquid detection feature active This is TRUE (1) when liquid detection (IsLiquidDetectionEnabled) is TRUE (1), Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	R	Y			int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
783	IsAbnormalProfileDetectionEnabled	Enables or disables abnormal profile detection Disables abnormal profile detection (IsAbnormalProfileDetected) when set FALSE (0). Setting this to TRUE (1) will enable abnormal profile present detection if Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
784	IsAbnormalProfileDetectionFeatureActive	Abnormal profile detection feature active This is TRUE (1) when abnormal profile detection (IsAbnormalProfileDetectionEnabled) is TRUE (1), Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled) and the meter device number (DeviceNumber) is 3414 or 3418.	R	Y			int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
785	IsFwdBaselineFlowTemperatureNotSet	Forward flow temperature baseline value is not set Baseline value, FwdBaselineFlowTemperature, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
786	IsFwdBaselineFlowPressureNotSet	Forward flow pressure baseline value is not set Baseline value, FwdBaselineFlowPressure, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
787	IsFwdBaselineTurbulenceANotSet	Forward turbulence A baseline value is not set Baseline value, FwdBaselineTurbulenceA, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
788	IsFwdBaselineTurbulenceBNotSet	Forward turbulence B baseline value is not set Baseline value, FwdBaselineTurbulenceB, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
789	IsFwdBaselineTurbulenceCNotSet	Forward turbulence C baseline value is not set Baseline value, FwdBaselineTurbulenceC, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
790	IsFwdBaselineTurbulenceDNotSet	Forward turbulence D baseline value is not set Baseline value, FwdBaselineTurbulenceD, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
791	IsFwdBaselineTurbulenceENotSet	Forward turbulence E baseline value is not set Baseline value, FwdBaselineTurbulenceE, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
792	IsFwdBaselineTurbulenceFNotSet	Forward turbulence F baseline value is not set Baseline value, FwdBaselineTurbulenceF, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
793	IsFwdBaselineTurbulenceGNotSet	Forward turbulence G baseline value is not set Baseline value, FwdBaselineTurbulenceG, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
794	IsFwdBaselineTurbulenceHNotSet	Forward turbulence H baseline value is not set Baseline value, FwdBaselineTurbulenceH, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
795	IsFwdBaselineCommentNotSet	Forward baseline comment is not set Baseline value, FwdBaselineComment, is set to factory default. Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
796	IsFwdBaselineAvgFlowNotSet	Forward average flow baseline value is not set Baseline value, FwdBaselineAvgFlow, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
797	IsFwdBaselineCrossFlowNotSet	Forward cross-flow baseline value is not set Baseline value, FwdBaselineCrossFlow, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
798	IsFwdBaselineProfileFactorNotSet	Forward profile factor baseline value is not set Baseline value, FwdBaselineProfileFactor, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
799	IsFwdBaselineSwirlAngleNotSet	Forward swirl angle baseline value is not set Baseline value, FwdBaselineSwirlAngle, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
800	IsFwdBaselineSymmetryNotSet	Forward symmetry baseline value is not set Baseline value, FwdBaselineSymmetry, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
801	IsFwdBaselineTimeNotSet	Forward baseline time is not set Baseline value, FwdBaselineTime, is set to factory default. Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
802	IsRevBaselineFlowTemperatureNotSet	Reverse flow temperature baseline value is not set Baseline value, RevBaselineFlowTemperature, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
803	IsRevBaselineFlowPressureNotSet	Reverse flow pressure baseline value is not set Baseline value, RevBaselineFlowPressure, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
804	IsRevBaselineTurbulenceANotSet	Reverse turbulence A baseline value is not set Baseline value, RevBaselineTurbulenceA, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
805	IsRevBaselineTurbulenceBNotSet	Reverse turbulence B baseline value is not set Baseline value, RevBaselineTurbulenceB, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
806	IsRevBaselineTurbulenceCNotSet	Reverse turbulence C baseline value is not set Baseline value, RevBaselineTurbulenceC, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
807	IsRevBaselineTurbulenceDNotSet	Reverse turbulence D baseline value is not set Baseline value, RevBaselineTurbulenceD, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
808	IsRevBaselineTurbulenceENotSet	Reverse turbulence E baseline value is not set Baseline value, RevBaselineTurbulenceE, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
809	IsRevBaselineTurbulenceFNotSet	Reverse turbulence F baseline value is not set Baseline value, RevBaselineTurbulenceF, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
810	IsRevBaselineTurbulenceGNotSet	Reverse turbulence G baseline value is not set Baseline value, RevBaselineTurbulenceG, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
811	IsRevBaselineTurbulenceHNotSet	Reverse turbulence H baseline value is not set Baseline value, RevBaselineTurbulenceH, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
812	IsRevBaselineCommentNotSet	Reverse baseline comment is not set Baseline value, RevBaselineComment, is set to factory default. Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
813	IsRevBaselineAvgFlowNotSet	Reverse average flow baseline value is not set Baseline value, RevBaselineAvgFlow, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
814	IsRevBaselineCrossFlowNotSet	Reverse cross-flow baseline value is not set Baseline value, RevBaselineCrossFlow, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
815	IsRevBaselineProfileFactorNotSet	Reverse profile factor baseline value is not set Baseline value, RevBaselineProfileFactor, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
816	IsRevBaselineSwirlAngleNotSet	Reverse swirl angle baseline value is not set Baseline value, RevBaselineSwirlAngle, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
817	IsRevBaselineSymmetryNotSet	Reverse symmetry baseline value is not set Baseline value, RevBaselineSymmetry, is set to factory default. The baseline is used by the meter for diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled). Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
818	IsRevBaselineTimeNotSet	Reverse baseline time is not set Baseline value, RevBaselineTime is set to factory default. Recommended Actions: 1. Run the Setup Baseline Wizard in MeterLink™.	R	Y			int	-	-	boolean	-		TRUE (1)	FALSE (0)	TRUE (1)
819	IsFwdBaselineNotSet	Forward baseline is not set Some or all forward baseline values used by the Continuous Flow Analysis feature are not set. The baseline captures the flow characteristics of the meter when installed so that the meter can monitor these parameters and use them to diagnose the health of the meter. Recommended Actions: 1. Run the Set Baseline Wizard in MeterLink™ to set the forward baseline parameters. 2. If the meter does not run in the forward direction or you do not wish to take advantage of the Continuous Flow Analysis feature, acknowledge this alarm to clear it.	RW	Y	Y		int	-	-	boolean	-	Baseline set (FALSE) Baseline not set (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
820	IsRevBaselineNotSet	Reverse baseline is not set Some or all reverse baseline values used by the Continuous Flow Analysis feature are not set. The baseline captures the flow characteristics of the meter when installed so that the meter can monitor these parameters and use them to diagnose the health of the meter. Recommended Actions: 1. Run the Set Baseline Wizard in MeterLink™ to set the reverse baseline parameters. 2. If the meter does not run in the reverse direction or you do not wish to take advantage of the Continuous Flow Analysis features, acknowledge this alarm to clear it.	RW	Y	Y		int	-	-	boolean	-	Baseline set (FALSE) Baseline not set (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
821	IsAnyBaselineAvail	Baselines supported for this meter type This indicates whether or not the baselines are supported for this meter type. If the meter is a JuniorSonic, device number (DeviceNumber) is 3411 or 3412, then the value is FALSE (0) and the baselines are not used.	R	Y			int	-	-	boolean	-	Not Available (FALSE) Available (TRUE)			
822	MeterStatusLevel	Overall meter status indication This indicates the highest meter status, green (0), yellow(1) or red (2) currently in the meter.	R				int	-	-	uint8	-	Green (0) Yellow (1) Red (2)			
823	ColocMeterMode	Dual-Configuration meter mode Configures the meter to operate as a single head meter ("Disabled", 0), a Dual-Configuration meter's head 1 ("Transmitter Head 1", 1) or a Dual-Configuration meter's head 2 ("Transmitter Head 2", 2). The meters that measure the same flow may share a meter body or be installed in series with each other with only data sharing enabled. The Dual-Configuration meter's mode can be set to "Transmitter Head 1" only if the device number (DeviceNumber) is 3414 or 3418. The Dual-Configuration meter's mode can be set to "Transmitter Head 2" only if the device number (DeviceNumber) is 3411, 3412, 3414 or 3418. When meter is configured as a Dual-Configuration meter, it can be configured to synchronize transducer firing (XdcrFiringSync) and also to enable data sharing and clock synchronization with Dual-Configuration meter (ColocMeterIPAddress).	RW	Y	Y	Y	int	-	-	uint8	-	Disabled (0) Transmitter Head 1 (1) Transmitter Head 2 (2)	0	0	2
826	PTPDomainNumber	PTP domain number Configures the PTP (Precision Time Protocol) domain number. This allows the Dual-Configuration meter's head 2 clock to synchronize to the Dual-Configuration meter's head 1 clock. The Dual-Configuration meter clock synchronization (IsColocMeterClockSyncEnabled) must be enabled on both Dual-Configuration meters to synchronize clock. When set to 128, meaning auto-configure PTP domain, then on the Dual-Configuration meter head 1, the low order octet of Ethernet IP address (Eth1IPAddr) is used as PTP domain number. While on the Dual-Configuration meter head 2, the low order octet of Dual-Configuration meter IP address (ColocMeterIPAddress) is used as the PTP domain number.	RW	Y	Y		int	-	-	uint8	-		128	0	255
827	IsColocMeterSndSpdRangeCheckEnabled	Enables or disables Dual-Configuration meter speed of sound range check error Enables Dual-Configuration meter speed of sound check feature (IsColocMeterSndSpdRangeCheckFeatureActive) when set TRUE (1). Setting this to FALSE (0) will disable Dual-Configuration meter speed of sound check feature.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
828	IsColocMeterSndSpdRangeCheckFeatureActive	Dual-Configuration meter speed of sound range check feature is active This is TRUE (1), when the Dual-Configuration meter speed of sound range check (IsColocMeterSndSpdRangeCheckEnabled) is TRUE (1), Dual-Configuration meter IP address (ColocMeterIPAddress) is configured with an IP address other than the loopback address or meter's Ethernet IP address (Eth1IPAddr) and Dual-Configuration meter mode (ColocMeterMode) is set to "Transmitter Head 1" or "Transmitter Head 2".	R				int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
829	IsColocMeterQFlowRangeCheckEnabled	Enables or disables Dual-Configuration meter uncorrected flow rate range check error Enables Dual-Configuration meter flow-condition volumetric flow rate range check feature (IsColocMeterQFlowRangeCheckFeatureActive) when set to TRUE (1). Setting this to FALSE (0) will disable Dual-Configuration meter flow-condition volumetric flow rate range check feature.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
830	IsColocMeterQFlowRangeCheckFeatureActive	Dual-Configuration meter uncorrected flow rate range check feature is active This is TRUE (1), when the Dual-Configuration meter flow-condition volumetric flow rate range check (IsColocMeterQFlowRangeCheckEnabled) is TRUE (1), Dual-Configuration meter IP address (ColocMeterIPAddress) is configured with an IP address other than the loopback address or meter's Ethernet IP address (Eth1IPAddr) and Dual-Configuration meter mode (ColocMeterMode) is set to "Transmitter Head 1" or "Transmitter Head 2".	R				int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
831	IsColocMeterRunningAvgAvgSndVelValid	Average speed of sound running average for Dual-Configuration meter diagnostic error validity The validity of average speed of sound one hour running average (ColocMeterRunningAvgAvgSndVel). This is used for Dual-Configuration meter speed of sound range check error (IsColocMeterSndSpdRangeErr).	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
832	IsColocMeterRunningAvgQFlowValid	Uncorrected flow rate running average for Dual-Configuration meter diagnostic error validity The validity of Dual-Configuration meter flow-condition volumetric flow rate one hour running average (ColocMeterRunningAvgQFlow). This is used for Dual-Configuration meter flow-condition volumetric flow rate range check error (IsColocMeterQFlowRangeErr).	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
833	ColocMeterCommErrReasons	Dual-Configuration meter communication error reason The reasons for Dual-Configuration meter communication error (IsColocMeterCommErr). 0 – No error 1 – Dual-Configuration meter IP address could not be reached 2 – Previously established connection with Dual-Configuration meter has gone down. This could be due to reasons that can cause the connection to go down, including the remote meter rebooting, network connectivity issues, or problems with the internal system error on the Dual-Configuration meter 3 – Internal error or system call failure 4 – Dual-Configuration meter clock out of sync	R				int	-	-	uint8	-	No error (0) Dual-Configuration meter IP address unreachable (1) Waiting for Dual-Configuration meter response (2) System internal error (3) Dual-Configuration meter clock out of sync (4)			
834	IsColocMeterClockSyncEnabled	Enables or disables clock synchronization with Dual-Configuration meter Enables clock synchronization for a data sharing Dual-Configuration meter when set to TRUE (1) in both transmitter heads.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
835	IsLocalDisplayAvail	Local display is available When TRUE (1) the system has detected the presence of the local display.	R				int	-	-	boolean	-	Not available (FALSE) Available (TRUE)			
836	IsLocalDisplayEnableTest	Test mode for local display When set TRUE (1) the local display will perform a series of tests to exercise all the segments of the display. This value will automatically return to FALSE (0) when the test is complete.	RW				int	-	-	boolean	-	Disable test (FALSE) Enable test (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
837	LocalDisplaySquawkMode	Local display squawk mode When squawk mode is set to Squawk On (1) the local display will display the pattern O-O-O-O until squawk mode is set to Squawk Off (0). When squawk mode is set to Squawk Once (2) the local display will display the pattern O-O-O-O for 60 seconds.	RW	Y			int	-	-	uint8	-	Squawk Off (0) Squawk On (1) Squawk Once (2)	0	0	2
838	LocalDisplayScrollDelay	Scroll delay time for local display The time interval in seconds used to change which item (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10) is shown on the local display.	RW	Y	Y	Y	int	sec	sec	uint8	sec		5	1	100

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839	LocalDisplayFlowRateTimeUnit	Local display time units The time units used by the local display, if applicable, to display the current item (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	second (0) hour (1) day (2)	1	0	2
840	LocalDisplayVolUnitUS	Local display U.S. Customary volume unit The volumetric units used by the local display, if applicable, to display the current item (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10) when the units system (UnitsSystem) is selected to U.S. Customary (0). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	Cubic feet (0) Thousand cubic feet (3)	0	0	3
841	LocalDisplayVolUnitMetric	Local display metric volume unit The volumetric units used by the local display, if applicable, to display the current item (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10) when the units system (UnitsSystem) is selected to Metric (1). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	Cubic meters (0) Thousand cubic meters (2)	0	0	2
842	LocalDisplayItem1	Local display item 1 This selects the first value to be shown on the local display. Other display items (LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	1	0	32
843	LocalDisplayItem2	Local display item 2 This selects the second value to be shown on the local display. Other display items (LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	6	0	32

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
844	LocalDisplayItem3	Local display item 3 This selects the third value to be shown on the local display. Other display items (LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	14	0	32
845	LocalDisplayItem4	Local display item 4 This selects the fourth value to be shown on the local display. Other display items (LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32
846	LocalDisplayItem5	Local display item 5 This selects the fifth value to be shown on the local display. Other display items (LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
847	LocalDisplayItem6	Local display item 6 This selects the sixth value to be shown on the local display. Other display items (LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32
848	LocalDisplayItem7	Local display item 7 This selects the seventh value to be shown on the local display. Other display items (LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32
849	LocalDisplayItem8	Local display item 8 This selects the eighth value to be shown on the local display. Other display items (LocalDisplayItem9, LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
850	LocalDisplayItem9	Local display item 9 This selects the ninth value to be shown on the local display. Other display items (LocalDisplayItem10, LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32
851	LocalDisplayItem10	Local display item 10 This selects the tenth value to be shown on the local display. Other display items (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9) will be displayed in sequence at a rate determined by the delay time (LocalDisplayScrollDelay). When selected as None (0), this item will be skipped. The units this item is displayed in are determined by the units system (UnitsSystem), the corresponding volume units (LocalDisplayVolUnitUS, LocalDisplayVolUnitMetric) and/or the time units (LocalDisplayFlowRateTimeUnit). This data point is only applicable when local display mode (LocalDisplayMode) is set to "Scroll items 1-10".	RW	Y	Y	Y	int	-	-	uint8	-	None (0) QFLOW - Uncorrected volume flow rate (1) TDYVL - Current day's forward uncorrected volume (2) TDYVL - Current day's reverse uncorrected volume (3) YSTVL - Previous day's forward uncorrected volume (4) YSTVL - Previous day's reverse uncorrected volume (5) TOTVL - Forward uncorrected volume (6) TOTVL - Reverse uncorrected volume (7) QBASE - Corrected volume flow rate (26) TDYVL - Current day's forward corrected volume (27) TDYVL - Current day's reverse corrected volume (28) YSTVL - Previous day's forward corrected volume (29) YSTVL - Previous day's reverse corrected volume (30) TOTVL - Forward corrected volume (31) TOTVL - Reverse corrected volume (32) VEL - Average flow velocity (8) SOS - Average speed of sound (9) TEMP - flow-condition temperature (10) PRESS - flow-condition pressure (11) FRQ1A - Frequency channel 1A (12) FRQ1B - Frequency channel 1B (13) KFCT1 - Frequency 1 K-factor (14) FRQ2A - Frequency channel 2A (15) FRQ2B - Frequency channel 2B (16) KFCT2 - Frequency 2 K-factor (17) AO1 - Analog Output 1 Current (24) AO2 - Analog Output 2 Current (25)	0	0	32
852	LocalDisplayMode	Local display mode When set to "Uncorrected volume only", the local display alternately shows the forward flow-condition volume (PosVolFlow) and the reverse flow-condition volume (NegVolFlow) in m3 or ft3/gal depending on the units system (UnitsSystem). The non-resettable running totals will be displayed as multiplier of 10 or 100 (depending upon the meter size) and only 7 least significant digits will be displayed. When set to "Scroll items 1-10", the local display will display items configured by local display items 1-10 (LocalDisplayItem1, LocalDisplayItem2, LocalDisplayItem3, LocalDisplayItem4, LocalDisplayItem5, LocalDisplayItem6, LocalDisplayItem7, LocalDisplayItem8, LocalDisplayItem9, LocalDisplayItem10). In both modes, items will be updated on the local display using the scroll delay time interval (LocalDisplayScrollDelay).	RW	Y	Y	Y	int	-	-	uint8	-	Scroll items 1-10 (0) Uncorrected volume only (1)	0	0	1
853	IsAutoResetTrkParamSupported	Automatic tracking reset supported This indicates if tracking parameters are reset automatically (ResetTrkParam) when any of the default tracking parameter values (Tspf, Tspe, Tamp) are changed. If this data point does not exist, then tracking parameters are not reset automatically.	R				int	-	-	boolean	-				
854	IsPropUpdtActive	Proportion bins are being updated When TRUE (1) the velocity estimation bins (FwdPropABin1..FwdPropHBin10, RevPropABin1..RevPropHBin10, FwdPropVelABin1..FwdPropVelHBin10 and RevPropVelABin1..RevPropVelHBin10) will be updated. The value is FALSE (0) if there has been a measurement speed of sound error (IsMeasSndSpdRangeA..IsMeasSndSpdRangeH), a need for transducer maintenance has been suspected (IsXdcrMaintenanceSuspectedA..IsXdcrMaintenanceSuspectedH) or a chord has failed for batch (IsFailedForBatchA..IsFailedForBatchH) anytime within the previous time period defined by (PropUpdtSeconds). The value is FALSE (0) if any chord (FlowVelA..FlowVelH) goes below minimum velocity for updating chord proportions (LowFlowLmt) or any chord is manually set to inactive (ChordInactvA..ChordInactvH).	R				int	-	-	boolean	-				
855	PropUpdtBatches	Number of consecutive batches without chord failures required for updating chord proportions Number of consecutive batches without chord failures required for updating chord proportions. It is computed from the time that must elapse without chord failures required for updating chord proportions (PropUpdtSeconds) divided by the batch update period (BatchUpdatePeriod).	R	Y			int	-	-	uint16	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
856	PropUpdtSeconds	Time that must elapse without chord failures required for updating chord proportions The number of seconds that must elapse without any chord failures before changes to the chord proportion bins for velocity estimation will occur ((IsPropUpdtActive) set to TRUE). This time is converted to the number of equivalent batch cycles (PropUpdtBatches) for comparison to the number of consecutive batches without chord failures (CurrPropUpdateBatches). This also specifies the number of seconds that must elapse while transducer maintenance is suspected (IsXdcrMaintenanceSuspectedA..IsXdcrMaintenanceSuspectedH) before the transducer maintenance required alarm is activated ((IsXdcrMaintenanceRequired) is set to TRUE).	RW	Y	Y	Y	int	sec	sec	uint16	sec		3600	10	3600
857	IsSevereFlowConditionDetected	Severe flow condition detected There are flow conditions that could impact measurement (for 8-path meters only). Recommended Actions: 1. Verify that there are no obstructions or unusual geometry such as piping bends near the meter. 2. Contact your local area Emerson Flow service representative for assistance.	R				int	-	-	boolean	-				
858	PeakSwitchDetectMode	Peak switch detection mode Determines what action to take if a peak switch is detected by the pattern of computed eta values (EtaBA, EtaBD, EtaCA, EtaCD EtaFE, EtaFH, EtaGE, EtaGH). Both the "Status Only" and the "Status and Discard" modes set the peak switch detection indicators (IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC, IsPeakSwitchDetectedD, (IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG, IsPeakSwitchDetectedH). If "Status and Discard" is selected the waveforms with peak switching detected will not be included in the flow calculations. Discarded measurement data may cause a chord to be considered failed if the percentage of good measurements falls below the minimum percentage good threshold (MinPctGood). If "Disabled" no status will be updated nor waveforms discarded.	RW	Y	Y	Y	int	-	-	uint8	-	Disabled (0) Status Only (1) Status and Discard (2)	0	0	2
859	IsPeakSwitchDetected	Peak switch detected A peak switch timing error was detected on at least one chord (IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC, IsPeakSwitchDetectedD, (IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG, IsPeakSwitchDetectedH).	R				int	-	-	boolean	-				
860	IsXdcrMaintenanceRequired	Transducer maintenance required One or more of the chords requires transducer maintenance (IsXdcrMaintenanceRequiredA, IsXdcrMaintenanceRequiredB, IsXdcrMaintenanceRequiredC, IsXdcrMaintenanceRequiredD, IsXdcrMaintenanceRequiredE, IsXdcrMaintenanceRequiredF, IsXdcrMaintenanceRequiredG, IsXdcrMaintenanceRequiredH).	R				int	-	-	boolean	-				
861	IsDiagnosticChordEnabled	Enable diagnostic chord When set to TRUE (1), it enables diagnostic chord on the meter. Changing this value requires warm-starting the meter. This only applies to (DeviceNumber) 3411 meters.	RW	Y	Y	Y	int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
862	IsDiagnosticSndSpdDetectionEnabled	Enables or disables diagnostic speed of sound check Disables diagnostic speed of sound check (IsDiagnosticSndSpdRangeErr) and the diagnostic speed of sound check feature (IsDiagnosticSndSpdDetectionFeatureActive) when set FALSE (0). Setting this to TRUE (1) will enable diagnostic speed of sound check.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
863	IsDiagnosticSndSpdDetectionFeatureActive	Diagnostic speed of sound check feature active This is TRUE (1), when the diagnostic speed of sound check (IsDiagnosticSndSpdDetectionEnabled) is TRUE (1), diagnostic chord is enabled (IsDiagnosticChordEnabled) and diagnostic chord is active.	R				int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)			
864	DiagnosticChordRunningAvgSeconds	Time period to calculate diagnostic chord speed of sound average Number of seconds to calculate diagnostic chord speed of sound running average (RunningAvgDiagnosticChordSndVel) and set diagnostic chord speed of sound average validity (IsDiagnosticChordRunningAvgValid).	RW	Y	Y	Y	int	sec	sec	uint16	sec		60	1	3600
865	IsDiagnosticChordRunningAvgValid	Validity for diagnostic chord speed of sound average When TRUE (1), it indicates that diagnostic chord speed of sound running average (RunningAvgDiagnosticChordSndVel) is valid. It is set to FALSE (0) when diagnostic speed of sound check feature (IsDiagnosticSndSpdDetectionFeatureActive) is FALSE (0) or meter is not in measurement mode or time period to calculate diagnostic speed of sound running average (RunningAvgDiagnosticChordSndVel) has not elapsed (DiagnosticChordRunningAvgSeconds).	R				int	-	-	boolean	-	Invalid (FALSE) Valid (TRUE)			
866	IsChordLengthMismatched	In-use chord length does not match calculated chord length The in-use chord length does not match for one or more chords. See chord alarms for more details (IsChordLengthMismatchedA, IsChordLengthMismatchedB, IsChordLengthMismatchedC, IsChordLengthMismatchedD, IsChordLengthMismatchedE, IsChordLengthMismatchedF, IsChordLengthMismatchedG, IsChordLengthMismatchedH). Recommended Actions: 1. Open the Transducer Swap-Out wizard in MeterLink™ and verify the component lengths for chord (LA, LB, LC, LD, LE, LF, LG and LH) are correct. Compare them against a Zero Flow Calibration report if you have one or read the values off the individual components. This report can be requested from your Emerson Flow service representative. The wizard will calculate the new chord lengths which can be written to the meter if different from the value In Use to clear this alarm. 2. 2. If the issue is unresolved, collect Meter Archive Logs (Daily, Hourly, Audit, Alarm and System) with MeterLink™ and contact your local area Emerson Flow service representative.	R				int	-	-	boolean	-				
867	ReadWriteModePortA	Serial port A read and write mode Indicate serial port A access level. When Read-write mode (0) is set, all valid read and write request will be performed. When Read-only mode (1) is set, all valid read requests will be performed and all write requests will be rejected. The serial port can be configured to allow PPP protocol only or to allow Modbus and PPP protocols (ProtocolPortA).	RW	Y	Y	Y	int	-	-	uint8	-	Read-write mode (0) Read-only mode (1)	0	0	1
868	ReadWriteModePortB	Serial port B read and write mode Indicate serial port B access level. When Read-write mode (0) is set, all valid read and write request will be performed. When Read-only mode (1) is set, all valid read requests will be performed and all write requests will be rejected. The serial port can be configured to allow PPP protocol only or to allow Modbus and PPP protocols (ProtocolPortB).	RW	Y	Y	Y	int	-	-	uint8	-	Read-write mode (0) Read-only mode (1)	0	0	1
869	ReadWriteModePortC	Serial port C read and write mode Indicate serial port C access level. When Read-write mode (0) is set, all valid read and write request will be performed. When Read-only mode (1) is set, all valid read requests will be performed and all write requests will be rejected. The serial port can be configured to allow PPP protocol only or to allow Modbus and PPP protocols (ProtocolPortC).	RW	Y	Y	Y	int	-	-	uint8	-	Read-write mode (0) Read-only mode (1)	0	0	1

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
870	IsGasCompositionValidationEnabled	Enables gas properties validation When set to Enabled, the meter will validate in-use gas properties as per the configured the AGA8 method (HCH_Method). When the AGA8 method is either configured as "GERG-2008" or "Detail Method", the meter will validate in-use gas composition (MethaneInUse, EthaneInUse, PropaneInUse, IsoButaneInUse, NButaneInUse, IsoPentaneInUse, NPentaneInUse, NHexaneInUse, NHeptaneInUse, NOctaneInUse, NNonaneInUse, NDecaneInUse, H2SInUse, HeliumInUse, WaterInUse, OxygenInUse, ArgonInUse) post-normalization to check if the individual gas components mole fraction are within limits as per the configured AGA8 method and the total unnormalized in-use gas composition mole percentage of all the gas components is within the range of 85% to 115%. When the AGA8 method is "Gross Method 1" or "Gross Method 2", the meter will validate the in-use specific gravity (SpecificGravityInUse) is within the range of 0.2 to 0.8. When the AGA8 method is "Gross Method 1", the meter will validate the in-use heating value (HeatingValueInUse) is within the range of 50 kJ/cubic dm to 15 kJ/cubic dm.	RW	Y	Y	Y	int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	TRUE (1)	FALSE (0)	TRUE (1)
871	PerfStatusSuppressLmt	Chord performance status suppression limit Minimum percentage of chord performance to suppress chordal performance statuses. If the chord performance (PctGoodA..PctGoodH) is above this limit then the chordal performance statuses for the chord (DidDltTmChkFailA..DidDltTmChkFailH, IsSigQltyBadA..IsSigQltyBadH, DidExceedMaxNoiseA..DidExceedMaxNoiseH, IsSNRTooLowA..IsSNRTooLowH, DidTmDevChkFailA..DidTmDevChkFailH, IsSigDistortedA..IsSigDistortedH, IsPeakSwitchDetectedA..IsPeakSwitchDetectedH, IsSigClippedA..IsSigClippedH and IsStackingIncompleteA..IsStackingIncompleteH) are suppressed. This limit cannot be set less than or equal to percentage good threshold (MinPctGood).	RW	Y	Y		int	%	%	uint8	%		95	0	100
872	MaxConnDBAPI	Maximum number of DB API connections This is the upper limit to the number of DB API connections.	RW	Y	Y		int	-	-	uint8	-		10	10	40
873	IsQFlowInvalid	Flow-condition volumetric flow rate invalid This indicates when the flow-condition volumetric flow rate (QFlow) is invalid. See also: QFlowValidity	R				int	-	-	boolean	-	Invalid (TRUE) Valid (FALSE)			
874	IsQBaseInvalid	Base-condition volumetric flow rate invalid This indicates when the base-condition volumetric flow rate (QBase) is invalid. See also: QBaseValidity	R				int	-	-	boolean	-	Invalid (TRUE) Valid (FALSE)			
875	IsMassRateInvalid	Mass flow rate invalid This indicates when the mass flow rate (MassRate) is invalid. See also: MassRateValidity	R				int	-	-	boolean	-	Invalid (TRUE) Valid (FALSE)			
876	IsAuditLogFixedDataPointsEnabled	Enables or disables audit log for fixed value configuration data points When set to TRUE (1), audit logging of fixed value configuration data point is enabled. Enables audit logging of MoleFractionNHeptane, MoleFractionH2S, MoleFractionArgon, MoleFractionN2Method2, MoleFractionCO2, MoleFractionH2, MoleFractionCO, MoleFractionMethane, MoleFractionNNonane, MoleFractionNOctane, MoleFractionHelium, MoleFractionWater, MoleFractionEthane, MoleFractionPropane, MoleFractionIsoButane, MoleFractionNButane, MoleFractionIsoPentane, MoleFractionNPentane, MoleFractionNHexane, MoleFractionNDecane, MoleFractionOxygen, MeasVolGrossHeatingVal, SpecZFlow, SpecZBase, SpecificGravity, SpecFlowPressure, SpecFlowTemperature and SpecRhoMixFlow.	RW	Y	Y		int	-	-	boolean	-	Disabled (FALSE) Enabled (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
877	XdcrType	Transducer type The set of transducers with the same tracking parameters of which the installed transducers are a member. The value is typically set by the set transducer type (SetXdcrType). However, this value may be manually entered or overwritten.	RW	Y	Y	Y	int	-	-	uint8	-	Not set (0) T-11/T-21/T-41 (2) T-12/T-22 (3) T-32 (4) T-200 (5)	0	0	5
878	MeterNominalSize	Meter nominal size The meter nominal size as set by the user or at the factory. The meter nominal size is used for the MeterLink™-created Smart Meter Verification report.	RW	Y	Y	Y	int	-	-	uint8	-	Not set (0) 4 in (DN 100) (4) 6 in (DN 150) (6) 8 in (DN 200) (8) 10 in (DN 250) (10) 12 in (DN 300) (12) 14 in (DN 350) (14) 16 in (DN 400) (16) 18 in (DN 450) (18) 20 in (DN 500) (20) 22 in (DN 550) (22) 24 in (DN 600) (24) 26 in (DN 650) (26) 28 in (DN 700) (28) 30 in (DN 750) (30) 32 in (DN 800) (32) 34 in (DN 850) (34) 36 in (DN 900) (36) 42 in (DN 1050) (42)	0	0	255
879	SwirlAngleLmt	Swirl angle limit The flow swirl angle limit around the baseline (FwdBaselineSwirlAngle, RevBaselineSwirlAngle, SwirlAngleLowLmt, SwirlAngleHighLmt) beyond which there is increased uncertainty in flow measurement.	RW	Y	Y	Y	int	deg	deg	uint8	deg		5	0	90
883	SMVDailyResultMonth	Daily SMV result month This indicates daily Smart Meter Verification results (DailyFlowVolFlowRateResult, DailyElectronicsResult, DailySpdSndPathSpreadResult, DailyPerformanceResult, DailyTransducersResult, DailyConfigurationResult, DailyBaseVolFlowRateResult, DailyVelocityDiagnosticsResult, DailySpdSndDiagnosticsResult, DailyFlowRateDiagnosticsResult, DailyGasCompPresTempResult, and DailyResult) real-time clock month where 1 means January and 12 means December. The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification).	R	Y			int	-	-	uint8	-	Not calculated (0) Jan (1) Feb (2) Mar (3) Apr (4) May (5) Jun (6) Jul (7) Aug (8) Sep (9) Oct (10) Nov (11) Dec (12)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
884	SMVDailyResultDay	Daily SMV result day This indicates daily Smart Meter Verification results (DailyFlowVolFlowRateResult, DailyElectronicsResult, DailySpdSndPathSpreadResult, DailyPerformanceResult, DailyTransducersResult, DailyConfigurationResult, DailyBaseVolFlowRateResult, DailyVelocityDiagnosticsResult, DailySpdSndDiagnosticsResult, DailyFlowRateDiagnosticsResult, DailyGasCompPresTempResult, and DailyResult) real-time clock day where 1 means 1st day of the month and so on. The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification).	R	Y			int	-	-	uint8	-				
885	SMVDailyResultYear	Daily SMV result year (2 digit) This indicates daily Smart Meter Verification results (DailyFlowVolFlowRateResult, DailyElectronicsResult, DailySpdSndPathSpreadResult, DailyPerformanceResult, DailyTransducersResult, DailyConfigurationResult, DailyBaseVolFlowRateResult, DailyVelocityDiagnosticsResult, DailySpdSndDiagnosticsResult, DailyFlowRateDiagnosticsResult, DailyGasCompPresTempResult, and DailyResult) real-time clock year in YY format (2 digit). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification).	R	Y			int	-	-	uint8	-				
886	DailyResult	Daily SMV result This indicates the overall daily result for the Smart Meter Verification subgroups (DailyFlowVolFlowRateResult, DailyElectronicsResult, DailySpdSndPathSpreadResult, DailyPerformanceResult, DailyTransducersResult, DailyConfigurationResult, DailyBaseVolFlowRateResult, DailyVelocityDiagnosticsResult, DailySpdSndDiagnosticsResult, DailyFlowRateDiagnosticsResult, and DailyGasCompPresTempResult). The overall daily Smart Meter Verification result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there is at least one daily Smart Meter Verification subgroup with result as "Warning" and no subgroup with result "Fail" for the period, then the overall daily Smart Meter Verification result is Warning(2). If there is at least one daily Smart Meter Verification subgroup with result "Fail" for the period, then the overall daily Smart Meter Verification result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
887	DailyFlowVolFlowRateResult	Daily SMV flow-condition volumetric flow rate subgroup result This indicates the daily Smart Meter Verification flow-condition volumetric flow rate subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsTooFewOperChords, IsEstimatedFlowVelocityInUse, and QFlowValidity alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
888	DailyElectronicsResult	Daily SMV electronics subgroup result This indicates the daily Smart Meter Verification electronics subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from DidColdStart, IsCorePresent, WatchDogReset, IsAcqModuleError, IsAcqModuleIncompatible, IsXdcrFiringSyncError, IsClkInvalid, IsColocMeterCommErr, DidPowerFail, IsElecTempOutOfRange, IsElecVoltOutOfRange, IsHourlyLogFull, IsDailyLogFull, IsAuditLogFull, IsAlarmLogFull, IsSystemLogFull, DidResetUsers, and DidWarmStart alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
889	DailySpdSndPathSpreadResult	Daily SMV speed of sound path spread subgroup result This indicates the daily Smart Meter Verification speed of sound path spread subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsMeasSndSpdRangeA..IsMeasSndSpdRangeH alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
890	DailyPerformanceResult	Daily SMV performance subgroup result This indicates the daily Smart Meter Verification performance subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsFailedForBatchA..IsFailedForBatchH, IsHardFailedA..IsHardFailedH, DidDltTmChkFailA..DidDltTmChkFailH, IsSigQltyBadA..IsSigQltyBadH, DidExceedMaxNoiseA..DidExceedMaxNoiseH, IsSNRTooLowA..IsSNRTooLowH, DidTmDevChkFailA..DidTmDevChkFailH, IsSigDistortedA..IsSigDistortedH, IsPeakSwitchDetectedA..IsPeakSwitchDetectedH, and IsSigClippedA..IsSigClippedH alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
891	DailyTransducersResult	Daily SMV transducers subgroup result This indicates the daily Smart Meter Verification transducers subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsAcqMode, IsBatchInactiveA..IsBatchInactiveH, and IsXdcrMaintenanceRequiredA..IsXdcrMaintenanceRequiredH alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
892	DailyConfigurationResult	Daily SMV configuration subgroup result This indicates the daily Smart Meter Verification configuration subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsWarmStartReq, IsChordLengthMismatchedA..IsChordLengthMismatchedH, and DidCnfgChksumChg alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
893	DailyBaseVolFlowRateResult	Daily SMV base-condition volumetric flow rate subgroup result This indicates the daily Smart Meter Verification base-condition volumetric flow rate subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from QBaseValidity alarm.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
894	DailyVelocityDiagnosticsResult	Daily SMV velocity diagnostics subgroup result This indicates the daily Smart Meter Verification velocity diagnostics subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsSevereFlowConditionDetected, IsMeterVelAboveMaxLmt, IsFwdBaselineNotSet, IsRevBaselineNotSet, IsBlockageDetected, IsBoreBuildupDetected, IsLiquidDetected, and IsAbnormalProfileDetected alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
895	DailySpdSndDiagnosticsResult	Daily SMV speed of sound diagnostics subgroup result This indicates the daily Smart Meter Verification speed of sound diagnostics subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsSndVelCompErr, IsColocMeterSndSpdRangeErr, IsDiagnosticSndSpdRangeErr, and IsAvgSoundVelRangeErr alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
896	DailyFlowRateDiagnosticsResult	Daily SMV flow rate diagnostics subgroup result This indicates the daily Smart Meter Verification flow rate diagnostics subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from IsColocMeterQFlowRangeErr and IsReverseFlowDetected alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
897	DailyGasCompPresTempResult	Daily SMV gas composition/pressure/temperature subgroup result This indicates the daily Smart Meter Verification gas composition/pressure/temperature subgroup result. The result is based on whether any alarm(s) is/are active for the period from the midnight of the previous day to the midnight of the present day (SMVDailyResultMonth, SMVDailyResultDay, SMVDailyResultYear). If there are no active alarms for the period, then result is Pass(1). If there is at least one alarm with status-level "Yellow" active and no alarm with status-level "Red" active for the period, then result is Warning(2). If there is at least one alarm with status-level "Red" active for the period, then result is Fail(3). The value is Not calculated(0) if Smart Meter Verification result has yet to be generated after firmware upgrade to Smart Meter Verification supported firmware, if there are no SMV-capable hourly logs present in the meter for the report period, or the meter does not support Smart Meter Verification (only 4-Path and 8-Path meters support Smart Meter Verification). The result is calculated at midnight of each day or on meter warm start if the previous day's result has not been generated. The result is calculated from PressureInvalid, TemperatureInvalid, AreGasPropertiesInvalidInUse, IsGCCommErr, IsGCDataErr, and IsGCAlarmPresent alarms.	R	Y			int	-	-	uint8	-	Not calculated (0) Pass (1) Warning (2) Fail (3)			
898	DidResetUsers	User database reset, latched until acknowledged The user database has been reset to a single user "administrator" with the privilege to perform user management and default password as "Administrator-<CPUBdSerialNumber>". The default password is based on CPU Module serial number (CPUBdSerialNumber) mentioned on a label on the CPU Module. Recommended Actions: 1. Reconfigure the meter's users. It is recommended that the default Administrator password should be changed. Other users can be reconfigured manually or imported from a previously exported encrypted user database file. 2. The alarm must be acknowledged to clear it from the list of alarms. 3. If facing any user management related issue, then contact your local area Emerson Flow service representative.	RW	Y	Y		int	-	-	boolean	-	Reset users cleared (FALSE) Reset users indicated (TRUE)	FALSE (0)	FALSE (0)	TRUE (1)
4000	AI1Input	Analog input 1 (temperature) current value Analog input 1 (temperature) current value, represents live flow-condition temperature (LiveFlowTemperature).	R				float	ma	ma	float32	ma				
4002	AI2Input	Analog input 2 (pressure) current value Analog input 2 (pressure) current value, represents live flow-condition pressure (LiveFlowPressure).	R				float	ma	ma	float32	ma				
4004	AI3Input	Analog input 3 current value Analog input 3 current value, available when Expansion I/O Module is connected.	R				float	ma	ma	float32	ma				
4006	EmRateDesired	Desired transducer firing (emission) rate The desired emission rate or time between the firing of two transducers in sequence based on the firing order (FireSeq). The actual emission rate used (EmRateActual) will not be less than the meter's calculated minimum based on the meter's geometry (pipe diameter (PipeDiam)), distance between transducers (LA, LB, LC, LD, LE, LF, LG, LH), axial distance between transducers (XA, XB, XC, XD, XE, XF, XG, XH), the minimum speed of sound (SSMin) and the physical characteristics of the transducers themselves. The actual emission rate used may also be impacted by stacking (StackEmRateActual). A value of (0) ensures the use of fastest available rate determined by the meter.	RW	Y	Y	Y	float	ms	ms	float32	ms		0	0	64
4008	StackEmRateDesired	Desired stacking transducer firing (emission) rate The desired emission rate or time between firing of the same transducer when stacking is turned on, that is the stack size (StackSize) is not equal to (1). The actual emission rate used (StackEmRateActual) will not be less than the meter's calculated minimum based on the meter's geometry (pipe diameter (PipeDiam)), distance between transducers (LA, LB, LC, LD, LE, LF, LG, LH), axial distance between transducers (XA, XB, XC, XD, XE, XF, XG, XH), the minimum speed of sound (SSMin) and the physical characteristics of the transducers themselves. This value may impact the overall transducer to transducer emission rate selected by the emission rate desired (EmRateDesired). A value of (0) ensures the use of fastest available rate determined by the meter.	RW	Y	Y	Y	float	ms	ms	float32	ms		0	0	64
4010	ZeroCut	Flow velocity below which the flow rate is considered zero This value is used along with the pipe area (PipeArea) to compute the volumetric flow cutoff (QCutOff) below which the flow-condition volumetric flow rate (QFlow) is considered zero, chord turbulence values are not calculated (TurbulenceA..TurbulenceH) and "flow gated" (FLOW_GATED) values are not accumulated. Also, when the average weighted flow velocity (AvgWtdFlowVel) is below this threshold the flow direction (FlowDirection) will not change. The flow analysis lower limit (FlowAnalysisLowFlowLmt) may not be set lower than this value.	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0.1	0	1
4012	MeterMaxVel	Maximum meter velocity The maximum for the meter's average flow velocity (AvgFlow). This limit is used to generate an alarm meter velocity above maximum limit (IsMeterVelAboveMaxLmt), when the average flow velocity magnitude is above this limit. Note, however, that this limit does not affect the meter's measurement.	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		50	1	50
4014	SSMin	Minimum speed of sound Minimum speed of sound. This is used to define the area to search for a signal when in acquisition mode and is also used in emission rate determination. This minimum and the maximum speed of sound (SSMax) may need to be adjusted to prevent problems acquiring the signal.	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		300	150	1500
4016	SSMax	Maximum speed of sound Maximum speed of sound. This is used to define the area to search for a signal when in acquisition mode. The minimum (SSMin) and this maximum speed of sound may need to be adjusted to prevent problems acquiring the signal.	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		450	150	1500
4018	AvgSoundVelLoLmt	Speed of sound lo-alarm limit The low limit for the average speed of sound range error (IsAvgSoundVelRangeErr) alarm. It is used strictly for alarming purposes and does not impact any other meter functionality. This is different from the minimum acquisition mode speed of sound (SSMin).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		300	0	1500
4020	AvgSoundVelHiLmt	Speed of sound hi-alarm limit The high limit for the average speed of sound range error (IsAvgSoundVelRangeErr) alarm. It is used strictly for alarming purposes and does not impact any other meter functionality. This is different from the maximum acquisition mode speed of sound (SSMax).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		450	0	1500

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4022	CRange	Maximum percentage chord speed of sound deviation Maximum percentage chord speed of sound deviation. If a chord's speed of sound measurement relative to the average speed of sound is above this threshold, IsMeasSndSpdRangeA, IsMeasSndSpdRangeB, IsMeasSndSpdRangeC, IsMeasSndSpdRangeD, IsMeasSndSpdRangeE, IsMeasSndSpdRangeF, IsMeasSndSpdRangeG, IsMeasSndSpdRangeH, is set to TRUE (1).	RW	Y	Y	Y	float	%	%	float32	%		0.5	0	10
4024	SndSpdChkMinVel	Minimum flow velocity for CRange test Minimum flow velocity for performing the inter-chord speed of sound check (CRange) and calculating speed of sound path spread (SpdSndSpread).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		1	1	50
4026	SndSpdChkMaxVel	Maximum flow velocity for CRange test Maximum flow velocity for performing the inter-chord speed of sound check (CRange) and calculating speed of sound path spread (SpdSndSpread).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		30	1	50
4028	Freq1ZeroScaleVolFlowRate	Frequency Output 1 pair volumetric flow rate corresponding to a frequency of zero Specifies the Frequency Output 1 pair volumetric flow rate corresponding to a frequency of zero when the Frequency Output 1 pair content (Freq1Content) is set to a volumetric flow rate.	RW	Y		Y	float	volume/time	volume/time	float32	m3/hr		0	0	0
4030	Freq1FullScaleVolFlowRate	Frequency Output 1 pair volumetric flow rate corresponding to the maximum frequency Specifies the Frequency Output 1 pair volumetric flow rate corresponding to the maximum frequency selected (Freq1MaxFrequency) when Frequency Output 1 pair content (Freq1Content) is set to a volumetric flow rate.	RW	Y	Y	Y	float	volume/time	volume/time	float32	m3/hr		200000	0	3.40E+38
4032	Freq1MinVel	Frequency Output 1 pair velocity corresponding to zero frequency Specifies the Frequency Output 1 pair velocity corresponding to the minimum frequency (0 Hz) when the Frequency Output 1 pair content (Freq1Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	0	1500
4034	Freq1MaxVel	Frequency Output 1 pair velocity corresponding to the maximum frequency Specifies the Frequency Output 1 pair velocity corresponding to the maximum frequency selected (Freq1MaxFrequency) when the Frequency Output 1 pair content (Freq1Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		50	0	1500
4036	Freq1ZeroScaleEnergyRate	Frequency Output 1 pair energy rate corresponding to a frequency of zero Specifies the Frequency Output 1 pair energy rate corresponding to a frequency of zero when the Frequency Output 1 pair content (Freq1Content) is set to energy rate (EnergyRate).	RW	Y		Y	float	energy/time	energy/time	float32	MJ/hr		0	0	0
4038	Freq1FullScaleEnergyRate	Frequency Output 1 pair energy rate corresponding to the maximum frequency Specifies the Frequency Output 1 pair energy rate corresponding to the maximum frequency selected (Freq1MaxFrequency) when the Frequency Output 1 pair content (Freq1Content) is set to energy rate (EnergyRate).	RW	Y	Y	Y	float	energy/time	energy/time	float32	MJ/hr		4000	0	3.40E+38
4040	Freq1ZeroScaleMassRate	Frequency Output 1 pair mass rate corresponding to a frequency of zero Specifies the Frequency Output 1 pair mass rate corresponding to a frequency of zero when the Frequency Output 1 pair content (Freq1Content) is set to mass rate (MassRate).	RW	Y		Y	float	mass/time	mass/time	float32	kg/hr		0	0	0
4042	Freq1FullScaleMassRate	Frequency Output 1 pair mass rate corresponding to the maximum frequency Specifies the Frequency Output 1 pair mass rate corresponding to the maximum frequency selected (Freq1MaxFrequency) when the Frequency Output 1 pair content (Freq1Content) is set to mass rate (MassRate).	RW	Y	Y	Y	float	mass/time	mass/time	float32	kg/hr		4000	0	3.40E+38
4044	Freq2ZeroScaleVolFlowRate	Frequency Output 2 pair volumetric flow rate corresponding to a frequency of zero Specifies the Frequency Output 2 pair volumetric flow rate corresponding to a frequency of zero when the Frequency Output 2 pair content (Freq2Content) is set to a volumetric flow rate.	RW	Y		Y	float	volume/time	volume/time	float32	m3/hr		0	0	0
4046	Freq2FullScaleVolFlowRate	Frequency Output 2 pair volumetric flow rate corresponding to the maximum frequency Specifies the Frequency Output 2 pair volumetric flow rate corresponding to the maximum frequency selected (Freq2MaxFrequency) when the Frequency Output 2 pair content (Freq2Content) is set to a volumetric flow rate.	RW	Y	Y	Y	float	volume/time	volume/time	float32	m3/hr		200000	0	3.40E+38
4048	Freq2MinVel	Frequency Output 2 pair velocity corresponding to zero frequency Specifies the Frequency Output 2 pair velocity corresponding to the minimum frequency (0 Hz) when the Frequency Output 2 pair content (Freq2Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	bitfield	bitfield	float32	m/s		0	0	1500
4050	Freq2MaxVel	Frequency Output 2 pair velocity corresponding to the maximum frequency Specifies the Frequency Output 2 pair velocity corresponding to the maximum frequency selected (Freq2MaxFrequency) when the Frequency Output 2 pair content (Freq2Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		50	0	1500
4052	Freq2ZeroScaleEnergyRate	Frequency Output 2 pair energy rate corresponding to a frequency of zero Specifies the Frequency Output 2 pair energy rate corresponding to a frequency of zero when the Frequency Output 2 pair content (Freq2Content) is set to energy rate (EnergyRate).	RW	Y		Y	float	energy/time	energy/time	float32	MJ/hr		0	0	0
4054	Freq2FullScaleEnergyRate	Frequency Output 2 pair energy rate corresponding to the maximum frequency Specifies the Frequency Output 2 pair energy rate corresponding to the maximum frequency selected (Freq2MaxFrequency) when the Frequency Output 2 pair content (Freq2Content) is set to energy rate (EnergyRate).	RW	Y	Y	Y	float	energy/time	energy/time	float32	MJ/hr		4000	0	3.40E+38
4056	Freq2ZeroScaleMassRate	Frequency Output 2 pair mass rate corresponding to a frequency of zero Specifies the Frequency Output 2 pair mass rate corresponding to a frequency of zero when the Frequency Output 2 pair content (Freq2Content) is set to mass rate (MassRate).	RW	Y		Y	float	mass/time	mass/time	float32	kg/hr		0	0	0
4058	Freq2FullScaleMassRate	Frequency Output 2 pair mass rate corresponding to the maximum frequency Specifies the Frequency Output 2 pair mass rate corresponding to the maximum frequency selected (Freq2MaxFrequency) when the Frequency Output 2 pair content (Freq2Content) is set to mass rate (MassRate).	RW	Y	Y	Y	float	mass/time	mass/time	float32	kg/hr		4000	0	3.40E+38
4060	PipeDiam	Pipe inside diameter The pipe inside diameter used to calculate the pipe area (PipeArea) and port angle (PortAngle).	RW	Y	Y	Y	float	m	in	float32	m		0.1524	0.0254	2
4062	PipeOutsideDiameter	Pipe outside diameter Pipe outside diameter. This is used to calculate the pressure expansion correction factor (when the correction is enabled via the enable pressure expansion correction (EnableExpCorrPress)).	RW	Y	Y	Y	float	m	ft	float32	m		2	0	3
4064	SystemDelay	System delay time The portion of the signal transit time due to the physical characteristics of the electronics. It is computed as seven times the sample interval (SampInterval) plus an electronics delay constant. It is used in conjunction with the chord specific delay times (AvgDlyA, AvgDlyB, AvgDlyC, AvgDlyD, AvgDlyE,AvgDlyF, AvgDlyG, AvgDlyH).	R	Y			float	us	us	float32	us				
4066	FwdA0	Dry calibration forward flow A0 coefficient The forward flow A0 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-1	1
4068	FwdA1	Dry calibration forward flow A1 coefficient The forward flow A1 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4070	FwdA2	Dry calibration forward flow A2 coefficient The forward flow A2 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	s/m	sec/ft	float32	s/m		0	-0.1	0.1

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4072	FwdA3	Dry calibration forward flow A3 coefficient The forward flow A3 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	s2/m2	sec2/ft2	float32	s2/m2		0	-0.1	0.1
4074	RevA0	Dry calibration reverse flow A0 coefficient The forward flow A0 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-1	1
4076	RevA1	Dry calibration reverse flow A1 coefficient The reverse flow A1 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4078	RevA2	Dry calibration reverse flow A2 coefficient The reverse flow A2 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	s/m	sec/ft	float32	s/m		0	-0.1	0.1
4080	RevA3	Dry calibration reverse flow A3 coefficient The reverse flow A3 coefficient used in dry calibration. The dry calibration "A" coefficients are always applied to the flow velocity to generate average flow velocity (AvgFlow).	RW	Y	Y	Y	float	s2/m2	sec2/ft2	float32	s2/m2		0	-0.1	0.1
4082	FwdC0	Flow calibration forward flow C0 coefficient The forward flow C0 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-1	1
4084	FwdC1	Flow calibration forward flow C1 coefficient The forward flow C1 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4086	FwdC2	Flow calibration forward flow C2 coefficient The forward flow C2 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	s/m	sec/ft	float32	s/m		0	-0.1	0.1
4088	FwdC3	Flow calibration forward flow C3 coefficient The forward flow C3 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	s2/m2	sec2/ft2	float32	s2/m2		0	-0.1	0.1
4090	RevC0	Flow calibration reverse flow C0 coefficient The reverse flow C0 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-1	1
4092	RevC1	Flow calibration reverse flow C1 coefficient The reverse flow C1 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4094	RevC2	Flow calibration reverse flow C2 coefficient The reverse flow C2 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	s/m	sec/ft	float32	s/m		0	-0.1	0.1
4096	RevC3	Flow calibration reverse flow C3 coefficient The reverse flow C3 coefficient used in flow calibration. The flow calibration "C" coefficients are applied to the flow velocity to produce average flow velocity (AvgFlow) when selected via the flow calibration method selector (CalMethod).	RW	Y	Y	Y	float	s2/m2	sec2/ft2	float32	s2/m2		0	-0.1	0.1
4098	FwdFlwRt1	Piecewise linearization fwd vol flow rate 1 The first and highest forward flow rate used for piecewise linearization. It is paired with forward meter factor 1 (FwdMtrFctr1) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero. Flow rates above this point will simply apply forward meter factor 1 (FwdMtrFctr1) as the linear meter factor (LinearMtrFctr).	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4100	FwdFlwRt2	Piecewise linearization fwd vol flow rate 2 The second forward flow rate used for piecewise linearization. It is paired with forward meter factor 2 (FwdMtrFctr2) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4102	FwdFlwRt3	Piecewise linearization fwd vol flow rate 3 The third forward flow rate used for piecewise linearization. It is paired with forward meter factor 3 (FwdMtrFctr3) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4104	FwdFlwRt4	Piecewise linearization fwd vol flow rate 4 The fourth forward flow rate used for piecewise linearization. It is paired with forward meter factor 4 (FwdMtrFctr4) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4106	FwdFlwRt5	Piecewise linearization fwd vol flow rate 5 The fifth forward flow rate used for piecewise linearization. It is paired with forward meter factor 5 (FwdMtrFctr5) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4108	FwdFlwRt6	Piecewise linearization fwd vol flow rate 6 The sixth forward flow rate used for piecewise linearization. It is paired with forward meter factor 6 (FwdMtrFctr6) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4110	FwdFlwRt7	Piecewise linearization fwd vol flow rate 7 The seventh forward flow rate used for piecewise linearization. It is paired with forward meter factor 7 (FwdMtrFctr7) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4112	FwdFlwRt8	Piecewise linearization fwd vol flow rate 8 The eighth forward flow rate used for piecewise linearization. It is paired with forward meter factor 8 (FwdMtrFctr8) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4114	FwdFlwRt9	Piecewise linearization fwd vol flow rate 9 The ninth forward flow rate used for piecewise linearization. It is paired with forward meter factor 9 (FwdMtrFctr9) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4116	FwdFlwRt10	Piecewise linearization fwd vol flow rate 10 The tenth forward flow rate used for piecewise linearization. It is paired with forward meter factor 10 (FwdMtrFctr10) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4118	FwdFlwRt11	Piecewise linearization fwd vol flow rate 11 The eleventh forward flow rate used for piecewise linearization. It is paired with forward meter factor 11 (FwdMtrFctr11) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4120	FwdFlwRt12	Piecewise linearization fwd vol flow rate 12 The twelfth and lowest forward flow rate used for piecewise linearization. It is paired with forward meter factor 12 (FwdMtrFctr12) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4122	FwdMtrFctr1	Piecewise linearization forward meter factor 1 The first forward meter factor used for piecewise linearization. It is paired with forward flow rate 1 (FwdFlwRt1) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4124	FwdMtrFctr2	Piecewise linearization forward meter factor 2 The second forward meter factor used for piecewise linearization. It is paired with forward flow rate 2 (FwdFlwRt2) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4126	FwdMtrFctr3	Piecewise linearization forward meter factor 3 The third forward meter factor used for piecewise linearization. It is paired with forward flow rate 3 (FwdFlwRt3) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4128	FwdMtrFctr4	Piecewise linearization forward meter factor 4 The fourth forward meter factor used for piecewise linearization. It is paired with forward flow rate 4 (FwdFlwRt4) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4130	FwdMtrFctr5	Piecewise linearization forward meter factor 5 The fifth forward meter factor used for piecewise linearization. It is paired with forward flow rate 5 (FwdFlwRt5) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4132	FwdMtrFctr6	Piecewise linearization forward meter factor 6 The sixth forward meter factor used for piecewise linearization. It is paired with forward flow rate 6 (FwdFlwRt6) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4134	FwdMtrFctr7	Piecewise linearization forward meter factor 7 The seventh forward meter factor used for piecewise linearization. It is paired with forward flow rate 7 (FwdFlwRt7) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4136	FwdMtrFctr8	Piecewise linearization forward meter factor 8 The eighth forward meter factor used for piecewise linearization. It is paired with forward flow rate 8 (FwdFlwRt8) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4138	FwdMtrFctr9	Piecewise linearization forward meter factor 9 The ninth forward meter factor used for piecewise linearization. It is paired with forward flow rate 9 (FwdFlwRt9) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4140	FwdMtrFctr10	Piecewise linearization forward meter factor 10 The tenth forward meter factor used for piecewise linearization. It is paired with forward flow rate 10 (FwdFlwRt10) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4142	FwdMtrFctr11	Piecewise linearization forward meter factor 11 The eleventh forward meter factor used for piecewise linearization. It is paired with forward flow rate 11 (FwdFlwRt11) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4144	FwdMtrFctr12	Piecewise linearization forward meter factor 12 The twelfth forward meter factor used for piecewise linearization. It is paired with forward flow rate 12 (FwdFlwRt12) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4146	RevFlwRt1	Piecewise linearization rev vol flow rate 1 The first and highest reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 1 (RevMtrFctr1) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero. Flow rates above this point will simply apply reverse meter factor 1 (RevMtrFctr1) as the linear meter factor (LinearMtrFctr).	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4148	RevFlwRt2	Piecewise linearization rev vol flow rate 2 The second reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 2 (RevMtrFctr2) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4150	RevFlwRt3	Piecewise linearization rev vol flow rate 3 The third reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 3 (RevMtrFctr3) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4152	RevFlwRt4	Piecewise linearization rev vol flow rate 4 The fourth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 4 (RevMtrFctr4) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4154	RevFlwRt5	Piecewise linearization rev vol flow rate 5 The fifth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 5 (RevMtrFctr5) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4156	RevFlwRt6	Piecewise linearization rev vol flow rate 6 The sixth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 6 (RevMtrFctr6) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4158	RevFlwRt7	Piecewise linearization rev vol flow rate 7 The seventh reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 7 (RevMtrFctr7) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4160	RevFlwRt8	Piecewise linearization rev vol flow rate 8 The eighth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 8 (RevMtrFctr8) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4162	RevFlwRt9	Piecewise linearization rev vol flow rate 9 The ninth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 9 (RevMtrFctr9) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4164	RevFlwRt10	Piecewise linearization rev vol flow rate 10 The tenth reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 10 (RevMtrFctr10) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4166	RevFlwRt11	Piecewise linearization rev vol flow rate 11 The eleventh reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 11 (RevMtrFctr11) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4168	RevFlwRt12	Piecewise linearization rev vol flow rate 12 The twelfth and lowest reverse flow rate used for piecewise linearization. It is paired with reverse meter factor 12 (RevMtrFctr12) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to zero.	RW	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	0	200000
4170	RevMtrFctr1	Piecewise linearization reverse meter factor 1 The first reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 1 (RevFlwRt1) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4172	RevMtrFctr2	Piecewise linearization reverse meter factor 2 The second reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 2 (RevFlwRt2) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4174	RevMtrFctr3	Piecewise linearization reverse meter factor 3 The third reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 3 (RevFlwRt3) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4176	RevMtrFctr4	Piecewise linearization reverse meter factor 4 The fourth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 4 (RevFlwRt4) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4178	RevMtrFctr5	Piecewise linearization reverse meter factor 5 The fifth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 5 (RevFlwRt5) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4180	RevMtrFctr6	Piecewise linearization reverse meter factor 6 The sixth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 6 (RevFlwRt6) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4182	RevMtrFctr7	Piecewise linearization reverse meter factor 7 The seventh reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 7 (RevFlwRt7) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4184	RevMtrFctr8	Piecewise linearization reverse meter factor 8 The eighth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 8 (RevFlwRt8) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4186	RevMtrFctr9	Piecewise linearization reverse meter factor 9 The ninth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 9 (RevFlwRt9) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4188	RevMtrFctr10	Piecewise linearization reverse meter factor 10 The tenth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 10 (RevFlwRt10) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4190	RevMtrFctr11	Piecewise linearization reverse meter factor 11 The eleventh reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 11 (RevFlwRt11) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4192	RevMtrFctr12	Piecewise linearization reverse meter factor 12 The twelfth reverse meter factor used for piecewise linearization. It is paired with reverse flow rate 12 (RevFlwRt12) to form an endpoint of a line segment to the next lowest endpoint. This line segment is used to interpolate the linear meter factor (LinearMtrFctr) based on the dry calibration flow velocity. If it is unused it should be set to unity (1).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1.05
4194	SpecCorrectionFactor	Specified (fixed) flow profile correction factor (for single- and dual-path meters only) Specifies the (fixed) flow profile correction factor (for single and dual-path meters only) either manually entered or calculated by the meter. A zero value indicates that the meter is to calculate the flow profile correction factor based on pipe wall roughness (WallRoughness), pipe inside diameter (PipeDiam) and Reynolds Number (ReynoldsNumber). Reynolds Number (ReynoldsNumber) requires that AGA8 calculations (HCH_Method) are performed by the meter or performed externally.	RW	Y	Y		float	-	-	float32	-		0	0	1.05
4196	Viscosity	Natural gas mixture dynamic viscosity Natural gas mixture dynamic viscosity. Only required for JuniorSonic meters when specified flow profile correction factor (SpecCorrectionFactor) is calculated.	RW	Y	Y		float	Pa.s	cPoise	float32	Pa.s		0.000012	0	0.00005

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4198	WallRoughness	Pipe wall roughness Pipe wall roughness. Only required for JuniorSonic meters when specified flow profile correction factor (SpecCorrectionFactor) is calculated.	RW	Y	Y	Y	float	m	ft	float32	m		0.00000762	0	0.0001
4200	YoungsModulus	Young's Modulus value (tensile stress to tensile strain ratio) Young's Modulus value (tensile stress to tensile strain ratio). This is used to calculate the strain per unit stress (StrainPerUnitStress) when expansion correction (EnableExpCorrPress) is enabled.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		202000	137895	310264
4202	PoissonsRatio	Poisson's Ratio value (absolute ratio of lateral strain to axial strain) Poisson's Ratio value (absolute ratio of lateral strain to axial strain). This is used to calculate the strain per unit stress (StrainPerUnitStress) when expansion correction (EnableExpCorrPress) is enabled.	RW	Y	Y	Y	float	-	-	float32	-		0.3	0.2	0.4
4204	AtmosphericPress	Atmospheric pressure Specifies the atmospheric pressure. This value is required when the input pressure absolute/gage selector (InputPressureUnit) is Gage, so that flow-condition absolute pressure (AbsFlowPressure) can be calculated.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.101325	0.03	0.1084
4206	SpecFlowPressure	Specified (fixed) flow-condition pressure Specifies the flow-condition pressure used in calculations when the enable pressure input (EnablePressureInput) is set to Fixed (2). This value is also required if the flow-condition pressure and/or temperature source when the corresponding input is in alarm (FlowPOrTSrcUponAlarm) is set to Use fixed value (1).	RW	Y	Y		float	MPa	psi	float32	MPa		0.10156	0	280
4208	LowPressureAlarm	Pressure alarm low limit Pressure alarm low limit. The pressure is invalid (PressureValidity) when the input flow pressure (SpecFlowPressure, LiveFlowPressure) is at or below this limit.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.001	0	280
4210	HighPressureAlarm	Pressure alarm high limit Pressure alarm high limit. The pressure is invalid (PressureValidity) when the input flow pressure (SpecFlowPressure, LiveFlowPressure) is at or above this limit.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		8.3	0	280
4212	SpecFlowTemperature	Specified (fixed) flow-condition temperature Specifies the flow-condition temperature used in calculations when the enable temperature input (EnableTemperatureInput) is set to Fixed (2). This value is also required if the flow-condition pressure and/or temperature source when the corresponding input is in alarm (FlowPOrTSrcUponAlarm) is set to Use fixed value (1).	RW	Y	Y		float	deg C	deg F	float32	K		273.15	143.15	473.15
4214	LowTemperatureAlarm	Temperature alarm low limit Temperature alarm low limit. The temperature is invalid (TemperatureValidity) when the input flow temperature is at or below this limit.	RW	Y	Y	Y	float	deg C	deg F	float32	K		233.15	143.15	473.15
4216	HighTemperatureAlarm	Temperature alarm high limit Temperature alarm high limit. The temperature is invalid (TemperatureValidity) when the input flow temperature is at or above this limit.	RW	Y	Y	Y	float	deg C	deg F	float32	K		473.15	143.15	523.15
4218	LinearExpansionCoef	Linear expansion coefficient Linear expansion coefficient. This is used to calculate the temperature expansion correction factor (when the correction is enabled via the enable temperature expansion correction (EnableExpCorrTemp)).	RW	Y	Y	Y	float	1/deg C	1/deg F	float32	1/K		0.0000115	0.00001	0.000018
4220	SpecRhoMixFlow	Specified (fixed) flow-condition gas mass density Specifies the flow-condition gas mass density. This is used as RhoMixFlow (RhoMixFlow) when the AGA8 calculations are performed externally (selected via AGA8 calculation method (HCH_Method)).	RW	Y	Y		float	kg/m3	lbm/ft3	float32	kg/m3		0	0	500
4222	RefTempLinearExpCoef	Reference temperature for linear expansion Reference temperature for linear expansion. This is used to calculate the temperature expansion correction factor (when the correction is enabled via the enable temperature expansion correction (EnableExpCorrTemp)).	RW	Y	Y	Y	float	deg C	deg F	float32	K		293.15	143.15	473.15
4224	SpecZFlow	Specified (fixed) flow-condition gas compressibility Specifies the flow-condition gas compressibility. This is used as ZFlow (ZFlow) when the AGA8 calculations are performed externally (selected via AGA8 calculation method (HCH_Method)).	RW	Y	Y		float	-	-	float32	-		0	0	2
4226	SpecZBase	Specified (fixed) base-condition gas compressibility Specifies the base-condition gas compressibility. This is used as ZBase (ZBase) when the AGA8 calculations are performed externally (selected via AGA8 calculation method (HCH_Method)).	RW	Y	Y		float	-	-	float32	-		0	0	2
4228	PBase	Base-condition pressure The base-condition pressure used for calculating the corrected, base-condition volumetric flow rate (QBase).	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.10156	0.001	280
4230	MeasVolGrossHeatingVal	Volumetric gross heating value Volumetric gross heating value (required when AGA8 calculation method (HCH_Method) is "Gross Method 1"). These gas property values are either fixed (heating value and its reference temperature are user specified) or read from GC when the gas properties source selector (GasPropertiesSrcSel) is "Live - GC" or read from Transmitter Head 1 of a Dual-Configuration meter when the gas properties source selector (GasPropertiesSrcSel) is "Transmitter Head 1". Reading the gas property data from a GC requires the interface to GC to be enabled (IsOptionalGCInterfaceEnabled) and the GC communication port (GCSerialPort) to be configured. See also RefTemperatureHV. Gas property data can be read from Transmitter Head 1 of a Dual-Configuration meter only on Transmitter Head 2 (ColocMeterMode) of a data sharing Dual-Configuration meter.	RW	Y	Y		float	kJ/dm3	Btu/ft3	float32	kJ/dm3		38.6022	15	50
4232	RefTemperatureHV	Volumetric gross heating value reference temperature Volumetric gross heating value reference temperature (required when AGA8 calculation method (HCH_Method) is Gross Method 1. See also MeasVolGrossHeatingVal.	RW	Y	Y	Y	float	deg C	deg F	float32	K		288.7056	143.15	328.15
4234	TBase	Base-condition temperature The base-condition temperature used for calculating the corrected, base-condition volumetric flow rate (QBase).	RW	Y	Y	Y	float	deg C	deg F	float32	K		273.15	143.15	328.15
4236	SpecificGravity	Gas specific gravity (relative density) Gas specific gravity (relative density) (required when AGA8 calculation method (HCH_Method) is either "Gross Method 1" or "Gross Method 2"). Specific gravity value is either a fixed (user specified) value or read from GC when the gas properties source selector (GasPropertiesSrcSel) is "Live - GC" or read from Transmitter Head 1 of a Dual-Configuration meter when the gas properties source selector (GasPropertiesSrcSel) is "Transmitter Head 1".	RW	Y	Y		float	-	-	float32	-		0.581078	0	2
4238	RefTemperatureGr	Reference temperature for specific gravity (relative density) Reference temperature for specific gravity (relative density) (required when AGA8 calculation method (HCH_Method) is either Gross Method 1 or Gross Method 2).	RW	Y	Y	Y	float	deg C	deg F	float32	K		288.7056	143.15	328.15
4240	RefPressureGr	Reference (absolute) pressure for specific gravity (relative density) Reference (absolute) pressure for specific gravity (relative density) (required when AGA8 calculation method (HCH_Method) is either Gross Method 1 or Gross Method 2).	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.10156	0.001	280
4242	RefTemperatureMolarDensity	Reference temperature for molar density Reference temperature for molar density (required when AGA8 calculation method (HCH_Method) is Gross Method 1).	RW	Y	Y	Y	float	deg C	deg F	float32	K		288.7056	143.15	328.15
4244	RefPressureMolarDensity	Reference (absolute) pressure for molar density Reference (absolute) pressure for molar density (required when AGA8 calculation method (HCH_Method) is Gross Method 1).	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.10156	0.001	280
4246	MoleFractionN2Method2	Nitrogen gas component The nitrogen gas component is calculated only when AGA8 method selector (HCH_Method) is Gross Method 1. It is assigned value of (N2InUse) for Gross Method 2, and is not calculated for other AGA8 methods.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4248	MoleFractionCO2	Carbon dioxide gas component Carbon dioxide gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4250	MoleFractionH2	Hydrogen gas component Hydrogen gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4252	MoleFractionCO	Carbon monoxide gas component Carbon monoxide gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4254	MoleFractionMethane	Methane gas component Methane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4256	MoleFractionEthane	Ethane gas component Ethane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4258	MoleFractionPropane	Propane gas component Propane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4260	MoleFractionIsoButane	Isobutane gas component Isobutane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4262	MoleFractionNButane	N-Butane gas component N-Butane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4264	MoleFractionIsoPentane	Isopentane gas component Isopentane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4266	MoleFractionNPentane	N-Pentane gas component N-Pentane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4268	MoleFractionNHexane	N-Hexane gas component N-Hexane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4270	MoleFractionNHeptane	N-Heptane gas component N-Heptane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4272	MoleFractionNOctane	N-Octane gas component N-Octane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4274	MoleFractionNNonane	N-Nonane gas component N-Nonane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4276	MoleFractionNDecane	N-Decane gas component N-Decane gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4278	MoleFractionH2S	Hydrogen sulfide gas component Hydrogen sulphide gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4280	MoleFractionHelium	Helium gas component Helium gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4282	MoleFractionWater	Water gas component Water gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4284	MoleFractionOxygen	Oxygen gas component Oxygen gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4286	MoleFractionArgon	Argon gas component Argon gas component mole fraction.	RW	Y	Y		float	mole %	mole %	float32	mole fraction		0	0	1
4288	GainLowLmt	Minimum gain limit The minimum gain applied to the received signal. On power-up, this value is set to the minimum gain for the Acquisition Module (DSPBdRevNum).	RW	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)		25	0	3.40E+38
4290	GainHighLmt	Maximum gain limit The maximum gain applied to the received signal. On power-up, this value is set to the maximum gain for the Acquisition Module (DSPBdRevNum).	RW	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)		49881.6	0	3.40E+38
4292	XdcrFreq	Transducer frequency The output frequency of the transducers. Usually adjusted by setting the transducer type (SetXdcrType). A transducer frequency of 125 KHz requires a standard Acquisition Module. A transducer frequency higher than 125 KHz requires a High Frequency Acquisition Module.	RW	Y	Y	Y	float	KHz	KHz	float32	KHz		125	125	250
4294	SampInterval	Sampling (rate) interval. Changing this value requires re-booting the meter The duration in nanoseconds of the signal sampling period. It is also used to compute the system delay (SystemDelay). Usually adjusted by setting the transducer type (SetXdcrType). A sample interval of 800 ns requires a standard Acquisition Module. A sample interval less than 800 ns requires a High Frequency Acquisition Module.	RW	Y	Y	Y	float	ns	ns	float32	ns		800	400	800
4296	MinHoldTime	Minimum sampling hold time The minimum sampling hold time limit. This is the minimum amount of time the meter waits after firing a transducer before sampling the receiving transducer's signal. This value should only be changed at the factory or under the direction of Emerson Flow Support. After a firmware upgrade, this value may be automatically adjusted to be within the required limits.	RW	Y	Y	Y	float	us	us	float32	us		208	208	32000
4298	MaxHoldTm	Maximum sampling hold time The maximum sampling hold time limit. This is the maximum amount of time the meter waits after firing a transducer before sampling the receiving transducer's signal. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	us	us	float32	us		32000	16	32000
4300	DltChk	Maximum delta time check parameter The maximum amount of time allowed for delta times (the difference between the up stream and down stream signal transit time). Usually adjusted by setting the transducer type (SetXdcrType). It is converted to sample interval units (DltChkSI) internally for use by the meter. When a chord's delta check value exceeds this limit, the chord's time check error status, DidDltTmChkFailA, DidDltTmChkFailB, DidDltTmChkFailC, DidDltTmChkFailD, DidDltTmChkFailE, DidDltTmChkFailF, DidDltTmChkFailG, DidDltTmChkFailH is set to TRUE (1).	RW	Y	Y	Y	float	us	us	float32	us		5.6	2.8	32
4302	NegSpan	Minimum negative pulse width The minimum time the signal must remain negative adjacent to a zero crossing. Usually adjusted by setting the transducer type (SetXdcrType). It is converted to sample interval units (NegSpanSI) internally for use by the meter. This parameter is used to detect distorted waveforms and incorrect measurements. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	us	us	float32	us		2.4	1	10
4304	PosSpan	Minimum positive pulse width The minimum time the signal must remain positive adjacent to a zero crossing. It is converted to sample interval units (PosSpanSI) internally for use by the meter. Usually adjusted by setting the transducer type (SetXdcrType). This parameter is used to detect distorted waveforms and incorrect measurements. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	us	us	float32	us		3.2	1	10

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4306	TmDevLow1	Transit time standard deviation threshold for measurement quality check The minimum standard deviation value of the transit time for which the quality check (TmDevFctr1) is evaluated. Paths with times closer to the mean are assumed to be valid without further evaluation. Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	us	us	float32	us		2	0	10
4308	TmDevFctr1	Measurement Quality check deviation factor Measurement Quality check transit time standard deviation factor. When a path's transit time is more than this number of standard deviations from the path's median transit time for the batch, the individual measurement is flagged as bad and the corresponding chord's DidTmDevChkFailA, DidTmDevChkFailB, DidTmDevChkFailC, DidTmDevChkFailD, DidTmDevChkFailE, DidTmDevChkFailF, DidTmDevChkFailG, DidTmDevChkFailH are set to TRUE (1). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	-	-	float32	-		2	1	100
4310	Pk1Wdth	Maximum selected peak pulse width The maximum time between zero crossings (one half cycle) used as the distance to search for the next peak value. This value is converted internally to sample intervals for use (PkPlsWdthSI). Usually adjusted by setting the transducer type (SetXdcrType). This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	us	us	float32	us		5.6	1	10
4312	TspfWt	Tracking target Pf weighting factor The weighting applied to the score generated by TspfSen when summed with TspeWt * TspeSen score and TampWt * TampSen score to generate an overall rating to select P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	-	-	float32	-		2	0	3
4314	TspeWt	Tracking target Pe weighting factor The weighting applied to the score generated by TspeSen when summed with TspfWt * TspfSen score and TampWt * TampSen score to generate an overall rating to select P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	-	-	float32	-		0	0	3
4316	TampWt	Tracking target normalized amplitude weighting factor The weighting applied to the score generated by TampSen when summed with TspeWt * TspeSen score and TspfWt * TspfSen score to generate an overall rating to select P1. This value should only be changed at the factory or under the direction of Emerson Flow Support.	RW	Y	Y	Y	float	-	-	float32	-		0.5	0	3
4318	WtA	Chord A weight for calculating average weighted velocity Chord A weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4320	WtB	Chord B weight for calculating average weighted velocity Chord B weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4322	WtC	Chord C weight for calculating average weighted velocity Chord C weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4324	WtD	Chord D weight for calculating average weighted velocity Chord D weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4326	WtE	Chord E weight for calculating average weighted velocity Chord E weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4328	WtF	Chord F weight for calculating average weighted velocity Chord F weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4330	WtG	Chord G weight for calculating average weighted velocity Chord G weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4332	WtH	Chord H weight for calculating average weighted velocity Chord H weight for calculating average weighted velocity (set by the meter based on the device number (DeviceNumber)).	R	Y			float	-	-	float32	-				
4334	MeterMaxNegVel	Maximum meter reverse flow velocity Maximum meter reverse flow velocity (-1 * MeterMaxVel). This is automatically calculated by the meter.	R				float	m/s	ft/s	float32	m/s				
4336	EmRateActual	Actual transducer firing (emission) rate Actual transducer firing (emission) rate. This is the time between firing two different transducers.	R	Y			float	ms	ms	float32	ms				
4338	StackEmRateActual	Actual stacking transducer firing (emission) rate Actual stacking transducer firing (emission) rate. The meter will wait this amount of time before firing the same transducer if stacking is set to >1.	R	Y			float	ms	ms	float32	ms				
4340	PipeArea	Pipe area Pipe cross-sectional area. Set by the meter from the pipe inside diameter (PipeDiam).	R				float	m2	ft2	float32	m2				
4342	LinearMtrFctr	Piecewise linearization meter factor Piecewise linearization meter factor. This meter factor is only applied to the flow velocity when the piecewise linearization method is selected via the calibration method (CalMethod) data point. It is computed from the piecewise velocities and the corresponding gains plus the offsets.	R				float	-	-	float32	-				
4344	GainA1	Gain when transducer A1 is receiving a signal Gain when transducer A1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4346	GainA2	Gain when transducer A2 is receiving a signal Gain when transducer A2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4348	GainB1	Gain when transducer B1 is receiving a signal Gain when transducer B1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4350	GainB2	Gain when transducer B2 is receiving a signal Gain when transducer B2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4352	GainC1	Gain when transducer C1 is receiving a signal Gain when transducer C1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4354	GainC2	Gain when transducer C2 is receiving a signal Gain when transducer C2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4356	GainD1	Gain when transducer D1 is receiving a signal Gain when transducer D1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4358	GainD2	Gain when transducer D2 is receiving a signal Gain when transducer D2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4360	GainE1	Gain when transducer E1 is receiving a signal Gain when transducer E1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4362	GainE2	Gain when transducer E2 is receiving a signal Gain when transducer E2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4364	GainF1	Gain when transducer F1 is receiving a signal Gain when transducer F1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4366	GainF2	Gain when transducer F2 is receiving a signal Gain when transducer F2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4368	GainG1	Gain when transducer G1 is receiving a signal Gain when transducer G1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4370	GainG2	Gain when transducer G2 is receiving a signal Gain when transducer G2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4372	GainH1	Gain when transducer H1 is receiving a signal Gain when transducer H1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4374	GainH2	Gain when transducer H2 is receiving a signal Gain when transducer H2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	Y			float	gain (dB)	gain (dB)	float32	gain (h/w)				
4376	HoldTmA1	Hold time (A1) Hold time (A1).	R				float	sec	sec	float32	us				
4378	HoldTmA2	Hold time (A2) Hold time (A2).	R				float	sec	sec	float32	us				
4380	HoldTmB1	Hold time (B1) Hold time (B1).	R				float	sec	sec	float32	us				
4382	HoldTmB2	Hold time (B2) Hold time (B2).	R				float	sec	sec	float32	us				
4384	HoldTmC1	Hold time (C1) Hold time (C1).	R				float	sec	sec	float32	us				
4386	HoldTmC2	Hold time (C2) Hold time (C2).	R				float	sec	sec	float32	us				
4388	HoldTmD1	Hold time (D1) Hold time (D1).	R				float	sec	sec	float32	us				
4390	HoldTmD2	Hold time (D2) Hold time (D2).	R				float	sec	sec	float32	us				
4392	HoldTmE1	Hold time (E1) Hold time (E1).	R				float	sec	sec	float32	us				
4394	HoldTmE2	Hold time (E2) Hold time (E2).	R				float	sec	sec	float32	us				
4396	HoldTmF1	Hold time (F1) Hold time (F1).	R				float	sec	sec	float32	us				
4398	HoldTmF2	Hold time (F2) Hold time (F2).	R				float	sec	sec	float32	us				
4400	HoldTmG1	Hold time (G1) Hold time (G1).	R				float	sec	sec	float32	us				
4402	HoldTmG2	Hold time (G2) Hold time (G2).	R				float	sec	sec	float32	us				
4404	HoldTmH1	Hold time (H1) Hold time (H1).	R				float	sec	sec	float32	us				
4406	HoldTmH2	Hold time (H2) Hold time (H2).	R				float	sec	sec	float32	us				
4408	TspfA1	Tracking target Pf value (A1) Tracking target Pf value (A1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4410	TspfA2	Tracking target Pf value (A2) Tracking target Pf value (A2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4412	TspfB1	Tracking target Pf value (B1) Tracking target Pf value (B1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4414	TspfB2	Tracking target Pf value (B2) Tracking target Pf value (B2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4416	TspfC1	Tracking target Pf value (C1) Tracking target Pf value (C1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4418	TspfC2	Tracking target Pf value (C2) Tracking target Pf value (C2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4420	TspfD1	Tracking target Pf value (D1) Tracking target Pf value (D1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4422	TspfD2	Tracking target Pf value (D2) Tracking target Pf value (D2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4424	TspfE1	Tracking target Pf value (E1) Tracking target Pf value (E1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4426	TspfE2	Tracking target Pf value (E2) Tracking target Pf value (E2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4428	TspfF1	Tracking target Pf value (F1) Tracking target Pf value (F1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4430	TspfF2	Tracking target Pf value (F2) Tracking target Pf value (F2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4432	TspfG1	Tracking target Pf value (G1) Tracking target Pf value (G1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4434	TspfG2	Tracking target Pf value (G2) Tracking target Pf value (G2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4436	TspfH1	Tracking target Pf value (H1) Tracking target Pf value (H1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4438	TspfH2	Tracking target Pf value (H2) Tracking target Pf value (H2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4440	TspeA1	Tracking target Pe value (A1) Tracking target Pe value (A1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4442	TspeA2	Tracking target Pe value (A2) Tracking target Pe value (A2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4444	TspeB1	Tracking target Pe value (B1) Tracking target Pe value (B1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4446	TspeB2	Tracking target Pe value (B2) Tracking target Pe value (B2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4448	TspeC1	Tracking target Pe value (C1) Tracking target Pe value (C1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4450	TspeC2	Tracking target Pe value (C2) Tracking target Pe value (C2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4452	TspeD1	Tracking target Pe value (D1) Tracking target Pe value (D1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4454	TspeD2	Tracking target Pe value (D2) Tracking target Pe value (D2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4456	TspeE1	Tracking target Pe value (E1) Tracking target Pe value (E1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4458	TspeE2	Tracking target Pe value (E2) Tracking target Pe value (E2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4460	TspeF1	Tracking target Pe value (F1) Tracking target Pe value (F1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4462	TspeF2	Tracking target Pe value (F2) Tracking target Pe value (F2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4464	TspeG1	Tracking target Pe value (G1) Tracking target Pe value (G1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4466	TspeG2	Tracking target Pe value (G2) Tracking target Pe value (G2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4468	TspeH1	Tracking target Pe value (H1) Tracking target Pe value (H1).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4470	TspeH2	Tracking target Pe value (H2) Tracking target Pe value (H2).	R	Y			float	sample intervals	sample intervals	float32	sample intervals				
4472	TampA1	Tracking target normalized amplitude value (A1) Tracking target normalized amplitude value (A1).	R	Y			float	%	%	float32	%				
4474	TampA2	Tracking target normalized amplitude value (A2) Tracking target normalized amplitude value (A2).	R	Y			float	%	%	float32	%				
4476	TampB1	Tracking target normalized amplitude value (B1) Tracking target normalized amplitude value (B1).	R	Y			float	%	%	float32	%				
4478	TampB2	Tracking target normalized amplitude value (B2) Tracking target normalized amplitude value (B2).	R	Y			float	%	%	float32	%				
4480	TampC1	Tracking target normalized amplitude value (C1) Tracking target normalized amplitude value (C1).	R	Y			float	%	%	float32	%				
4482	TampC2	Tracking target normalized amplitude value (C2) Tracking target normalized amplitude value (C2).	R	Y			float	%	%	float32	%				
4484	TampD1	Tracking target normalized amplitude value (D1) Tracking target normalized amplitude value (D1).	R	Y			float	%	%	float32	%				
4486	TampD2	Tracking target normalized amplitude value (D2) Tracking target normalized amplitude value (D2).	R	Y			float	%	%	float32	%				
4488	TampE1	Tracking target normalized amplitude value (E1) Tracking target normalized amplitude value (E1).	R	Y			float	%	%	float32	%				
4490	TampE2	Tracking target normalized amplitude value (E2) Tracking target normalized amplitude value (E2).	R	Y			float	%	%	float32	%				
4492	TampF1	Tracking target normalized amplitude value (F1) Tracking target normalized amplitude value (F1).	R	Y			float	%	%	float32	%				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4494	TampF2	Tracking target normalized amplitude value (F2) Tracking target normalized amplitude value (F2).	R	Y			float	%	%	float32	%				
4496	TampG1	Tracking target normalized amplitude value (G1) Tracking target normalized amplitude value (G1).	R	Y			float	%	%	float32	%				
4498	TampG2	Tracking target normalized amplitude value (G2) Tracking target normalized amplitude value (G2).	R	Y			float	%	%	float32	%				
4500	TampH1	Tracking target normalized amplitude value (H1) Tracking target normalized amplitude value (H1).	R	Y			float	%	%	float32	%				
4502	TampH2	Tracking target normalized amplitude value (H2) Tracking target normalized amplitude value (H2).	R	Y			float	%	%	float32	%				
4504	FlowPressure	Flow-condition pressure This is either gage or absolute pressure depending upon input pressure absolute/gage selector (InputPressureUnit). If flow-condition pressure input selector (EnablePressureInput) is "Fixed", flow-condition pressure = specified (fixed) flow-condition pressure (SpecFlowPressure) when written via a non-ISO 17089 Modbus register or via the HART Command-132 or via DB API protocol. When the flow-condition absolute pressure is written via the ISO 17089 Modbus register and the input pressure absolute/gage selector is set to "Gage", flow-condition pressure = specified (fixed) flow-condition pressure - Atmospheric pressure (AtmosphericPress). If flow-condition pressure input selector is "Live", flow-condition pressure = average of live flow-condition pressure (LiveFlowPressure) values for the past five seconds. If flow-condition pressure input selector is "Transmitter Head 1", flow-condition pressure is read from Transmitter Head 1 of a Dual-Configuration meter (ColocMeterIPAddress).	R	Y			float	MPa	psi	float32	MPa				
4506	AbsFlowPressure	Flow-condition absolute pressure Flow-condition absolute pressure. If input pressure absolute/gage selector (InputPressureUnit) is "Gage", flow-condition absolute pressure = flow-condition pressure (FlowPressure) + specified atmospheric pressure (AtmosphericPress). Otherwise, if input pressure absolute/gage selector (InputPressureUnit) is "Absolute", flow-condition absolute pressure = flow-condition pressure (FlowPressure).	R				float	MPa	psi	float32	MPa				
4508	FlowTemperature	Flow-condition temperature If flow-condition temperature input selector (EnableTemperatureInput) is "Fixed", flow-condition temperature = specified (fixed) flow-condition temperature (SpecFlowTemperature) when written via a Modbus register or via the HART Command-132 or via DB API protocol. Otherwise, if flow-condition temperature input selector is "Live", flow-condition temperature = average of live flow-condition temperature (LiveFlowTemperature) values for the past five seconds. If flow-condition temperature input selector is "Transmitter Head 1", flow-condition temperature is read from Transmitter Head 1 of a Dual-Configuration meter (ColocMeterIPAddress).	R	Y			float	deg C	deg F	float32	K				
4510	StrainPerUnitStress	Calculated strain per unit stress due to pressure Calculated strain per unit stress due to pressure. This is calculated if pressure expansion correction (ExpCorrPressure) is enabled via the Enable for pressure expansion correction (EnableExpCorrPress).	R				float	1/MPa	1/psi	float32	1/MPa				
4512	RefPressExpCoef	Pressure expansion correction reference coefficient Reference coefficient used to compute pressure expansion correction (ExpCorrPressure). Normally this is one atmosphere.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0.101325	-3.40E+38	3.40E+38
4514	ExpCorrPressure	Pressure expansion correction factor Pressure expansion correction factor. If pressure expansion correction is enabled via the Enable for pressure expansion correction (EnableExpCorrPress), then this value, is computed as (1.0 + (3.0 x strain per unit stress (StrainPerUnitStress) x (absolute flow pressure (AbsFlowPressure) - reference pressure (RefPressExpCoef)))), otherwise this value is unity (1.0) Along with temperature expansion correction factor (ExpCorrTemperature), this value is used to compute the corrected flow (QExpCorr) from the uncorrected flow (QMeter).	R				float	-	-	float32	-				
4516	ExpCorrTemperature	Temperature expansion correction factor in three dimensions The temperature expansion correction factor used to correct volumes. If temperature expansion correction is enabled (EnableExpCorrTemp), then this value is calculated, otherwise it is set to 1. This correction factor is computed from the linear expansion coefficient (LinearExpansionCoef), the reference temperature (RefTempLinearExpCoef) and the flow temperature (FlowTemperature) as: (1 + 3 * linear expansion coefficient * (flow temperature - reference temperature)) Typically, this correction factor is applied to the volumetric flows (QExpCorr and those derived from it, QFlow and QBase).	R				float	-	-	float32	-				
4518	ExpCorrTemperatureForVel	Temperature expansion correction factor in a single dimension The temperature expansion correction factor for linear measurements. If temperature expansion correction is enabled (EnableExpCorrTemp), then this value is calculated, otherwise it is set to 1. This correction factor is computed from the linear expansion coefficient (LinearExpansionCoef), the reference temperature (RefTempLinearExpCoef) and the flow temperature (FlowTemperature) as: (1 + linear expansion coefficient * (flow temperature - reference temperature)) Typically, this correction factor is applied to the speeds of sound (SndVelA, SndVelB, SndVelC, SndVelD, SndVelE, SndVelF, SndVelH, SndVelG) to correct for changes in the L distances (LA, LB, LC, LD, LE, LF, LG, LH) .	R				float	-	-	float32	-				
4520	ReynoldsNumber	Reynolds Number (measure of turbulence) The Reynolds Number is the ratio of inertial forces to viscous forces. A low values indicates laminar flow while a high value indicates turbulent flow.	R				float	-	-	float32	-				
4522	CorrectionFactor	Flow profile correction factor Flow profile correction factor (for single and dual-path meters only) either manually entered (SpecCorrectionFactor) or calculated by the meter.	R				float	-	-	float32	-				
4524	BatchUpdatePeriod	Desired batch update period Desired batch update period based on the configured batch update period (SpecBatchUpdtPeriod) and stack size (StackSize). The actual duration (BatchTimeSec) will vary slightly around this value from batch to batch.	R				float	ms	ms	float32	sec				
4526	FwdPropABin1	Fwd direction chord A bin 1 proportion Forward direction chord A bin 1 proportion.	R	Y			float	-	-	float32	-				
4528	FwdPropABin2	Fwd direction chord A bin 2 proportion Forward direction chord A bin 2 proportion.	R	Y			float	-	-	float32	-				
4530	FwdPropABin3	Fwd direction chord A bin 3 proportion Forward direction chord A bin 3 proportion.	R	Y			float	-	-	float32	-				
4532	FwdPropABin4	Fwd direction chord A bin 4 proportion Forward direction chord A bin 4 proportion.	R	Y			float	-	-	float32	-				
4534	FwdPropABin5	Fwd direction chord A bin 5 proportion Forward direction chord A bin 5 proportion.	R	Y			float	-	-	float32	-				
4536	FwdPropABin6	Fwd direction chord A bin 6 proportion Forward direction chord A bin 6 proportion.	R	Y			float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4538	FwdPropABin7	Fwd direction chord A bin 7 proportion Forward direction chord A bin 7 proportion.	R	Y			float	-	-	float32	-				
4540	FwdPropABin8	Fwd direction chord A bin 8 proportion Forward direction chord A bin 8 proportion.	R	Y			float	-	-	float32	-				
4542	FwdPropABin9	Fwd direction chord A bin 9 proportion Forward direction chord A bin 9 proportion.	R	Y			float	-	-	float32	-				
4544	FwdPropABin10	Fwd direction chord A bin 10 proportion Forward direction chord A bin 10 proportion.	R	Y			float	-	-	float32	-				
4546	FwdPropBBin1	Fwd direction chord B bin 1 proportion Forward direction chord B bin 1 proportion.	R	Y			float	-	-	float32	-				
4548	FwdPropBBin2	Fwd direction chord B bin 2 proportion Forward direction chord B bin 2 proportion.	R	Y			float	-	-	float32	-				
4550	FwdPropBBin3	Fwd direction chord B bin 3 proportion Forward direction chord B bin 3 proportion.	R	Y			float	-	-	float32	-				
4552	FwdPropBBin4	Fwd direction chord B bin 4 proportion Forward direction chord B bin 4 proportion.	R	Y			float	-	-	float32	-				
4554	FwdPropBBin5	Fwd direction chord B bin 5 proportion Forward direction chord B bin 5 proportion.	R	Y			float	-	-	float32	-				
4556	FwdPropBBin6	Fwd direction chord B bin 6 proportion Forward direction chord B bin 6 proportion.	R	Y			float	-	-	float32	-				
4558	FwdPropBBin7	Fwd direction chord B bin 7 proportion Forward direction chord B bin 7 proportion.	R	Y			float	-	-	float32	-				
4560	FwdPropBBin8	Fwd direction chord B bin 8 proportion Forward direction chord B bin 8 proportion.	R	Y			float	-	-	float32	-				
4562	FwdPropBBin9	Fwd direction chord B bin 9 proportion Forward direction chord B bin 9 proportion.	R	Y			float	-	-	float32	-				
4564	FwdPropBBin10	Fwd direction chord B bin 10 proportion Forward direction chord B bin 10 proportion.	R	Y			float	-	-	float32	-				
4566	FwdPropCBin1	Fwd direction chord C bin 1 proportion Forward direction chord C bin 1 proportion.	R	Y			float	-	-	float32	-				
4568	FwdPropCBin2	Fwd direction chord C bin 2 proportion Forward direction chord C bin 2 proportion.	R	Y			float	-	-	float32	-				
4570	FwdPropCBin3	Fwd direction chord C bin 3 proportion Forward direction chord C bin 3 proportion.	R	Y			float	-	-	float32	-				
4572	FwdPropCBin4	Fwd direction chord C bin 4 proportion Forward direction chord C bin 4 proportion.	R	Y			float	-	-	float32	-				
4574	FwdPropCBin5	Fwd direction chord C bin 5 proportion Forward direction chord C bin 5 proportion.	R	Y			float	-	-	float32	-				
4576	FwdPropCBin6	Fwd direction chord C bin 6 proportion Forward direction chord C bin 6 proportion.	R	Y			float	-	-	float32	-				
4578	FwdPropCBin7	Fwd direction chord C bin 7 proportion Forward direction chord C bin 7 proportion.	R	Y			float	-	-	float32	-				
4580	FwdPropCBin8	Fwd direction chord C bin 8 proportion Forward direction chord C bin 8 proportion.	R	Y			float	-	-	float32	-				
4582	FwdPropCBin9	Fwd direction chord C bin 9 proportion Forward direction chord C bin 9 proportion.	R	Y			float	-	-	float32	-				
4584	FwdPropCBin10	Fwd direction chord C bin 10 proportion Forward direction chord C bin 10 proportion.	R	Y			float	-	-	float32	-				
4586	FwdPropDBin1	Fwd direction chord D bin 1 proportion Forward direction chord D bin 1 proportion.	R	Y			float	-	-	float32	-				
4588	FwdPropDBin2	Fwd direction chord D bin 2 proportion Forward direction chord D bin 2 proportion.	R	Y			float	-	-	float32	-				
4590	FwdPropDBin3	Fwd direction chord D bin 3 proportion Forward direction chord D bin 3 proportion.	R	Y			float	-	-	float32	-				
4592	FwdPropDBin4	Fwd direction chord D bin 4 proportion Forward direction chord D bin 4 proportion.	R	Y			float	-	-	float32	-				
4594	FwdPropDBin5	Fwd direction chord D bin 5 proportion Forward direction chord D bin 5 proportion.	R	Y			float	-	-	float32	-				
4596	FwdPropDBin6	Fwd direction chord D bin 6 proportion Forward direction chord D bin 6 proportion.	R	Y			float	-	-	float32	-				
4598	FwdPropDBin7	Fwd direction chord D bin 7 proportion Forward direction chord D bin 7 proportion.	R	Y			float	-	-	float32	-				
4600	FwdPropDBin8	Fwd direction chord D bin 8 proportion Forward direction chord D bin 8 proportion.	R	Y			float	-	-	float32	-				
4602	FwdPropDBin9	Fwd direction chord D bin 9 proportion Forward direction chord D bin 9 proportion.	R	Y			float	-	-	float32	-				
4604	FwdPropDBin10	Fwd direction chord D bin 10 proportion Forward direction chord D bin 10 proportion.	R	Y			float	-	-	float32	-				
4606	FwdPropEBin1	Fwd direction chord E bin 1 proportion Forward direction chord E bin 1 proportion.	R	Y			float	-	-	float32	-				
4608	FwdPropEBin2	Fwd direction chord E bin 2 proportion Forward direction chord E bin 2 proportion.	R	Y			float	-	-	float32	-				
4610	FwdPropEBin3	Fwd direction chord E bin 3 proportion Forward direction chord E bin 3 proportion.	R	Y			float	-	-	float32	-				
4612	FwdPropEBin4	Fwd direction chord E bin 4 proportion Forward direction chord E bin 4 proportion.	R	Y			float	-	-	float32	-				
4614	FwdPropEBin5	Fwd direction chord E bin 5 proportion Forward direction chord E bin 5 proportion.	R	Y			float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4616	FwdPropEBin6	Fwd direction chord E bin 6 proportion Forward direction chord E bin 6 proportion.	R	Y			float	-	-	float32	-				
4618	FwdPropEBin7	Fwd direction chord E bin 7 proportion Forward direction chord E bin 7 proportion.	R	Y			float	-	-	float32	-				
4620	FwdPropEBin8	Fwd direction chord E bin 8 proportion Forward direction chord E bin 8 proportion.	R	Y			float	-	-	float32	-				
4622	FwdPropEBin9	Fwd direction chord E bin 9 proportion Forward direction chord E bin 9 proportion.	R	Y			float	-	-	float32	-				
4624	FwdPropEBin10	Fwd direction chord E bin 10 proportion Forward direction chord E bin 10 proportion.	R	Y			float	-	-	float32	-				
4626	FwdPropFBin1	Fwd direction chord F bin 1 proportion Forward direction chord F bin 1 proportion.	R	Y			float	-	-	float32	-				
4628	FwdPropFBin2	Fwd direction chord F bin 2 proportion Forward direction chord F bin 2 proportion.	R	Y			float	-	-	float32	-				
4630	FwdPropFBin3	Fwd direction chord F bin 3 proportion Forward direction chord F bin 3 proportion.	R	Y			float	-	-	float32	-				
4632	FwdPropFBin4	Fwd direction chord F bin 4 proportion Forward direction chord F bin 4 proportion.	R	Y			float	-	-	float32	-				
4634	FwdPropFBin5	Fwd direction chord F bin 5 proportion Forward direction chord F bin 5 proportion.	R	Y			float	-	-	float32	-				
4636	FwdPropFBin6	Fwd direction chord F bin 6 proportion Forward direction chord F bin 6 proportion.	R	Y			float	-	-	float32	-				
4638	FwdPropFBin7	Fwd direction chord F bin 7 proportion Forward direction chord F bin 7 proportion.	R	Y			float	-	-	float32	-				
4640	FwdPropFBin8	Fwd direction chord F bin 8 proportion Forward direction chord F bin 8 proportion.	R	Y			float	-	-	float32	-				
4642	FwdPropFBin9	Fwd direction chord F bin 9 proportion Forward direction chord F bin 9 proportion.	R	Y			float	-	-	float32	-				
4644	FwdPropFBin10	Fwd direction chord F bin 10 proportion Forward direction chord F bin 10 proportion.	R	Y			float	-	-	float32	-				
4646	FwdPropGBin1	Fwd direction chord G bin 1 proportion Forward direction chord G bin 1 proportion.	R	Y			float	-	-	float32	-				
4648	FwdPropGBin2	Fwd direction chord G bin 2 proportion Forward direction chord G bin 2 proportion.	R	Y			float	-	-	float32	-				
4650	FwdPropGBin3	Fwd direction chord G bin 3 proportion Forward direction chord G bin 3 proportion.	R	Y			float	-	-	float32	-				
4652	FwdPropGBin4	Fwd direction chord G bin 4 proportion Forward direction chord G bin 4 proportion.	R	Y			float	-	-	float32	-				
4654	FwdPropGBin5	Fwd direction chord G bin 5 proportion Forward direction chord G bin 5 proportion.	R	Y			float	-	-	float32	-				
4656	FwdPropGBin6	Fwd direction chord G bin 6 proportion Forward direction chord G bin 6 proportion.	R	Y			float	-	-	float32	-				
4658	FwdPropGBin7	Fwd direction chord G bin 7 proportion Forward direction chord G bin 7 proportion.	R	Y			float	-	-	float32	-				
4660	FwdPropGBin8	Fwd direction chord G bin 8 proportion Forward direction chord G bin 8 proportion.	R	Y			float	-	-	float32	-				
4662	FwdPropGBin9	Fwd direction chord G bin 9 proportion Forward direction chord G bin 9 proportion.	R	Y			float	-	-	float32	-				
4664	FwdPropGBin10	Fwd direction chord G bin 10 proportion Forward direction chord G bin 10 proportion.	R	Y			float	-	-	float32	-				
4666	FwdPropHBin1	Fwd direction chord H bin 1 proportion Forward direction chord H bin 1 proportion.	R	Y			float	-	-	float32	-				
4668	FwdPropHBin2	Fwd direction chord H bin 2 proportion Forward direction chord H bin 2 proportion.	R	Y			float	-	-	float32	-				
4670	FwdPropHBin3	Fwd direction chord H bin 3 proportion Forward direction chord H bin 3 proportion.	R	Y			float	-	-	float32	-				
4672	FwdPropHBin4	Fwd direction chord H bin 4 proportion Forward direction chord H bin 4 proportion.	R	Y			float	-	-	float32	-				
4674	FwdPropHBin5	Fwd direction chord H bin 5 proportion Forward direction chord H bin 5 proportion.	R	Y			float	-	-	float32	-				
4676	FwdPropHBin6	Fwd direction chord H bin 6 proportion Forward direction chord H bin 6 proportion.	R	Y			float	-	-	float32	-				
4678	FwdPropHBin7	Fwd direction chord H bin 7 proportion Forward direction chord H bin 7 proportion.	R	Y			float	-	-	float32	-				
4680	FwdPropHBin8	Fwd direction chord H bin 8 proportion Forward direction chord H bin 8 proportion.	R	Y			float	-	-	float32	-				
4682	FwdPropHBin9	Fwd direction chord H bin 9 proportion Forward direction chord H bin 9 proportion.	R	Y			float	-	-	float32	-				
4684	FwdPropHBin10	Fwd direction chord H bin 10 proportion Forward direction chord H bin 10 proportion.	R	Y			float	-	-	float32	-				
4686	FwdPropVelABin1	Proportion update fwd direction chord A bin 1 velocity Proportion update forward direction chord A bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4688	FwdPropVelABin2	Proportion update fwd direction chord A bin 2 velocity Proportion update forward direction chord A bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4690	FwdPropVelABin3	Proportion update fwd direction chord A bin 3 velocity Proportion update forward direction chord A bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4692	FwdPropVelABin4	Proportion update fwd direction chord A bin 4 velocity Proportion update forward direction chord A bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4694	FwdPropVelABin5	Proportion update fwd direction chord A bin 5 velocity Proportion update forward direction chord A bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4696	FwdPropVelABin6	Proportion update fwd direction chord A bin 6 velocity Proportion update forward direction chord A bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4698	FwdPropVelABin7	Proportion update fwd direction chord A bin 7 velocity Proportion update forward direction chord A bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4700	FwdPropVelABin8	Proportion update fwd direction chord A bin 8 velocity Proportion update forward direction chord A bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4702	FwdPropVelABin9	Proportion update fwd direction chord A bin 9 velocity Proportion update forward direction chord A bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4704	FwdPropVelABin10	Proportion update fwd direction chord A bin 10 velocity Proportion update forward direction chord A bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4706	FwdPropVelBBin1	Proportion update fwd direction chord B bin 1 velocity Proportion update forward direction chord B bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4708	FwdPropVelBBin2	Proportion update fwd direction chord B bin 2 velocity Proportion update forward direction chord B bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4710	FwdPropVelBBin3	Proportion update fwd direction chord B bin 3 velocity Proportion update forward direction chord B bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4712	FwdPropVelBBin4	Proportion update fwd direction chord B bin 4 velocity Proportion update forward direction chord B bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4714	FwdPropVelBBin5	Proportion update fwd direction chord B bin 5 velocity Proportion update forward direction chord B bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4716	FwdPropVelBBin6	Proportion update fwd direction chord B bin 6 velocity Proportion update forward direction chord B bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4718	FwdPropVelBBin7	Proportion update fwd direction chord B bin 7 velocity Proportion update forward direction chord B bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4720	FwdPropVelBBin8	Proportion update fwd direction chord B bin 8 velocity Proportion update forward direction chord B bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4722	FwdPropVelBBin9	Proportion update fwd direction chord B bin 9 velocity Proportion update forward direction chord B bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4724	FwdPropVelBBin10	Proportion update fwd direction chord B bin 10 velocity Proportion update forward direction chord B bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4726	FwdPropVelCBin1	Proportion update fwd direction chord C bin 1 velocity Proportion update forward direction chord C bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4728	FwdPropVelCBin2	Proportion update fwd direction chord C bin 2 velocity Proportion update forward direction chord C bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4730	FwdPropVelCBin3	Proportion update fwd direction chord C bin 3 velocity Proportion update forward direction chord C bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4732	FwdPropVelCBin4	Proportion update fwd direction chord C bin 4 velocity Proportion update forward direction chord C bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4734	FwdPropVelCBin5	Proportion update fwd direction chord C bin 5 velocity Proportion update forward direction chord C bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4736	FwdPropVelCBin6	Proportion update fwd direction chord C bin 6 velocity Proportion update forward direction chord C bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4738	FwdPropVelCBin7	Proportion update fwd direction chord C bin 7 velocity Proportion update forward direction chord C bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4740	FwdPropVelCBin8	Proportion update fwd direction chord C bin 8 velocity Proportion update forward direction chord C bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4742	FwdPropVelCBin9	Proportion update fwd direction chord C bin 9 velocity Proportion update forward direction chord C bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4744	FwdPropVelCBin10	Proportion update fwd direction chord C bin 10 velocity Proportion update forward direction chord C bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4746	FwdPropVelDBin1	Proportion update fwd direction chord D bin 1 velocity Proportion update forward direction chord D bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4748	FwdPropVelDBin2	Proportion update fwd direction chord D bin 2 velocity Proportion update forward direction chord D bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4750	FwdPropVelDBin3	Proportion update fwd direction chord D bin 3 velocity Proportion update forward direction chord D bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4752	FwdPropVelDBin4	Proportion update fwd direction chord D bin 4 velocity Proportion update forward direction chord D bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4754	FwdPropVelDBin5	Proportion update fwd direction chord D bin 5 velocity Proportion update forward direction chord D bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4756	FwdPropVelDBin6	Proportion update fwd direction chord D bin 6 velocity Proportion update forward direction chord D bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4758	FwdPropVelDBin7	Proportion update fwd direction chord D bin 7 velocity Proportion update forward direction chord D bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4760	FwdPropVelDBin8	Proportion update fwd direction chord D bin 8 velocity Proportion update forward direction chord D bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4762	FwdPropVelDBin9	Proportion update fwd direction chord D bin 9 velocity Proportion update forward direction chord D bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4764	FwdPropVelDBin10	Proportion update fwd direction chord D bin 10 velocity Proportion update forward direction chord D bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4766	FwdPropVelEBin1	Proportion update fwd direction chord E bin 1 velocity Proportion update forward direction chord E bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4768	FwdPropVelEBin2	Proportion update fwd direction chord E bin 2 velocity Proportion update forward direction chord E bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4770	FwdPropVelEBin3	Proportion update fwd direction chord E bin 3 velocity Proportion update forward direction chord E bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4772	FwdPropVelEBin4	Proportion update fwd direction chord E bin 4 velocity Proportion update forward direction chord E bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4774	FwdPropVelEBin5	Proportion update fwd direction chord E bin 5 velocity Proportion update forward direction chord E bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4776	FwdPropVelEBin6	Proportion update fwd direction chord E bin 6 velocity Proportion update forward direction chord E bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4778	FwdPropVelEBin7	Proportion update fwd direction chord E bin 7 velocity Proportion update forward direction chord E bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4780	FwdPropVelEBin8	Proportion update fwd direction chord E bin 8 velocity Proportion update forward direction chord E bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4782	FwdPropVelEBin9	Proportion update fwd direction chord E bin 9 velocity Proportion update forward direction chord E bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4784	FwdPropVelEBin10	Proportion update fwd direction chord E bin 10 velocity Proportion update forward direction chord E bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4786	FwdPropVelFBin1	Proportion update fwd direction chord F bin 1 velocity Proportion update forward direction chord F bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4788	FwdPropVelFBin2	Proportion update fwd direction chord F bin 2 velocity Proportion update forward direction chord F bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4790	FwdPropVelFBin3	Proportion update fwd direction chord F bin 3 velocity Proportion update forward direction chord F bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4792	FwdPropVelFBin4	Proportion update fwd direction chord F bin 4 velocity Proportion update forward direction chord F bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4794	FwdPropVelFBin5	Proportion update fwd direction chord F bin 5 velocity Proportion update forward direction chord F bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4796	FwdPropVelFBin6	Proportion update fwd direction chord F bin 6 velocity Proportion update forward direction chord F bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4798	FwdPropVelFBin7	Proportion update fwd direction chord F bin 7 velocity Proportion update forward direction chord F bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4800	FwdPropVelFBin8	Proportion update fwd direction chord F bin 8 velocity Proportion update forward direction chord F bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4802	FwdPropVelFBin9	Proportion update fwd direction chord F bin 9 velocity Proportion update forward direction chord F bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4804	FwdPropVelFBin10	Proportion update fwd direction chord F bin 10 velocity Proportion update forward direction chord F bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4806	FwdPropVelGBin1	Proportion update fwd direction chord G bin 1 velocity Proportion update forward direction chord G bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4808	FwdPropVelGBin2	Proportion update fwd direction chord G bin 2 velocity Proportion update forward direction chord G bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4810	FwdPropVelGBin3	Proportion update fwd direction chord G bin 3 velocity Proportion update forward direction chord G bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4812	FwdPropVelGBin4	Proportion update fwd direction chord G bin 4 velocity Proportion update forward direction chord G bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4814	FwdPropVelGBin5	Proportion update fwd direction chord G bin 5 velocity Proportion update forward direction chord G bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4816	FwdPropVelGBin6	Proportion update fwd direction chord G bin 6 velocity Proportion update forward direction chord G bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4818	FwdPropVelGBin7	Proportion update fwd direction chord G bin 7 velocity Proportion update forward direction chord G bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4820	FwdPropVelGBin8	Proportion update fwd direction chord G bin 8 velocity Proportion update forward direction chord G bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4822	FwdPropVelGBin9	Proportion update fwd direction chord G bin 9 velocity Proportion update forward direction chord G bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4824	FwdPropVelGBin10	Proportion update fwd direction chord G bin 10 velocity Proportion update forward direction chord G bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4826	FwdPropVelHBin1	Proportion update fwd direction chord H bin 1 velocity Proportion update forward direction chord H bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4828	FwdPropVelHBin2	Proportion update fwd direction chord H bin 2 velocity Proportion update forward direction chord H bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4830	FwdPropVelHBin3	Proportion update fwd direction chord H bin 3 velocity Proportion update forward direction chord H bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4832	FwdPropVelHBin4	Proportion update fwd direction chord H bin 4 velocity Proportion update forward direction chord H bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4834	FwdPropVelHBin5	Proportion update fwd direction chord H bin 5 velocity Proportion update forward direction chord H bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4836	FwdPropVelHBin6	Proportion update fwd direction chord H bin 6 velocity Proportion update forward direction chord H bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4838	FwdPropVelHBin7	Proportion update fwd direction chord H bin 7 velocity Proportion update forward direction chord H bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4840	FwdPropVelHBin8	Proportion update fwd direction chord H bin 8 velocity Proportion update forward direction chord H bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4842	FwdPropVelHBin9	Proportion update fwd direction chord H bin 9 velocity Proportion update forward direction chord H bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4844	FwdPropVelHBin10	Proportion update fwd direction chord H bin 10 velocity Proportion update forward direction chord H bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
4846	RevPropABin1	Rev direction chord A bin 1 proportion Reverse direction chord A bin 1 proportion.	R	Y			float	-	-	float32	-				
4848	RevPropABin2	Rev direction chord A bin 2 proportion Reverse direction chord A bin 2 proportion.	R	Y			float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4850	RevPropABin3	Rev direction chord A bin 3 proportion Reverse direction chord A bin 3 proportion.	R	Y			float	-	-	float32	-				
4852	RevPropABin4	Rev direction chord A bin 4 proportion Reverse direction chord A bin 4 proportion.	R	Y			float	-	-	float32	-				
4854	RevPropABin5	Rev direction chord A bin 5 proportion Reverse direction chord A bin 5 proportion.	R	Y			float	-	-	float32	-				
4856	RevPropABin6	Rev direction chord A bin 6 proportion Reverse direction chord A bin 6 proportion.	R	Y			float	-	-	float32	-				
4858	RevPropABin7	Rev direction chord A bin 7 proportion Reverse direction chord A bin 7 proportion.	R	Y			float	-	-	float32	-				
4860	RevPropABin8	Rev direction chord A bin 8 proportion Reverse direction chord A bin 8 proportion.	R	Y			float	-	-	float32	-				
4862	RevPropABin9	Rev direction chord A bin 9 proportion Reverse direction chord A bin 9 proportion.	R	Y			float	-	-	float32	-				
4864	RevPropABin10	Rev direction chord A bin 10 proportion Reverse direction chord A bin 10 proportion.	R	Y			float	-	-	float32	-				
4866	RevPropBBin1	Rev direction chord B bin 1 proportion Reverse direction chord B bin 1 proportion.	R	Y			float	-	-	float32	-				
4868	RevPropBBin2	Rev direction chord B bin 2 proportion Reverse direction chord B bin 2 proportion.	R	Y			float	-	-	float32	-				
4870	RevPropBBin3	Rev direction chord B bin 3 proportion Reverse direction chord B bin 3 proportion.	R	Y			float	-	-	float32	-				
4872	RevPropBBin4	Rev direction chord B bin 4 proportion Reverse direction chord B bin 4 proportion.	R	Y			float	-	-	float32	-				
4874	RevPropBBin5	Rev direction chord B bin 5 proportion Reverse direction chord B bin 5 proportion.	R	Y			float	-	-	float32	-				
4876	RevPropBBin6	Rev direction chord B bin 6 proportion Reverse direction chord B bin 6 proportion.	R	Y			float	-	-	float32	-				
4878	RevPropBBin7	Rev direction chord B bin 7 proportion Reverse direction chord B bin 7 proportion.	R	Y			float	-	-	float32	-				
4880	RevPropBBin8	Rev direction chord B bin 8 proportion Reverse direction chord B bin 8 proportion.	R	Y			float	-	-	float32	-				
4882	RevPropBBin9	Rev direction chord B bin 9 proportion Reverse direction chord B bin 9 proportion.	R	Y			float	-	-	float32	-				
4884	RevPropBBin10	Rev direction chord B bin 10 proportion Reverse direction chord B bin 10 proportion.	R	Y			float	-	-	float32	-				
4886	RevPropCBin1	Rev direction chord C bin 1 proportion Reverse direction chord C bin 1 proportion.	R	Y			float	-	-	float32	-				
4888	RevPropCBin2	Rev direction chord C bin 2 proportion Reverse direction chord C bin 2 proportion.	R	Y			float	-	-	float32	-				
4890	RevPropCBin3	Rev direction chord C bin 3 proportion Reverse direction chord C bin 3 proportion.	R	Y			float	-	-	float32	-				
4892	RevPropCBin4	Rev direction chord C bin 4 proportion Reverse direction chord C bin 4 proportion.	R	Y			float	-	-	float32	-				
4894	RevPropCBin5	Rev direction chord C bin 5 proportion Reverse direction chord C bin 5 proportion.	R	Y			float	-	-	float32	-				
4896	RevPropCBin6	Rev direction chord C bin 6 proportion Reverse direction chord C bin 6 proportion.	R	Y			float	-	-	float32	-				
4898	RevPropCBin7	Rev direction chord C bin 7 proportion Reverse direction chord C bin 7 proportion.	R	Y			float	-	-	float32	-				
4900	RevPropCBin8	Rev direction chord C bin 8 proportion Reverse direction chord C bin 8 proportion.	R	Y			float	-	-	float32	-				
4902	RevPropCBin9	Rev direction chord C bin 9 proportion Reverse direction chord C bin 9 proportion.	R	Y			float	-	-	float32	-				
4904	RevPropCBin10	Rev direction chord C bin 10 proportion Reverse direction chord C bin 10 proportion.	R	Y			float	-	-	float32	-				
4906	RevPropDBin1	Rev direction chord D bin 1 proportion Reverse direction chord D bin 1 proportion.	R	Y			float	-	-	float32	-				
4908	RevPropDBin2	Rev direction chord D bin 2 proportion Reverse direction chord D bin 2 proportion.	R	Y			float	-	-	float32	-				
4910	RevPropDBin3	Rev direction chord D bin 3 proportion Reverse direction chord D bin 3 proportion.	R	Y			float	-	-	float32	-				
4912	RevPropDBin4	Rev direction chord D bin 4 proportion Reverse direction chord D bin 4 proportion.	R	Y			float	-	-	float32	-				
4914	RevPropDBin5	Rev direction chord D bin 5 proportion Reverse direction chord D bin 5 proportion.	R	Y			float	-	-	float32	-				
4916	RevPropDBin6	Rev direction chord D bin 6 proportion Reverse direction chord D bin 6 proportion.	R	Y			float	-	-	float32	-				
4918	RevPropDBin7	Rev direction chord D bin 7 proportion Reverse direction chord D bin 7 proportion.	R	Y			float	-	-	float32	-				
4920	RevPropDBin8	Rev direction chord D bin 8 proportion Reverse direction chord D bin 8 proportion.	R	Y			float	-	-	float32	-				
4922	RevPropDBin9	Rev direction chord D bin 9 proportion Reverse direction chord D bin 9 proportion.	R	Y			float	-	-	float32	-				
4924	RevPropDBin10	Rev direction chord D bin 10 proportion Reverse direction chord D bin 10 proportion.	R	Y			float	-	-	float32	-				
4926	RevPropEBin1	Rev direction chord E bin 1 proportion Reverse direction chord E bin 1 proportion.	R	Y			float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
4928	RevPropEBin2	Rev direction chord E bin 2 proportion Reverse direction chord E bin 2 proportion.	R	Y			float	-	-	float32	-				
4930	RevPropEBin3	Rev direction chord E bin 3 proportion Reverse direction chord E bin 3 proportion.	R	Y			float	-	-	float32	-				
4932	RevPropEBin4	Rev direction chord E bin 4 proportion Reverse direction chord E bin 4 proportion.	R	Y			float	-	-	float32	-				
4934	RevPropEBin5	Rev direction chord E bin 5 proportion Reverse direction chord E bin 5 proportion.	R	Y			float	-	-	float32	-				
4936	RevPropEBin6	Rev direction chord E bin 6 proportion Reverse direction chord E bin 6 proportion.	R	Y			float	-	-	float32	-				
4938	RevPropEBin7	Rev direction chord E bin 7 proportion Reverse direction chord E bin 7 proportion.	R	Y			float	-	-	float32	-				
4940	RevPropEBin8	Rev direction chord E bin 8 proportion Reverse direction chord E bin 8 proportion.	R	Y			float	-	-	float32	-				
4942	RevPropEBin9	Rev direction chord E bin 9 proportion Reverse direction chord E bin 9 proportion.	R	Y			float	-	-	float32	-				
4944	RevPropEBin10	Rev direction chord E bin 10 proportion Reverse direction chord E bin 10 proportion.	R	Y			float	-	-	float32	-				
4946	RevPropFBin1	Rev direction chord F bin 1 proportion Reverse direction chord F bin 1 proportion.	R	Y			float	-	-	float32	-				
4948	RevPropFBin2	Rev direction chord F bin 2 proportion Reverse direction chord F bin 2 proportion.	R	Y			float	-	-	float32	-				
4950	RevPropFBin3	Rev direction chord F bin 3 proportion Reverse direction chord F bin 3 proportion.	R	Y			float	-	-	float32	-				
4952	RevPropFBin4	Rev direction chord F bin 4 proportion Reverse direction chord F bin 4 proportion.	R	Y			float	-	-	float32	-				
4954	RevPropFBin5	Rev direction chord F bin 5 proportion Reverse direction chord F bin 5 proportion.	R	Y			float	-	-	float32	-				
4956	RevPropFBin6	Rev direction chord F bin 6 proportion Reverse direction chord F bin 6 proportion.	R	Y			float	-	-	float32	-				
4958	RevPropFBin7	Rev direction chord F bin 7 proportion Reverse direction chord F bin 7 proportion.	R	Y			float	-	-	float32	-				
4960	RevPropFBin8	Rev direction chord F bin 8 proportion Reverse direction chord F bin 8 proportion.	R	Y			float	-	-	float32	-				
4962	RevPropFBin9	Rev direction chord F bin 9 proportion Reverse direction chord F bin 9 proportion.	R	Y			float	-	-	float32	-				
4964	RevPropFBin10	Rev direction chord F bin 10 proportion Reverse direction chord F bin 10 proportion.	R	Y			float	-	-	float32	-				
4966	RevPropGBin1	Rev direction chord G bin 1 proportion Reverse direction chord G bin 1 proportion.	R	Y			float	-	-	float32	-				
4968	RevPropGBin2	Rev direction chord G bin 2 proportion Reverse direction chord G bin 2 proportion.	R	Y			float	-	-	float32	-				
4970	RevPropGBin3	Rev direction chord G bin 3 proportion Reverse direction chord G bin 3 proportion.	R	Y			float	-	-	float32	-				
4972	RevPropGBin4	Rev direction chord G bin 4 proportion Reverse direction chord G bin 4 proportion.	R	Y			float	-	-	float32	-				
4974	RevPropGBin5	Rev direction chord G bin 5 proportion Reverse direction chord G bin 5 proportion.	R	Y			float	-	-	float32	-				
4976	RevPropGBin6	Rev direction chord G bin 6 proportion Reverse direction chord G bin 6 proportion.	R	Y			float	-	-	float32	-				
4978	RevPropGBin7	Rev direction chord G bin 7 proportion Reverse direction chord G bin 7 proportion.	R	Y			float	-	-	float32	-				
4980	RevPropGBin8	Rev direction chord G bin 8 proportion Reverse direction chord G bin 8 proportion.	R	Y			float	-	-	float32	-				
4982	RevPropGBin9	Rev direction chord G bin 9 proportion Reverse direction chord G bin 9 proportion.	R	Y			float	-	-	float32	-				
4984	RevPropGBin10	Rev direction chord G bin 10 proportion Reverse direction chord G bin 10 proportion.	R	Y			float	-	-	float32	-				
4986	RevPropHBin1	Rev direction chord H bin 1 proportion Reverse direction chord H bin 1 proportion.	R	Y			float	-	-	float32	-				
4988	RevPropHBin2	Rev direction chord H bin 2 proportion Reverse direction chord H bin 2 proportion.	R	Y			float	-	-	float32	-				
4990	RevPropHBin3	Rev direction chord H bin 3 proportion Reverse direction chord H bin 3 proportion.	R	Y			float	-	-	float32	-				
4992	RevPropHBin4	Rev direction chord H bin 4 proportion Reverse direction chord H bin 4 proportion.	R	Y			float	-	-	float32	-				
4994	RevPropHBin5	Rev direction chord H bin 5 proportion Reverse direction chord H bin 5 proportion.	R	Y			float	-	-	float32	-				
4996	RevPropHBin6	Rev direction chord H bin 6 proportion Reverse direction chord H bin 6 proportion.	R	Y			float	-	-	float32	-				
4998	RevPropHBin7	Rev direction chord H bin 7 proportion Reverse direction chord H bin 7 proportion.	R	Y			float	-	-	float32	-				
5000	RevPropHBin8	Rev direction chord H bin 8 proportion Reverse direction chord H bin 8 proportion.	R	Y			float	-	-	float32	-				
5002	RevPropHBin9	Rev direction chord H bin 9 proportion Reverse direction chord H bin 9 proportion.	R	Y			float	-	-	float32	-				
5004	RevPropHBin10	Rev direction chord H bin 10 proportion Reverse direction chord H bin 10 proportion.	R	Y			float	-	-	float32	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5006	RevPropVelABin1	Proportion update rev direction chord A bin 1 velocity Proportion update reverse direction chord A bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5008	RevPropVelABin2	Proportion update rev direction chord A bin 2 velocity Proportion update reverse direction chord A bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5010	RevPropVelABin3	Proportion update rev direction chord A bin 3 velocity Proportion update reverse direction chord A bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5012	RevPropVelABin4	Proportion update rev direction chord A bin 4 velocity Proportion update reverse direction chord A bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5014	RevPropVelABin5	Proportion update rev direction chord A bin 5 velocity Proportion update reverse direction chord A bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5016	RevPropVelABin6	Proportion update rev direction chord A bin 6 velocity Proportion update reverse direction chord A bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5018	RevPropVelABin7	Proportion update rev direction chord A bin 7 velocity Proportion update reverse direction chord A bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5020	RevPropVelABin8	Proportion update rev direction chord A bin 8 velocity Proportion update reverse direction chord A bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5022	RevPropVelABin9	Proportion update rev direction chord A bin 9 velocity Proportion update reverse direction chord A bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5024	RevPropVelABin10	Proportion update rev direction chord A bin 10 velocity Proportion update reverse direction chord A bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5026	RevPropVelBBin1	Proportion update rev direction chord B bin 1 velocity Proportion update reverse direction chord B bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5028	RevPropVelBBin2	Proportion update rev direction chord B bin 2 velocity Proportion update reverse direction chord B bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5030	RevPropVelBBin3	Proportion update rev direction chord B bin 3 velocity Proportion update reverse direction chord B bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5032	RevPropVelBBin4	Proportion update rev direction chord B bin 4 velocity Proportion update reverse direction chord B bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5034	RevPropVelBBin5	Proportion update rev direction chord B bin 5 velocity Proportion update reverse direction chord B bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5036	RevPropVelBBin6	Proportion update rev direction chord B bin 6 velocity Proportion update reverse direction chord B bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5038	RevPropVelBBin7	Proportion update rev direction chord B bin 7 velocity Proportion update reverse direction chord B bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5040	RevPropVelBBin8	Proportion update rev direction chord B bin 8 velocity Proportion update reverse direction chord B bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5042	RevPropVelBBin9	Proportion update rev direction chord B bin 9 velocity Proportion update reverse direction chord B bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5044	RevPropVelBBin10	Proportion update rev direction chord B bin 10 velocity Proportion update reverse direction chord B bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5046	RevPropVelCBin1	Proportion update rev direction chord C bin 1 velocity Proportion update reverse direction chord C bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5048	RevPropVelCBin2	Proportion update rev direction chord C bin 2 velocity Proportion update reverse direction chord C bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5050	RevPropVelCBin3	Proportion update rev direction chord C bin 3 velocity Proportion update reverse direction chord C bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5052	RevPropVelCBin4	Proportion update rev direction chord C bin 4 velocity Proportion update reverse direction chord C bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5054	RevPropVelCBin5	Proportion update rev direction chord C bin 5 velocity Proportion update reverse direction chord C bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5056	RevPropVelCBin6	Proportion update rev direction chord C bin 6 velocity Proportion update reverse direction chord C bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5058	RevPropVelCBin7	Proportion update rev direction chord C bin 7 velocity Proportion update reverse direction chord C bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5060	RevPropVelCBin8	Proportion update rev direction chord C bin 8 velocity Proportion update reverse direction chord C bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5062	RevPropVelCBin9	Proportion update rev direction chord C bin 9 velocity Proportion update reverse direction chord C bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5064	RevPropVelCBin10	Proportion update rev direction chord C bin 10 velocity Proportion update reverse direction chord C bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5066	RevPropVelDBin1	Proportion update rev direction chord D bin 1 velocity Proportion update reverse direction chord D bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5068	RevPropVelDBin2	Proportion update rev direction chord D bin 2 velocity Proportion update reverse direction chord D bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5070	RevPropVelDBin3	Proportion update rev direction chord D bin 3 velocity Proportion update reverse direction chord D bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5072	RevPropVelDBin4	Proportion update rev direction chord D bin 4 velocity Proportion update reverse direction chord D bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5074	RevPropVelDBin5	Proportion update rev direction chord D bin 5 velocity Proportion update reverse direction chord D bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5076	RevPropVelDBin6	Proportion update rev direction chord D bin 6 velocity Proportion update reverse direction chord D bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5078	RevPropVelDBin7	Proportion update rev direction chord D bin 7 velocity Proportion update reverse direction chord D bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5080	RevPropVelDBin8	Proportion update rev direction chord D bin 8 velocity Proportion update reverse direction chord D bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5082	RevPropVelDBin9	Proportion update rev direction chord D bin 9 velocity Proportion update reverse direction chord D bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5084	RevPropVelDBin10	Proportion update rev direction chord D bin 10 velocity Proportion update reverse direction chord D bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5086	RevPropVelEBin1	Proportion update rev direction chord E bin 1 velocity Proportion update reverse direction chord E bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5088	RevPropVelEBin2	Proportion update rev direction chord E bin 2 velocity Proportion update reverse direction chord E bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5090	RevPropVelEBin3	Proportion update rev direction chord E bin 3 velocity Proportion update reverse direction chord E bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5092	RevPropVelEBin4	Proportion update rev direction chord E bin 4 velocity Proportion update reverse direction chord E bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5094	RevPropVelEBin5	Proportion update rev direction chord E bin 5 velocity Proportion update reverse direction chord E bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5096	RevPropVelEBin6	Proportion update rev direction chord E bin 6 velocity Proportion update reverse direction chord E bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5098	RevPropVelEBin7	Proportion update rev direction chord E bin 7 velocity Proportion update reverse direction chord E bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5100	RevPropVelEBin8	Proportion update rev direction chord E bin 8 velocity Proportion update reverse direction chord E bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5102	RevPropVelEBin9	Proportion update rev direction chord E bin 9 velocity Proportion update reverse direction chord E bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5104	RevPropVelEBin10	Proportion update rev direction chord E bin 10 velocity Proportion update reverse direction chord E bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5106	RevPropVelFBin1	Proportion update rev direction chord F bin 1 velocity Proportion update reverse direction chord F bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5108	RevPropVelFBin2	Proportion update rev direction chord F bin 2 velocity Proportion update reverse direction chord F bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5110	RevPropVelFBin3	Proportion update rev direction chord F bin 3 velocity Proportion update reverse direction chord F bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5112	RevPropVelFBin4	Proportion update rev direction chord F bin 4 velocity Proportion update reverse direction chord F bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5114	RevPropVelFBin5	Proportion update rev direction chord F bin 5 velocity Proportion update reverse direction chord F bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5116	RevPropVelFBin6	Proportion update rev direction chord F bin 6 velocity Proportion update reverse direction chord F bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5118	RevPropVelFBin7	Proportion update rev direction chord F bin 7 velocity Proportion update reverse direction chord F bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5120	RevPropVelFBin8	Proportion update rev direction chord F bin 8 velocity Proportion update reverse direction chord F bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5122	RevPropVelFBin9	Proportion update rev direction chord F bin 9 velocity Proportion update reverse direction chord F bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5124	RevPropVelFBin10	Proportion update rev direction chord F bin 10 velocity Proportion update reverse direction chord F bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5126	RevPropVelGBin1	Proportion update rev direction chord G bin 1 velocity Proportion update reverse direction chord G bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5128	RevPropVelGBin2	Proportion update rev direction chord G bin 2 velocity Proportion update reverse direction chord G bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5130	RevPropVelGBin3	Proportion update rev direction chord G bin 3 velocity Proportion update reverse direction chord G bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5132	RevPropVelGBin4	Proportion update rev direction chord G bin 4 velocity Proportion update reverse direction chord G bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5134	RevPropVelGBin5	Proportion update rev direction chord G bin 5 velocity Proportion update reverse direction chord G bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5136	RevPropVelGBin6	Proportion update rev direction chord G bin 6 velocity Proportion update reverse direction chord G bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5138	RevPropVelGBin7	Proportion update rev direction chord G bin 7 velocity Proportion update reverse direction chord G bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5140	RevPropVelGBin8	Proportion update rev direction chord G bin 8 velocity Proportion update reverse direction chord G bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5142	RevPropVelGBin9	Proportion update rev direction chord G bin 9 velocity Proportion update reverse direction chord G bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5144	RevPropVelGBin10	Proportion update rev direction chord G bin 10 velocity Proportion update reverse direction chord G bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5146	RevPropVelHBin1	Proportion update rev direction chord H bin 1 velocity Proportion update reverse direction chord H bin 1 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5148	RevPropVelHBin2	Proportion update rev direction chord H bin 2 velocity Proportion update reverse direction chord H bin 2 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5150	RevPropVelHBin3	Proportion update rev direction chord H bin 3 velocity Proportion update reverse direction chord H bin 3 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5152	RevPropVelHBin4	Proportion update rev direction chord H bin 4 velocity Proportion update reverse direction chord H bin 4 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5154	RevPropVelHBin5	Proportion update rev direction chord H bin 5 velocity Proportion update reverse direction chord H bin 5 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5156	RevPropVelHBin6	Proportion update rev direction chord H bin 6 velocity Proportion update reverse direction chord H bin 6 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5158	RevPropVelHBin7	Proportion update rev direction chord H bin 7 velocity Proportion update reverse direction chord H bin 7 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5160	RevPropVelHBin8	Proportion update rev direction chord H bin 8 velocity Proportion update reverse direction chord H bin 8 velocity.	R	Y			float	m/s	ft/s	float32	m/s				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5162	RevPropVelHBin9	Proportion update rev direction chord H bin 9 velocity Proportion update reverse direction chord H bin 9 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5164	RevPropVelHBin10	Proportion update rev direction chord H bin 10 velocity Proportion update reverse direction chord H bin 10 velocity.	R	Y			float	m/s	ft/s	float32	m/s				
5166	MaxTmA1	Maximum batch transit time (A1) Maximum batch transit time (A1).	R				float	sec	sec	float32	us				
5168	MaxTmA2	Maximum batch transit time (A2) Maximum batch transit time (A2).	R				float	sec	sec	float32	us				
5170	MaxTmB1	Maximum batch transit time (B1) Maximum batch transit time (B1).	R				float	sec	sec	float32	us				
5172	MaxTmB2	Maximum batch transit time (B2) Maximum batch transit time (B2).	R				float	sec	sec	float32	us				
5174	MaxTmC1	Maximum batch transit time (C1) Maximum batch transit time (C1).	R				float	sec	sec	float32	us				
5176	MaxTmC2	Maximum batch transit time (C2) Maximum batch transit time (C2).	R				float	sec	sec	float32	us				
5178	MaxTmD1	Maximum batch transit time (D1) Maximum batch transit time (D1).	R				float	sec	sec	float32	us				
5180	MaxTmD2	Maximum batch transit time (D2) Maximum batch transit time (D2).	R				float	sec	sec	float32	us				
5182	MaxTmE1	Maximum batch transit time (E1) Maximum batch transit time (E1).	R				float	sec	sec	float32	us				
5184	MaxTmE2	Maximum batch transit time (E2) Maximum batch transit time (E2).	R				float	sec	sec	float32	us				
5186	MaxTmF1	Maximum batch transit time (F1) Maximum batch transit time (F1).	R				float	sec	sec	float32	us				
5188	MaxTmF2	Maximum batch transit time (F2) Maximum batch transit time (F2).	R				float	sec	sec	float32	us				
5190	MaxTmG1	Maximum batch transit time (G1) Maximum batch transit time (G1).	R				float	sec	sec	float32	us				
5192	MaxTmG2	Maximum batch transit time (G2) Maximum batch transit time (G2).	R				float	sec	sec	float32	us				
5194	MaxTmH1	Maximum batch transit time (H1) Maximum batch transit time (H1).	R				float	sec	sec	float32	us				
5196	MaxTmH2	Maximum batch transit time (H2) Maximum batch transit time (H2).	R				float	sec	sec	float32	us				
5198	MinTmA1	Minimum batch transit time (A1) Minimum batch transit time (A1).	R				float	sec	sec	float32	us				
5200	MinTmA2	Minimum batch transit time (A2) Minimum batch transit time (A2).	R				float	sec	sec	float32	us				
5202	MinTmB1	Minimum batch transit time (B1) Minimum batch transit time (B1).	R				float	sec	sec	float32	us				
5204	MinTmB2	Minimum batch transit time (B2) Minimum batch transit time (B2).	R				float	sec	sec	float32	us				
5206	MinTmC1	Minimum batch transit time (C1) Minimum batch transit time (C1).	R				float	sec	sec	float32	us				
5208	MinTmC2	Minimum batch transit time (C2) Minimum batch transit time (C2).	R				float	sec	sec	float32	us				
5210	MinTmD1	Minimum batch transit time (D1) Minimum batch transit time (D1).	R				float	sec	sec	float32	us				
5212	MinTmD2	Minimum batch transit time (D2) Minimum batch transit time (D2).	R				float	sec	sec	float32	us				
5214	MinTmE1	Minimum batch transit time (E1) Minimum batch transit time (E1).	R				float	sec	sec	float32	us				
5216	MinTmE2	Minimum batch transit time (E2) Minimum batch transit time (E2).	R				float	sec	sec	float32	us				
5218	MinTmF1	Minimum batch transit time (F1) Minimum batch transit time (F1).	R				float	sec	sec	float32	us				
5220	MinTmF2	Minimum batch transit time (F2) Minimum batch transit time (F2).	R				float	sec	sec	float32	us				
5222	MinTmG1	Minimum batch transit time (G1) Minimum batch transit time (G1).	R				float	sec	sec	float32	us				
5224	MinTmG2	Minimum batch transit time (G2) Minimum batch transit time (G2).	R				float	sec	sec	float32	us				
5226	MinTmH1	Minimum batch transit time (H1) Minimum batch transit time (H1).	R				float	sec	sec	float32	us				
5228	MinTmH2	Minimum batch transit time (H2) Minimum batch transit time (H2).	R				float	sec	sec	float32	us				
5230	MeanTmA1	Average transit time upstream for chord A Mean batch transit time (A1).	R				float	sec	sec	float32	us				
5232	MeanTmA2	Average transit time downstream for chord A Mean batch transit time (A2).	R				float	sec	sec	float32	us				
5234	MeanTmB1	Average transit time upstream for chord B Mean batch transit time (B1).	R				float	sec	sec	float32	us				
5236	MeanTmB2	Average transit time downstream for chord B Mean batch transit time (B2).	R				float	sec	sec	float32	us				
5238	MeanTmC1	Average transit time upstream for chord C Mean batch transit time (C1).	R				float	sec	sec	float32	us				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5240	MeanTmC2	Average transit time downstream for chord C Mean batch transit time (C2).	R				float	sec	sec	float32	us				
5242	MeanTmD1	Average transit time upstream for chord D Mean batch transit time (D1).	R				float	sec	sec	float32	us				
5244	MeanTmD2	Average transit time downstream for chord D Mean batch transit time (D2).	R				float	sec	sec	float32	us				
5246	MeanTmE1	Average transit time upstream for chord E Mean batch transit time (E1).	R				float	sec	sec	float32	us				
5248	MeanTmE2	Average transit time downstream for chord E Mean batch transit time (E2).	R				float	sec	sec	float32	us				
5250	MeanTmF1	Average transit time upstream for chord F Mean batch transit time (F1).	R				float	sec	sec	float32	us				
5252	MeanTmF2	Average transit time downstream for chord F Mean batch transit time (F2).	R				float	sec	sec	float32	us				
5254	MeanTmG1	Average transit time upstream for chord G Mean batch transit time (G1).	R				float	sec	sec	float32	us				
5256	MeanTmG2	Average transit time downstream for chord G Mean batch transit time (G2).	R				float	sec	sec	float32	us				
5258	MeanTmH1	Average transit time upstream for chord H Mean batch transit time (H1).	R				float	sec	sec	float32	us				
5260	MeanTmH2	Average transit time downstream for chord H Mean batch transit time (H2).	R				float	sec	sec	float32	us				
5262	SDevTmA1	Std. deviation of transit times for chord A upstream Batch transit time standard deviation (A1). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5264	SDevTmA2	Std. deviation of transit times for chord A downstream Batch transit time standard deviation (A2). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5266	SDevTmB1	Std. deviation of transit times for chord B upstream Batch transit time standard deviation (B1). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5268	SDevTmB2	Std. deviation of transit times for chord B downstream Batch transit time standard deviation (B2). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5270	SDevTmC1	Std. deviation of transit times for chord C upstream Batch transit time standard deviation (C1). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5272	SDevTmC2	Std. deviation of transit times for chord C downstream Batch transit time standard deviation (C2). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5274	SDevTmD1	Std. deviation of transit times for chord D upstream Batch transit time standard deviation (D1). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5276	SDevTmD2	Std. deviation of transit times for chord D downstream Batch transit time standard deviation (D2). It is calculated from transit times of waveforms used for measurement.	R				float	ns	ns	float32	us				
5278	SDevTmE1	Std. deviation of transit times for chord E upstream Batch transit time standard deviation (E1). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5280	SDevTmE2	Std. deviation of transit times for chord E downstream Batch transit time standard deviation (E2). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5282	SDevTmF1	Std. deviation of transit times for chord F upstream Batch transit time standard deviation (F1). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5284	SDevTmF2	Std. deviation of transit times for chord F downstream Batch transit time standard deviation (F2). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5286	SDevTmG1	Std. deviation of transit times for chord G upstream Batch transit time standard deviation (G1). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5288	SDevTmG2	Std. deviation of transit times for chord G downstream Batch transit time standard deviation (G2). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5290	SDevTmH1	Std. deviation of transit times for chord H upstream Batch transit time standard deviation (H1). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5292	SDevTmH2	Std. deviation of transit times for chord H downstream Batch transit time standard deviation (H2). It is calculated from transit times of waveforms used for measurement.	R				float	sec	sec	float32	us				
5294	MaxDltTmA	Maximum batch delta time for chord A Maximum batch delta time for chord A.	R				float	sec	sec	float32	us				
5296	MaxDltTmB	Maximum batch delta time for chord B Maximum batch delta time for chord B.	R				float	sec	sec	float32	us				
5298	MaxDltTmC	Maximum batch delta time for chord C Maximum batch delta time for chord C.	R				float	sec	sec	float32	us				
5300	MaxDltTmD	Maximum batch delta time for chord D Maximum batch delta time for chord D.	R				float	sec	sec	float32	us				
5302	MaxDltTmE	Maximum batch delta time for chord E Maximum batch delta time for chord E.	R				float	sec	sec	float32	us				
5304	MaxDltTmF	Maximum batch delta time for chord F Maximum batch delta time for chord F.	R				float	sec	sec	float32	us				
5306	MaxDltTmG	Maximum batch delta time for chord G Maximum batch delta time for chord G.	R				float	sec	sec	float32	us				
5308	MaxDltTmH	Maximum batch delta time for chord H Maximum batch delta time for chord H.	R				float	sec	sec	float32	us				
5310	MinDltTmA	Minimum batch delta time for chord A Minimum batch delta time for chord A.	R				float	sec	sec	float32	us				
5312	MinDltTmB	Minimum batch delta time for chord B Minimum batch delta time for chord B.	R				float	sec	sec	float32	us				
5314	MinDltTmC	Minimum batch delta time for chord C Minimum batch delta time for chord C.	R				float	sec	sec	float32	us				
5316	MinDltTmD	Minimum batch delta time for chord D Minimum batch delta time for chord D.	R				float	sec	sec	float32	us				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5318	MinDltTmE	Minimum batch delta time for chord E Minimum batch delta time for chord E.	R				float	sec	sec	float32	us				
5320	MinDltTmF	Minimum batch delta time for chord F Minimum batch delta time for chord F.	R				float	sec	sec	float32	us				
5322	MinDltTmG	Minimum batch delta time for chord G Minimum batch delta time for chord G.	R				float	sec	sec	float32	us				
5324	MinDltTmH	Minimum batch delta time for chord H Minimum batch delta time for chord H.	R				float	sec	sec	float32	us				
5326	DltTmA	Mean batch delta time for chord A Mean batch delta time for chord A.	R				float	sec	sec	float32	us				
5328	DltTmB	Mean batch delta time for chord B Mean batch delta time for chord B.	R				float	sec	sec	float32	us				
5330	DltTmC	Mean batch delta time for chord C Mean batch delta time for chord C.	R				float	sec	sec	float32	us				
5332	DltTmD	Mean batch delta time for chord D Mean batch delta time for chord D.	R				float	sec	sec	float32	us				
5334	DltTmE	Mean batch delta time for chord E Mean batch delta time for chord E.	R				float	sec	sec	float32	us				
5336	DltTmF	Mean batch delta time for chord F Mean batch delta time for chord F.	R				float	sec	sec	float32	us				
5338	DltTmG	Mean batch delta time for chord G Mean batch delta time for chord G.	R				float	sec	sec	float32	us				
5340	DltTmH	Mean batch delta time for chord H Mean batch delta time for chord H.	R				float	sec	sec	float32	us				
5342	SDevDltTmA	Batch delta time standard deviation for chord A Batch delta time standard deviation for chord A.	R				float	ns	ns	float32	us				
5344	SDevDltTmB	Batch delta time standard deviation for chord B Batch delta time standard deviation for chord B.	R				float	ns	ns	float32	us				
5346	SDevDltTmC	Batch delta time standard deviation for chord C Batch delta time standard deviation for chord C.	R				float	ns	ns	float32	us				
5348	SDevDltTmD	Batch delta time standard deviation for chord D Batch delta time standard deviation for chord D.	R				float	ns	ns	float32	us				
5350	SDevDltTmE	Batch delta time standard deviation for chord E Batch delta time standard deviation for chord E.	R				float	sec	sec	float32	us				
5352	SDevDltTmF	Batch delta time standard deviation for chord F Batch delta time standard deviation for chord F.	R				float	sec	sec	float32	us				
5354	SDevDltTmG	Batch delta time standard deviation for chord G Batch delta time standard deviation for chord G.	R				float	sec	sec	float32	us				
5356	SDevDltTmH	Batch delta time standard deviation for chord H Batch delta time standard deviation for chord H.	R				float	sec	sec	float32	us				
5358	FlowVelA	Flow velocity for chord A Chord A flow velocity.	R				float	m/s	ft/s	float32	m/s				
5360	FlowVelB	Flow velocity for chord B Chord B flow velocity.	R				float	m/s	ft/s	float32	m/s				
5362	FlowVelC	Flow velocity for chord C Chord C flow velocity.	R				float	m/s	ft/s	float32	m/s				
5364	FlowVelD	Flow velocity for chord D Chord D flow velocity.	R				float	m/s	ft/s	float32	m/s				
5366	FlowVelE	Flow velocity for chord E Chord E flow velocity.	R				float	m/s	ft/s	float32	m/s				
5368	FlowVelF	Flow velocity for chord F Chord F flow velocity.	R				float	m/s	ft/s	float32	m/s				
5370	FlowVelG	Flow velocity for chord G Chord G flow velocity.	R				float	m/s	ft/s	float32	m/s				
5372	FlowVelH	Flow velocity for chord H Chord H flow velocity.	R				float	m/s	ft/s	float32	m/s				
5374	AvgWtdFlowVel	Average weighted flow velocity (no calibration applied) Average weighted flow velocity (per batch). When all active chords are non-failed, the average weighted flow velocity is a weighted sum of the chord velocity measurements, WtA, WtB, WtC, WtD, WtE, WtF, WtG, WtH, where the chord weights are determined by the meter geometry. The diagnostic chord is not included in the average. See also FlowVelA, FlowVelB, FlowVelC, FlowVelD, FlowVelE, FlowVelF, FlowVelG, FlowVelH.	R				float	m/s	ft/s	float32	m/s				
5376	SndVelA	Speed of sound for chord A Speed of sound for chord A including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrA).	R				float	m/s	ft/s	float32	m/s				
5378	SndVelB	Speed of sound for chord B Speed of sound for chord B including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrB).	R				float	m/s	ft/s	float32	m/s				
5380	SndVelC	Speed of sound for chord C Speed of sound for chord C including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrC).	R				float	m/s	ft/s	float32	m/s				
5382	SndVelD	Speed of sound for chord D Speed of sound for chord D including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrD).	R				float	m/s	ft/s	float32	m/s				
5384	SndVelE	Speed of sound for chord E Speed of sound for chord E including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrE).	R				float	m/s	ft/s	float32	m/s				
5386	SndVelF	Speed of sound for chord F Speed of sound for chord F including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrF).	R				float	m/s	ft/s	float32	m/s				
5388	SndVelG	Speed of sound for chord G Speed of sound for chord G including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrG).	R				float	m/s	ft/s	float32	m/s				
5390	SndVelH	Speed of sound for chord H Speed of sound for chord H including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrH).	R				float	m/s	ft/s	float32	m/s				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5392	AvgSndVel	Average speed of sound Average speed of sound (per batch) of all non-failed velocity measurement chords. The diagnostic chord's (IsDiagnosticChordEnabled) speed of sound is not included in the average.	R	Y			float	m/s	ft/s	float32	m/s				
5394	QCutOff	Volumetric flow rate threshold below which the flow rate is considered zero The volumetric flow rate below which the flow-condition volumetric flow rate (QFlow) is considered zero, chord turbulence values are not calculated (TurbulenceA..TurbulenceH) and "flow gated" (FLOW_GATED) values are not accumulated. This value is computed by multiplying the flow velocity low cutoff (ZeroCut) by the meter inside pipe area (PipeArea). When the flow rate is above this threshold, the cutoff indicator (IsFlowAboveCutoff) is TRUE (1).	R				float	volume/time	volume/time	float32	m3/hr				
5396	QMeter	Volumetric flow rate (no expansion correction) Volumetric flow rate (no expansion correction). Computed as average flow (AvgFlow) times pipe area (PipeArea).	R				float	volume/time	volume/time	float32	m3/hr				
5398	QExpCorr	Expansion corrected (flow-condition) vol flow Expansion corrected (flow-condition) volumetric flow rate, the volumetric flow rate with no expansion correction (QMeter) with pressure expansion correction (ExpCorrPressure) and temperature expansion correction (ExpCorrTemperature) applied.	R				float	volume/time	volume/time	float32	m3/hr				
5400	QFlow	Volumetric flow rate at flow condition Flow-condition volumetric flow rate, corrected for flow-condition expansion (QExpCorr) and flow profile correction factor (CorrectionFactor).	R				float	volume/time	volume/time	float32	m3/hr				
5402	CalVol	Calibration accumulated uncorrected volume Calibration accumulated uncorrected volume. This is the accumulation of the uncorrected volume while the CalFlag data point is set to TRUE (1) or the DI1 gates the calibration with IsDI1UsedForCal as indicated by IsCalOnBatch.	R				float	m3	ft3	float32	m3				
5404	CalProfileFactor	Calibration average profile factor This is the average profile factor (ProfileFactor) while the timed calibration flag (CalFlag) is set to TRUE (1) or while the DI1 gates the calibration when DI1 is configured to synchronize calibration (IsDI1UsedForCal).	R				float	-	-	float32	-				
5406	SEA1	Batch average signal energy (A1) Average batch signal energy (A1).	R				float	energy	energy	float32	energy				
5408	SEA2	Batch average signal energy (A2) Average batch signal energy (A2).	R				float	energy	energy	float32	energy				
5410	SEB1	Batch average signal energy (B1) Average batch signal energy (B1).	R				float	energy	energy	float32	energy				
5412	SEB2	Batch average signal energy (B2) Average batch signal energy (B2).	R				float	energy	energy	float32	energy				
5414	SEC1	Batch average signal energy (C1) Average batch signal energy (C1).	R				float	energy	energy	float32	energy				
5416	SEC2	Batch average signal energy (C2) Average batch signal energy (C2).	R				float	energy	energy	float32	energy				
5418	SED1	Batch average signal energy (D1) Average batch signal energy (D1).	R				float	energy	energy	float32	energy				
5420	SED2	Batch average signal energy (D2) Average batch signal energy (D2).	R				float	energy	energy	float32	energy				
5422	SEE1	Batch average signal energy (E1) Average batch signal energy (E1).	R				float	energy	energy	float32	energy				
5424	SEE2	Batch average signal energy (E2) Average batch signal energy (E2).	R				float	energy	energy	float32	energy				
5426	SEF1	Batch average signal energy (F1) Average batch signal energy (F1).	R				float	energy	energy	float32	energy				
5428	SEF2	Batch average signal energy (F2) Average batch signal energy (F2).	R				float	energy	energy	float32	energy				
5430	SEG1	Batch average signal energy (G1) Average batch signal energy (G1).	R				float	energy	energy	float32	energy				
5432	SEG2	Batch average signal energy (G2) Average batch signal energy (G2).	R				float	energy	energy	float32	energy				
5434	SEH1	Batch average signal energy (H1) Average batch signal energy (H1).	R				float	energy	energy	float32	energy				
5436	SEH2	Batch average signal energy (H2) Average batch signal energy (H2).	R				float	energy	energy	float32	energy				
5438	NEA1	Batch average noise energy (A1) Average batch noise energy (A1).	R				float	energy	energy	float32	energy				
5440	NEA2	Batch average noise energy (A2) Average batch noise energy (A2).	R				float	energy	energy	float32	energy				
5442	NEB1	Batch average noise energy (B1) Average batch noise energy (B1).	R				float	energy	energy	float32	energy				
5444	NEB2	Batch average noise energy (B2) Average batch noise energy (B2).	R				float	energy	energy	float32	energy				
5446	NEC1	Batch average noise energy (C1) Average batch noise energy (C1).	R				float	energy	energy	float32	energy				
5448	NEC2	Batch average noise energy (C2) Average batch noise energy (C2).	R				float	energy	energy	float32	energy				
5450	NED1	Batch average noise energy (D1) Average batch noise energy (D1).	R				float	energy	energy	float32	energy				
5452	NED2	Batch average noise energy (D2) Average batch noise energy (D2).	R				float	energy	energy	float32	energy				
5454	NEE1	Batch average noise energy (E1) Average batch noise energy (E1).	R				float	energy	energy	float32	energy				
5456	NEE2	Batch average noise energy (E2) Average batch noise energy (E2).	R				float	energy	energy	float32	energy				
5458	NEF1	Batch average noise energy (F1) Average batch noise energy (F1).	R				float	energy	energy	float32	energy				
5460	NEF2	Batch average noise energy (F2) Average batch noise energy (F2).	R				float	energy	energy	float32	energy				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5462	NEG1	Batch average noise energy (G1) Average batch noise energy (G1).	R				float	energy	energy	float32	energy				
5464	NEG2	Batch average noise energy (G2) Average batch noise energy (G2).	R				float	energy	energy	float32	energy				
5466	NEH1	Batch average noise energy (H1) Average batch noise energy (H1).	R				float	energy	energy	float32	energy				
5468	NEH2	Batch average noise energy (H2) Average batch noise energy (H2).	R				float	energy	energy	float32	energy				
5470	SNRA1	Average signal-to-noise ratio (A1) Average signal-to-noise ratio (A1).	R				float	dB	dB	float32	dB				
5472	SNRA2	Average signal-to-noise ratio (A2) Average signal-to-noise ratio (A2).	R				float	dB	dB	float32	dB				
5474	SNRB1	Average signal-to-noise ratio (B1) Average signal-to-noise ratio (B1).	R				float	dB	dB	float32	dB				
5476	SNRB2	Average signal-to-noise ratio (B2) Average signal-to-noise ratio (B2).	R				float	dB	dB	float32	dB				
5478	SNRC1	Average signal-to-noise ratio (C1) Average signal-to-noise ratio (C1).	R				float	dB	dB	float32	dB				
5480	SNRC2	Average signal-to-noise ratio (C2) Average signal-to-noise ratio (C2).	R				float	dB	dB	float32	dB				
5482	SNRD1	Average signal-to-noise ratio (D1) Average signal-to-noise ratio (D1).	R				float	dB	dB	float32	dB				
5484	SNRD2	Average signal-to-noise ratio (D2) Average signal-to-noise ratio (D2).	R				float	dB	dB	float32	dB				
5486	SNRE1	Average signal-to-noise ratio (E1) Average signal-to-noise ratio (E1).	R				float	dB	dB	float32	dB				
5488	SNRE2	Average signal-to-noise ratio (E2) Average signal-to-noise ratio (E2).	R				float	dB	dB	float32	dB				
5490	SNRF1	Average signal-to-noise ratio (F1) Average signal-to-noise ratio (F1).	R				float	dB	dB	float32	dB				
5492	SNRF2	Average signal-to-noise ratio (F2) Average signal-to-noise ratio (F2).	R				float	dB	dB	float32	dB				
5494	SNRG1	Average signal-to-noise ratio (G1) Average signal-to-noise ratio (G1).	R				float	dB	dB	float32	dB				
5496	SNRG2	Average signal-to-noise ratio (G2) Average signal-to-noise ratio (G2).	R				float	dB	dB	float32	dB				
5498	SNRH1	Average signal-to-noise ratio (H1) Average signal-to-noise ratio (H1).	R				float	dB	dB	float32	dB				
5500	SNRH2	Average signal-to-noise ratio (H2) Average signal-to-noise ratio (H2).	R				float	dB	dB	float32	dB				
5502	BatchTimeSec	Elapsed time for all firing sequences processed in batch cycle This is calculated as difference of the timestamps of the last sequence of previous batch cycle and the last sequence of current batch cycle. This will vary from batch to batch around the desired duration (BatchUpdatePeriod) and depends on number of new sequences received by batch (BatchNewSeq).	R				float	sec	sec	float32	sec				
5504	AvgBatchTimeHours	Average batch time Average batch time. The average is computed over the previous 8 batches.	R				float	hr	hr	float32	hr				
5506	Freq1ChnlA	Frequency Output 1A value Frequency Output 1 channel A value.	R				float	Hz	Hz	float32	Hz				
5508	Freq2ChnlA	Frequency Output 2A value Frequency Output 2 channel A value.	R				float	Hz	Hz	float32	Hz				
5510	Freq1ChnlB	Frequency Output 1B value Frequency Output 1 channel B value.	R				float	Hz	Hz	float32	Hz				
5512	Freq2ChnlB	Frequency Output 2B value Frequency Output 2 channel B value.	R				float	Hz	Hz	float32	Hz				
5514	Freq1KFactor	Frequency Output 1 pair K-Factor Frequency Output 1 pair K-Factor.	R				float	pulses/m3	pulses/ft3	float32	pulses/m3				
5516	Freq2KFactor	Frequency Output 2 pair K-Factor Frequency Output 2 pair K-Factor.	R				float	pulses/m3	pulses/ft3	float32	pulses/m3				
5518	Freq1InvKFactor	Frequency Output 1 pair inverse K-Factor Frequency Output 1 pair inverse K-Factor.	R				float	m3/pulse	ft3/pulse	float32	m3/pulse				
5520	Freq2InvKFactor	Frequency Output 2 pair inverse K-Factor Frequency Output 2 pair inverse K-Factor.	R				float	m3/pulse	ft3/pulse	float32	m3/pulse				
5522	Freq1FeedbackVol	Frequency Output 1 pair feedback volume Frequency Output 1 pair feedback volume.	R				float	m3	ft3	float32	m3				
5524	Freq2FeedbackVol	Frequency Output 2 pair feedback volume Frequency Output 2 pair feedback volume.	R				float	m3	ft3	float32	m3				
5526	Freq1FeedbackPrevDesiredVol	Frequency Output 1 pair previous desired volume Frequency Output 1 pair previous desired volume.	R				float	m3	ft3	float32	m3				
5528	Freq2FeedbackPrevDesiredVol	Frequency Output 2 pair previous desired volume Frequency Output 2 pair previous desired volume.	R				float	m3	ft3	float32	m3				
5530	Freq1FeedbackVolErr	Frequency Output 1 pair feedback volume error Frequency Output 1 pair feedback volume error.	R				float	m3	ft3	float32	m3				
5532	Freq2FeedbackVolErr	Frequency Output 2 pair feedback volume error Frequency Output 2 pair feedback volume error.	R				float	m3	ft3	float32	m3				
5534	Freq1FeedbackDesiredVol	Frequency Output 1 pair desired volume Frequency Output 1 pair desired volume.	R				float	m3	ft3	float32	m3				
5536	Freq2FeedbackDesiredVol	Frequency Output 2 pair desired volume Frequency Output 2 pair desired volume.	R				float	m3	ft3	float32	m3				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5538	Freq1TTLVFRErr	Frequency Output 1 pair total volumetric flow rate error Frequency Output 1 pair total volumetric flow rate error.	R				float	volume/time	volume/time	float32	m3/hr				
5540	Freq2TTLVFRErr	Frequency Output 2 pair total volumetric flow rate error Frequency Output 2 pair total volumetric flow rate error.	R				float	volume/time	volume/time	float32	m3/hr				
5542	Freq1VFRErrComp	Frequency Output 1 pair volumetric flow rate error compensation Frequency Output 1 pair volumetric flow rate error compensation.	R				float	volume/time	volume/time	float32	m3/hr				
5544	Freq2VFRErrComp	Frequency Output 2 pair volumetric flow rate error compensation Frequency Output 2 pair volumetric flow rate error compensation.	R				float	volume/time	volume/time	float32	m3/hr				
5546	Freq1AbsVFR	Frequency Output 1 pair absolute volumetric flow rate Frequency Output 1 pair absolute volumetric flow rate. This is the absolute value of the volumetric flow rate represented by the Frequency Output 1 pair and does not include any feedback error compensation.	R				float	volume/time	volume/time	float32	m3/hr				
5548	Freq2AbsVFR	Frequency Output 2 pair absolute volumetric flow rate Frequency Output 2 pair absolute volumetric flow rate. This is the absolute value of the volumetric flow rate represented by the Frequency Output 2 pair and does not include any feedback error compensation.	R				float	volume/time	volume/time	float32	m3/hr				
5550	Freq1OutputVFR	Frequency Output 1 pair output volumetric flow rate Frequency Output 1 pair output volumetric flow rate. This includes frequency feedback correction if applicable.	R				float	volume/time	volume/time	float32	m3/hr				
5552	Freq2OutputVFR	Frequency Output 2 pair output volumetric flow rate Frequency Output 2 pair output volumetric flow rate. This includes frequency feedback correction if applicable.	R				float	volume/time	volume/time	float32	m3/hr				
5554	Ap1A1	Peak 1 normalized amplitude (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5556	Ap1A2	Peak 1 normalized amplitude (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5558	Ap1B1	Peak 1 normalized amplitude (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5560	Ap1B2	Peak 1 normalized amplitude (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5562	Ap1C1	Peak 1 normalized amplitude (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5564	Ap1C2	Peak 1 normalized amplitude (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5566	Ap1D1	Peak 1 normalized amplitude (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5568	Ap1D2	Peak 1 normalized amplitude (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5570	Ap1E1	Peak 1 normalized amplitude (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5572	Ap1E2	Peak 1 normalized amplitude (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5574	Ap1F1	Peak 1 normalized amplitude (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5576	Ap1F2	Peak 1 normalized amplitude (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5578	Ap1G1	Peak 1 normalized amplitude (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5580	Ap1G2	Peak 1 normalized amplitude (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5582	Ap1H1	Peak 1 normalized amplitude (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5584	Ap1H2	Peak 1 normalized amplitude (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5586	Ap2A1	Peak 2 normalized amplitude (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5588	Ap2A2	Peak 2 normalized amplitude (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5590	Ap2B1	Peak 2 normalized amplitude (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5592	Ap2B2	Peak 2 normalized amplitude (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5594	Ap2C1	Peak 2 normalized amplitude (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5596	Ap2C2	Peak 2 normalized amplitude (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5598	Ap2D1	Peak 2 normalized amplitude (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5600	Ap2D2	Peak 2 normalized amplitude (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5602	Ap2E1	Peak 2 normalized amplitude (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5604	Ap2E2	Peak 2 normalized amplitude (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5606	Ap2F1	Peak 2 normalized amplitude (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5608	Ap2F2	Peak 2 normalized amplitude (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5610	Ap2G1	Peak 2 normalized amplitude (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5612	Ap2G2	Peak 2 normalized amplitude (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				

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5614	Ap2H1	Peak 2 normalized amplitude (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5616	Ap2H2	Peak 2 normalized amplitude (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5618	Ap3A1	Peak 3 normalized amplitude (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5620	Ap3A2	Peak 3 normalized amplitude (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5622	Ap3B1	Peak 3 normalized amplitude (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5624	Ap3B2	Peak 3 normalized amplitude (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5626	Ap3C1	Peak 3 normalized amplitude (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5628	Ap3C2	Peak 3 normalized amplitude (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5630	Ap3D1	Peak 3 normalized amplitude (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5632	Ap3D2	Peak 3 normalized amplitude (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5634	Ap3E1	Peak 3 normalized amplitude (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5636	Ap3E2	Peak 3 normalized amplitude (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5638	Ap3F1	Peak 3 normalized amplitude (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5640	Ap3F2	Peak 3 normalized amplitude (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5642	Ap3G1	Peak 3 normalized amplitude (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5644	Ap3G2	Peak 3 normalized amplitude (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5646	Ap3H1	Peak 3 normalized amplitude (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5648	Ap3H2	Peak 3 normalized amplitude (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5650	Ap4A1	Peak 4 normalized amplitude (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5652	Ap4A2	Peak 4 normalized amplitude (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5654	Ap4B1	Peak 4 normalized amplitude (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5656	Ap4B2	Peak 4 normalized amplitude (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5658	Ap4C1	Peak 4 normalized amplitude (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5660	Ap4C2	Peak 4 normalized amplitude (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5662	Ap4D1	Peak 4 normalized amplitude (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5664	Ap4D2	Peak 4 normalized amplitude (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5666	Ap4E1	Peak 4 normalized amplitude (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5668	Ap4E2	Peak 4 normalized amplitude (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5670	Ap4F1	Peak 4 normalized amplitude (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5672	Ap4F2	Peak 4 normalized amplitude (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5674	Ap4G1	Peak 4 normalized amplitude (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5676	Ap4G2	Peak 4 normalized amplitude (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5678	Ap4H1	Peak 4 normalized amplitude (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5680	Ap4H2	Peak 4 normalized amplitude (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				float	%	%	float32	%				
5682	SysTemp	System temperature System temperature. The temperature is measured on the CPU Module and will read higher than the ambient due to internal heat rise. The alarm limits are system temperature low limit (SysTempLoLmt) and system temperature high limit (SysTempHiLmt). The alarm is IsElecTempOutOfRange.	R				float	deg C	deg F	float32	deg C				
5684	SysTempAcqModule	System temperature - Acquisition Module The temperature is measured in the Acquisition Module will read higher than the ambient due to internal heat rise. The alarm limits are system temperature low limit (SysTempAcqModuleLoLmt) and system temperature high limit (SysTempAcqModuleHiLmt). The alarm is IsElecTempOutOfRange.	R				float	deg C	deg F	float32	deg C				
5686	SysTempLoLmt	CPU temperature alarm low limit System temperature alarm low limit for CPU Module.	RW	Y			float	deg C	deg F	float32	deg C		-40	-3.40E+38	3.40E+38

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5688	SysTempHiLmt	CPU temperature alarm high limit System temperature alarm high limit for CPU Module.	RW	Y			float	deg C	deg F	float32	deg C		100	-3.40E+38	3.40E+38
5690	SysTempAcqModuleLoLmt	Acquisition Module temperature alarm low limit System temperature alarm low limit for Acquisition Module.	RW	Y			float	deg C	deg F	float32	deg C		-40	-3.40E+38	3.40E+38
5692	SysTempAcqModuleHiLmt	Acquisition Module temperature alarm high limit System temperature alarm high limit for Acquisition Module.	RW	Y			float	deg C	deg F	float32	deg C		100	-3.40E+38	3.40E+38
5694	SysVoltage1V	System 1.0V reading Actual voltage of the system 1.0V supply. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage1VLoLmt and SysVoltage1VHiLmt.	R				float	V	V	float32	V				
5696	SysVoltage1V2	System 1.2V reading Actual voltage of the system 1.2V supply. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage1V2LoLmt and SysVoltage1V2HiLmt.	R				float	V	V	float32	V				
5698	SysVoltageAcqModule1V2	Acquisition Module 1.2V reading Actual voltage of the system 1.2V supply in the Acquisition Module. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage1V2LoLmt and SysVoltage1V2HiLmt.	R				float	V	V	float32	V				
5700	SysVoltage2V5	System 2.5V reading Actual voltage of the system 2.5V supply. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage2V5LoLmt and SysVoltage2V5HiLmt.	R				float	V	V	float32	V				
5702	SysVoltageAcqModule2V5	Acquisition Module 2.5V reading Actual voltage of the system 2.5V supply in the Acquisition Module. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage2V5LoLmt and SysVoltage2V5HiLmt.	R				float	V	V	float32	V				
5704	SysVoltage3V3	System 3.3V reading Actual voltage of the system 3.3V supply. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage3V3LoLmt and SysVoltage3V3HiLmt.	R				float	V	V	float32	V				
5706	SysVoltageAcqModule3V3	Acquisition Module 3.3V reading Actual voltage of the system 3.3V supply in the Acquisition Module. The alarm is IsElecVoltOutOfRange. The alarm limits are SysVoltage3V3LoLmt and SysVoltage3V3HiLmt.	R				float	V	V	float32	V				
5708	SysVoltage1VLoLmt	System 1.0V reading alarm low limit System 1.0V reading alarm low limit.	RW	Y			float	V	V	float32	V		0.9	-3.40E+38	3.40E+38
5710	SysVoltage1VHiLmt	System 1.0V reading alarm high limit System 1.0V reading alarm high limit.	RW	Y			float	V	V	float32	V		1.1	-3.40E+38	3.40E+38
5712	SysVoltage1V2LoLmt	System 1.2V reading alarm low limit System 1.2V reading alarm low limit.	RW	Y			float	V	V	float32	V		1.08	-3.40E+38	3.40E+38
5714	SysVoltage1V2HiLmt	System 1.2V reading alarm high limit System 1.2V reading alarm high limit.	RW	Y			float	V	V	float32	V		1.32	-3.40E+38	3.40E+38
5716	SysVoltage2V5LoLmt	System 2.5V reading alarm low limit System 2.5V reading alarm low limit.	RW	Y			float	V	V	float32	V		2.225	-3.40E+38	3.40E+38
5718	SysVoltage2V5HiLmt	System 2.5V reading alarm high limit System 2.5V reading alarm high limit.	RW	Y			float	V	V	float32	V		2.775	-3.40E+38	3.40E+38
5720	SysVoltage3V3LoLmt	System 3.3V reading alarm low limit System 3.3V reading alarm low limit.	RW	Y			float	V	V	float32	V		2.937	-3.40E+38	3.40E+38
5722	SysVoltage3V3HiLmt	System 3.3V reading alarm high limit System 3.3V reading alarm high limit.	RW	Y			float	V	V	float32	V		3.663	-3.40E+38	3.40E+38
5724	PrevHourFlowTime	Previous hour's flow time Amount of time during the previous hour that flow was above the cutoff value.	R	Y			float	ms	ms	float32	min				
5726	PrevDayFlowTime	Previous day's flow time Amount of time during the previous day that flow was above the cutoff value.	R	Y			float	ms	ms	float32	min				
5728	CurrHourFlowTime	Current hour's flow time Amount of time during the current hour that flow is above the cutoff value.	R	Y			float	ms	ms	float32	min				
5730	CurrDayFlowTime	Current day's flow time Amount of time during the current day that flow is above the cutoff value. The start of the day is defined by the 'ContractHour' data point.	R	Y			float	ms	ms	float32	min				
5732	PortAngle	Meter port angle for speed of sound correction The meter port angle for the speed of sound port angle factor correction. The port angle is computed from chord "X" dimension (XA) and pipe ID dimension (PipeDiam). See also the speed of sound correction factor (SOSGeometryCorrFctrA, SOSGeometryCorrFctrB, SOSGeometryCorrFctrC, SOSGeometryCorrFctrD, SOSGeometryCorrFctrE, SOSGeometryCorrFctrF, SOSGeometryCorrFctrG, SOSGeometryCorrFctrH) data points.	R				float	deg	deg	float32	deg				
5734	SOSGeometryCorrFctrA	Speed of sound geometry-dependent correction factor (chord A) Speed of sound correction factor for chord A. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XA), chord length (LA), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XA), chord length (LA) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. 3. Liquid meters with port angle (PortAngle) set to 45 degrees. See also speed of sound for chord A (SndVelA) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5736	SOSGeometryCorrFctrB	Speed of sound geometry-dependent correction factor (chord B) Speed of sound correction factor for chord B. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XB), chord length (LB), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XB), chord length (LB) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. 3. Liquid meters with port angle (PortAngle) set to 45 degrees. See also speed of sound for chord B (SndVelB) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5738	SOSGeometryCorrFctrC	Speed of sound geometry-dependent correction factor (chord C) Speed of sound correction factor for chord C. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XC), chord length (LC), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XC), chord length (LC) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. 3. Liquid meters with port angle (PortAngle) set to 45 degrees. See also speed of sound for chord C (SndVelC) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5740	SOSGeometryCorrFctrD	Speed of sound geometry-dependent correction factor (chord D) Speed of sound correction factor for chord D. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XD), chord length (LD), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XD), chord length (LD) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. 3. Liquid meters with port angle (PortAngle) set to 45 degrees. See also speed of sound for chord D (SndVelD) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5742	SOSGeometryCorrFctrE	Speed of sound geometry-dependent correction factor (chord E) Speed of sound correction factor for chord E. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XE), chord length (LE), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XE), chord length (LE) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. See also speed of sound for chord E (SndVelE) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5744	SOSGeometryCorrFctrF	Speed of sound geometry-dependent correction factor (chord F) Speed of sound correction factor for chord F. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XF), chord length (LF), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XF), chord length (LF) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. See also speed of sound for chord F (SndVelF) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5746	SOSGeometryCorrFctrG	Speed of sound geometry-dependent correction factor (chord G) Speed of sound correction factor for chord G. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XG), chord length (LG), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XG), chord length (LG) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. See also speed of sound for chord G (SndVelG) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5748	SOSGeometryCorrFctrH	Speed of sound geometry-dependent correction factor (chord H) Speed of sound correction factor for chord H. For 4-Path and 8-Path meters, speed of sound correction factor is calculated based on chord "X" dimension (XH), chord length (LH), chordal configuration (ChordalConfig), transducer type (XdcrType) and port angle (PortAngle). For Gas 1-Path and Gas 2-Path meters, speed of sound correction factor is based on chord "X" dimension (XH), chord length (LH) and port angle (PortAngle). This value is zero for meters that don't require speed of sound correction as listed below: 1. Gas meters with port angle (PortAngle) set to 45 degrees, chordal configuration (ChordalConfig) set to "BG" and transducer type (XdcrType) is "Not set". 2. Gas meters with chordal configuration (ChordalConfig) set to Dual-X. See also speed of sound for chord H (SndVelH) data point and the Gas Ultrasonic Operations manual.	R				float	-	-	float32	-				
5750	TspfMinA1	Minimum Tspf value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5752	TspfMinA2	Minimum Tspf value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5754	TspfMinB1	Minimum Tspf value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5756	TspfMinB2	Minimum Tspf value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5758	TspfMinC1	Minimum Tspf value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5760	TspfMinC2	Minimum Tspf value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5762	TspfMinD1	Minimum Tspf value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5764	TspfMinD2	Minimum Tspf value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5766	TspfMinE1	Minimum Tspf value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5768	TspfMinE2	Minimum Tspf value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5770	TspfMinF1	Minimum Tspf value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5772	TspfMinF2	Minimum Tspf value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5774	TspfMinG1	Minimum Tspf value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5776	TspfMinG2	Minimum Tspf value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5778	TspfMinH1	Minimum Tspf value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5780	TspfMinH2	Minimum Tspf value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5782	TspfMaxA1	Maximum Tspf value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5784	TspfMaxA2	Maximum Tspf value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5786	TspfMaxB1	Maximum Tspf value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5788	TspfMaxB2	Maximum Tspf value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5790	TspfMaxC1	Maximum Tspf value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5792	TspfMaxC2	Maximum Tspf value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5794	TspfMaxD1	Maximum Tspf value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5796	TspfMaxD2	Maximum Tspf value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5798	TspfMaxE1	Maximum Tspf value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5800	TspfMaxE2	Maximum Tspf value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5802	TspfMaxF1	Maximum Tspf value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5804	TspfMaxF2	Maximum Tspf value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5806	TspfMaxG1	Maximum Tspf value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5808	TspfMaxG2	Maximum Tspf value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5810	TspfMaxH1	Maximum Tspf value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5812	TspfMaxH2	Maximum Tspf value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5814	TspfMeanA1	Mean Tspf value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5816	TspfMeanA2	Mean Tspf value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5818	TspfMeanB1	Mean Tspf value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5820	TspfMeanB2	Mean Tspf value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5822	TspfMeanC1	Mean Tspf value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5824	TspfMeanC2	Mean Tspf value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5826	TspfMeanD1	Mean Tspf value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5828	TspfMeanD2	Mean Tspf value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5830	TspfMeanE1	Mean Tspf value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5832	TspfMeanE2	Mean Tspf value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5834	TspfMeanF1	Mean Tspf value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5836	TspfMeanF2	Mean Tspf value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5838	TspfMeanG1	Mean Tspf value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5840	TspfMeanG2	Mean Tspf value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5842	TspfMeanH1	Mean Tspf value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5844	TspfMeanH2	Mean Tspf value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	sample intervals	sample intervals	float32	sample intervals				
5846	SigQltyMinA1	Minimum signal quality value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5848	SigQltyMinA2	Minimum signal quality value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5850	SigQltyMinB1	Minimum signal quality value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5852	SigQltyMinB2	Minimum signal quality value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5854	SigQltyMinC1	Minimum signal quality value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5856	SigQltyMinC2	Minimum signal quality value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5858	SigQltyMinD1	Minimum signal quality value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5860	SigQltyMinD2	Minimum signal quality value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5862	SigQltyMinE1	Minimum signal quality value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5864	SigQltyMinE2	Minimum signal quality value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5866	SigQltyMinF1	Minimum signal quality value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5868	SigQltyMinF2	Minimum signal quality value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5870	SigQltyMinG1	Minimum signal quality value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5872	SigQltyMinG2	Minimum signal quality value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5874	SigQltyMinH1	Minimum signal quality value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5876	SigQltyMinH2	Minimum signal quality value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5878	SigQltyMaxA1	Maximum signal quality value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5880	SigQltyMaxA2	Maximum signal quality value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5882	SigQltyMaxB1	Maximum signal quality value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5884	SigQltyMaxB2	Maximum signal quality value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5886	SigQltyMaxC1	Maximum signal quality value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5888	SigQltyMaxC2	Maximum signal quality value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5890	SigQltyMaxD1	Maximum signal quality value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5892	SigQltyMaxD2	Maximum signal quality value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5894	SigQltyMaxE1	Maximum signal quality value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5896	SigQltyMaxE2	Maximum signal quality value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5898	SigQltyMaxF1	Maximum signal quality value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5900	SigQltyMaxF2	Maximum signal quality value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5902	SigQltyMaxG1	Maximum signal quality value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5904	SigQltyMaxG2	Maximum signal quality value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5906	SigQltyMaxH1	Maximum signal quality value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5908	SigQltyMaxH2	Maximum signal quality value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5910	SigQltyMeanA1	Mean signal quality value (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5912	SigQltyMeanA2	Mean signal quality value (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5914	SigQltyMeanB1	Mean signal quality value (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5916	SigQltyMeanB2	Mean signal quality value (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5918	SigQltyMeanC1	Mean signal quality value (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5920	SigQltyMeanC2	Mean signal quality value (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5922	SigQltyMeanD1	Mean signal quality value (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5924	SigQltyMeanD2	Mean signal quality value (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5926	SigQltyMeanE1	Mean signal quality value (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5928	SigQltyMeanE2	Mean signal quality value (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5930	SigQltyMeanF1	Mean signal quality value (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5932	SigQltyMeanF2	Mean signal quality value (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5934	SigQltyMeanG1	Mean signal quality value (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5936	SigQltyMeanG2	Mean signal quality value (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5938	SigQltyMeanH1	Mean signal quality value (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5940	SigQltyMeanH2	Mean signal quality value (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5942	GainPrevA1	Previous gain value (A1) The gain value last used by transducer A1. It is used to compute the new gain (GainNewA1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5944	GainPrevA2	Previous gain value (A2) The gain value last used by transducer A2. It is used to compute the new gain (GainNewA2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5946	GainPrevB1	Previous gain value (B1) The gain value last used by transducer B1. It is used to compute the new gain (GainNewB1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5948	GainPrevB2	Previous gain value (B2) The gain value last used by transducer B2. It is used to compute the new gain (GainNewB2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5950	GainPrevC1	Previous gain value (C1) The gain value last used by transducer C1. It is used to compute the new gain (GainNewC1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5952	GainPrevC2	Previous gain value (C2) The gain value last used by transducer C2. It is used to compute the new gain (GainNewC2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5954	GainPrevD1	Previous gain value (D1) The gain value last used by transducer D1. It is used to compute the new gain (GainNewD1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5956	GainPrevD2	Previous gain value (D2) The gain value last used by transducer D2. It is used to compute the new gain (GainNewD2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5958	GainPrevE1	Previous gain value (E1) The gain value last used by transducer E1. It is used to compute the new gain (GainNewE1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5960	GainPrevE2	Previous gain value (E2) The gain value last used by transducer E2. It is used to compute the new gain (GainNewE2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5962	GainPrevF1	Previous gain value (F1) The gain value last used by transducer F1. It is used to compute the new gain (GainNewF1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5964	GainPrevF2	Previous gain value (F2) The gain value last used by transducer F2. It is used to compute the new gain (GainNewF2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5966	GainPrevG1	Previous gain value (G1) The gain value last used by transducer G1. It is used to compute the new gain (GainNewG1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5968	GainPrevG2	Previous gain value (G2) The gain value last used by transducer G2. It is used to compute the new gain (GainNewG2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5970	GainPrevH1	Previous gain value (H1) The gain value last used by transducer H1. It is used to compute the new gain (GainNewH1). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5972	GainPrevH2	Previous gain value (H2) The gain value last used by transducer H2. It is used to compute the new gain (GainNewH2). The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
5974	AbsMaxPeakMeanA1	Mean value of absolute maximum peak (A1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5976	AbsMaxPeakMeanA2	Mean value of absolute maximum peak (A2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5978	AbsMaxPeakMeanB1	Mean value of absolute maximum peak (B1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5980	AbsMaxPeakMeanB2	Mean value of absolute maximum peak (B2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5982	AbsMaxPeakMeanC1	Mean value of absolute maximum peak (C1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5984	AbsMaxPeakMeanC2	Mean value of absolute maximum peak (C2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5986	AbsMaxPeakMeanD1	Mean value of absolute maximum peak (D1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5988	AbsMaxPeakMeanD2	Mean value of absolute maximum peak (D2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5990	AbsMaxPeakMeanE1	Mean value of absolute maximum peak (E1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
5992	AbsMaxPeakMeanE2	Mean value of absolute maximum peak (E2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5994	AbsMaxPeakMeanF1	Mean value of absolute maximum peak (F1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5996	AbsMaxPeakMeanF2	Mean value of absolute maximum peak (F2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
5998	AbsMaxPeakMeanG1	Mean value of absolute maximum peak (G1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
6000	AbsMaxPeakMeanG2	Mean value of absolute maximum peak (G2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
6002	AbsMaxPeakMeanH1	Mean value of absolute maximum peak (H1) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
6004	AbsMaxPeakMeanH2	Mean value of absolute maximum peak (H2) The value is updated only while the update chord diagnostics control (DoUpdtChordDiag) is TRUE (1).	R				float	-	-	float32	-				
6006	GainNewA1	New gain value (A1) The gain value for transducer A1 to be used on future waveforms. It should not be confused with the gain currently used by A1 (GainA1). The new gain is computed from the previous gain value for transducer A1 (GainPrevA1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6008	GainNewA2	New gain value (A2) The gain value for transducer A2 to be used on future waveforms. It should not be confused with the gain currently used by A2 (GainA2). The new gain is computed from the previous gain value for transducer A2 (GainPrevA2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6010	GainNewB1	New gain value (B1) The gain value for transducer B1 to be used on future waveforms. It should not be confused with the gain currently used by B1 (GainB1). The new gain is computed from the previous gain value for transducer B1 (GainPrevB1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6012	GainNewB2	New gain value (B2) The gain value for transducer B2 to be used on future waveforms. It should not be confused with the gain currently used by B2 (GainB2). The new gain is computed from the previous gain value for transducer B2 (GainPrevB2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6014	GainNewC1	New gain value (C1) The gain value for transducer C1 to be used on future waveforms. It should not be confused with the gain currently used by C1 (GainC1). The new gain is computed from the previous gain value for transducer C1 (GainPrevC1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6016	GainNewC2	New gain value (C2) The gain value for transducer C2 to be used on future waveforms. It should not be confused with the gain currently used by C2 (GainC2). The new gain is computed from the previous gain value for transducer C2 (GainPrevC2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6018	GainNewD1	New gain value (D1) The gain value for transducer D1 to be used on future waveforms. It should not be confused with the gain currently used by D1 (GainD1). The new gain is computed from the previous gain value for transducer D1 (GainPrevD1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6020	GainNewD2	New gain value (D2) The gain value for transducer D2 to be used on future waveforms. It should not be confused with the gain currently used by D2 (GainD2). The new gain is computed from the previous gain value for transducer D2 (GainPrevD2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6022	GainNewE1	New gain value (E1) The gain value for transducer E1 to be used on future waveforms. It should not be confused with the gain currently used by E1 (GainE1). The new gain is computed from the previous gain value for transducer E1 (GainPrevE1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6024	GainNewE2	New gain value (E2) The gain value for transducer E2 to be used on future waveforms. It should not be confused with the gain currently used by E2 (GainE2). The new gain is computed from the previous gain value for transducer E2 (GainPrevE2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6026	GainNewF1	New gain value (F1) The gain value for transducer F1 to be used on future waveforms. It should not be confused with the gain currently used by F1 (GainF1). The new gain is computed from the previous gain value for transducer F1 (GainPrevF1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6028	GainNewF2	New gain value (F2) The gain value for transducer F2 to be used on future waveforms. It should not be confused with the gain currently used by F2 (GainF2). The new gain is computed from the previous gain value for transducer F2 (GainPrevF2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6030	GainNewG1	New gain value (G1) The gain value for transducer G1 to be used on future waveforms. It should not be confused with the gain currently used by G1 (GainG1). The new gain is computed from the previous gain value for transducer G1 (GainPrevG1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6032	GainNewG2	New gain value (G2) The gain value for transducer G2 to be used on future waveforms. It should not be confused with the gain currently used by G2 (GainG2). The new gain is computed from the previous gain value for transducer G2 (GainPrevG2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6034	GainNewH1	New gain value (H1) The gain value for transducer H1 to be used on future waveforms. It should not be confused with the gain currently used by H1 (GainH1). The new gain is computed from the previous gain value for transducer H1 (GainPrevH1).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6036	GainNewH2	New gain value (H2) The gain value for transducer H2 to be used on future waveforms. It should not be confused with the gain currently used by H2 (GainH2). The new gain is computed from the previous gain value for transducer H2 (GainPrevH2).	R				float	gain (dB)	gain (dB)	float32	gain (s/w)				
6038	LiveFlowPressure	Live flow-condition pressure This is the live flow pressure calculated from analog input 2 (AI2Input) and applying the calibration coefficients (LiveFlowPressureOffset and LiveFlowPressureGain). The flow-condition pressure (FlowPressure) can be set to this value depending on the selector (EnablePressureInput). This value is logged in the alarm log depending on the low and high pressure alarm limits (LowPressureAlarm, HighPressureAlarm). The connectors for this input are designated as ANALOG IN PT- and PT+.	R	Y			float	MPa	psi	float32	MPa				
6040	LiveFlowTemperature	Live flow-condition temperature This is the live flow temperature calculated from analog input 1 (AI1Input) and applying the calibration coefficients (LiveFlowTemperatureOffset and LiveFlowTemperatureGain). The flow-condition temperature (FlowTemperature) can be set to this value depending on the selector (EnableTemperatureInput). This value is logged in the alarm log depending on the low and high temperature alarm limits (LowTemperatureAlarm, HighTemperatureAlarm). The connectors for this input are designated as ANALOG IN TT- and TT+.	R	Y			float	deg C	deg F	float32	K				
6042	LiveFlowPressureOffset	Live flow-condition pressure calibration offset value Live flow-condition pressure calibration offset value. The calibrated live pressure is calculated by multiplying the raw live pressure sample by the live flow-condition pressure calibration gain value (LiveFlowPressureGain) and then adding this offset.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0	-280	280

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6044	LiveFlowPressureGain	Live flow-condition pressure calibration gain value Live flow-condition pressure calibration gain value. The calibrated live pressure is calculated by multiplying the raw live pressure sample by this gain and then adding the live flow-condition pressure calibration offset value (LiveFlowPressureOffset).	RW	Y	Y	Y	float	-	-	float32	-		1	0.9	1.1
6046	LiveFlowTemperatureOffset	Live flow-condition temperature calibration offset value Live flow-condition temperature calibration offset value. The calibrated live temperature is calculated by multiplying the raw live temperature by the live flow-condition temperature calibration gain value (LiveFlowTemperatureGain) and then adding this offset. This value is applied to the temperature in Kelvin. Due to temperature conversion factors, use the MeterLink™ to set this parameter. MODIFYING THIS POINT VIA MODBUS IS NOT RECOMMENDED.	RW	Y	Y	Y	float	deg C	deg F	float32	K		0	-273.15	473.15
6048	LiveFlowTemperatureGain	Live flow-condition temperature calibration gain value Live flow-condition temperature calibration gain value. The calibrated live temperature is calculated by multiplying the raw live temperature by this gain and then adding the live flow-condition temperature calibration offset value (LiveFlowTemperatureOffset).	RW	Y	Y	Y	float	-	-	float32	-		1	0.9	1.1
6050	MinInputPressure	Live flow pressure value corresponding to 4 mA input signal Specifies the input flow pressure value that corresponds to the minimum (4 mA) input signal.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		0	0	280
6052	MaxInputPressure	Live flow pressure value corresponding to 20 mA input signal Specifies the input flow pressure value that corresponds to the maximum (20 mA) input signal.	RW	Y	Y	Y	float	MPa	psi	float32	MPa		100	0	280
6054	MinInputTemperature	Live temperature value corresponding to 4 mA input signal Specifies the input flow temperature value that corresponds to the minimum (4 mA) input signal.	RW	Y	Y	Y	float	deg C	deg F	float32	K		233.15	0	473.15
6056	MaxInputTemperature	Live temperature value corresponding to 20 mA input signal Specifies the input flow temperature value that corresponds to the maximum (20 mA) input signal.	RW	Y	Y	Y	float	deg C	deg F	float32	K		473.15	0	523.15
6058	AO1ZeroScaleVolFlowRate	Analog Output 1 volumetric flow rate corresponding to the minimum current (4 mA) Specifies the Analog Output 1 volumetric flow rate corresponding to the minimum current (4 mA) when the Analog Output 1 (AO1Content) is set to uncorrected volume flow rate (QFlow) or corrected volume flow rate (QBase).	RW	Y		Y	float	volume/time	volume/time	float32	m3/hr		0	0	0
6060	AO1FullScaleVolFlowRate	Analog Output 1 volumetric flow rate corresponding to the maximum current (20 mA) Specifies the Analog Output 1 volumetric flow rate corresponding to the maximum current (20 mA) when the Analog Output 1 (AO1Content) is set to uncorrected volume flow rate (QFlow) or corrected volume flow rate (QBase).	RW	Y	Y	Y	float	volume/time	volume/time	float32	m3/hr		200000	0	3.40E+38
6062	AO1Output	Analog Output 1 current value Analog Output 1 current value.	R				float	ma	ma	float32	ma				
6064	AO1OutputTrimmed	Analog Output 1 current value after trim applied Analog Output 1 current value after trim applied.	R				float	ma	ma	float32	ma				
6066	AO1TrimCurrent	Analog Output 1 fixed current value (for trim) Specifies the Analog Output 1 Fixed Current Mode value for trimming the output. A value of zero causes the Fixed Current Mode to be exited. Cycling power also causes the Fixed Current Mode to be exited.	RW			Y	float	ma	ma	float32	ma		0	0	21
6068	AO1TrimZeroExtMeasCurrent	Analog Output 1 zero trim externally measured current Analog Output 1 zero trim externally measured current.	RW			Y	float	ma	ma	float32	ma		4	3	5
6070	AO1TrimGainExtMeasCurrent	Analog Output 1 gain trim externally measured current Analog Output 1 gain trim externally measured current.	RW			Y	float	ma	ma	float32	ma		20	19	21
6072	AO1CurrentTrimZero	Analog Output 1 current calibration zero (offset) Analog Output 1 current calibration zero (offset).	R	Y			float	ma	ma	float32	ma				
6074	AO1CurrentTrimGain	Analog Output 1 current calibration gain Analog Output 1 current calibration gain.	R	Y			float	-	-	float32	-				
6076	AO2ZeroScaleVolFlowRate	Analog Output 2 volumetric flow rate corresponding to the minimum current (4 mA) Specifies the Analog Output 2 volumetric rate corresponding to the minimum current (4 mA) when the AO2Content data point is set to is set to "Uncorrected volume flow rate" (QFlow) or "Corrected volume flow rate" (QBase).	RW	Y		Y	float	volume/time	volume/time	float32	m3/hr		0	0	0
6078	AO2FullScaleVolFlowRate	Analog Output 2 volumetric flow rate corresponding to the maximum current (20 mA) Specifies the Analog Output 2 volumetric flow rate corresponding to the maximum current (20 mA) when the AO2Content data point is set to "Uncorrected volume flow rate" (QFlow) or "Corrected volume flow rate" (QBase).	RW	Y	Y	Y	float	volume/time	volume/time	float32	m3/hr		200000	0	3.40E+38
6080	AO2Output	Analog Output 2 current value Analog Output 2 current value.	R				float	ma	ma	float32	ma				
6082	AO2OutputTrimmed	Analog Output 2 current value after trim applied Analog Output 2 current value after trim applied.	R				float	ma	ma	float32	ma				
6084	AO2TrimCurrent	Analog Output 2 fixed current value (for trim) Specifies the Analog Output 2 Fixed Current Mode value for trimming the output. A value of zero causes the Fixed Current Mode to be exited. Cycling power also causes the Fixed Current Mode to be exited.	RW			Y	float	ma	ma	float32	ma		0	0	21
6086	AO2TrimZeroExtMeasCurrent	Analog Output 2 zero trim externally measured current Analog Output 2 zero trim externally measured current.	RW			Y	float	ma	ma	float32	ma		4	3	5
6088	AO2TrimGainExtMeasCurrent	Analog Output 2 gain trim externally measured current Analog Output 2 gain trim externally measured current.	RW			Y	float	ma	ma	float32	ma		20	19	21
6090	AO2CurrentTrimZero	Analog Output 2 current calibration zero (offset) Analog Output 2 current calibration zero (offset).	R	Y			float	ma	ma	float32	ma				
6092	AO2CurrentTrimGain	Analog Output 2 current calibration gain Analog Output 2 current calibration gain.	R	Y			float	-	-	float32	-				
6094	DampingValue	Damping value (outputs and data points) Specifies the damping value for all outputs and measurement data points. The damping value is the (worst case) time for the outputs and measurement data points to reach 63% of the steady-state value in response to a step input. This is a function of the desired batch update period (BatchUpdatePeriod).	R				float	sec	sec	float32	sec				
6096	RunningAvgFlowTemperature	Flow temperature one minute average A running average of flow-condition temperature (FlowTemperature) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	deg C	deg F	float32	K				
6098	RunningAvgFlowPressure	Flow pressure one minute average A running average of flow-condition pressure (FlowPressure) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	MPa	psi	float32	MPa				
6100	RunningAvgTurbulenceA	Chord A turbulence one minute average A running average of chord A turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6102	RunningAvgTurbulenceB	Chord B turbulence one minute average A running average of chord B turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6104	RunningAvgTurbulenceC	Chord C turbulence one minute average A running average of chord C turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6106	RunningAvgTurbulenceD	Chord D turbulence one minute average A running average of chord D turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6108	RunningAvgTurbulenceE	Chord E turbulence one minute average A running average of chord E turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6110	RunningAvgTurbulenceF	Chord F turbulence one minute average A running average of chord F turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6112	RunningAvgTurbulenceG	Chord G turbulence one minute average A running average of chord G turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6114	RunningAvgTurbulenceH	Chord H turbulence one minute average A running average of chord H turbulence over one minute when the running averages are valid (IsRunningAvgValid).	R				float	%	%	float32	%				
6116	RunningAvgAvgFlow	Avg flow averaged for one minute A running average of average flow velocity (AvgFlow) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	m/s	ft/s	float32	m/s				
6118	RunningAvgCrossFlow	Cross-flow one minute average A running average of cross-flow (CrossFlow) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6120	RunningAvgProfileFactor	Profile factor one minute average A running average of profile factor (ProfileFactor) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6122	RunningAvgSymmetry	Symmetry one minute average A running average of symmetry (Symmetry) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6124	RunningSDevCrossFlow	Running standard deviation of cross-flow over a minute A running average of standard deviation of cross-flow (SDevCrossFlow) over a minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6126	RunningSDevProfileFactor	Running standard deviation of the profile factor over a minute A running average of standard deviation of the profile factor (SDevProfileFactor) over a minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6128	RunningSDevSymmetry	Running standard deviation of symmetry over a minute A running average of standard deviation of symmetry (SDevSymmetry) over a minute when the running averages are valid (IsRunningAvgValid).	R				float	-	-	float32	-				
6130	ReverseFlowVolLmt	Reverse flow alarm limit This is the limit for the reverse flow alarm (IsReverseFlowDetected). If the volume for reverse flow (ReverseFlowVol) exceeds this value with continuous reverse flow, the reverse flow alarm will be set.	RW	Y	Y	Y	float	volume	volume	float32	m3		0	0	3.40E+38
6132	ReverseFlowVol	Accumulated volume for reverse flow alarm Volume flowed from continuous flow in reverse direction. This volume is compared to the reverse flow limit (ReverseFlowVolLmt) to determine the reverse flow alarm (IsReverseFlowDetected). It is only accumulated when the flow velocity (AvgWtdFlowVel) is below the reverse flow velocity threshold (ReverseFlowDetectionZeroCut).	R				float	volume	volume	float32	m3				
6134	ReverseFlowDetectionZeroCut	Velocity threshold below which reverse flow volume accumulates Velocity threshold below which the flow velocity is considered reversed (and thus the reverse flow volume (ReverseFlowVol) is accumulated).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0.1	0	3.40E+38
6136	SignalAmplitudeA1	Batch average signal amplitude on path A1 Batch average of the signal amplitude when transducer A1 receives a signal.	R				float	mV	mV	float32	mV				
6138	SignalAmplitudeA2	Batch average signal amplitude on path A2 Batch average of the signal amplitude when transducer A2 receives a signal.	R				float	mV	mV	float32	mV				
6140	SignalAmplitudeB1	Batch average signal amplitude on path B1 Batch average of the signal amplitude when transducer B1 receives a signal.	R				float	mV	mV	float32	mV				
6142	SignalAmplitudeB2	Batch average signal amplitude on path B2 Batch average of the signal amplitude when transducer B2 receives a signal.	R				float	mV	mV	float32	mV				
6144	SignalAmplitudeC1	Batch average signal amplitude on path C1 Batch average of the signal amplitude when transducer C1 receives a signal.	R				float	mV	mV	float32	mV				
6146	SignalAmplitudeC2	Batch average signal amplitude on path C2 Batch average of the signal amplitude when transducer C2 receives a signal.	R				float	mV	mV	float32	mV				
6148	SignalAmplitudeD1	Batch average signal amplitude on path D1 Batch average of the signal amplitude when transducer D1 receives a signal.	R				float	mV	mV	float32	mV				
6150	SignalAmplitudeD2	Batch average signal amplitude on path D2 Batch average of the signal amplitude when transducer D2 receives a signal.	R				float	mV	mV	float32	mV				
6152	SignalAmplitudeE1	Batch average signal amplitude on path E1 Batch average of the signal amplitude when transducer E1 receives a signal.	R				float	mV	mV	float32	mV				
6154	SignalAmplitudeE2	Batch average signal amplitude on path E2 Batch average of the signal amplitude when transducer E2 receives a signal.	R				float	mV	mV	float32	mV				
6156	SignalAmplitudeF1	Batch average signal amplitude on path F1 Batch average of the signal amplitude when transducer F1 receives a signal.	R				float	mV	mV	float32	mV				
6158	SignalAmplitudeF2	Batch average signal amplitude on path F2 Batch average of the signal amplitude when transducer F2 receives a signal.	R				float	mV	mV	float32	mV				
6160	SignalAmplitudeG1	Batch average signal amplitude on path G1 Batch average of the signal amplitude when transducer G1 receives a signal.	R				float	mV	mV	float32	mV				
6162	SignalAmplitudeG2	Batch average signal amplitude on path G2 Batch average of the signal amplitude when transducer G2 receives a signal.	R				float	mV	mV	float32	mV				
6164	SignalAmplitudeH1	Batch average signal amplitude on path H1 Batch average of the signal amplitude when transducer H1 receives a signal.	R				float	mV	mV	float32	mV				
6166	SignalAmplitudeH2	Batch average signal amplitude on path H2 Batch average of the signal amplitude when transducer H2 receives a signal.	R				float	mV	mV	float32	mV				
6168	NoiseAmplitudeA1	Batch average noise amplitude on path A1 Batch average of the noise amplitude when transducer A1 receives a signal.	R				float	mV	mV	float32	mV				
6170	NoiseAmplitudeA2	Batch average noise amplitude on path A2 Batch average of the noise amplitude when transducer A2 receives a signal.	R				float	mV	mV	float32	mV				
6172	NoiseAmplitudeB1	Batch average noise amplitude on path B1 Batch average of the noise amplitude when transducer B1 receives a signal.	R				float	mV	mV	float32	mV				
6174	NoiseAmplitudeB2	Batch average noise amplitude on path B2 Batch average of the noise amplitude when transducer B2 receives a signal.	R				float	mV	mV	float32	mV				

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6176	NoiseAmplitudeC1	Batch average noise amplitude on path C1 Batch average of the noise amplitude when transducer C1 receives a signal.	R				float	mV	mV	float32	mV				
6178	NoiseAmplitudeC2	Batch average noise amplitude on path C2 Batch average of the noise amplitude when transducer C2 receives a signal.	R				float	mV	mV	float32	mV				
6180	NoiseAmplitudeD1	Batch average noise amplitude on path D1 Batch average of the noise amplitude when transducer D1 receives a signal.	R				float	mV	mV	float32	mV				
6182	NoiseAmplitudeD2	Batch average noise amplitude on path D2 Batch average of the noise amplitude when transducer D2 receives a signal.	R				float	mV	mV	float32	mV				
6184	NoiseAmplitudeE1	Batch average noise amplitude on path E1 Batch average of the noise amplitude when transducer E1 receives a signal.	R				float	mV	mV	float32	mV				
6186	NoiseAmplitudeE2	Batch average noise amplitude on path E2 Batch average of the noise amplitude when transducer E2 receives a signal.	R				float	mV	mV	float32	mV				
6188	NoiseAmplitudeF1	Batch average noise amplitude on path F1 Batch average of the noise amplitude when transducer F1 receives a signal.	R				float	mV	mV	float32	mV				
6190	NoiseAmplitudeF2	Batch average noise amplitude on path F2 Batch average of the noise amplitude when transducer F2 receives a signal.	R				float	mV	mV	float32	mV				
6192	NoiseAmplitudeG1	Batch average noise amplitude on path G1 Batch average of the noise amplitude when transducer G1 receives a signal.	R				float	mV	mV	float32	mV				
6194	NoiseAmplitudeG2	Batch average noise amplitude on path G2 Batch average of the noise amplitude when transducer G2 receives a signal.	R				float	mV	mV	float32	mV				
6196	NoiseAmplitudeH1	Batch average noise amplitude on path H1 Batch average of the noise amplitude when transducer H1 receives a signal.	R				float	mV	mV	float32	mV				
6198	NoiseAmplitudeH2	Batch average noise amplitude on path H2 Batch average of the noise amplitude when transducer H2 receives a signal.	R				float	mV	mV	float32	mV				
6200	dBase	AGA8 gas mixture base-condition molar density AGA8 gas mixture base-condition molar density is calculated using base-condition pressure (PBase) and base-condition temperature (TBase).	R				float	g-mol/dm3	lbm-mol/ft3	float32	g-mol/dm3				
6202	ZBase	AGA8 base-condition gas mixture compressibility The AGA8 base-condition gas mixture compressibility is used for calculating the base-condition (corrected) volumetric flow rate (QBase). When AGA8 calculation method (HCH_Method) is set to Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017) it is calculated using base-condition temperature (TBase) and molar density (dBase). When AGA8 calculation method (HCH_Method) is "External", it is equal to the specified (fixed) base-condition gas compressibility (SpecZBase).	R				float	-	-	float32	-				
6204	dFlow	AGA8 gas mixture flow-condition molar density AGA8 gas mixture flow-condition molar density is calculated using flow-condition pressure (AbsFlowPressure) and flow-condition temperature (FlowTemperature).	R				float	g-mol/dm3	lbm-mol/ft3	float32	g-mol/dm3				
6206	ZFlow	AGA8 flow-condition gas mixture compressibility AGA8 flow-condition gas mixture compressibility is used for calculating the base-condition (corrected) volumetric flow rate (QBase). When AGA8 calculation method (HCH_Method) is set to Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017) it is calculated using flow-condition temperature (FlowTemperature) and molar density (dFlow). When AGA8 calculation method (HCH_Method) is "External", it is equal to the specified (fixed) flow-condition gas compressibility (SpecZFlow).	R				float	-	-	float32	-				
6208	AGA8FlowToBaseConversion	AGA8-calculated flow- to base-condition conversion factor AGA8-calculated flow- to base-condition conversion factor is calculated as AbsFlowPressure (AbsFlowPressure) / PBase (PBase) * TBase (TBase) / FlowTemperature (FlowTemperature) * Zbase (ZBase) / Zflow (ZFlow). This is used for calculating base-condition (corrected) volumetric flow rate (QBase) from the flow-condition volumetric flow rate (QFlow).	R				float	-	-	float32	-				
6210	RhoMixFlow	AGA8 gas mixture flow-condition mass density AGA8 gas mixture flow-condition mass density is used for calculating Reynolds Number (ReynoldsNumber) (required when calculating the flow profile correction factor on single and dual-path meters). When AGA8 calculation method (HCH_Method) is set to Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994) or GERG-2008 (AGA8 Part 2, 2017) it is the product of molar mass (Mr) and molar density (dFlow). When AGA8 calculation method (HCH_Method) is "External", then it is equal to the specified (fixed) flow-condition mass density (SpecRhoMixFlow).	R				float	kg/m3	lbm/ft3	float32	kg/m3				
6212	RhoAir	AGA8 air mass density at the specified Gr reference (T ,P) AGA8 (Gross Method 1 and 2 Base) air mass density at the specified Gr reference (T, P).	R				float	kg/m3	lbm/ft3	float32	kg/m3				
6214	HNGERG	AGA8 (Gross Method 1) molar gross ideal gas heating value at (298.15K,0.101325MPa) AGA8 (Gross Method 1 and 2 Base) molar gross ideal gas heating value at (298.15K,0.101325MPa).	R				float	kJ/g-mol	Btu/lbm-mol	float32	kJ/g-mol				
6216	Mr	AGA8 gas mixture molar mass AGA8 gas mixture base-condition molar mass.	R				float	kg/kg-mol	lbm/lbm-mol	float32	kg/kg-mol				
6218	MoleFractionCH	AGA8 equivalent hydrocarbon gas component AGA8 (Gross Method 1 and 2 Base) equivalent hydrocarbon gas component.	R				float	mole fraction	mole fraction	float32	mole fraction				
6220	MoleFractionN2Method1	AGA8 (Gross Method 1) nitrogen gas component AGA8 (Gross Method 1 and 2 Base) calculated nitrogen gas component.	R				float	mole fraction	mole fraction	float32	mole fraction				
6222	HCH	AGA8 equivalent hydrocarbon molar gross heating value AGA8 (Gross Method 1 and 2 Base) equivalent hydrocarbon molar gross heating value.	R				float	kJ/g-mol	Btu/lbm-mol	float32	kJ/g-mol				
6224	MrCH	AGA8 equivalent hydrocarbon molar mass AGA8 (Gross Method 1 and 2 Base) equivalent hydrocarbon molar mass.	R				float	kg/kg-mol	lbm/lbm-mol	float32	kg/kg-mol				
6226	B-CH-CH_Base	AGA8 base-condition binary CH-CH interaction coefficient AGA8 base-condition binary CH-CH interaction coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm3/g-mol	ft3/lbm-mol	float32	dm3/g-mol				
6228	BmixBase	AGA8 gas mixture base-condition second virial coefficient AGA8 gas mixture base-condition second virial coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm3/g-mol	ft3/lbm-mol	float32	dm3/g-mol				
6230	CmixBase	AGA8 gas mixture base-condition third virial coefficient AGA8 gas mixture base-condition third virial coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm6/g-mol2	ft6/lbm-mol2	float32	dm6/g-mol2				

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6232	B-CH-CH_Flow	AGA8 flow-condition binary CH-CH interaction coefficient AGA8 flow-condition binary CH-CH interaction coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm3/g-mol	ft3/lbm-mol	float32	dm3/g-mol				
6234	BmixFlow	AGA8 gas mixture flow-condition second virial coefficient AGA8 gas mixture flow-condition second virial coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm3/g-mol	ft3/lbm-mol	float32	dm3/g-mol				
6236	CmixFlow	AGA8 gas mixture flow-condition third virial coefficient AGA8 gas mixture flow-condition third virial coefficient is calculated when AGA8 calculation method (HCH_Method) is Gross Method 1 or Gross Method 2 or Detail Method (AGA8, 1994).	R				float	dm6/g-mol2	ft6/lbm-mol2	float32	dm6/g-mol2				
6238	DryCalVel	Flow velocity after dry cal and before flow cal Flow velocity after application of dry-calibration coefficients (A coefficients FwdA0, FwdA1, FwdA2, FwdA3, RevA0, RevA1, RevA2 and RevA3) and before application of the flow calibration method (CalMethod) to the average weighted flow velocity (AvgWtdFlowVel).	R				float	m/s	ft/s	float32	m/s				
6240	AvgFlow	Average flow velocity (dry and flow calibration applied) Average flow velocity (per batch). This is the dry cal velocity (DryCalVel) with any selected flow calibration method (CalMethod) as well as the flow profile correction factor (CorrectionFactor) applied.	R				float	m/s	ft/s	float32	m/s				
6242	QBase	Volumetric flow rate at base condition The base-condition volumetric flow rate. QBase = Qflow (QFlow) * AGA8FlowToBaseConversion (AGA8FlowToBaseConversion)	R				float	volume/time	volume/time	float32	m3/hr				
6244	EnergyRate	Energy flow rate Energy rate. This is applicable when the heating value is fixed (specified) or read from a gas chromatograph. It is computed as QBase with HeatingValueInUse applied.	R				float	energy/time	energy/time	float32	MJ/hr				
6246	MassRate	Mass flow rate Mass flow rate. This is applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (AGA8 calculation method (HCH_Method) is not set to "None"). It is computed as QFlow with RhoMixFlow applied.	R				float	mass/time	mass/time	float32	kg/hr				
6248	CalTime	Calibration elapsed time Calibration elapsed time. This is the elapsed time while the CalFlag data point is set to TRUE (1) or the DI1 gates the calibration with IsDI1UsedForCal as indicated by IsCalOnBatch. Note that the native units UNIT_MKIII_PULSES are counted in 1000 pulses/second while the Modbus UNIT_MKII_PULSES are counted as 1 pulse/0.1048575 seconds	R				float	MkII time pulses	MkII time pulses	float32	Time pulses				
6250	Freq1EnergyKFactor	Frequency Output 1 pair energy K-Factor Frequency Output 1 pair energy K-Factor.	R				float	pulses/MJ	pulses/MMBtu	float32	pulses/MJ				
6252	Freq2EnergyKFactor	Frequency Output 2 pair energy K-Factor Frequency Output 2 pair energy K-Factor.	R				float	pulses/MJ	pulses/MMBtu	float32	pulses/MJ				
6254	Freq1OutputEnergyRate	Frequency Output 1 pair output energy rate Frequency Output 1 pair output energy rate. This includes frequency feedback correction if applicable.	R				float	energy/time	energy/time	float32	MJ/hr				
6256	Freq2OutputEnergyRate	Frequency Output 2 pair output energy rate Frequency Output 2 pair output energy rate. This includes frequency feedback correction if applicable.	R				float	energy/time	energy/time	float32	MJ/hr				
6258	Freq1MassKFactor	Frequency Output 1 pair mass K-Factor Frequency Output 1 pair mass K-Factor.	R				float	pulses/kg	pulses/lbm	float32	pulses/kg				
6260	Freq2MassKFactor	Frequency Output 2 pair mass K-Factor Frequency Output 2 pair mass K-Factor.	R				float	pulses/kg	pulses/lbm	float32	pulses/kg				
6262	Freq1OutputMassRate	Frequency Output 1 pair output mass rate Frequency Output 1 pair output mass rate. This includes frequency feedback correction if applicable.	R				float	mass/time	mass/time	float32	kg/hr				
6264	Freq2OutputMassRate	Frequency Output 2 pair output mass rate Frequency Output 2 pair output mass rate. This includes frequency feedback correction if applicable.	R				float	mass/time	mass/time	float32	kg/hr				
6266	EtaBA	Chord B to chord A peak switch detector value Value computed by comparing chords A and B which is used to detect peak switching as indicated by IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC and IsPeakSwitchDetectedD. The status of this comparison is found in EtaStatusBA. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6268	EtaCA	Chord C to chord A peak switch detector value Value computed by comparing chords A and C which is used to detect peak switching as indicated by IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC and IsPeakSwitchDetectedD. The status of this comparison is found in EtaStatusCA. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6270	EtaBD	Chord B to chord D peak switch detector value Value computed by comparing chords B and D which is used to detect peak switching as indicated by IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC and IsPeakSwitchDetectedD. The status of this comparison is found in EtaStatusBD. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6272	EtaCD	Chord C to chord D peak switch detector value Value computed by comparing chords C and D which is used to detect peak switching as indicated by IsPeakSwitchDetectedA, IsPeakSwitchDetectedB, IsPeakSwitchDetectedC and IsPeakSwitchDetectedD. The status of this comparison is found in EtaStatusCD. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6274	EtaFE	Chord F to chord E peak switch detector value Value computed by comparing chords F and E which is used to detect peak switching as indicated by IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG and IsPeakSwitchDetectedH. The status of this comparison is found in EtaStatusFE. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6276	EtaFH	Chord F to chord H peak switch detector value Value computed by comparing chords F and H which is used to detect peak switching as indicated by IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG and IsPeakSwitchDetectedH. The status of this comparison is found in EtaStatusFH. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6278	EtaGE	Chord G to chord E peak switch detector value Value computed by comparing chords G and E which is used to detect peak switching as indicated by IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG and IsPeakSwitchDetectedH. The status of this comparison is found in EtaStatusGE. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6280	EtaGH	Chord G to chord H peak switch detector value Value computed by comparing chords G and H which is used to detect peak switching as indicated by IsPeakSwitchDetectedE, IsPeakSwitchDetectedF, IsPeakSwitchDetectedG and IsPeakSwitchDetectedH. The status of this comparison is found in EtaStatusGH. This value is computed for BG style meters only. Note: Starting with firmware version (CPUBdSwVer) 1.18 the value is normalized based on the transducer frequency (XdcrFreq) and may be substantially different from the value reported by earlier firmware versions.	R				float	-	-	float32	-				
6282	TrigDeltaPosVolFlow	Amount of forward flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			float	m3	ft3	float64	m3				
6284	TrigDeltaNegVolFlow	Amount of reverse flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			float	m3	ft3	float64	m3				
6286	TrigDeltaPosVolBase	Amount of forward base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			float	m3	ft3	float64	m3				
6288	TrigDeltaNegVolBase	Amount of reverse base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			float	m3	ft3	float64	m3				
6290	AGA10SndVel	Speed of sound from gas mixture Speed of sound from gas mixture that is calculated when the speed of sound from gas composition calculation is enabled (IsOptionalAGA10CalcEnabled). When the AGA8 method selector (HCH_Method) is Detail then speed of sound is calculated as per AGA10, 2003 specification. When the AGA8 method selector (HCH_Method) is configured as GERG-2008 then speed of sound is calculated as per AGA8 Part 2, 2017 specification.	R				float	m/s	ft/s	float32	m/s				
6292	SndVelCompErrLimit	Error limit for gas composition SOS and meter SOS comparison Alarm limit for the comparison of speed of sound from the gas composition to the meter-calculated speed of sound error (IsSndVelCompErr).	RW	Y	Y	Y	float	%	%	float32	%		0.2	0.1	90
6294	SndVelCompErr	Previous hour error between gas composition SOS and meter SOS Previous hour error between the average speed of sound calculated from the gas composition (CompAvgAGA10SndVel) and the average meter-calculated speed of sound (CompAvgMeterSndVel). It is computed as: ((CompAvgMeterSndVel - CompAvgAGA10SndVel) / CompAvgAGA10SndVel) * 100%. When the absolute error is greater than speed of sound comparison error limit (SndVelCompErrLimit) then the speed of sound comparison alarm (IsSndVelCompErr) is set TRUE (1).	R				float	%	%	float32	%				
6296	SOSComparePctDiff	Percent difference between the speed of sound calculated from gas composition and the average measured speed of sound The percent difference between the optional speed of sound calculated from gas composition (AGA10SndVel) and the average measured speed of sound (AvgSndVel) computed each Batch cycle as: ((AvgSndVel - AGA10SndVel) / AGA10SndVel) * 100%.	R				float	%	%	float32	%				
6298	Symmetry	Symmetry measurement Meter measure of symmetry. This compares the upper chord velocities (FlowVelA + FlowVelB + FlowVelE + FlowVelF) to the lower chord velocities (FlowVelC + FlowVelD + FlowVelG + FlowVelH). For perfectly symmetrical flow, this value equals 1.0. See also CrossFlow and ProfileFactor. This is only applicable when meter device number (DeviceNumber) is 3414 or 3418.	R				float	-	-	float32	-				
6300	CrossFlow	Cross-flow measurement Meter measure of cross-flow. This compares the flow velocities from one side of the meter (FlowVelA + FlowVelC + FlowVelF + FlowVelH) to the other side (FlowVelB + FlowVelD + FlowVelE + FlowVelG). This value is equal to 1.0 when there is no cross-flow. See also Symmetry and ProfileFactor. This is only applicable when meter device number (DeviceNumber) is 3414 or 3418.	R				float	-	-	float32	-				
6302	TurbulenceA	Chord A turbulence measurement Meter turbulence A is the standard deviation of delta time (SDevDltTmA) as a percentage of delta time (DltTmA) for chord A. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6304	TurbulenceB	Chord B turbulence measurement Meter turbulence B is the standard deviation of delta time (SDevDltTmB) as a percentage of delta time (DltTmB) for chord B. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6306	TurbulenceC	Chord C turbulence measurement Meter turbulence C is the standard deviation of delta time (SDevDltTmC) as a percentage of delta time (DltTmC) for chord C. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6308	TurbulenceD	Chord D turbulence measurement Meter turbulence D is the standard deviation of delta time (SDevDltTmD) as a percentage of delta time (DltTmD) for chord D. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6310	TurbulenceE	Chord E turbulence measurement Meter turbulence E is the standard deviation of delta time (SDevDltTmE) as a percentage of delta time (DltTmE) for chord E. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6312	TurbulenceF	Chord F turbulence measurement Meter turbulence F is the standard deviation of delta time (SDevDltTmF) as a percentage of delta time (DltTmF) for chord F. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6314	TurbulenceG	Chord G turbulence measurement Meter turbulence G is the standard deviation of delta time (SDevDltTmG) as a percentage of delta time (DltTmG) for chord G. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6316	TurbulenceH	Chord H turbulence measurement Meter turbulence H is the standard deviation of delta time (SDevDltTmH) as a percentage of delta time (DltTmH) for chord H. The turbulence value for chord is calculated when the volumetric flow rate (QMeter) is above the cutoff (QCutOff). A value of 0% indicates no turbulence.	R				float	%	%	float32	%				
6318	ProfileFactor	Profile factor measurement The ratio of the sum of the velocities of the inner chords (FlowVelB, FlowVelC, FlowVelF and FlowVelG) to the sum of the velocities of the outer chords (FlowVelA, FlowVelD, FlowVelE and FlowVelH). This ratio is a numerical representation of the velocities taken in cross section in the direction of flow. When out of tolerance (AbnormalProfileDetectionLmt or LiquidDetectionSDevProfileFactorLmt), it may be used to diagnose abnormal flow conditions. This is only applicable when meter device number (DeviceNumber) is 3414 or 3418.	R				float	-	-	float32	-				
6320	AO1ZeroScaleEnergyRate	Analog Output 1 energy rate corresponding to the minimum current (4 mA) Specifies the Analog Output 1 energy rate corresponding to the minimum current (4 mA) when the Analog Output 1 (AO1Content) is set to energy rate (EnergyRate).	RW	Y		Y	float	energy/time	energy/time	float32	MJ/hr		0	0	0
6322	AO1FullScaleEnergyRate	Analog Output 1 energy rate corresponding to the maximum current (20 mA) Specifies the Analog Output 1 energy rate corresponding to the maximum current (20 mA) when the Analog Output 1 (AO1Content) is set to energy rate (EnergyRate).	RW	Y	Y	Y	float	energy/time	energy/time	float32	MJ/hr		4000	0	3.40E+38
6324	AO1MinVel	Analog Output 1 velocity corresponding to the minimum current (4 mA) Specifies the Analog Output 1 velocity corresponding to the minimum current (4 mA) when the Analog Output 1 (AO1Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	0	1500
6326	AO1MaxVel	Analog Output 1 velocity corresponding to the maximum current (20 mA) Specifies the Analog Output 1 velocity corresponding to the maximum current (20 mA) when the Analog Output 1 (AO1Content) is set to average flow velocity (AvgFlow) or average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		50	0	1500
6328	AO1ZeroScaleMassRate	Analog Output 1 mass rate corresponding to the minimum current (4 mA) Specifies the Analog Output 1 mass rate corresponding to the minimum current (4 mA) when the Analog Output 1 (AO1Content) is set to mass rate (MassRate).	RW	Y		Y	float	mass/time	mass/time	float32	kg/hr		0	0	0
6330	AO1FullScaleMassRate	Analog Output 1 mass rate corresponding to the maximum current (20 mA) Specifies the Analog Output 1 mass rate corresponding to the maximum current (20 mA) when the Analog Output 1 (AO1Content) is set to mass rate (MassRate).	RW	Y	Y	Y	float	mass/time	mass/time	float32	kg/hr		4000	0	3.40E+38
6332	AO2ZeroScaleEnergyRate	Analog Output 2 energy rate corresponding to the minimum current (4 mA) Specifies the Analog Output 2 energy rate corresponding to the minimum current (4 mA) when the AO2Content data point is set to energy rate (EnergyRate).	RW	Y		Y	float	energy/time	energy/time	float32	MJ/hr		0	0	0
6334	AO2FullScaleEnergyRate	Analog Output 2 energy rate corresponding to the maximum current (20 mA) Specifies the Analog Output 2 energy rate corresponding to the maximum current (20 mA) when the AO2Content data point is set to energy rate (EnergyRate).	RW	Y	Y	Y	float	energy/time	energy/time	float32	MJ/hr		4000	0	3.40E+38
6336	AO2MinVel	Analog Output 2 velocity corresponding to the minimum current (4 mA) Specifies the Analog Output 2 velocity corresponding to the minimum current (4 mA) when the AO2Content data point is set to Average flow velocity (AvgFlow) or Average speed of sound (AvgSndVel).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	0	1500
6338	AO2MaxVel	Analog Output 2 velocity corresponding to the maximum current (20 mA) Specifies the Analog Output 2 velocity corresponding to the maximum current (20 mA) when the AO2Content data point is set to "Average flow velocity" or "Average speed of sound".	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		50	0	1500
6340	AO2ZeroScaleMassRate	Analog Output 2 mass rate corresponding to the minimum current (4 mA) Specifies the Analog Output 2 mass rate corresponding to the minimum current (4 mA) when the AO2Content data point is set to mass rate (MassRate).	RW	Y		Y	float	mass/time	mass/time	float32	kg/hr		0	0	0
6342	AO2FullScaleMassRate	Analog Output 2 mass rate corresponding to the maximum current (20 mA) Specifies the Analog Output 2 mass rate corresponding to the maximum current (20 mA) when the AO2Content data point is set to Mass rate (MassRate).	RW	Y	Y	Y	float	mass/time	mass/time	float32	kg/hr		4000	0	3.40E+38
6344	N2InUse	Nitrogen gas component used for AGA8 and AGA10 calculations This is either a specified N2 value (MoleFractionN2Method2), the N2 value read from a GC (N2GC) or the N2 value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6346	CO2InUse	Carbon dioxide gas component used for AGA8 and AGA10 calculations This is either a specified CO2 value (MoleFractionCO2), the CO2 value read from a GC (CO2GC) or the CO2 value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6348	H2InUse	Hydrogen gas component used for AGA8 and AGA10 calculations This is either a specified H2 value (MoleFractionH2), the H2 value read from a GC (H2GC) or the H2 value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6350	COInUse	Carbon monoxide gas component used for AGA8 and AGA10 calculations This is either a specified CO value (MoleFractionCO), the CO value read from a GC (COGC) or the CO value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6352	MethaneInUse	Methane gas component used for AGA8 and AGA10 calculations This is either a specified Methane value (MoleFractionMethane), the Methane value read from a GC (MethaneGC) or the Methane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6354	EthaneInUse	Ethane gas component used for AGA8 and AGA10 calculations This is either a specified Ethane value (MoleFractionEthane), the Ethane value read from a GC (EthaneGC) or the Ethane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6356	PropaneInUse	Propane gas component used for AGA8 and AGA10 calculations This is either a specified Propane value (MoleFractionPropane), the Propane value read from a GC (PropaneGC) or the Propane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6358	IsoButaneInUse	Isobutane gas component used for AGA8 and AGA10 calculations This is either a specified IsoButane value (MoleFractionIsoButane), the IsoButane value read from a GC (IsoButaneGC) or the IsoButane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6360	NButaneInUse	N-Butane gas component used for AGA8 and AGA10 calculations This is either a specified NButane value (MoleFractionNButane), the NButane value read from a GC (NButaneGC) or the NButance value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6362	IsoPentaneInUse	Isopentane gas component used for AGA8 and AGA10 calculations This is either a specified IsoPentane value (MoleFractionIsoPentane), the IsoPentane value read from a GC (IsoPentaneGC) or the IsoPentane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6364	NPentaneInUse	N-Pentane gas component used for AGA8 and AGA10 calculations This is either a specified NPentane value (MoleFractionNPentane), the NPentane value read from a GC (NPentaneGC) or the NPentane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6366	NHexaneInUse	N-Hexane gas component used for AGA8 and AGA10 calculations This is either a specified NHexane value (MoleFractionNHexane), the NHexane value read from a GC (NHexaneGC) or the NHexane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6368	NHeptaneInUse	N-Heptane gas component used for AGA8 and AGA10 calculations This is either a specified NHeptane value (MoleFractionNHeptane), the NHeptane value read from a GC (NHeptaneGC) or the NHeptane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6370	NOctaneInUse	N-Octane gas component used for AGA8 and AGA10 calculations This is either a specified NOctane value (MoleFractionNOctane), the NOctane value read from a GC (NOctaneGC) or the NOctane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6372	NNonaneInUse	N-Nonane gas component used for AGA8 and AGA10 calculations This is either a specified NNonane value (MoleFractionNNonane), the NNonane value read from a GC (NNonaneGC) or the NNonane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6374	NDecaneInUse	N-Decane gas component used for AGA8 and AGA10 calculations This is either a specified NDecane value (MoleFractionNDecane), the NDecane value read from a GC (NDecaneGC) or the NDecane value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6376	H2SInUse	Hydrogen sulfide gas component used for AGA8 and AGA10 calculations This is either a specified H2S value (MoleFractionH2S), the H2S value read from a GC (H2SGC) or the H2S value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6378	HeliumInUse	Helium gas component used for AGA8 and AGA10 calculations This is either a specified Helium value (MoleFractionHelium), the Helium value read from a GC (HeliumGC) or the Helium value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6380	WaterInUse	Water gas component used for AGA8 and AGA10 calculations This is either a specified Water value (MoleFractionWater), the Water value read from a GC (WaterGC) or the Water value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6382	OxygenInUse	Oxygen gas component used for AGA8 and AGA10 calculations This is either a specified Oxygen value (MoleFractionOxygen), the Oxygen value read from a GC (OxygenGC) or the Oxygen value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6384	ArgonInUse	Argon gas component used for AGA8 and AGA10 calculations This is either a specified Argon value (MoleFractionArgon), the Argon value read from a GC (ArgonGC) or the Argon value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	mole %	mole %	float32	mole fraction				
6386	HeatingValueInUse	Heating value used for energy calculations The heating value used for energy calculations. This is either a specified heating value (MeasVolGrossHeatingVal), the heating value read from a GC (HeatingValueGC) or the heating value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	kJ/dm3	Btu/ft3	float32	kJ/dm3				
6388	SpecificGravityInUse	Gas specific gravity (relative density) This is either a specified Specific Gravity value (SpecificGravity), the Specific Gravity value read from a GC (SpecificGravityGC) or the Specific Gravity value read from Transmitter Head 1 of a Dual-Configuration meter.	R	Y			float	-	-	float32	-				
6390	N2GC	Nitrogen gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Nitrogen if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6392	CO2GC	Carbon dioxide gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) CO2 if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6394	H2GC	Hydrogen gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Hydrogen if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6396	COGC	Carbon monoxide gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) CO if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6398	MethaneGC	Methane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Methane if the GC functionality is enabled via the (IsOptionalGCInterfaceEnabled) data point, the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6400	EthaneGC	Ethane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Ethane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6402	PropaneGC	Propane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Propane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6404	IsoButaneGC	Isobutane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) i-Butane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6406	NButaneGC	N-Butane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Butane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6408	IsoPentaneGC	Isopentane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) i-Pentane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6410	NPentaneGC	N-Pentane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Pentane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6412	NHexaneGC	N-Hexane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Hexane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6414	NHeptaneGC	N-Heptane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Heptane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6416	NOctaneGC	N-Octane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Octane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6418	NNonaneGC	N-Nonane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Nonane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6420	NDecaneGC	N-Decane gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) n-Decane if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6422	H2SGC	Hydrogen sulfide gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) H2S if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6424	HeliumGC	Helium gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Helium if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6426	WaterGC	Water gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) H2O if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6428	OxygenGC	Oxygen gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Oxygen if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6430	ArgonGC	Argon gas component read from the GC This value is copied to the 'in-use' gas component (GasPropertiesSrc) Argon if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6432	C6PlusGC	C6+ gas component read from the GC This value is divided into appropriate standard gas component(s) (according to the identification of the C6+ gas component via enable C6+ gas component index automatic detection(IsC6PlusAutoDetectionEnabled), C6+ gas component identifier (C6PlusGCComponentID) and C6+ gas component index (C6PlusComponentIndex)) if the GC functionality is enabled (IsOptionalGCInterfaceEnabled).	R	Y			float	mole %	mole %	float32	mole fraction				
6434	NeoPentaneGC	Neo-pentane component read from the GC This value is divided into one or more of the 21 standard gas components if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC).	R	Y			float	mole %	mole %	float32	mole fraction				
6436	HeatingValueGC	Heating value read from the GC This value is copied to the 'in-use' heating value (HeatingValueInUse) if the GC functionality is enabled (IsOptionalGCInterfaceEnabled), the GC-read gas properties is selected (GasPropertiesSrcSel) and the GC data is valid (AreGasPropertiesInvalidGC). Note that the type of heating value to be read from the GC must be specified (GCHeatingValueType) as either Btu-Dry, Btu-Saturated or Btu-Actual so that the correct GC register is read. Also, the heating value unit must be specified (GCHeatingValueUnit).	R	Y			float	kJ/dm3	Btu/ft3	float32	kJ/dm3				
6438	SpecificGravityGC	Specific gravity (relative density) read from the GC Specific gravity (relative density) read from the GC.	R	Y			float	-	-	float32	-				
6440	CompAvgMeterSndVel	Previous hour average meter speed of sound Previous hour average meter-calculated speed of sound for comparison to the previous hour average speed of sound calculated from the gas composition (CompAvgAGA10SndVel). This is an average over an hour when average flow velocity (AvgFlow) is between the diagnostic analysis flow limits (FlowAnalysisLowFlowLmt) and the diagnostic analysis high flow limit (FlowAnalysisHighFlowLmt) and is only calculated when all calculation inputs (gas composition, pressure and temperature) are valid during the flow time over the hour. This is used to calculate speed of sound comparison error (SndVelCompErr).	R				float	m/s	ft/s	float32	m/s				
6442	CompAvgAGA10SndVel	Previous hour average speed of sound calculated from the gas composition Previous hour average speed of sound calculated from the gas composition for comparison to the meter-calculated average speed of sound (CompAvgMeterSndVel). This is an average over an hour when average flow velocity (AvgFlow) is between the diagnostic analysis low flow limit (FlowAnalysisLowFlowLmt) and the diagnostic analysis high flow limit (FlowAnalysisHighFlowLmt) and is only calculated when all calculation inputs (gas composition, pressure and temperature) are valid during the flow time over the hour. This is used to calculate speed of sound comparison error (SndVelCompErr).	R				float	m/s	ft/s	float32	m/s				
6444	C6PlusHexaneFrac	C6+ Hexane gas component mole fraction C6+ Hexane gas component mole fraction value to be used if C6+ gas component index (C6PlusComponentIndex) is other than 8, 9, 10 or 11. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	float	mole %	mole %	float32	mole fraction		0.47466	0	1
6446	C6PlusHeptaneFrac	C6+ Heptane gas component mole fraction C6+ Heptane gas component mole fraction value to be used if C6+ gas component index (C6PlusComponentIndex) is other than 8, 9, 10 or 11. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	float	mole %	mole %	float32	mole fraction		0.3534	0	1

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6448	C6PlusOctaneFrac	C6+ Octane gas component mole fraction C6+ Octane gas component mole fraction value to be used if C6+ gas component index (C6PlusComponentIndex) is other than 8, 9, 10 or 11. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	float	mole %	mole %	float32	mole fraction		0.17194	0	1
6450	C6PlusNonaneFrac	C6+ Nonane gas component mole fraction C6+ Nonane gas component mole fraction value to be used if C6+ gas component index (C6PlusComponentIndex) is other than 8, 9, 10 or 11. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	float	mole %	mole %	float32	mole fraction		0	0	1
6452	C6PlusDecaneFrac	C6+ Decane gas component mole fraction C6+ Decane gas component mole fraction value to be used if C6+ gas component index (C6PlusComponentIndex) is other than 8, 9, 10 or 11. Applicable only when C6+ gas component index automatic detection (IsC6PlusAutoDetectionEnabled) is disabled.	RW	Y	Y	Y	float	mole %	mole %	float32	mole fraction		0	0	1
6454	FlowAnalysisHighFlowLmt	Upper flow velocity limit for performing flow analysis diagnostics The upper flow velocity limit for performing flow analysis diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled), Dual-Configuration meter diagnostics (IsColocMeterQFlowRangeErr and IsColocMeterSndSpdRangeErr) and gating "flow analysis gated" values in daily and hourly logs.	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		30.48	1	50
6456	FlowAnalysisLowFlowLmt	Lower flow velocity limit for performing flow analysis diagnostics The lower flow velocity limit for performing flow analysis diagnostics when Continuous Flow Analysis feature is enabled (IsOptionalContinuousFlowAnalysisEnabled), Dual-Configuration meter diagnostics (IsColocMeterQFlowRangeErr and IsColocMeterSndSpdRangeErr) and gating "flow analysis gated" values in daily and hourly logs. This value may not be less than the lower velocity threshold (ZeroCut).	RW	Y	Y	Y	float	m/s	ft/s	float32	m/s		1.524	-3.40E+38	3.40E+38
6458	FwdBaselineFlowTemperature	Forward flow temperature baseline The flow temperature value when the baseline is taken in the forward direction. Normally taken from RunningAvgFlowTemperature.	R	Y	Y	Y	float	deg C	deg F	float32	K		273.15	-3.40E+38	3.40E+38
6460	FwdBaselineFlowPressure	Forward flow pressure baseline The flow pressure value when the baseline is taken in the forward direction. Normally taken from RunningAvgFlowPressure.	R	Y	Y	Y	float	MPa	psi	float32	MPa		0.10156	-3.40E+38	3.40E+38
6462	FwdBaselineTurbulenceA	Forward flow chord A turbulence baseline The chord A turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceA.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6464	FwdBaselineTurbulenceB	Forward flow chord B turbulence baseline The chord B turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceB.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6466	FwdBaselineTurbulenceC	Forward flow chord C turbulence baseline The chord C turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceC.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6468	FwdBaselineTurbulenceD	Forward flow chord D turbulence baseline The chord D turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceD.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6470	FwdBaselineTurbulenceE	Forward flow chord E turbulence baseline The chord E turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceE.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6472	FwdBaselineTurbulenceF	Forward flow chord F turbulence baseline The chord F turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceF.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6474	FwdBaselineTurbulenceG	Forward flow chord G turbulence baseline The chord G turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceG.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6476	FwdBaselineTurbulenceH	Forward flow chord H turbulence baseline The chord H turbulence value when the baseline is taken in the forward direction. Normally taken from RunningAvgTurbulenceH.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6478	FwdBaselineAvgFlow	Forward flow average flow baseline The average flow value when the baseline is taken in the forward direction. Normally taken from RunningAvgAvgFlow.	R	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-3.40E+38	3.40E+38
6480	FwdBaselineCrossFlow	Forward flow cross-flow baseline The cross-flow value when the baseline is taken in the forward direction. Normally taken from RunningAvgCrossFlow.	R	Y	Y	Y	float	-	-	float32	-		1	-3.40E+38	3.40E+38
6482	FwdBaselineProfileFactor	Forward flow profile factor baseline The profile factor value when the baseline is taken in the forward direction. Normally taken from RunningAvgProfileFactor.	R	Y	Y	Y	float	-	-	float32	-		1.17	-3.40E+38	3.40E+38
6484	FwdBaselineSymmetry	Forward flow symmetry baseline The symmetry value when the baseline is taken in the forward direction. Normally taken from RunningAvgSymmetry.	R	Y	Y	Y	float	-	-	float32	-		1	-3.40E+38	3.40E+38
6486	RevBaselineFlowTemperature	Reverse flow temperature baseline The flow temperature value when the baseline is taken in the reverse direction. Normally taken from RunningAvgFlowTemperature.	R	Y	Y	Y	float	deg C	deg F	float32	K		273.15	-3.40E+38	3.40E+38
6488	RevBaselineFlowPressure	Reverse flow pressure baseline The flow pressure value when the baseline is taken in the reverse direction. Normally taken from RunningAvgFlowPressure.	R	Y	Y	Y	float	MPa	psi	float32	MPa		0.10156	-3.40E+38	3.40E+38
6490	RevBaselineTurbulenceA	Reverse flow chord A turbulence baseline The chord A turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceA.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6492	RevBaselineTurbulenceB	Reverse flow chord B turbulence baseline The chord B turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceB.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6494	RevBaselineTurbulenceC	Reverse flow chord C turbulence baseline The chord C turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceC.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6496	RevBaselineTurbulenceD	Reverse flow chord D turbulence baseline The chord D turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceD.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6498	RevBaselineTurbulenceE	Reverse flow chord E turbulence baseline The chord E turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceE.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38

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6500	RevBaselineTurbulenceF	Reverse flow chord F turbulence baseline The chord F turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceF.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6502	RevBaselineTurbulenceG	Reverse flow chord G turbulence baseline The chord G turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceG.	R	Y	Y	Y	float	%	%	float32	%		2	-3.40E+38	3.40E+38
6504	RevBaselineTurbulenceH	Reverse flow chord H turbulence baseline The chord H turbulence value when the baseline is taken in the reverse direction. Normally taken from RunningAvgTurbulenceH.	R	Y	Y	Y	float	%	%	float32	%		3	-3.40E+38	3.40E+38
6506	RevBaselineAvgFlow	Reverse flow average flow baseline The average flow value when the baseline is taken in the reverse direction. Normally taken from RunningAvgAvgFlow.	R	Y	Y	Y	float	m/s	ft/s	float32	m/s		0	-3.40E+38	3.40E+38
6508	RevBaselineCrossFlow	Reverse flow cross-flow baseline The cross-flow value when the baseline is taken in the reverse direction. Normally taken from RunningAvgCrossFlow.	R	Y	Y	Y	float	-	-	float32	-		1	-3.40E+38	3.40E+38
6510	RevBaselineProfileFactor	Reverse flow profile factor baseline The profile factor value when the baseline is taken in the reverse direction. Normally taken from RunningAvgProfileFactor.	R	Y	Y	Y	float	-	-	float32	-		1.17	-3.40E+38	3.40E+38
6512	RevBaselineSymmetry	Reverse flow symmetry baseline The symmetry value when the baseline is taken in the reverse direction. Normally taken from RunningAvgSymmetry.	R	Y	Y	Y	float	-	-	float32	-		1	-3.40E+38	3.40E+38
6514	LiquidDetectionSDevSymmetryLmt	Liquid detection symmetry limit Alarm limit for running average of standard deviation of symmetry (RunningSDevSymmetry) involved in detection of potential liquids present (IsLiquidDetected).	RW	Y	Y	Y	float	-	-	float32	-		0.07	0	3.40E+38
6516	LiquidDetectionSDevProfileFactorLmt	Liquid detection profile factor limit Alarm limit for running average of standard deviation of profile factor (RunningSDevProfileFactor) involved in detection of potential liquids present (IsLiquidDetected).	RW	Y	Y	Y	float	-	-	float32	-		0.07	0	3.40E+38
6518	LiquidDetectionSDevCrossFlowLmt	Liquid detection cross-flow limit Alarm limit for running average of standard deviation of cross flow (RunningSDevCrossFlow) involved in detection of potential liquids present (IsLiquidDetected).	RW	Y	Y	Y	float	-	-	float32	-		0.07	0	3.40E+38
6520	AbnormalProfileDetectionLmt	Abnormal profile detection alarm limit Abnormal profile detection (IsAbnormalProfileDetected) alarm limit.	RW	Y	Y	Y	float	%	%	float32	%		5	0	100
6522	SevereFlowConditionFactor	Severe flow condition correction factor Correction applied when severe flow condition (IsSevereFlowConditionDetected) is TRUE (1) (for 8-path meters only).	RW	Y	Y	Y	float	-	-	float32	-		1	0.95	1
6524	SevereFlowConditionLmt1	Severe flow condition limit 1 First limit used to determine severe flow condition (IsSevereFlowConditionDetected) (for 8-path meters only).	RW	Y	Y	Y	float	deg	deg	uint8	deg		6	0	90
6526	SevereFlowConditionLmt2	Severe flow condition limit 2 Second limit for severe flow condition (IsSevereFlowConditionDetected) (for 8-path meters only).	RW	Y	Y	Y	float	%	%	float32	%		10	0	40
6530	SNRatioDB	Minimum signal-to-noise threshold in decibels Represents the conversion of the minimum signal-to-noise threshold (SNRatio) to decibels by multiplying ten times the log base ten.	R				float	dB	dB	float32	dB				
6532	XdcrMaintenanceGainRange	Gain range for transducer maintenance The maximum allowed difference between a path's gain (GainA1..GainH2) in dB from the lowest gain path. The gain value of inner chord path is compared with lowest path gain from the inner chords (Chord B, Chord C, Chord F, Chord G) and the gain value of outer chord path is compared with lowest gain from the other chords (Chord A, Chord D, Chord E, Chord H). This check is used to set the chord's transducer maintenance required indicator (IsXdcrMaintenanceRequiredA..IsXdcrMaintenanceRequiredH).	RW	Y	Y	Y	float	gain (dB)	gain (dB)	float32	gain (dB)		20	1	40
6534	XdcrMaintenanceSNRRange	SNR range for transducer maintenance The maximum allowed difference between a path's SNR (SNRA1..SNRH2) in dB from the highest SNR of any other path. The SNR value of inner chord path is compared with highest path SNR from the inner chords (Chord B, Chord C, Chord F, Chord G) and the SNR value of outer chord path is compared with highest SNR from the other chords (Chord A, Chord D, Chord E, Chord H). This check is used to set the chord's transducer maintenance required indicator (IsXdcrMaintenanceRequiredA..IsXdcrMaintenanceRequiredH).	RW	Y	Y	Y	float	dB	dB	float32	dB		20	1	3.40E+38
6536	DiagnosticSndSpdErrLimit	Limit for diagnostic speed of sound check Limit on the difference between average speed of sound one minute average (RunningAvgAvgSndVel) and diagnostic chord speed of sound average (RunningAvgDiagnosticChordSndVel). This is used to generate diagnostic speed of sound error (IsDiagnosticSndSpdRangeErr).	RW	Y	Y	Y	float	%	%	float32	%		0.5	0	10
6538	RunningAvgAvgSndVel	Average speed of sound one-minute running average A running average of average speed of sound (AvgSndVel) over one minute when the running averages are valid (IsRunningAvgValid).	R				float	m/s	ft/s	float32	m/s				
6540	RunningAvgDiagnosticChordSndVel	Diagnostic chord speed of sound running average The running average of diagnostic chord speed of sound over a time period (DiagnosticChordRunningAvgSeconds) used for diagnostic speed of sound error (IsDiagnosticSndSpdRangeErr). Diagnostic chord speed of sound is determined using an additional diagnostic chord on the meter when diagnostic chord is enabled (IsDiagnosticChordEnabled).	R				float	m/s	ft/s	float32	m/s				
6542	AvgDlyA	Chord A average delay time The chord-specific delay for chord A primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6544	DltDlyA	Chord A difference in upstream and downstream delay times The adjustment to the chord A delta times (the individual times used for DltTmA (DltTmA)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6546	XA	Chord A "X" dimension Chord A "X" dimension (component of LA in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.1778	0	2
6548	LA	Chord A length ("L" dimension) The distance between the transducer faces on chord A. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.3175	0	5
6550	XdcrAssyComponent4LengthA1	Transducer assembly A1 component 4 length The length for the transducer assembly component 4 for A1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6552	XdcrAssyComponent4LengthA2	Transducer assembly A2 component 4 length The length for the transducer assembly component 4 for A2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6554	XdcrAssyComponent3LengthA1	Transducer assembly A1 component 3 length The length of the transducer assembly component 3 for A1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6556	XdcrAssyComponent3LengthA2	Transducer assembly A2 component 3 length The length of the transducer assembly component 3 for A2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6558	XdcrAssyComponent2LengthA1	Transducer assembly A1 component 2 length The length of the transducer assembly component 2 for A1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6560	XdcrAssyComponent2LengthA2	Transducer assembly A2 component 2 length The length of the transducer assembly component 2 for A2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6562	XdcrAssyComponent1LengthA1	Transducer assembly A1 component 1 length The length of the transducer assembly component 1 for A1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6564	XdcrAssyComponent1LengthA2	Transducer assembly A2 component 1 length The length of the transducer assembly component 1 for A2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6566	MeterHousingLengthA	Chord A meter housing length The meter housing length for chord A. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6568	AvgDlyB	Chord B average delay time The chord-specific delay for chord B primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6570	DltDlyB	Chord B difference in upstream and downstream delay times The adjustment to the chord B delta times (the individual times used for DltTmB (DltTmB)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6572	XB	Chord B "X" dimension Chord B "X" dimension (component of LB in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.28575	0	2
6574	LB	Chord B length ("L" dimension) The distance between the transducer faces on chord B. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.4445	0	5
6576	XdcrAssyComponent4LengthB1	Transducer assembly B1 component 4 length The length for the transducer assembly component 4 for B1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6578	XdcrAssyComponent4LengthB2	Transducer assembly B2 component 4 length The length for the transducer assembly component 4 for B2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6580	XdcrAssyComponent3LengthB1	Transducer assembly B1 component 3 length The length of the transducer assembly component 3 for B1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6582	XdcrAssyComponent3LengthB2	Transducer assembly B2 component 3 length The length of the transducer assembly component 3 for B2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6584	XdcrAssyComponent2LengthB1	Transducer assembly B1 component 2 length The length of the transducer assembly component 2 for B1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6586	XdcrAssyComponent2LengthB2	Transducer assembly B2 component 2 length The length of the transducer assembly component 2 for B2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6588	XdcrAssyComponent1LengthB1	Transducer assembly B1 component 1 length The length of the transducer assembly component 1 for B1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6590	XdcrAssyComponent1LengthB2	Transducer assembly B2 component 1 length The length of the transducer assembly component 1 for B2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6592	MeterHousingLengthB	Chord B meter housing length The meter housing length for chord B. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6594	AvgDlyC	Chord C average delay time The chord-specific delay for chord C primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6596	DltDlyC	Chord C difference in upstream and downstream delay times The adjustment to the chord C delta times (the individual times used for DltTmC (DltTmC)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6598	XC	Chord C "X" dimension Chord C "X" dimension (component of LC in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.28575	0	2
6600	LC	Chord C length ("L" dimension) The distance between the transducer faces on chord C. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.4445	0	5
6602	XdcrAssyComponent4LengthC1	Transducer assembly C1 component 4 length The length for the transducer assembly component 4 for C1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6604	XdcrAssyComponent4LengthC2	Transducer assembly C2 component 4 length The length for the transducer assembly component 4 for C2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6606	XdcrAssyComponent3LengthC1	Transducer assembly C1 component 3 length The length of the transducer assembly component 3 for C1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6608	XdcrAssyComponent3LengthC2	Transducer assembly C2 component 3 length The length of the transducer assembly component 3 for C2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6610	XdcrAssyComponent2LengthC1	Transducer assembly C1 component 2 length The length of the transducer assembly component 2 for C1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6612	XdcrAssyComponent2LengthC2	Transducer assembly C2 component 2 length The length of the transducer assembly component 2 for C2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6614	XdcrAssyComponent1LengthC1	Transducer assembly C1 component 1 length The length of the transducer assembly component 1 for C1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6616	XdcrAssyComponent1LengthC2	Transducer assembly C2 component 1 length The length of the transducer assembly component 1 for C2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6618	MeterHousingLengthC	Chord C meter housing length The meter housing length for chord C. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6620	AvgDlyD	Chord D average delay time The chord-specific delay for chord D primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6622	DltDlyD	Chord D difference in upstream and downstream delay times The adjustment to the chord D delta times (the individual times used for DltTmD (DltTmD)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6624	XD	Chord D "X" dimension Chord D "X" dimension (component of LD in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.1778	0	2
6626	LD	Chord D length ("L" dimension) The distance between the transducer faces on chord D. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.3175	0	5
6628	XdcrAssyComponent4LengthD1	Transducer assembly D1 component 4 length The length for the transducer assembly component 4 for D1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6630	XdcrAssyComponent4LengthD2	Transducer assembly D2 component 4 length The length for the transducer assembly component 4 for D2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6632	XdcrAssyComponent3LengthD1	Transducer assembly D1 component 3 length The length of the transducer assembly component 3 for D1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6634	XdcrAssyComponent3LengthD2	Transducer assembly D2 component 3 length The length of the transducer assembly component 3 for D2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6636	XdcrAssyComponent2LengthD1	Transducer assembly D1 component 2 length The length of the transducer assembly component 2 for D1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6638	XdcrAssyComponent2LengthD2	Transducer assembly D2 component 2 length The length of the transducer assembly component 2 for D2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6640	XdcrAssyComponent1LengthD1	Transducer assembly D1 component 1 length The length of the transducer assembly component 1 for D1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6642	XdcrAssyComponent1LengthD2	Transducer assembly D2 component 1 length The length of the transducer assembly component 1 for D2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6644	MeterHousingLengthD	Chord D meter housing length The meter housing length for chord D. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6646	AvgDlyE	Chord E average delay time The chord-specific delay for chord E primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6648	DltDlyE	Chord E difference in upstream and downstream delay times The adjustment to the chord E delta times (the individual times used for DltTmE (DltTmE)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6650	XE	Chord E "X" dimension Chord E "X" dimension (component of LE in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.1778	0	2
6652	LE	Chord E length ("L" dimension) The distance between the transducer faces on chord E. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.3175	0	5
6654	XdcrAssyComponent4LengthE1	Transducer assembly E1 component 4 length The length for the transducer assembly component 4 for E1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6656	XdcrAssyComponent4LengthE2	Transducer assembly E2 component 4 length The length for the transducer assembly component 4 for E2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6658	XdcrAssyComponent3LengthE1	Transducer assembly E1 component 3 length The length of the transducer assembly component 3 for E1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6660	XdcrAssyComponent3LengthE2	Transducer assembly E2 component 3 length The length of the transducer assembly component 3 for E2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6662	XdcrAssyComponent2LengthE1	Transducer assembly E1 component 2 length The length of the transducer assembly component 2 for E1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6664	XdcrAssyComponent2LengthE2	Transducer assembly E2 component 2 length The length of the transducer assembly component 2 for E2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6666	XdcrAssyComponent1LengthE1	Transducer assembly E1 component 1 length The length of the transducer assembly component 1 for E1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6668	XdcrAssyComponent1LengthE2	Transducer assembly E2 component 1 length The length of the transducer assembly component 1 for E2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6670	MeterHousingLengthE	Chord E meter housing length The meter housing length for hord E. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6672	AvgDlyF	Chord F average delay time The chord-specific delay for chord F primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6674	DltDlyF	Chord F difference in upstream and downstream delay times The adjustment to the chord F delta times (the individual times used for DltTmF (DltTmF)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6676	XF	Chord F "X" dimension Chord F "X" dimension (component of LF in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.28575	0	2
6678	LF	Chord F length ("L" dimension) The distance between the transducer faces on chord F. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.4445	0	5
6680	XdcrAssyComponent4LengthF1	Transducer assembly F1 component 4 length The length for the transducer assembly component 4 for F1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6682	XdcrAssyComponent4LengthF2	Transducer assembly component 4 for F2 length The length for the transducer assembly component 4 for F2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6684	XdcrAssyComponent3LengthF1	Transducer assembly F1 component 3 length The length of the transducer assembly component 3 for F1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6686	XdcrAssyComponent3LengthF2	Transducer assembly F2 component 3 length The length of the transducer assembly component 3 for F2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6688	XdcrAssyComponent2LengthF1	Transducer assembly F1 component 2 length The length of the transducer assembly component 2 for F1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6690	XdcrAssyComponent2LengthF2	Transducer assembly F2 component 2 length The length of the transducer assembly component 2 for F2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6692	XdcrAssyComponent1LengthF1	Transducer assembly F1 component 1 length The length of the transducer assembly component 1 for F1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6694	XdcrAssyComponent1LengthF2	Transducer assembly F2 component 1 length The length of the transducer assembly component 1 for F2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6696	MeterHousingLengthF	Chord F meter housing length The meter housing length for hord F. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6698	AvgDlyG	Chord G average delay time The chord-specific delay for chord G primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6700	DltDlyG	Chord G difference in upstream and downstream delay times The adjustment to the chord G delta times (the individual times used for DltTmG (DltTmG)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1
6702	XG	Chord G "X" dimension Chord G "X" dimension (component of LG in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.28575	0	2
6704	LG	Chord G length ("L" dimension) The distance between the transducer faces on chord G. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.4445	0	5
6706	XdcrAssyComponent4LengthG1	Transducer assembly G1 component 4 length The length for the transducer assembly component 4 for G1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6708	XdcrAssyComponent4LengthG2	Transducer assembly G2 component 4 length The length for the transducer assembly component 4 for G2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6710	XdcrAssyComponent3LengthG1	Transducer assembly G1 component 3 length The length of the transducer assembly component 3 for G1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6712	XdcrAssyComponent3LengthG2	Transducer assembly G2 component 3 length The length of the transducer assembly component 3 for G2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6714	XdcrAssyComponent2LengthG1	Transducer assembly G1 component 2 length The length of the transducer assembly component 2 for G1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6716	XdcrAssyComponent2LengthG2	Transducer assembly G2 component 2 length The length of the transducer assembly component 2 for G2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6718	XdcrAssyComponent1LengthG1	Transducer assembly G1 component 1 length The length of the transducer assembly component 1 for G1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6720	XdcrAssyComponent1LengthG2	Transducer assembly G2 component 1 length The length of the transducer assembly component 1 for G2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6722	MeterHousingLengthG	Chord G meter housing length The meter housing length for hord G. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6724	AvgDlyH	Chord H average delay time The chord-specific delay for chord H primarily due to the signal processing algorithm and acoustic propagation time within the transducer including the matching layer. It is used in conjunction with the overall system delay (SystemDelay).	RW	Y	Y	Y	float	us	us	float32	us		0	0	50
6726	DltDlyH	Chord H difference in upstream and downstream delay times The adjustment to the chord H delta times (the individual times used for DltTmH (DltTmH)) to ensure calibration at zero flow.	RW	Y	Y	Y	float	us	us	float32	us		0	-1	1

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6728	XH	Chord H "X" dimension Chord H "X" dimension (component of LH in the direction of flow within the meter bore). The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.1778	0	2
6730	LH	Chord H length ("L" dimension) The distance between the transducer faces on chord H. The factory setting should only be changed when changing a transducer or after a meter cold start.	RW	Y	Y	Y	float	m	in	float32	m		0.3175	0	5
6732	XdcrAssyComponent4LengthH1	Transducer assembly H1 component 4 length The length for the transducer assembly component 4 for H1, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6734	XdcrAssyComponent4LengthH2	Transducer assembly H2 component 4 length The length for the transducer assembly component 4 for H2, which is the transducer for the T-XX series transducer assemblies or transducer housing for the T-XXX series transducer assemblies. The length is engraved on the transducer body or transducer housing and is also included in the Zero Flow Calibration report provided with the meter or on the Transducer Calibration sheet provided with replacement transducers.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6736	XdcrAssyComponent3LengthH1	Transducer assembly H1 component 3 length The length of the transducer assembly component 3 for H1, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6738	XdcrAssyComponent3LengthH2	Transducer assembly H2 component 3 length The length of the transducer assembly component 3 for H2, which is the stalk for the T-XX series transducer assemblies or the spacer for the T-XXX series transducer assemblies. The length is engraved on the stalk body or spacer and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6740	XdcrAssyComponent2LengthH1	Transducer assembly H1 component 2 length The length of the transducer assembly component 2 for H1, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6742	XdcrAssyComponent2LengthH2	Transducer assembly H2 component 2 length The length of the transducer assembly component 2 for H2, which is the holder for the T-XX series transducer assemblies or the stalk for the T-XXX series transducer assemblies. The length is engraved on the holder body or stalk and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6744	XdcrAssyComponent1LengthH1	Transducer assembly H1 component 1 length The length of the transducer assembly component 1 for H1, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6746	XdcrAssyComponent1LengthH2	Transducer assembly H2 component 1 length The length of the transducer assembly component 1 for H2, which is the mount for the T-XX series transducer assemblies. The length is engraved on the mount and is also included in the Zero Flow Calibration report provided with the meter. This length must be zero when selecting a T-XXX series transducer in set transducer type (SetXdcrType).	RW	Y	Y	Y	float	m	in	float32	m		0	0	0.508
6748	MeterHousingLengthH	Chord H meter housing length The meter housing length for hord H. The length is located on the tag attached to the ultrasonic meter body and is also included in the Zero Flow Calibration report provided with the meter.	RW	Y	Y	Y	float	m	in	float32	m		0	0	5
6750	SDevCrossFlow	Standard deviation of cross-flow Standard deviation of cross-flow calculated using measurement sequences received in a batch. This is used to calculate one minute running average of standard deviation of cross-flow (RunningSDevCrossFlow).	R				float	-	-	float32	-				
6752	SDevProfileFactor	Standard deviation of profile factor Standard deviation of profile factor calculated using measurement sequences received in a batch. This is used to calculate one minute running average of standard deviation of profile factor (RunningSDevProfileFactor).	R				float	-	-	float32	-				
6754	SDevSymmetry	Standard deviation of symmetry Standard deviation of symmetry calculated using measurement sequences received in a batch. This is used to calculate one minute running average of standard deviation of symmetry (RunningSDevSymmetry).	R				float	-	-	float32	-				
6760	SpdSndSpread	Speed of sound path spread The difference between the maximum and minimum speeds of sound of the velocity measurement chords (SndVelA..SndVelH). It is not calculated when the average flow velocity (AvgFlow) is not between the minimum flow velocity for CRange test (SndSpdChkMinVel) and the maximum flow velocity for CRange test (SndSpdChkMaxVel).	R				float	m/s	ft/s	float32	m/s				
6762	SndVelDiffA	Chord A speed of sound difference from average speed of sound The chord A speed of sound (SndVelA) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6764	SndVelDiffB	Chord B speed of sound difference from average speed of sound The chord B speed of sound (SndVelB) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6766	SndVelDiffC	Chord C speed of sound difference from average speed of sound The chord C speed of sound (SndVelC) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6768	SndVelDiffD	Chord D speed of sound difference from average speed of sound The chord D speed of sound (SndVelD) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6770	SndVelDiffE	Chord E speed of sound difference from average speed of sound The chord E speed of sound (SndVelE) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6772	SndVelDiffF	Chord F speed of sound difference from average speed of sound The chord F speed of sound (SndVelF) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6774	SndVelDiffG	Chord G speed of sound difference from average speed of sound The chord G speed of sound (SndVelG) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6776	SndVelDiffH	Chord H speed of sound difference from average speed of sound The chord H speed of sound (SndVelH) difference from the average speed of sound (AvgSndVel).	R				float	m/s	ft/s	float32	m/s				
6778	FlowVelRatioA	Chord A flow velocity ratio Ratio of chord A flow velocity (FlowVelA) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6780	FlowVelRatioB	Chord B flow velocity ratio Ratio of chord B flow velocity (FlowVelB) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6782	FlowVelRatioC	Chord C flow velocity ratio Ratio of chord C flow velocity (FlowVelC) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
6784	FlowVelRatioD	Chord D flow velocity ratio Ratio of chord D flow velocity (FlowVelD) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6786	FlowVelRatioE	Chord E flow velocity ratio Ratio of chord E flow velocity (FlowVelE) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6788	FlowVelRatioF	Chord F flow velocity ratio Ratio of chord F flow velocity (FlowVelF) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6790	FlowVelRatioG	Chord G flow velocity ratio Ratio of chord G flow velocity (FlowVelG) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6792	FlowVelRatioH	Chord H flow velocity ratio Ratio of chord H flow velocity (FlowVelH) to the average flow velocity (AvgFlow). It is calculated as 0 when the uncorrected volumetric flow rate (QMeter) is below the volumetric flow rate threshold (QCutOff).	R				float	-	-	float32	-				
6794	ColocMeterSndSpdErrLimit	Error limit for Dual-Configuration meter speed of sound range check error Limit on the difference between average speed of sound one hour average (ColocMeterRunningAvgAvgSndVel) of the Dual-Configuration meters. This is used to generate Dual-Configuration meter speed of sound range check alarm (IsColocMeterSndSpdRangeErr).	RW	Y	Y	Y	float	%	%	float32	%		0.5	0	10
6796	ColocMeterQFlowErrLimit	Error limit for Dual-Configuration meter uncorrected flow rate range check error Limit on the difference between flow-condition volumetric flow rate one hour average (ColocMeterRunningAvgQFlow) of the Dual-Configuration meters. This is used to generate Dual-Configuration meter flow-condition volumetric flow rate range check alarm (IsColocMeterQFlowRangeErr).	RW	Y	Y	Y	float	%	%	float32	%		1	0	10
6798	ColocMeterRunningAvgAvgSndVel	Average speed of sound running average for Dual-Configuration meter diagnostic error One hour running average of average speed of sound (AvgSndVel). The running average is updated once in a minute using average speed of sound samples per batch. It is used to indicate Dual-Configuration meter speed of sound range check alarm (IsColocMeterSndSpdRangeErr).	R				float	m/s	ft/s	float32	m/s				
6800	ColocMeterRunningAvgQFlow	Uncorrected flow rate running average for Dual-Configuration meter diagnostic error One hour running average of Dual-Configuration meter flow-condition volumetric flow rate (QFlow). The running average is updated once in a minute using flow-condition volumetric flow rate samples per batch. It is used to indicate Dual-Configuration meter flow-condition volumetric flow rate range check alarm (IsColocMeterQFlowRangeErr).	R				float	volume/time	volume/time	float32	m3/hr				
6802	Qt	Transitional volumetric flow rate as stamped on the physical nameplate of the meter Transitional volumetric flow rate as set by the user or at the factory.	R	Y	Y	Y	float	m3/hr	ft3/hr	float32	m3/hr		0	-3.40E+38	3.40E+38
7970	HourlyMacro1	Hourly log macro 1 Hourly log macro status indicator 1. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7972	HourlyMacro2	Hourly log macro 2 Hourly log macro status indicator 2. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7974	HourlyMacro3	Hourly log macro 3 Hourly log macro status indicator 3. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7976	HourlyMacro4	Hourly log macro 4 Hourly log macro status indicator 4. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7978	HourlyMacro5	Hourly log macro 5 Hourly log macro status indicator 5. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7980	HourlyMacro6	Hourly log macro 6 Hourly log macro status indicator 6. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7984	DailyMacro1	Daily log macro 1 Daily log macro status indicator 1. This is a bitfield that contains a variety of alarms bits that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7986	DailyMacro2	Daily log macro 2 Daily log macro status indicator 2. This is a bitfield that contains a variety of alarms bits not contained in status 1 that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7988	DailyMacro3	Daily log macro 3 Daily log macro status indicator 3. This is a bitfield that contains a variety of alarms bits that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7990	DailyMacro4	Daily log macro 4 Daily log macro status indicator 4. This is a bitfield that contains a variety of alarms bits not contained in status 1 that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7992	DailyMacro5	Daily log macro 5 Daily log macro status indicator 5. This is a bitfield that contains a variety of alarms bits that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
7994	DailyMacro6	Daily log macro 6 Daily log macro status indicator 6. This is a bitfield that contains a variety of alarms bits not contained in status 1 that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119

The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
7998	FTPServerControlPort	FTP server control port The port on which the FTP server listens for client connection requests. The port cannot be set to any of the reserved or well-known ports 1, 7, 20, 23, 42, 53, 67, 68, 502, 10000, 10001, 10002, 10003, 11000, or 11001. Also, the port cannot be set equal to Modbus TCP alternate port (Eth1AltModbusPort) or HTTP server port (HTTPServerPort). The FTP server restarts when the port is changed. The FTP server terminates if the port is set to zero.	RW	Y	Y	Y	long	-	-	uint16	-		21	0	65535
8000	CPUBdSerialNumber	CPU Module serial number The CPU Module serial number is on a label on the CPU Module. Its minimum expected value is 0018000.	R				long	-	-	uint32	-				
8002	CPUBdSwIntVer	CPU Module firmware version number as integer CPU Module firmware version number (CPUBdSwVer) (read as an integer for Modbus compatibility).	R				long	-	-	uint32	-				
8004	AcqBdSwIntVer	Acquisition Module firmware version number as integer Acquisition Module firmware version number (read as an integer for Modbus compatibility).	R				long	-	-	uint32	-				
8006	CnfgChksumDate	Configuration checksum date Configuration checksum date. This is the date and time of the last configuration change in POSIX-compliant "time_t" format (seconds elapsed since midnight January 1, 1970).	R	Y			long	sec	sec	int32	Epoch sec				
8008	RTCSecondsSinceEpochRead	System time (read-only) This is used to read the system time in POSIX-compliant "time_t" format (seconds elapsed since midnight January 1, 1970 local time). Use the real-time clock set data point (RTCSecondsSinceEpochSet) to set the system time.	R	Y			long	sec	sec	int32	Epoch sec				
8010	MeterResetTime	Time of the last meter reset Time of the last meter reset in POSIX-compliant "time_t" format (seconds elapsed since midnight January 1, 1970) due to power failure (DidPowerFail), meter warm start (DidWarmStart) or software watchdog reset (WatchDogReset).	R	Y			long	sec	sec	int32	Epoch sec				
8012	Eth1AltModbusPort	Alternate TCP port used for Modbus TCP The TCP/IP port used for Modbus TCP in addition to port 502. The alternate port cannot be set to any of the reserved or well-known ports 1, 7, 20, 21, 23, 42, 53, 67, 68, 502, 10000, 10001, 10002, 10003, 11000 or 11001. The alternate port cannot be set equal to HTTP server port (HTTPServerPort) or FTP server control port (FTPServerControlPort). If the alternate port is changed while there are open connections on it, then the connections shall be closed. The alternate port cannot be set to zero when Modbus TCP alternate port slave read and write mode (Eth1AltModbusReadWriteMode) is set to a non-zero value.	RW	Y	Y		long	-	-	uint32	-		0	0	65535
8014	BaudPortA	Communication Port A baud rate The baud rate used for serial port A.	RW	Y	Y		long	bits/sec	bits/sec	uint32	bits/sec	1200 (1200) 2400 (2400) 9600 (9600) 19200 (19200) 38400 (38400) 57600 (57600) 115200 (115200)	19200	1200	115200
8016	HTTPServerPort	TCP port used for HTTP server The TCP/IP port used by the HTTP server. The port cannot be set to any of the reserved or well-known ports 1, 7, 20, 21, 23, 42, 53, 67, 68, 502, 10000, 10001, 10002, 10003, 11000, or 11001. Also the HTTP port cannot be set equal to Modbus TCP alternate port (Eth1AltModbusPort) or FTP server control port (FTPServerControlPort). The HTTP server restarts when the port number is changed. The HTTP server terminates if the port is set to zero.	RW	Y	Y	Y	long	-	-	uint16	-		80	0	65535
8018	BaudPortB	Communication Port B baud rate The baud rate used for serial port B.	RW	Y	Y		long	bits/sec	bits/sec	uint32	bits/sec	1200 (1200) 2400 (2400) 9600 (9600) 19200 (19200) 38400 (38400) 57600 (57600) 115200 (115200)	19200	1200	115200
8020	BaudPortC	Communication Port C Slave mode baud rate The baud rate used for serial port C.	RW	Y	Y		long	bits/sec	bits/sec	uint32	bits/sec	1200 (1200) 2400 (2400) 9600 (9600) 19200 (19200) 38400 (38400) 57600 (57600) 115200 (115200)	19200	1200	115200
8022	RTCSecondsSinceEpochSet	Used to set the system time This is used to set the system time in POSIX-compliant "time_t" format (seconds elapsed since midnight January 1, 1970 local time) within the range from the firmware release date to midnight January 19, 2038. Use the real-time clock read data point (RTCSecondsSinceEpochRead) to read the system time. When the system time is set then the meter's real-time clock is also updated. The system time might be adjusted for the following reasons: 1. Clock drift (the system time is different from the required time). 2. The meter is installed in a time zone that is different from the meter manufacturer's time zone or if a replacement CPU Module is installed in a time zone that is different from the meter manufacturer's time zone. 3. Adjustments for the start and end of daylight saving time. (This may cause two hourly logs to be generated with the same timestamp or may cause hourly logs for an hour to be skipped.)	RW				long	sec	sec	int32	Epoch sec		1041400800	1041400800	2147472000
8024	Freq1Content	Frequency Output 1 pair content Selects the data to be represented by the Frequency Output 1 pair (Freq1A (Freq1ChnlA) and Freq1B (Freq1ChnlB)) to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). See Gas Ultrasonic Installation, Operations or Maintenance and Troubleshooting manuals.	RW	Y	Y	Y	long	-	-	int32	-	Uncorrected volume flow rate (0) Corrected volume flow rate (1) Average flow velocity (2) Average speed of sound (3) Energy flow rate (4) Mass flow rate (5)	0	0	5
8026	Freq1Dir	Selects the flow direction represented by the Frequency Output 1 pair (Freq1A, Freq1B) Selects the flow direction represented by the Frequency Output 1 pair (Freq1A (Freq1ChnlA) and Freq1B (Freq1ChnlB)). When set to "Reverse" or "Forward", both channels A and B represent the specified content when the flow is in selected direction. When set to "Absolute", both channels A and B represent the specified content regardless of the flow direction. When set to "Bidirectional", channel A represents the specified content when the flow is in the forward direction and channel B represents the specified content when flow is in the reverse direction. See Gas Ultrasonic Installation, Operations or Maintenance and Troubleshooting manuals. Mark II upgrade note: this data point is similar (but not identical) in function to the Mark II Freq1Content register.	RW	Y	Y	Y	long	-	-	int32	-	Reverse (0) Forward (1) Absolute (2) Bidirectional (3)	1	0	3
8028	Freq1BPhase	Frequency Output 1B phase relative to 1A Selects the Frequency Output 1 pair channel B phase relative to the channel A phase based on the flow direction.	RW	Y	Y	Y	long	-	-	int32	-	Lag forward, Lead reverse (0) Lead forward, Lag reverse (1)	0	0	1

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8030	DO1AContent	Digital Output 1A content selector Selects the content (Freq1 Validity (0), Flow Direction (2), Dual-Configuration meter flow rate range validity (3), or Process Validity (4)) for Digital Output 1A to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). Freq1 Validity is Freq1DataValidity. Flow Direction is FlowDir. Dual-Configuration meter flow rate range validity is the inverse of IsColocMeterQFlowRangeErr. Process Validity is the inverse of the 'OR' of the continuous flow analysis validities (IsAbnormalProfileDetected, IsBlockageDetected, IsBoreBuildupDetected, IsLiquidDetected, IsSndVelCompErr). Process Validity is only selectable on device numbers (DeviceNumber) that support CFA (3418 and 3414).	RW	Y	Y	Y	long	-	-	int32	-	Frequency Output 1 validity (0) Flow direction (2) Dual-Configuration meter flow rate range validity (3) Process validity (4)	0	0	4
8032	DO1BContent	Digital Output 1B content selector Selects the content (Freq1 Validity (0), Flow Direction (2), Dual-Configuration meter flow rate range validity (3), or Process Validity (4)) for Digital Output 1B to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). Freq1 Validity is Freq1DataValidity. Flow Direction is FlowDir. Dual-Configuration meter flow rate range validity is the inverse of IsColocMeterQFlowRangeErr. Process Validity is the inverse of the 'OR' of the continuous flow analysis validities (IsAbnormalProfileDetected, IsBlockageDetected, IsBoreBuildupDetected, IsLiquidDetected, IsSndVelCompErr) Process Validity is only selectable on device numbers (DeviceNumber) that support CFA (3418 and 3414).	RW	Y	Y	Y	long	-	-	int32	-	Frequency Output 1 validity (0) Flow direction (2) Dual-Configuration meter flow rate range validity (3) Process validity (4)	2	0	4
8034	Freq2Content	Frequency Output 2 pair content Selects the data to be represented by the Frequency Output 2 pair (Freq2A (Freq2ChnlA) and Freq2B (Freq2ChnlB)) to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). See Gas Ultrasonic Installation, Operations or Maintenance and Troubleshooting manuals.	RW	Y	Y	Y	long	-	-	int32	-	Uncorrected volume flow rate (0) Corrected volume flow rate (1) Average flow velocity (2) Average speed of sound (3) Energy flow rate (4) Mass flow rate (5)	0	0	5
8036	Freq2Dir	Selects the flow direction represented by the Frequency Output 2 pair (Freq2A, Freq2B) Selects the flow direction represented by the Frequency Output 2 pair (Freq2A (Freq2ChnlA) and Freq2B (Freq2ChnlB)). When set to "Reverse" or "Forward", both channels A and B represent the specified content when the flow is in selected direction. When set to "Absolute", both channels A and B represent the specified content regardless of the flow direction. When set to "Bidirectional", channel A represents the specified content when the flow is in the forward direction and channel B represents the specified content when flow is in the reverse direction. See Gas Ultrasonic Installation, Operations or Maintenance and Troubleshooting manuals. Mark II upgrade note: this data point is similar (but not identical) in function to the Mark II Freq1Content register.	RW	Y	Y	Y	long	-	-	int32	-	Reverse (0) Forward (1) Absolute (2) Bidirectional (3)	1	0	3
8038	Freq2BPhase	Frequency Output 2B phase relative to 2A Selects the Frequency Output 2 pair channel B phase relative to the channel A phase based on the flow direction.	RW	Y	Y	Y	long	-	-	int32	-	Lag forward, Lead reverse (0) Lead forward, Lag reverse (1)	0	0	1
8040	DO2AContent	Digital Output 2A content selector Selects the content (Freq2 Validity (1), Flow Direction (2), Dual-Configuration meter flow rate range validity (3), or Process Validity (4)) for Digital Output 2A to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). Freq2 Validity is Freq2DataValidity. Flow Direction is FlowDir. Dual-Configuration meter flow rate range validity is the inverse of IsColocMeterQFlowRangeErr. Process Validity is the inverse of the 'OR' of the continuous flow analysis validities (IsAbnormalProfileDetected, IsBlockageDetected, IsBoreBuildupDetected, IsLiquidDetected, IsSndVelCompErr) Process Validity is only selectable on device numbers (DeviceNumber) that support CFA (3418 and 3414).	RW	Y	Y	Y	long	-	-	int32	-	Frequency Output 2 validity (1) Flow direction (2) Dual-Configuration meter flow rate range validity (3) Process validity (4)	1	1	4
8042	DO2BContent	Digital Output 2B content selector Selects the content (Freq2 Validity (1), Flow Direction (2), Dual-Configuration meter flow rate range validity (3), or Process Validity (4)) for Digital Output 2B to be directed to Frequency/Digital Output 1 (FODO1Source), Frequency/Digital Output 2 (FODO2Source), Frequency/Digital Output 3 (FODO3Source), Frequency/Digital Output 4 (FODO4Source), Frequency/Digital Output 5 (FODO5Source) or Frequency/Digital Output 6 (FODO6Source). Freq2 Validity is Freq2DataValidity. Flow Direction is FlowDir. Dual-Configuration meter flow rate range validity is the inverse of IsColocMeterQFlowRangeErr. Process Validity is the inverse of the 'OR' of the continuous flow analysis validities (IsAbnormalProfileDetected, IsBlockageDetected, IsBoreBuildupDetected, IsLiquidDetected, IsSndVelCompErr) Process Validity is only selectable on device numbers (DeviceNumber) that support CFA (3418 and 3414).	RW	Y	Y	Y	long	-	-	int32	-	Frequency Output 2 validity (1) Flow direction (2) Dual-Configuration meter flow rate range validity (3) Process validity (4)	2	1	4
8044	HCH_Method	AGA8 method selector Selects the AGA8 calculation method. If the calculations are to be performed externally, then the calculation results must be specified (SpecRhoMixFlow, SpecZBase and SpecZFlow). For AGA8 method to be "Gross Method 1" or "Gross Method 2" or "Detail Method (AGA8, 1994)" or "GERG-2008 (AGA8 Part 2, 2017)", the base-condition pressure and temperature values must be specified (PBase and TBase), the flow-condition pressure input (EnablePressureInput) and temperature input (EnableTemperatureInput) must be "Fixed" (SpecFlowPressure and SpecFlowTemperature) or "Live" or "Transmitter Head 1" and the gas composition source (GasPropertiesSrcSel) must be "Fixed" or "Live - GC" or "Transmitter Head 1".	RW	Y	Y	Y	long	-	-	int32	-	External (0) Gross Method 1 (1) Gross Method 2 (2) Detail Method (3) GERG-2008 (5) None (4)	4	0	5
8046	MaxNoise	Maximum noise energy threshold Maximum noise energy threshold. If the signal's noise energy is above this threshold, the signal for that transducer firing is discarded. If a chord has at least one signal for a batch discarded due to too large noise energy, the chord's max noise alarm, DidExceedMaxNoiseA, DidExceedMaxNoiseB, DidExceedMaxNoiseC, DidExceedMaxNoiseD, DidExceedMaxNoiseE, DidExceedMaxNoiseF, DidExceedMaxNoiseG, DidExceedMaxNoiseH is set to TRUE (1).	RW	Y	Y	Y	long	energy (MkII equiv)	energy (MkII equiv)	uint32	energy		195	24	391
8048	MinHoldTmSI	Minimum sampling hold time in sample intervals Minimum sampling hold time in sample intervals. It is computed from the minimum hold time in usec (MinHoldTime) using the duration of a sample interval (SampInterval).	R				long	sample intervals	sample intervals	uint32	sample intervals				
8050	MaxHoldTmSI	Maximum sampling hold time in sample intervals Maximum sampling hold time in sample intervals. It is computed from the maximum hold time in usec (MaxHoldTm) using the duration of a sample interval (SampInterval).	R				long	sample intervals	sample intervals	uint32	sample intervals				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8052	AcqModuleErrorReasons	Reason for Acquisition Module error Reason for Acquisition Module error when (IsAcqModuleError) is indicated. A value of zero indicates no error. Bit Value Description: 0x00000001 AcqModuleExtendedStatusAvailable - Acquisition Module extended status is available. Check the further data in AcqModuleExtendedStatus 0x00000002 AcqModuleReprogrammingFailed - Acquisition Module reprogramming error. Check the AcqModuleMaxReprogramFail bit (below) to see if all attempts have failed. 0x00000004 AcqModuleCommNoLink - No Ethernet connection to the Acquisition Module. Check the interconnect cable between the Acquisition Module and the CPU Module. 0x00000008 AcqModuleCommNoComm - No communications to the Acquisition Module / unable to ping. Check the interconnect cable between the Acquisition Module and the CPU Module and/or cycle power to the meter. 0x00000010 AcqModuleCommFail - Acquisition Module communications failure. A command or response has failed. Check the interconnect cable between the Acquisition Module and the CPU Module and/or cycle power to the meter. 0x00000200 AcqModuleImageFailure - Acquisition Module loader file is corrupted. Download new firmware to the meter using Program Download in MeterLink™. 0x00000400 AcqModuleMaxReprogramFail - The maximum number of Acquisition Module reprogramming retries has been exceeded. Replace the Acquisition Module. If the issue is unresolved, contact your local area Emerson Flow service representative.	R				long	-	-	uint32	-				
8054	AcqModuleExtendedStatus	Extended status returned from Acquisition Module Status returned from Acquisition Module when the reason for the Acquisition Module error (AcqModuleErrorReasons) is ExtendedStatusAvailable (0x01) Bit Value Description: 0x00000000 ACQUISITION_NO_EXTENDED_ERROR 0x00000001 Not used 0x00000002 ACQUISITION_FLASH_POLL_TIMEOUT_ERROR 0x00000004 ACQUISITION_FLASH_INVALID_SECTOR_ERROR 0x00000008 ACQUISITION_FLASH_PROCESS_COMMAND_ERR_ERROR 0x00000010 ACQUISITION_FLASH_BUFFER_IS_NULL_ERROR 0x00000020 Not used 0x00000040 ACQUISITION_FLASH_VERIFY_WRITE_ERROR 0x00000080 ACQUISITION_FLASH_UNKNOWN_COMMAND_ERROR 0x00000100 ACQUISITION_FLASH_NO_ACCESS_SECTOR_ERROR 0x00000200 Not used 0x00000400 Not used 0x00000800 Not used 0x00001000 Not used 0x00002000 Not used 0x00004000 Not used 0x00008000 Not used 0x00010000 ACQUISITION_FPGA_LOAD_FAIL 0x00020000 Not used 0x00040000 ACQUISITION_RAM_FAIL 0x00080000 ACQUISITION_FLASH_FAIL 0x00100000 ACQUISITION_UPTIME_TEST_FAIL 0x00200000 ACQUISITION_ACQ_REPROGRAM_FAIL 0x00400000 Not used 0x00800000 Not used 0x01000000 ACQUISITION_WATCHDOG_OCCURRED 0x02000000 ACQUISITION_WAVEFORM_SEQUENCE_ERROR (Reserved for engineering) 0x04000000 Not used 0x08000000 Not used 0x10000000 Not used 0x20000000 Not used	R				long	-	-	uint32	-				
8056	TimeLapse2	Accumulated time pulses (1000 pulses/sec) Accumulated time pulses (1000 pulses/sec).	R	Y			long	sec	sec	uint64	Time pulses				
8058	AccumFlowTime	Accumulated flow time Accumulated time when flow is greater than the cutoff.	R				long	sec	sec	uint32	sec				
8060	MsqvA1	Maximum signal quality value (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8062	MsqvA2	Maximum signal quality value (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8064	MsqvB1	Maximum signal quality value (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8066	MsqvB2	Maximum signal quality value (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8068	MsqvC1	Maximum signal quality value (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8070	MsqvC2	Maximum signal quality value (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8072	MsqvD1	Maximum signal quality value (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8074	MsqvD2	Maximum signal quality value (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8076	MsqvE1	Maximum signal quality value (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8078	MsqvE2	Maximum signal quality value (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8080	MsqvF1	Maximum signal quality value (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8082	MsqvF2	Maximum signal quality value (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8084	MsqvG1	Maximum signal quality value (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8086	MsqvG2	Maximum signal quality value (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8088	MsqvH1	Maximum signal quality value (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8090	MsqvH2	Maximum signal quality value (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8092	PfvA1	Critical point value (A1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8094	PfvA2	Critical point value (A2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8096	PfvB1	Critical point value (B1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8098	PfvB2	Critical point value (B2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8100	PfvC1	Critical point value (C1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8102	PfvC2	Critical point value (C2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8104	PfvD1	Critical point value (D1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8106	PfvD2	Critical point value (D2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8108	PfvE1	Critical point value (E1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8110	PfvE2	Critical point value (E2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8112	PfvF1	Critical point value (F1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8114	PfvF2	Critical point value (F2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8116	PfvG1	Critical point value (G1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8118	PfvG2	Critical point value (G2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8120	PfvH1	Critical point value (H1) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8122	PfvH2	Critical point value (H2) The value is updated only while the update path diagnostics control (DoUpdtPathDiag) is TRUE (1).	R				long	-	-	uint32	-				
8124	HourlyMacro1	Hourly log macro 1 Hourly log macro status indicator 1. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
8126	HourlyMacro2	Hourly log macro 2 Hourly log macro status indicator 2. This is a bitfield that contains a variety of alarms bits that were active in the last logging hour. Each bit is "sticky" for the logging period and clears for the next hour if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
8128	DailyMacro1	Daily log macro 1 Daily log macro status indicator 1. This is a bitfield that contains a variety of alarms bits that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
8130	DailyMacro2	Daily log macro 2 Daily log macro status indicator 2. This is a bitfield that contains a variety of alarms bits not contained in status 1 that were active in the last logging day. Each bit is "sticky" for the logging period and clears for the next day if the condition cleared in that period. Consult the alarm log for further information.	R	Y			long	-	-	uint32	-				
8132	RawSEA1	Raw (non-normalized) signal energy (A1) Raw (non-normalized) signal energy (A1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8134	RawSEA2	Raw (non-normalized) signal energy (A2) Raw (non-normalized) signal energy (A2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8136	RawSEB1	Raw (non-normalized) signal energy (B1) Raw (non-normalized) signal energy (B1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8138	RawSEB2	Raw (non-normalized) signal energy (B2) Raw (non-normalized) signal energy (B2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8140	RawSEC1	Raw (non-normalized) signal energy (C1) Raw (non-normalized) signal energy (C1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8142	RawSEC2	Raw (non-normalized) signal energy (C2) Raw (non-normalized) signal energy (C2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8144	RawSED1	Raw (non-normalized) signal energy (D1) Raw (non-normalized) signal energy (D1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8146	RawSED2	Raw (non-normalized) signal energy (D2) Raw (non-normalized) signal energy (D2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8148	RawSEE1	Raw (non-normalized) signal energy (E1) Raw (non-normalized) signal energy (E1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8150	RawSEE2	Raw (non-normalized) signal energy (E2) Raw (non-normalized) signal energy (E2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8152	RawSEF1	Raw (non-normalized) signal energy (F1) Raw (non-normalized) signal energy (F1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8154	RawSEF2	Raw (non-normalized) signal energy (F2) Raw (non-normalized) signal energy (F2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8156	RawSEG1	Raw (non-normalized) signal energy (G1) Raw (non-normalized) signal energy (G1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8158	RawSEG2	Raw (non-normalized) signal energy (G2) Raw (non-normalized) signal energy (G2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8160	RawSEH1	Raw (non-normalized) signal energy (H1) Raw (non-normalized) signal energy (H1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8162	RawSEH2	Raw (non-normalized) signal energy (H2) Raw (non-normalized) signal energy (H2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8164	RawNEA1	Raw (non-normalized) noise energy (A1) Raw (non-normalized) noise energy (A1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8166	RawNEA2	Raw (non-normalized) noise energy (A2) Raw (non-normalized) noise energy (A2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8168	RawNEB1	Raw (non-normalized) noise energy (B1) Raw (non-normalized) noise energy (B1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8170	RawNEB2	Raw (non-normalized) noise energy (B2) Raw (non-normalized) noise energy (B2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8172	RawNEC1	Raw (non-normalized) noise energy (C1) Raw (non-normalized) noise energy (C1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8174	RawNEC2	Raw (non-normalized) noise energy (C2) Raw (non-normalized) noise energy (C2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8176	RawNED1	Raw (non-normalized) noise energy (D1) Raw (non-normalized) noise energy (D1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8178	RawNED2	Raw (non-normalized) noise energy (D2) Raw (non-normalized) noise energy (D2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8180	RawNEE1	Raw (non-normalized) noise energy (E1) Raw (non-normalized) noise energy (E1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8182	RawNEE2	Raw (non-normalized) noise energy (E2) Raw (non-normalized) noise energy (E2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8184	RawNEF1	Raw (non-normalized) noise energy (F1) Raw (non-normalized) noise energy (F1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8186	RawNEF2	Raw (non-normalized) noise energy (F2) Raw (non-normalized) noise energy (F2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8188	RawNEG1	Raw (non-normalized) noise energy (G1) Raw (non-normalized) noise energy (G1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8190	RawNEG2	Raw (non-normalized) noise energy (G2) Raw (non-normalized) noise energy (G2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8192	RawNEH1	Raw (non-normalized) noise energy (H1) Raw (non-normalized) noise energy (H1).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8194	RawNEH2	Raw (non-normalized) noise energy (H2) Raw (non-normalized) noise energy (H2).	R				long	energy (raw)	energy (raw)	uint32	energy (raw)				
8196	AO1Dir	Selects the flow direction represented by the Analog Output 1 Selects the flow direction represented by Analog Output 1. When set to "Reverse" or "Forward", the analog output represents the specified content when the flow is in selected direction. When set to "Absolute", the analog output represents the specified content regardless of the flow direction.	RW	Y	Y	Y	long	-	-	int32	-	Reverse (0) Forward (1) Absolute (2)	2	0	2
8198	AO2Dir	Selects the flow direction represented by the Analog Output 2 Selects the flow direction represented by Analog Output 2. When set to "Reverse" or "Forward", the analog output represents the specified content when the flow is in selected direction. When set to "Absolute", the analog output represents the specified content regardless of the flow direction.	RW	Y	Y	Y	long	-	-	int32	-	Reverse (0) Forward (1) Absolute (2)	2	0	2
8200	AGA8BaseCalcStatus	AGA8 base-condition calculation status This alarm indicates an error when AGA8 calculations are invalid. This indicates an alarm if the AGA8 base-condition calculation is invalid. AGA8 base-condition becomes invalid if AreGasPropertiesInvalidInUse is set to invalid or this alarm has a non zero value. Value Description -1 AGA8 calculations not performed (neither internally nor externally). 0 Calculations successful. 1 (Gross Method 1 only) H_CH could not be calculated due to conflicting user inputs. 2 Bmix could not be calculated due to an attempt to take the square root of a negative number. 3 H_CH could not be calculated as the number of iterations for the selected gross method exceeded the limit. 4 The virial coefficient for either the equivalent hydrocarbon or carbon dioxide is negative; the natural gas mixture third virial coefficient was not calculated. 5 The molar density was not bounded. 6 The iterative algorithm to estimate the molar density did not converge. 7 Not used. 8 Not used. 9 Not used. 10 Division by zero error during air mass density calculation. 11 (Gross Method 1 only) Division by zero error during HN_GERG calculation. 12 (Gross Methods 1 and 2) Division by zero or square root of negative number error during compressibility calculation. 13 (Gross Method 1 only) Division by zero error during H_CH calculation. 14 (Gross Method 1 only) Division by zero error during calculation of compressibility estimate at density reference condition. 15 Division by zero error during calculation of new compressibility estimate at specific gravity reference condition. 16 Division by zero error during calculation of ratio for determining H_CH calculation iterative loop exit. 17 (Gross Method 2 only) Division by zero error during the calculation of the equivalent hydrocarbon molar mass. 18 Division by zero error during calculation of the mixture molar mass. 19 Division by zero error during calculation of the new density estimate. 20 Division by zero error during calculation of the density estimate. 21 Not used. 22 Not used. 23 (Detail Method only) Division by zero error during coefficient B calculation. 24 (Detail Method only) Division by zero error during molar density calculation. 25 (Detail Method only) Division by zero or square root of negative number error during compressibility calculation. 26 Gas properties are invalid. 27 Not Used. 28 (Detail and GERG-2008) Gas component(s) is/are outside AGA specified gas component range.	R				long	-	-	int32	-				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8202	AGA8FlowCalcStatus	AGA8 flow-condition calculation status AGA8 flow-condition calculation status. See AGA8BaseCalcValidity. Value Description -1 AGA8 calculations not performed (neither internally nor externally). 0 Calculations successful. 1 (Gross Method 1 only) H_CH could not be calculated due to conflicting user inputs. 2 Bmix could not be calculated due to an attempt to take the square root of a negative number. 3 H_CH could not be calculated as the number of iterations for the selected gross method exceeded the limit. 4 The virial coefficient for either the equivalent hydrocarbon or carbon dioxide is negative; the natural gas mixture third virial coefficient was not calculated. 5 The molar density was not bounded. 6 The iterative algorithm to estimate the molar density did not converge. 7 Not used. 8 Not used. 9 Not used. 10 Division by zero error during air mass density calculation. 11 (Gross Method 1 only) Division by zero error during HN_GERG calculation. 12 (Gross Methods 1 and 2) Division by zero or square root of negative number error during compressibility calculation. 13 (Gross Method 1 only) Division by zero error during H_CH calculation. 14 (Gross Method 1 only) Division by zero error during calculation of compressibility estimate at density reference condition. 15 Division by zero error during calculation of new compressibility estimate at specific gravity reference condition. 16 Division by zero error during calculation of ratio for determining H_CH calculation iterative loop exit. 17 (Gross Method 2 only) Division by zero error during the calculation of the equivalent hydrocarbon molar mass. 18 Division by zero error during calculation of the mixture molar mass. 19 Division by zero error during calculation of the new density estimate. 20 Division by zero error during calculation of the density estimate. 21 Not used. 22 Not used. 23 (Detail Method only) Division by zero error during coefficient B calculation. 24 (Detail Method only) Division by zero error during molar density calculation. 25 (Detail Method only) Division by zero or square root of negative number error during compressibility calculation. 26 Flow-condition pressure, temperature and/or gas properties are/is invalid. 27 Flow-condition calculations were not performed due to a base-condition calculation error/not performed. 28 (Detail and GERG-2008) Gas component(s) is/are outside AGA specified gas component range 29 Failed to read flow-condition pressure, temperature and/or gas properties from Transmitter Head 1	R				long	-	-	int32	-				
8204	AGA8CalcValidStatusValue	AGA8 calculation status alarm limit AGA8 calculation status alarm limit. Any AGA8 calculation status value (AGA8FlowCalcStatus) and AGA8BaseCalcStatus are greater than or equal to this limit will cause an alarm log entry.	R				long	-	-	int32	-				
8206	PosVolUncorr (Deprecated)	Forward uncorrected volume Accumulation of uncorrected volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8208	NegVolUncorr (Deprecated)	Reverse uncorrected volume Accumulation of uncorrected volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8210	PosVolFlow (Deprecated)	Forward flow-condition volume Accumulation of flow-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid (PosVolFlowAct) and forward flow-condition volume when flow rate is invalid (PosVolFlowErr) is equal to forward flow-condition volume. Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8212	NegVolFlow (Deprecated)	Reverse flow-condition volume Accumulation of flow-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid (NegVolFlowAct) and reverse flow-condition volume when flow rate is invalid (NegVolFlowErr) is equal to reverse flow-condition volume. Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8214	PosVolBase (Deprecated)	Forward base-condition volume Accumulation of base-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8216	NegVolBase (Deprecated)	Reverse base-condition volume Accumulation of base-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8218	PosEnergy (Deprecated)	Forward accumulated energy Accumulation of flow energy in the forward direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in MJ (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in MMBtu (multiply by 1,000,000,000 to add to accumulator)	uint64	MJ				
8220	NegEnergy (Deprecated)	Reverse accumulated energy Accumulation of flow energy in the reverse direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in MJ (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in MMBtu (multiply by 1,000,000,000 to add to accumulator)	uint64	MJ				
8222	PosMass (Deprecated)	Forward accumulated mass Accumulation of flow mass in the forward direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in kg (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in lbm (multiply by 1,000,000,000 to add to accumulator)	uint64	kg				
8224	NegMass (Deprecated)	Reverse accumulated mass Accumulation of flow mass in the reverse direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in kg (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in lbm (multiply by 1,000,000,000 to add to accumulator)	uint64	kg				
8226	PrevHourFlowPosVol	Previous hour's forward volume at flow condition Previous hour's flow-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8228	PrevHourFlowNegVol	Previous hour's reverse volume at flow condition Previous hour's flow-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8230	PrevHourBasePosVol	Previous hour's forward volume at base condition Previous hour's base-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8232	PrevHourBaseNegVol	Previous hour's reverse volume at base condition Previous hour's base-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8234	PrevHourPosEnergy	Previous hour's forward energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MBtu	uint32	MJ				
8236	PrevHourNegEnergy	Previous hour's reverse energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MBtu	uint32	MJ				
8238	PrevHourPosMass	Previous hour's forward mass This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8240	PrevHourNegMass	Previous hour's reverse mass This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8242	PrevDayFlowPosVol	Previous day's forward volume at flow condition Previous day's flow-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8244	PrevDayFlowNegVol	Previous day's reverse volume at flow condition Previous day's flow-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8246	PrevDayBasePosVol	Previous day's forward volume at base condition Previous day's base-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8248	PrevDayBaseNegVol	Previous day's reverse volume at base condition Previous day's base-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8250	PrevDayPosEnergy	Previous day's forward energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MMBtu	uint32	MJ				
8252	PrevDayNegEnergy	Previous day's reverse energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MMBtu	uint32	MJ				
8254	PrevDayPosMass	Previous day's forward mass This point is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8256	PrevDayNegMass	Previous day's reverse mass This point is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8258	CurrHourFlowPosVol	Current hour's flow-condition positive volume (int) Current hour's flow-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8260	CurrHourFlowNegVol	Current hour's flow-condition negative volume (int) Current hour's flow-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8262	CurrHourBasePosVol	Current hour's base-condition positive volume (int) Current hour's base-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8264	CurrHourBaseNegVol	Current hour's base-condition negative volume (int) Current hour's base-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8266	CurrHourPosEnergy	Current hour's forward energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MBtu	uint32	MJ				
8268	CurrHourNegEnergy	Current hour's reverse energy This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MBtu	uint32	MJ				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8270	CurrHourPosMass	Current hour's forward mass This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8272	CurrHourNegMass	Current hour's reverse mass This point is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8274	CurrDayFlowPosVol	Current day's flow-condition positive volume (int) Current day's flow-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8276	CurrDayFlowNegVol	Current day's flow-condition negative volume (int) Current day's flow-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8278	CurrDayBasePosVol	Current day's base-condition positive volume (int) Current day's base-condition positive volume (int).	R	Y			long	m3	ft3	uint32	m3				
8280	CurrDayBaseNegVol	Current day's base-condition negative volume (int) Current day's base-condition negative volume (int).	R	Y			long	m3	ft3	uint32	m3				
8282	CurrDayPosEnergy	Current day's forward energy Current day's forward energy. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MMBtu	uint32	MJ				
8284	CurrDayNegEnergy	Current day's reverse energy Current day's reverse energy. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph.	R	Y			long	MJ	MMBtu	uint32	MJ				
8286	CurrDayPosMass	Current day's forward mass Current day's forward mass. This point is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8288	CurrDayNegMass	Current day's reverse mass Current day's reverse mass. This point is only applicable when the AGA8 calculations are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow).	R	Y			long	kg	lbm	uint32	kg				
8290	AO1Content	Analog Output 1 content (and HART primary variable) Selects the data to be represented by Analog Output 1. Is used for HART communication as the Primary Variable content.	RW	Y	Y	Y	long	-	-	int32	-	Uncorrected volume flow rate (0) Corrected volume flow rate (1) Average flow velocity (2) Average speed of sound (3) Energy flow rate (4) Mass flow rate (5)	0	0	5
8292	AO2Content	Analog Output 2 content (and HART secondary variable) Selects the data to be represented by Analog Output 2. Is used for HART communication as the Secondary Variable content.	RW	Y	Y	Y	long	-	-	int32	-	Uncorrected volume flow rate (0) Corrected volume flow rate (1) Average flow velocity (2) Average speed of sound (3) Energy flow rate (4) Mass flow rate (5)	0	0	5
8294	GCStartCycleTime	Most recent GC analysis cycle start date and time Start date and time of the most recent GC analysis in POSIX-compliant "time_t" format (seconds elapsed since midnight January 1, 1970).	R	Y			long	Epoch sec	Epoch sec	int32	Epoch sec				
8296	GCProtocol	GC communication protocol Selects the type of Modbus protocol (ASCII or RTU) used to communicate with the GC.	RW	Y	Y	Y	long	-	-	uint32	-	ASCII (0) RTU (1)	0	0	1
8298	GCBaud	GC communication baud rate Baud rate used to communicate serially to a GC.	RW	Y	Y	Y	long	bits/sec	bits/sec	uint32	bits/sec	1200 (1200) 2400 (2400) 9600 (9600) 19200 (19200) 38400 (38400) 57600 (57600) 115200 (115200)	9600	1200	115200
8300	GCTCPPort	Modbus TCP communication port number for GC Gas chromatograph port number for Modbus TCP communication. This must be configured when the gas composition source for AGA8 and AGA10 calculations (GasPropertiesSrcSel) is live set to Live - GC (1) and the communication port for GC (GCSerialPort) is set to Ethernet (128). The meter acts as Modbus TCP client which connects to GC (Modbus TCP server) on this port number and GC IP address (GCIPAddr).	RW	Y	Y		long	-	-	uint32	-		502	0	65535
8302	FwdBaselineTime	Time of forward flow baseline The time value when the baseline is taken in the forward direction.	R	Y	Y	Y	long	sec	sec	int32	Epoch sec		0	0	2147483647
8304	RevBaselineTime	Time of reverse flow baseline The time value when the baseline is taken in the reverse direction.	R	Y	Y	Y	long	sec	sec	int32	Epoch sec		0	0	2147483647
8306	FwdBoreBuildupDailyLogRecNum1	First daily log record indicating forward flow bore buildup The number of the Daily Log record that indicates the first day of possible bore buildup while flow is in the forward direction.	R	Y			long	-	-	uint32	-				
8308	FwdBoreBuildupDailyLogRecNum2	Second daily log record indicating forward flow bore buildup The number of the Daily Log record that indicates the second day of possible bore buildup while flow is in the forward direction.	R	Y			long	-	-	uint32	-				
8310	FwdBoreBuildupDailyLogRecNum3	Third daily log record indicating forward flow bore buildup The number of the Daily Log record that indicates the third day of possible bore buildup while flow is in the forward direction.	R	Y			long	-	-	uint32	-				
8312	FwdBoreBuildupDailyLogRecNum4	Fourth daily log record indicating forward flow bore buildup The number of the Daily Log record that indicates the fourth day of possible bore buildup while flow is in the forward direction.	R	Y			long	-	-	uint32	-				
8314	FwdBoreBuildupDailyLogRecNum5	Fifth daily log record indicating forward flow bore buildup The number of the Daily Log record that indicates the fifth day of possible bore buildup while flow is in the forward direction.	R	Y			long	-	-	uint32	-				
8316	RevBoreBuildupDailyLogRecNum1	First daily log record indicating reverse flow bore buildup The number of the Daily Log record that indicates the first day of possible bore buildup while flow is in the reverse direction.	R	Y			long	-	-	uint32	-				
8318	RevBoreBuildupDailyLogRecNum2	Second daily log record indicating reverse flow bore buildup The number of the Daily Log record that indicates the second day of possible bore buildup while flow is in the reverse direction.	R	Y			long	-	-	uint32	-				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8320	RevBoreBuildupDailyLogRecNum3	Third daily log record indicating reverse flow bore buildup The number of the Daily Log record that indicates the third day of possible bore buildup while flow is in the reverse direction.	R	Y			long	-	-	uint32	-				
8322	RevBoreBuildupDailyLogRecNum4	Fourth daily log record indicating reverse flow bore buildup The number of the Daily Log record that indicates the fourth day of possible bore buildup while flow is in the reverse direction.	R	Y			long	-	-	uint32	-				
8324	RevBoreBuildupDailyLogRecNum5	Fifth daily log record indicating reverse flow bore buildup The number of the Daily Log record that indicates the fifth day of possible bore buildup while flow is in the reverse direction.	R	Y			long	-	-	uint32	-				
8326	BatchSeqNum	Batch sequence number The batch sequence number which is zero on a warm start and then incremented each batch period (BatchUpdatePeriod).	R				long	-	-	uint32	-				
8328	ProgramChksum	Program checksum value This is the checksum of the meter's programs. All NOR flash program partitions are included in the checksum.	R	Y			long	-	-	uint32	-				
8330	CnfgChksumValue	Configuration checksum value This is the checksum of the meter's configuration. All non-STRING write-protected data points are included in the checksum. The timestamp of the most recent change is in configuration checksum date (CnfgChksumDate).	R	Y			long	-	-	uint32	-				
8332	PropUpdtSecondsOverride	Override time required for updating chord proportions When enabled, the number of failure free seconds required (PropUpdtSeconds) is overridden such that chord proportion bins shall be updated (IsPropUpdtActive) whenever the number of consecutive batches without chord failures (CurrPropUpdateBatches) is greater than 24. The purpose of this override is to allow testing of chord proportions before the required time has elapsed since the last chord failure (PropUpdtSeconds). This should only be enabled under the direction of Emerson Flow Support.	RW			Y	long	-	-	uint16	-		0	0	65535
8350	DataQlty	Flow data quality Flow data quality indicator. This is a bitfield consisting of multiple Boolean data point values and indicates the meter is operating at less than optimal performance.	R	*	*	*	long	-	-	bitfield	-	0 IsHardFailedA (NV) 1 IsHardFailedB (NV) 2 IsHardFailedC (NV) 3 IsHardFailedD (NV) 4 IsHardFailedE (NV) 5 IsHardFailedF (NV) 6 IsHardFailedG (NV) 7 IsHardFailedH (NV) 9 IsSndVelCompErr (NV) 16 IsTooFewOperChords (NV) 17 IsMeterVelAboveMaxLmt (NV)			
8352	ChordInactv	Chord inactive Chord inactive indicator. Used to set one or more chords to be inactive. At least one chord must be active. The range and default value are dependent upon the meter type (indicated by the DeviceNumber). If a chord is set to be inactive, its corresponding IsBatchInactiveA, IsBatchInactiveB, IsBatchInactiveC, IsBatchInactiveD, IsBatchInactiveE, IsBatchInactiveF, IsBatchInactiveG, IsBatchInactiveH, data point(s) is set to TRUE (1).	R	*	*	*	long	-	-	bitfield	-	0 ChordInactvA (NV, Cnfg, Prot) 1 ChordInactvB (NV, Cnfg, Prot) 2 ChordInactvC (NV, Cnfg, Prot) 3 ChordInactvD (NV, Cnfg, Prot) 4 ChordInactvE (NV, Cnfg, Prot) 5 ChordInactvF (NV, Cnfg, Prot) 6 ChordInactvG (NV, Cnfg, Prot) 7 ChordInactvH (NV, Cnfg, Prot)			
8354	SystemStatus	General system status General system status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	1 AreSwComponentsIncompatible (NV) 2 DidPowerFail (NV, Cnfg) 3 IsAcqModuleIncompatible (NV) 4 IsXdcrFiringSyncError (NV) 5 IsEstimatedFlowVelocityInUse (NV) 6 DidWarmStart (NV, Cnfg) 7 IsColocMeterQFlowRangeErr (NV) 8 IsTooFewOperChords (NV) 9 IsMeterVelAboveMaxLmt (NV) 10 IsBlockageDetected (NV) 11 IsBoreBuildupDetected (NV) 12 IsLiquidDetected (NV) 13 IsAbnormalProfileDetected (NV) 14 IsReverseFlowDetected (NV) 15 WatchDogReset (NV, Cnfg)			
8356	StatusA	Chord A status Chord A status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseA (NV) 1 IsSNRTooLowA (NV) 2 DidTmDevChkFailA (NV) 4 DidDltTmChkFailA (NV) 5 IsXdcrMaintenanceRequiredA (NV, Cnfg) 6 IsStackingIncompleteA (NV) 7 IsChordLengthMismatchedA (NV) 8 IsSigClippedA (NV) 9 IsSigQltyBadA (NV) 10 IsSigDistortedA (NV) 11 IsPeakSwitchDetectedA (NV) 12 IsMeasSndSpdRangeA (NV) 13 IsBatchInactiveA (NV) 14 IsFailedForBatchA (NV) 15 IsAcqMode (NV)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8358	StatusB	Chord B status Chord B status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseB (NV) 1 IsSNRTooLowB (NV) 2 DidTmDevChkFailB (NV) 4 DidDltTmChkFailB (NV) 5 IsXdcrMaintenanceRequiredB (NV, Cnfg) 6 IsStackingIncompleteB (NV) 7 IsChordLengthMismatchedB (NV) 8 IsSigClippedB (NV) 9 IsSigQltyBadB (NV) 10 IsSigDistortedB (NV) 11 IsPeakSwitchDetectedB (NV) 12 IsMeasSndSpdRangeB (NV) 13 IsBatchInactiveB (NV) 14 IsFailedForBatchB (NV) 15 IsAcqMode (NV)			
8360	StatusC	Chord C status Chord C status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseC (NV) 1 IsSNRTooLowC (NV) 2 DidTmDevChkFailC (NV) 4 DidDltTmChkFailC (NV) 5 IsXdcrMaintenanceRequiredC (NV, Cnfg) 6 IsStackingIncompleteC (NV) 7 IsChordLengthMismatchedC (NV) 8 IsSigClippedC (NV) 9 IsSigQltyBadC (NV) 10 IsSigDistortedC (NV) 11 IsPeakSwitchDetectedC (NV) 12 IsMeasSndSpdRangeC (NV) 13 IsBatchInactiveC (NV) 14 IsFailedForBatchC (NV) 15 IsAcqMode (NV)			
8362	StatusD	Chord D status Chord D status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseD (NV) 1 IsSNRTooLowD (NV) 2 DidTmDevChkFailD (NV) 4 DidDltTmChkFailD (NV) 5 IsXdcrMaintenanceRequiredD (NV, Cnfg) 6 IsStackingIncompleteD (NV) 7 IsChordLengthMismatchedD (NV) 8 IsSigClippedD (NV) 9 IsSigQltyBadD (NV) 10 IsSigDistortedD (NV) 11 IsPeakSwitchDetectedD (NV) 12 IsMeasSndSpdRangeD (NV) 13 IsBatchInactiveD (NV) 14 IsFailedForBatchD (NV) 15 IsAcqMode (NV)			
8364	StatusE	Chord E status Chord E status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseE (NV) 1 IsSNRTooLowE (NV) 2 DidTmDevChkFailE (NV) 4 DidDltTmChkFailE (NV) 5 IsXdcrMaintenanceRequiredE (NV, Cnfg) 6 IsStackingIncompleteE (NV) 7 IsChordLengthMismatchedE (NV) 8 IsSigClippedE (NV) 9 IsSigQltyBadE (NV) 10 IsSigDistortedE (NV) 11 IsPeakSwitchDetectedE (NV) 12 IsMeasSndSpdRangeE (NV) 13 IsBatchInactiveE (NV) 14 IsFailedForBatchE (NV) 15 IsAcqMode (NV)			
8366	StatusF	Chord F status Chord F status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseF (NV) 1 IsSNRTooLowF (NV) 2 DidTmDevChkFailF (NV) 4 DidDltTmChkFailF (NV) 5 IsXdcrMaintenanceRequiredF (NV, Cnfg) 6 IsStackingIncompleteF (NV) 7 IsChordLengthMismatchedF (NV) 8 IsSigClippedF (NV) 9 IsSigQltyBadF (NV) 10 IsSigDistortedF (NV) 11 IsPeakSwitchDetectedF (NV) 12 IsMeasSndSpdRangeF (NV) 13 IsBatchInactiveF (NV) 14 IsFailedForBatchF (NV) 15 IsAcqMode (NV)			

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8368	StatusG	Chord G status Chord G status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseG (NV) 1 IsSNRTooLowG (NV) 2 DidTmDevChkFailG (NV) 4 DidDltTmChkFailG (NV) 5 IsXdcrMaintenanceRequiredG (NV, Cnfg) 6 IsStackingIncompleteG (NV) 7 IsChordLengthMismatchedG (NV) 8 IsSigClippedG (NV) 9 IsSigQltyBadG (NV) 10 IsSigDistortedG (NV) 11 IsPeakSwitchDetectedG (NV) 12 IsMeasSndSpdRangeG (NV) 13 IsBatchInactiveG (NV) 14 IsFailedForBatchG (NV) 15 IsAcqMode (NV)			
8370	StatusH	Chord H status Chord H status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	0 DidExceedMaxNoiseH (NV) 1 IsSNRTooLowH (NV) 2 DidTmDevChkFailH (NV) 4 DidDltTmChkFailH (NV) 5 IsXdcrMaintenanceRequiredH (NV, Cnfg) 6 IsStackingIncompleteH (NV) 7 IsChordLengthMismatchedH (NV) 8 IsSigClippedH (NV) 9 IsSigQltyBadH (NV) 10 IsSigDistortedH (NV) 11 IsPeakSwitchDetectedH (NV) 12 IsMeasSndSpdRangeH (NV) 13 IsBatchInactiveH (NV) 14 IsFailedForBatchH (NV) 15 IsAcqMode (NV)			
8372	FieldIOStatus	Ancillary devices and device status Externally connected devices and device status	R	*	*	*	long	-	-	bitfield	-	0 IsColocMeterCommErr (NV) 1 PressureInvalid (NV) 2 TemperatureInvalid (NV) 3 AreGasPropertiesInvalidInUse (NV) 4 IsGCCommErr (NV) 5 IsGCDataErr (NV) 7 IsGCAlarmPresent (NV) 8 DidResetUsers (NV, Cnfg) 18 IsCorePresent (NV, Cnfg)			
8374	SystemStatusLatched	General system status General system status indicator. This is a bitfield consisting of multiple Boolean data point values.	R	*	*	*	long	-	-	bitfield	-	7 IsColocMeterQFlowRangeErrLatched (NV) 8 IsTooFewOperChordsLatched (NV) 9 IsMeterVelAboveMaxLmtLatched (NV) 10 IsBlockageDetectedLatched (NV) 11 IsBoreBuildupDetectedLatched (NV) 12 IsLiquidDetectedLatched (NV) 13 IsAbnormalProfileDetectedLatched (NV) 14 IsReverseFlowDetectedLatched (NV)			
8376	FieldIOStatusLatched	Latched status of field IO Latched field IO indicator. This is a bitfield consisting of multiple latched Boolean data point values corresponding to the field I/O status (FieldIOStatus).	R	*	*	*	long	-	-	bitfield	-	0 IsColocMeterCommErrLatched (NV) 1 PressureInvalidLatched (NV) 2 TemperatureInvalidLatched (NV) 3 AreGasPropertiesInvalidInUseLatched (NV)			
8378	ProfileStatus	Status of profile factor Profile factor indicator. This is a bitfield consisting of multiple Boolean data point values corresponding to the Profile status group.	R	*	*	*	long	-	-	bitfield	-	0 IsAbnormalProfileDetected (NV) 1 IsBlockageDetected (NV) 2 IsBoreBuildupDetected (NV) 3 IsSevereFlowConditionDetected (NV)			
8380	ProfileStatusLatched	Latched status of profile factor Latched profile factor indicator. This is a bitfield consisting of multiple latched Boolean data point values corresponding to the profile status (ProfileStatus).	R	*	*	*	long	-	-	bitfield	-	0 IsAbnormalProfileDetectedLatched (NV) 1 IsBlockageDetectedLatched (NV) 2 IsBoreBuildupDetectedLatched (NV)			
8382	SOSCompareStatus	Status of SOS comparison Speed of sound comparison indicator. This is a bitfield consisting of multiple Boolean data point values corresponding to the speed of sound comparison group.	R	*	*	*	long	-	-	bitfield	-	0 IsSndVelCompErr (NV) 2 IsDiagnosticSndSpdRangeErr (NV) 3 IsColocMeterSndSpdRangeErr (NV)			
8384	SOSCompareStatusLatched	Latched status of SOS comparison Latched speed of sound comparison status indicator. This is a bitfield consisting of multiple latched Boolean data point values corresponding to the speed of sound compare status (SOSCompareStatus).	R	*	*	*	long	-	-	bitfield	-	0 IsSndVelCompErrLatched (NV) 2 IsDiagnosticSndSpdRangeErrLatched (NV) 3 IsColocMeterSndSpdRangeErrLatched (NV)			
8386	LiquidDetectedStatus	Status of liquid detection Liquid detection indicator. This is a bitfield consisting of multiple Boolean data point values corresponding to the liquid detection status group.	R	*	*	*	long	-	-	bitfield	-	0 IsLiquidDetected (NV)			
8388	LiquidDetectedLatched	Latched status of liquid detection Latched liquid detection indicator. This is a bitfield consisting of multiple latched Boolean data point values corresponding to liquid detected status (LiquidDetectedStatus).	R	*	*	*	long	-	-	bitfield	-	0 IsLiquidDetectedLatched (NV)			
8390	PosVolUncorr	Forward uncorrected volume Accumulation of uncorrected volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	m3	ft3	uint64	m3				
8392	PosVolUncorr	Forward uncorrected volume Accumulation of uncorrected volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter

Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8394	NegVolUncorr	Reverse uncorrected volume Accumulation of uncorrected volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	m3	ft3	uint64	m3				
8396	NegVolUncorr	Reverse uncorrected volume Accumulation of uncorrected volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8398	PosVolFlow	Forward flow-condition volume Accumulation of flow-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid (PosVolFlowAct) and forward flow-condition volume when flow rate is invalid (PosVolFlowErr) is equal to forward flow-condition volume. Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	Y			long	m3	ft3	uint64	m3				
8400	PosVolFlow	Forward flow-condition volume Accumulation of flow-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid (PosVolFlowAct) and forward flow-condition volume when flow rate is invalid (PosVolFlowErr) is equal to forward flow-condition volume. Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8402	NegVolFlow	Reverse flow-condition volume Accumulation of flow-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid (NegVolFlowAct) and reverse flow-condition volume when flow rate is invalid (NegVolFlowErr) is equal to reverse flow-condition volume. Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	Y			long	m3	ft3	uint64	m3				
8404	NegVolFlow	Reverse flow-condition volume Accumulation of flow-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid (NegVolFlowAct) and reverse flow-condition volume when flow rate is invalid (NegVolFlowErr) is equal to reverse flow-condition volume. Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8406	PosVolBase	Forward base-condition volume Accumulation of base-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	m3	ft3	uint64	m3				
8408	PosVolBase	Forward base-condition volume Accumulation of base-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8410	NegVolBase	Reverse base-condition volume Accumulation of base-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	m3	ft3	uint64	m3				
8412	NegVolBase	Reverse base-condition volume Accumulation of base-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	uint64	m3				
8414	PosEnergy	Forward accumulated energy Accumulation of flow energy in the forward direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	MJ	MMBtu	uint64	MJ				
8416	PosEnergy	Forward accumulated energy Accumulation of flow energy in the forward direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in MJ (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in MMBtu (multiply by 1,000,000,000 to add to accumulator)	uint64	MJ				
8418	NegEnergy	Reverse accumulated energy Accumulation of flow energy in the reverse direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	MJ	MMBtu	uint64	MJ				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8420	NegEnergy	Reverse accumulated energy Accumulation of flow energy in the reverse direction. This point is only applicable when the heating value is fixed (specified) or read from a gas chromatograph. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 MJ). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in MJ (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in MMBtu (multiply by 1,000,000,000 to add to accumulator)	uint64	MJ				
8422	PosMass	Forward accumulated mass Accumulation of flow mass in the forward direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	kg	lbm	uint64	kg				
8424	PosMass	Forward accumulated mass Accumulation of flow mass in the forward direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in kg (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in lbm (multiply by 1,000,000,000 to add to accumulator)	uint64	kg				
8426	NegMass	Reverse accumulated mass Accumulation of flow mass in the reverse direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	kg	lbm	uint64	kg				
8428	NegMass	Reverse accumulated mass Accumulation of flow mass in the reverse direction. This point is only applicable when the AGA8 calculations (HCH_Method) are performed internally or are performed externally with the mixture flow-condition mass density specified (SpecRhoMixFlow). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 KG). However, when read via Modbus, the value rolls from 999,999,999 to 0.	R	Y			long	number of rollovers in kg (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in lbm (multiply by 1,000,000,000 to add to accumulator)	uint64	kg				
8430	TrigDeltaPosVolFlow	Amount of forward flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	m3	ft3	float64	m3				
8432	TrigDeltaPosVolFlow	Amount of forward flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	float64	m3				
8434	TrigDeltaNegVolFlow	Amount of reverse flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	m3	ft3	float64	m3				
8436	TrigDeltaNegVolFlow	Amount of reverse flow-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	float64	m3				
8438	TrigDeltaPosVolBase	Amount of forward base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	m3	ft3	float64	m3				
8440	TrigDeltaPosVolBase	Amount of forward base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	float64	m3				
8442	TrigDeltaNegVolBase	Amount of reverse base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	m3	ft3	float64	m3				
8444	TrigDeltaNegVolBase	Amount of reverse base-condition volume between the last two delta volume triggers The value is updated only while the update triggered delta volumes control (DoUpdtTrigDeltaVols) is TRUE (1).	R	Y			long	number of rollovers in m3 (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in ft3 (multiply by 1,000,000,000 to add to accumulator)	float64	m3				
8446	TimeLapse2	Accumulated time pulses (1000 pulses/sec) Accumulated time pulses (1000 pulses/sec).	R	Y			long	MkII time pulses	MkII time pulses	uint64	Time pulses				

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Reg Num	Label	Description	Acc	NV	Cnfg	Prot	Modbus Reg Type	Modbus Metric Unit	Modbus U.S. Customary Unit	Native Data Type	Native Data Unit	Selections/Bitmap	Default Value (native unit)	Minimum Value (native unit)	Maximum Value (native unit)
8448	TimeLapse2	Accumulated time pulses (1000 pulses/sec) Accumulated time pulses (1000 pulses/sec).	R	Y			long	number of rollovers in MkII time pulses (multiply by 1,000,000,000 to add to accumulator)	number of rollovers in MkII time pulses (multiply by 1,000,000,000 to add to accumulator)	uint64	Time pulses				
8450	MeterModel	Meter model The meter model as set by the user or at the factory. The meter model is used for the MeterLink™-created Smart Meter Verification report.	RW	Y	Y	Y	long	-	-	uint16	-	Not set (0) 3411 (3411) 3412 (3412) 3414 (3414) 3415 (3415) 3416 (3416) 3417 (3417) 3418 (3418)	0	0	65535
8998	CPUBdSerialNumber	CPU Module serial number The CPU Module serial number is on a label on the CPU Module. Its minimum expected value is 0018000.	R				long	-	-	uint32	-				
9000	ISOModbusProcessDataTimeout	ISO 17089 Modbus process data timeout Sets ISO 17089 Modbus process data timeout value. When process data values, flow-condition absolute pressure (AbsFlowPressure) and flow-condition temperature (FlowTemperature), are written via ISO 17089 Modbus registers then a timer loaded with this value monitors loss of communication with the Modbus client. After first write to ISO 17089 process data Modbus register, if the meter doesn't receive process data value updates before timer expires then the flow-condition pressure validity (PressureValidity) and the flow-condition temperature validity (TemperatureValidity) are set to FALSE (0). The timer is reloaded when update is received. Setting value as 0 disables the timer and clears the flow-condition pressure validity alarm (PressureInvalid) and the flow-condition temperature validity alarm (TemperatureInvalid) alarm if those are active due to loss of communication with the Modbus client.	RW	Y	Y		long	min	min	uint8	min		0	0	60
65533	Reserved		R				float								
65534	Reserved		R				long								
65535	Reserved		R				int								

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119					
The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter					
Reg Num	Type	Register Label	Bit In Register	Status/Alarm/Alert Label	Status-Level
8356	LONG	StatusA	0	DidExceedMaxNoiseA	Yellow
			1	IsSNRTooLowA	Yellow
			2	DidTmDevChkFailA	Yellow
			4	DidDltTmChkFailA	Yellow
			5	IsXdcrMaintenanceRequiredA	Yellow
			6	IsStackingIncompleteA	Yellow
			7	IsChordLengthMismatchedA	Red
			8	IsSigClippedA	Yellow
			9	IsSigQltyBadA	Yellow
			10	IsSigDistortedA	Yellow
			11	IsPeakSwitchDetectedA	Yellow
			12	IsMeasSndSpdRangeA	Yellow
			13	IsBatchInactiveA	Yellow
			14	IsFailedForBatchA	Yellow
			15	IsAcqMode	Red
8358	LONG	StatusB	0	DidExceedMaxNoiseB	Yellow
			1	IsSNRTooLowB	Yellow
			2	DidTmDevChkFailB	Yellow
			4	DidDltTmChkFailB	Yellow
			5	IsXdcrMaintenanceRequiredB	Yellow
			6	IsStackingIncompleteB	Yellow
			7	IsChordLengthMismatchedB	Red
			8	IsSigClippedB	Yellow
			9	IsSigQltyBadB	Yellow
			10	IsSigDistortedB	Yellow
			11	IsPeakSwitchDetectedB	Yellow
			12	IsMeasSndSpdRangeB	Yellow
			13	IsBatchInactiveB	Yellow
			14	IsFailedForBatchB	Yellow
			15	IsAcqMode	Red
8360	LONG	StatusC	0	DidExceedMaxNoiseC	Yellow
			1	IsSNRTooLowC	Yellow
			2	DidTmDevChkFailC	Yellow
			4	DidDltTmChkFailC	Yellow
			5	IsXdcrMaintenanceRequiredC	Yellow
			6	IsStackingIncompleteC	Yellow
			7	IsChordLengthMismatchedC	Red
			8	IsSigClippedC	Yellow
			9	IsSigQltyBadC	Yellow
			10	IsSigDistortedC	Yellow
			11	IsPeakSwitchDetectedC	Yellow
			12	IsMeasSndSpdRangeC	Yellow
			13	IsBatchInactiveC	Yellow
			14	IsFailedForBatchC	Yellow
			15	IsAcqMode	Red
8362	LONG	StatusD	0	DidExceedMaxNoiseD	Yellow
			1	IsSNRTooLowD	Yellow
			2	DidTmDevChkFailD	Yellow
			4	DidDltTmChkFailD	Yellow
			5	IsXdcrMaintenanceRequiredD	Yellow
			6	IsStackingIncompleteD	Yellow
			7	IsChordLengthMismatchedD	Red
			8	IsSigClippedD	Yellow
			9	IsSigQltyBadD	Yellow
			10	IsSigDistortedD	Yellow
			11	IsPeakSwitchDetectedD	Yellow
			12	IsMeasSndSpdRangeD	Yellow
			13	IsBatchInactiveD	Yellow
			14	IsFailedForBatchD	Yellow
			15	IsAcqMode	Red
8364	LONG	StatusE	0	DidExceedMaxNoiseE	Yellow
			1	IsSNRTooLowE	Yellow
			2	DidTmDevChkFailE	Yellow
			4	DidDltTmChkFailE	Yellow
			5	IsXdcrMaintenanceRequiredE	Yellow
			6	IsStackingIncompleteE	Yellow
			7	IsChordLengthMismatchedE	Red
			8	IsSigClippedE	Yellow
			9	IsSigQltyBadE	Yellow

Rosemount™ Gas Ultrasonic Firmware: 1.61 Database: 8.29.119					
The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter					
Reg Num	Type	Register Label	Bit In Register	Status/Alarm/Alert Label	Status-Level
			10	IsSigDistortedE	Yellow
			11	IsPeakSwitchDetectedE	Yellow
			12	IsMeasSndSpdRangeE	Yellow
			13	IsBatchInactiveE	Yellow
			14	IsFailedForBatchE	Yellow
			15	IsAcqMode	Red
8366	LONG	StatusF	0	DidExceedMaxNoiseF	Yellow
			1	IsSNRTooLowF	Yellow
			2	DidTmDevChkFailF	Yellow
			4	DidDltTmChkFailF	Yellow
			5	IsXdcrMaintenanceRequiredF	Yellow
			6	IsStackingIncompleteF	Yellow
			7	IsChordLengthMismatchedF	Red
			8	IsSigClippedF	Yellow
			9	IsSigQltyBadF	Yellow
			10	IsSigDistortedF	Yellow
			11	IsPeakSwitchDetectedF	Yellow
			12	IsMeasSndSpdRangeF	Yellow
			13	IsBatchInactiveF	Yellow
			14	IsFailedForBatchF	Yellow
			15	IsAcqMode	Red
8368	LONG	StatusG	0	DidExceedMaxNoiseG	Yellow
			1	IsSNRTooLowG	Yellow
			2	DidTmDevChkFailG	Yellow
			4	DidDltTmChkFailG	Yellow
			5	IsXdcrMaintenanceRequiredG	Yellow
			6	IsStackingIncompleteG	Yellow
			7	IsChordLengthMismatchedG	Red
			8	IsSigClippedG	Yellow
			9	IsSigQltyBadG	Yellow
			10	IsSigDistortedG	Yellow
			11	IsPeakSwitchDetectedG	Yellow
			12	IsMeasSndSpdRangeG	Yellow
			13	IsBatchInactiveG	Yellow
			14	IsFailedForBatchG	Yellow
			15	IsAcqMode	Red
8370	LONG	StatusH	0	DidExceedMaxNoiseH	Yellow
			1	IsSNRTooLowH	Yellow
			2	DidTmDevChkFailH	Yellow
			4	DidDltTmChkFailH	Yellow
			5	IsXdcrMaintenanceRequiredH	Yellow
			6	IsStackingIncompleteH	Yellow
			7	IsChordLengthMismatchedH	Red
			8	IsSigClippedH	Yellow
			9	IsSigQltyBadH	Yellow
			10	IsSigDistortedH	Yellow
			11	IsPeakSwitchDetectedH	Yellow
			12	IsMeasSndSpdRangeH	Yellow
			13	IsBatchInactiveH	Yellow
			14	IsFailedForBatchH	Yellow
			15	IsAcqMode	Red
8354	INT	SystemStatus	0	Reserved	NA
			1	AreSwComponentsIncompatible	NA
			2	DidPowerFail	Red
			3	IsAcqModuleIncompatible	Red
			4	IsXdcrFiringSyncError	Yellow
			5	IsEstimatedFlowVelocityInUse	Yellow
			6	DidWarmStart	Yellow
			7	IsColocMeterQFlowRangeErr	Yellow
			8	IsTooFewOperChords	Red
			9	IsMeterVelAboveMaxLmt	Yellow
			10	IsBlockageDetected	Yellow
			11	IsBoreBuildupDetected	Yellow
			12	IsLiquidDetected	Yellow
			13	IsAbnormalProfileDetected	Yellow
			14	IsReverseFlowDetected	Yellow
			15	WatchDogReset	Red
366	INT	Freq1DataValidity	NA	Freq1DataValidity	Red
340	INT	QMeterValidity	NA	QMeterValidity	Red

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter					
Reg Num	Type	Register Label	Bit In Register	Status/Alarm/Alert Label	Status-Level
341	INT	QFlowValidity	NA	QFlowValidity	Red
342	INT	QBaseValidity	NA	QBaseValidity	Yellow
169	INT	TemperatureValidity	NA	TemperatureValidity	Yellow
168	INT	PressureValidity	NA	PressureValidity	Yellow
699	INT	AGA8BaseCalcValidity	NA	AGA8BaseCalcValidity	Yellow
700	INT	AGA8FlowCalcValidity	NA	AGA8FlowCalcValidity	Yellow
173	INT	ExpCorrTempValidity	NA	ExpCorrTempValidity	Red
172	INT	ExpCorrPressValidity	NA	ExpCorrPressValidity	Red
698	INT	FlowProfileCorrValidity	NA	FlowProfileCorrValidity	Red
8350	LONG	DataQlty	0	IsHardFailedA	Yellow
			1	IsHardFailedB	Yellow
			2	IsHardFailedC	Yellow
			3	IsHardFailedD	Yellow
			4	IsHardFailedE	Yellow
			5	IsHardFailedF	Yellow
			6	IsHardFailedG	Yellow
			7	IsHardFailedH	Yellow
			8	Reserved	NA
			9	IsSndVelCompErr	Yellow
			16	IsTooFewOperChords	Red
			17	IsMeterVelAboveMaxLmt	Yellow
621	INT	IsWarmStartReq	NA	IsWarmStartReq	Red
161	INT	DidColdStart	NA	DidColdStart	Red
162	INT	DidCnfgChksumChg	NA	DidCnfgChksumChg	Yellow
163	INT	IsCorePresent	NA	IsCorePresent	Red
164	INT	WatchDogReset	NA	WatchDogReset	Red
702	INT	IsAvgSoundVelRangeErr	NA	IsAvgSoundVelRangeErr	Yellow
176	INT	IsAcqModuleError	NA	IsAcqModuleError	Red
617	INT	IsDailyLogFull	NA	IsDailyLogFull	Yellow
616	INT	IsHourlyLogFull	NA	IsHourlyLogFull	Yellow
618	INT	IsAuditLogFull	NA	IsAuditLogFull	Yellow
619	INT	IsAlarmLogFull	NA	IsAlarmLogFull	Yellow
620	INT	IsSystemLogFull	NA	IsSystemLogFull	Yellow
613	INT	IsElecTempOutOfRange	NA	IsElecTempOutOfRange	Yellow
614	INT	IsElecVoltOutOfRange	NA	IsElecVoltOutOfRange	Yellow
36	INT	IsClkInvalid	NA	IsClkInvalid	Yellow
703	INT	EnergyRateValidity	NA	EnergyRateValidity	Yellow
705	INT	MassRateValidity	NA	MassRateValidity	Yellow
367	INT	Freq2DataValidity	NA	Freq2DataValidity	Red
665	INT	AO1DataValidity	NA	AO1DataValidity	Red
671	INT	AO2DataValidity	NA	AO2DataValidity	Red
704	INT	IsEnergyRateInvalid	NA	IsEnergyRateInvalid	NA
8374	LONG	SystemStatusLatched	7	IsColocMeterQFlowRangeErrLatched	Yellow
			8	IsTooFewOperChordsLatched	Red
			9	IsMeterVelAboveMaxLmtLatched	Yellow
			10	IsBlockageDetectedLatched	Yellow
			11	IsBoreBuildupDetectedLatched	Yellow
			12	IsLiquidDetectedLatched	Yellow
			13	IsAbnormalProfileDetectedLatched	Yellow
			14	IsReverseFlowDetectedLatched	Yellow
8372	LONG	FieldIOStatus	0	IsColocMeterCommErr	Yellow
			1	PressureInvalid	Yellow
			2	TemperatureInvalid	Yellow
			3	AreGasPropertiesInvalidInUse	Yellow
			4	IsGCCommErr	Yellow
			5	IsGCDataErr	Yellow
			7	IsGCAlarmPresent	Yellow
			8	DidResetUsers	Yellow
			18	IsCorePresent	Red
8376	LONG	FieldIOStatusLatched	0	IsColocMeterCommErrLatched	Yellow
			1	PressureInvalidLatched	Yellow
			2	TemperatureInvalidLatched	Yellow
			3	AreGasPropertiesInvalidInUseLatched	Yellow
8382	LONG	SOSCompareStatus	0	IsSndVelCompErr	Yellow
			2	IsDiagnosticSndSpdRangeErr	Yellow
			3	IsColocMeterSndSpdRangeErr	Yellow
8384	LONG	SOSCompareStatusLatched	0	IsSndVelCompErrLatched	Yellow
			2	IsDiagnosticSndSpdRangeErrLatched	Yellow
			3	IsColocMeterSndSpdRangeErrLatched	Yellow

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The below Modbus map is applicable for Rosemount™ Gas 8-Path (DeviceNumber 3418) meter					
Reg Num	Type	Register Label	Bit In Register	Status/Alarm/Alert Label	Status-Level
8386	LONG	LiquidDetectedStatus	0	IsLiquidDetected	Yellow
8388	LONG	LiquidDetectedLatched	0	IsLiquidDetectedLatched	Yellow
819	INT	IsFwdBaselineNotSet	NA	IsFwdBaselineNotSet	Yellow
820	INT	IsRevBaselineNotSet	NA	IsRevBaselineNotSet	Yellow
177	INT	IsAcqModuleErrorLatched	NA	IsAcqModuleErrorLatched	Red
339	INT	IsAvgSoundVelRangeErrLatched	NA	IsAvgSoundVelRangeErrLatched	Yellow
345	INT	IsAcqModeLatched	NA	IsAcqModeLatched	Red
8378	LONG	ProfileStatus	0	IsAbnormalProfileDetected	Yellow
			1	IsBlockageDetected	Yellow
			2	IsBoreBuildupDetected	Yellow
			3	IsSevereFlowConditionDetected	Yellow
8380	LONG	ProfileStatusLatched	0	IsAbnormalProfileDetectedLatched	Yellow
			1	IsBlockageDetectedLatched	Yellow
			2	IsBoreBuildupDetectedLatched	Yellow
875	INT	IsMassRateInvalid	NA	IsMassRateInvalid	NA
874	INT	IsQBaseInvalid	NA	IsQBaseInvalid	NA
873	INT	IsQFlowInvalid	NA	IsQFlowInvalid	NA

Modbus notes

1. The units are as shown below (in alphabetical order):

Unit	Description
-	dimensionless or not applicable
%	percent
1/degC	inverse degree-Celsius
1/degF	inverse degree-Fahrenheit
1/K	inverse Kelvin
1/MPa	inverse megapascal
1/psi	inverse pounds-per-square-inch
1e9 ft3	10^9 cubic feet (for "overflow" volume)
1e9 m3	10^9 cubic meters (for "overflow" volume)
1e9 MkII time pulses	10^9 Mark II time pulses (for "overflow" Mark II equivalent time pulses)
1e9 MJ	10^9 megajoules (for "overflow" energy)
1e9 MMBtu	10^9 million British thermal units (for "overflow" energy)
bits/sec	bits per second
Btu/ft3	British thermal units per cubic foot
Btu/lbm-mol	British thermal units per pound-mass mole
cPoise	centipoise
deg	degrees (angular measure)
deg C	degrees Celsius
deg F	degrees Fahrenheit
dm3/g-mol	cubic decimeters per gram-mole
dm6/g-mol2	decimeters6 per square gram-mole
energy	(Mark III) energy unit (21 Mark II energy units = 1 Mark III energy unit)
energy (MkII equiv)	Mark II-equivalent energy unit (21 Mark II energy units = 1 Mark III energy unit)
energy/time	See note 3
Epoch sec	time in seconds since Epoch (midnight Jan. 1, 1970)
ft	feet
ft/s	feet per second
ft3	cubic feet
ft3/day	cubic feet per day
ft3/hr	cubic feet per hour
ft3/lbm-mol	cubic feet per pound-mass mole
ft3/pulse	cubic feet per pulse
ft3/sec	cubic feet per second
ft6/lbm-mol2	feet6 per square pound-mass mole
gain (h/w)	gain (hardware units) where decibels = 20log10(hardware unit gain)
g-mol/dm3	gram-mole per cubic decimeter
hr	hour
Hz	Hertz
in	inches
K	Kelvin
kg/kg-mol	kilogram per kilogram-mole
kg/m3	kilogram per cubic meter
KHz	kiloHertz
kJ/dm3	kiloJoule per cubic decimeter
kJ/g-mol	kiloJoule per gram-mole
lbm/ft3	pound-mass per cubic foot
lbm/lbm-mol	pound-mass per pound-mass mole
lbm-mol/ft3	pound-mass mole per cubic foot

Modbus notes

m	meters
ma	milliamperes
m/s	meters per second
m3	cubic meters
m3/day	cubic meters per day
m3/hr	cubic meters per hour
m3/pulse	cubic meters per pulse
m3/s	cubic meters per second
mass/time	See note 3
min	minutes
MJ/day	megaJoules per day
MJ/hr	megaJoules per hour
MJ/s	megaJoules per second
MkII time pulses	Mark II time pulses (0.1048576 sec per Mark II time pulse)
MkIII time pulses	Mark III time pulses (0.001000 sec per Mark III time pulse)
MBtu	thousand British thermal units
MMBtu	million British thermal units
MMBtu/day	million British thermal units per day
MMBtu/hr	million British thermal units per hour
MMBtu/sec	million British thermal units per second
mole %	mole percent
mole fraction	mole fraction
MPa	MegaPascals
ms	milliseconds
ns	nanoseconds
Pa.s	Pascal seconds
psi	pounds-per-square inch
pulses/ft3	pulses per cubic foot
pulses/m3	pulses per cubic meter
s/m	seconds per meter
s2/m2	square seconds per square meter
sample intervals	sample intervals
sec	seconds per meter
sec/ft	seconds per foot
sec2/ft2	square seconds per square foot
us	microseconds
V	Volts
volume	See Note 3
volume lower	lower volume portion (i.e., amount below overflow of 10^9 volume units) where the volume unit is determined by the UnitsSystem, VolUnitUS, and VolUnitMetric data points
volume overflow	overflow volume portion (i.e., multiples of 10^9 volume units) where the volume unit is determined by the UnitsSystem, VolUnitUS, and VolUnitMetric data points
volume/pulse	volume per frequency pulse where the volume unit is determined by the UnitsSystem, VolUnitUS, and VolUnitMetric data points
volume/time	See Note 3

2. When no units are listed then the value is dimensionless or not applicable.

Modbus notes

3. Some units are configurable in the meter. These units are marked as volume, volume/time, energy/time, or mass/time.

   The volume, energy and mass terms are selected with the UnitsSystem. For metric they are m3, MJ, and Kg respectively. For U.S. Customary units they are ft3, MMBTU, and lbm. The flow rate time units (x/time) is selectable with VolFlowRateTimeUnit. For both U.S and metric these can be per second, per hour, or per day.

4. The native data types are as follows:
   int8, int16, int32, and int64 are 8-, 16-, 32-, and 64-bit integers
   uint8, uint16, uint32, and uint64 are 8-, 16-, 32-, and 64-bit unsigned integers
   float32 is 32-bit floating point
   float64 is 64-bit floating point
   boolean is a Boolean value (i.e., has FALSE or TRUE value where FALSE=0, TRUE=1)
   bitfield is a bitmapped collection of Boolean database points.

5. The "Selections/Bitmap" column is used to indicate selection values and bitfield bit mapping. For selection values, the selection option is followed by the corresponding data point value in parentheses. For bitfields, the bit number is followed by the boolean data point label. Following the data point label, in parentheses, is the data point characteristics: NV if non-volatile, Config if a configuration point, and Prot if write-protected. Bit 0 is the least significant bit.

6. Following list contains the Modbus extensions (features not defined in standard Modbus) that are
   a. 32-bit values like floats and longs occupy two consecutive Modbus 16-bit registers. Modbus implemented in Rosemount™ ultrasonic flow meters is big endian. So the first (lowest number) register contains the most significant word with the most significant byte first, and the second the least significant byte last (high byte first and high word first). 32-bit floating point values are stored in IEEE 754 Floating-Point format.

   b. Some other Modbus devices use a pre-defined type based on the register number. Rosemount™ ultrasonic flow meters uses types (int, long, float) without regard to register number.

   c. In Rosemount™ ultrasonic 4-Path gas meters, registers are dual mapped to accommodate different flow computers. So all gas 4-Path registers with values > 10,000 have a second occurrence at the register 8,000 less.

   d. 4-Path gas registers over 10,000 may be read in either metric or U.S. Customary units. 4-Path gas under 2000 are metric only for backward compatibility with the Mark II meter. 8-Path gas do not have this restriction.

   e. When a Modbus register is undefined in the meter a value of zero is returned. There are 3 dummy registers at the end of the Modbus map (65533-65535) that are reserved for internal use to facilitate this.

   f. If an odd number of registers are polled for 32-bit values, the meter returns one extra register so that a complete set of 32-bit values are polled. It is recommended to use transactions with registers of the same Modbus type.

Modbus notes

For ISO 17089 Modbus Table:

7. Use MeterLink™ or HART or standard Modbus map to set EnablePressureInput and EnableTemperatureInput as Fixed for writing pressure & temperature values using ISO Modbus map. EnablePressureInput and EnableTemperatureInput data points are not mapped in the ISO 17089 Modbus map but are available via standard Modbus map.
8. Pressure value read from the meter and written to the meter through ISO 17089 Modbus register is always Absolute. There is no impact of InputPressureUnit data point configuration.
9. UnitsSystem and ISOModbusUnitsSystem data point configurations are independent of each other. The value selected by UnitsSystem has no impact on the ISOModbusUnitsSystem data point and vice versa. Units selected by ISOModbusUnitsSystem are applicable for the ISO 17089 Modbus map. Units selected UnitsSystem are applicable to the standard Modbus map.
10. ISOModbusProcessDataTimeout data point default value is 0. This means that process data update timeout is disabled. In order to have 100% compliance with ISO 17089 Modbus spec, this data point can be written with a non-zero value between 0 to 60.
11. String registers contain two 8 bit characters in each 16 bit register.

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The below ISO 17089 Modbus map is applicable for Gas 8-Path (DeviceNumber 3418), 4-Path (DeviceNumber 3414), 2-Path (DeviceNumber 3412) and 1-Path (DeviceNumber 3411) meters

Register	Label	Description	Access (RW/RO)	Register Type	Units System 0	Units System 1	Units System 2	Selections/Bitmap
32768	QFlow	Volumetric flow rate at flow condition Flow-condition volumetric flow rate, corrected for flow-condition expansion (QExpCorr) and flow profile correction factor (CorrectionFactor).	R	float	m3/hr	ft3/hr	m3/hr	
32770	AvgFlow	Average flow velocity (dry and flow calibration applied) Average flow velocity (per batch). This is the dry cal velocity (DryCalVel) with any selected flow calibration method (CalMethod) as well as the flow profile correction factor (CorrectionFactor) applied.	R	float	m/s	ft/s	m/s	
32772	AvgSndVel	Average speed of sound Average speed of sound (per batch) of all non-failed velocity measurement chords. The diagnostic chord's (IsDiagnosticChordEnabled) speed of sound is not included in the average.	R	float	m/s	ft/s	m/s	
32774	PosVolFlow	Forward flow-condition volume Accumulation of flow-condition volume in the forward direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid (PosVolFlowAct) and forward flow-condition volume when flow rate is invalid (PosVolFlowErr) is equal to forward flow-condition volume. Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32776	NegVolFlow	Reverse flow-condition volume Accumulation of flow-condition volume in the reverse direction. Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid (NegVolFlowAct) and reverse flow-condition volume when flow rate is invalid (NegVolFlowErr) is equal to reverse flow-condition volume. Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32778	PosVolFlowAct	Forward flow-condition volume when flow rate is valid Accumulation of flow-condition volume in the forward direction when flow-condition volumetric flow rate is valid (QFlowValidity). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid and forward flow-condition volume when flow rate is invalid (PosVolFlowErr) is equal to forward flow-condition volume (PosVolFlow). Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32780	NegVolFlowAct	Reverse flow-condition volume when flow rate is valid Accumulation of flow-condition volume in the reverse direction when flow-condition volumetric flow rate is valid (QFlowValidity). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid and reverse flow-condition volume when flow rate is invalid (NegVolFlowErr) is equal to reverse flow-condition volume (NegVolFlow). Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32782	PosVolFlowErr	Forward flow-condition volume when flow rate is invalid Accumulation of flow-condition volume in the forward direction when flow-condition volumetric flow rate is invalid (QFlowValidity). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of forward flow-condition volume when flow rate is valid (PosVolFlowAct) and forward flow-condition volume when flow rate is invalid is equal to forward flow-condition volume (PosVolFlow). Due to truncating values to be read as integers, the summed value and forward flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32784	NegVolFlowErr	Reverse flow-condition volume when flow rate is invalid Accumulation of flow-condition volume in the reverse direction when flow-condition volumetric flow rate is invalid (QFlowValidity). Note that this value is incremented using internal units which may be different than those displayed and rolls over at an unsigned 64 bit integer (18,446,744,073,709,551,615 cubic meters). However, when read via Modbus, the value rolls from 999,999,999 to 0. The sum of reverse flow-condition volume when flow rate is valid (NegVolFlowAct) and reverse flow-condition volume when flow rate is invalid is equal to reverse flow-condition volume (NegVolFlow). Due to truncating values to be read as integers, the summed value and reverse flow-condition volume may differ by one.	R	long	m3	ft3	m3	
32786	ISOModbusVolFlowResolution	10^9 cubic meters (for "overflow" volume)	R	long	-	-	-	
32788	IsQFlowAboveQt	Flow-condition volumetric flow rate is above the transactional cutoff This is set to TRUE (1) when flow-condition volumetric flow rate (QFlow) is above the transactional cutoff (Qt).	R	long	-	-	-	
32790	AvgPctGood	Performance of active measurement chords The average performance of the paths of active velocity measurement chords (PctGoodA1, PctGoodA2, PctGoodB1, PctGoodB2, PctGoodC1, PctGoodC2, PctGoodD1, PctGoodD2, PctGoodE1, PctGoodE2, PctGoodF1, PctGoodF2, PctGoodG1, PctGoodG2, PctGoodH1, and PctGoodH2). Any diagnostic chord is not included in the average.	R	long	%	%	%	
32792	ISOModbusErrorStatus	Meter error status for ISO 17089 Modbus This is a 32-bit bitfield value where each bit represents reason for error in measurement as per ISO 17089 Modbus specification. Bit 0 is set to 1 when flow-condition volumetric flow rate (QFlowValidity) is invalid. Bit 1 is set to 1 when average performance of active measurement chords (AvgPctGood) is less than or equal to 33% for the batch. Other bits, bit 2 to bit 31, are reserved for future use and are set to 0.	R	long	-	-	-	
32794	NumChords	Number of chords The number of measurement chords based on the meter device number (DeviceNumber) plus any diagnostic chord (IsDiagnosticChordEnabled).	R	long	-	-	-	
32796	SndVelDiffPctA	Percentage of chord A speed of sound difference from average speed of sound The percentage of chord A speed of sound (SndVelA) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32798	SndVelDiffPctB	Percentage of chord B speed of sound difference from average speed of sound The percentage of chord B speed of sound (SndVelB) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32800	SndVelDiffPctC	Percentage of chord C speed of sound difference from average speed of sound The percentage of chord C speed of sound (SndVelC) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32802	SndVelDiffPctD	Percentage of chord D speed of sound difference from average speed of sound The percentage of chord D speed of sound (SndVelD) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32804	SndVelDiffPctE	Percentage of chord E speed of sound difference from average speed of sound The percentage of chord E speed of sound (SndVelE) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32806	SndVelDiffPctF	Percentage of chord F speed of sound difference from average speed of sound The percentage of chord F speed of sound (SndVelF) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32808	SndVelDiffPctG	Percentage of chord G speed of sound difference from average speed of sound The percentage of chord G speed of sound (SndVelG) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	

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The below ISO 17089 Modbus map is applicable for Gas 8-Path (DeviceNumber 3418), 4-Path (DeviceNumber 3414), 2-Path (DeviceNumber 3412) and 1-Path (DeviceNumber 3411) meters

Register	Label	Description	Access (RW/RO)	Register Type	Units System 0	Units System 1	Units System 2	Selections/Bitmap
32810	SndVelDiffPctH	Percentage of chord H speed of sound difference from average speed of sound The percentage of chord H speed of sound (SndVelH) difference from the average speed of sound (AvgSndVel).	R	float	%	%	%	
32896	FlowVelA	Flow velocity for chord A Chord A flow velocity.	R	float	m/s	ft/s	m/s	
32898	SndVelA	Speed of sound for chord A Speed of sound for chord A including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrA).	R	float	m/s	ft/s	m/s	
32900	PctGoodA	Average performance of chord A The average performance of chord A indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path A1 (PctGoodA1) and performance of path A2 (PctGoodA2).	R	float	%	%	%	
32902	SNRA2	Average signal-to-noise ratio (A2) Average signal-to-noise ratio (A2).	R	float	dB	dB	dB	
32904	SNRA1	Average signal-to-noise ratio (A1) Average signal-to-noise ratio (A1).	R	float	dB	dB	dB	
32906	GainA2	Gain when transducer A2 is receiving a signal Gain when transducer A2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32908	GainA1	Gain when transducer A1 is receiving a signal Gain when transducer A1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32912	FlowVelB	Flow velocity for chord B Chord B flow velocity.	R	float	m/s	ft/s	m/s	
32914	SndVelB	Speed of sound for chord B Speed of sound for chord B including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrB).	R	float	m/s	ft/s	m/s	
32916	PctGoodB	Average performance of chord B The average performance of chord B indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path B1 (PctGoodB1) and performance of path B2 (PctGoodB2).	R	float	%	%	%	
32918	SNRB2	Average signal-to-noise ratio (B2) Average signal-to-noise ratio (B2).	R	float	dB	dB	dB	
32920	SNRB1	Average signal-to-noise ratio (B1) Average signal-to-noise ratio (B1).	R	float	dB	dB	dB	
32922	GainB2	Gain when transducer B2 is receiving a signal Gain when transducer B2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32924	GainB1	Gain when transducer B1 is receiving a signal Gain when transducer B1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32928	FlowVelC	Flow velocity for chord C Chord C flow velocity.	R	float	m/s	ft/s	m/s	
32930	SndVelC	Speed of sound for chord C Speed of sound for chord C including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrC).	R	float	m/s	ft/s	m/s	
32932	PctGoodC	Average performance of chord C The average performance of chord C indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path C1 (PctGoodC1) and performance of path C2 (PctGoodC2).	R	float	%	%	%	
32934	SNRC2	Average signal-to-noise ratio (C2) Average signal-to-noise ratio (C2).	R	float	dB	dB	dB	
32936	SNRC1	Average signal-to-noise ratio (C1) Average signal-to-noise ratio (C1).	R	float	dB	dB	dB	
32938	GainC2	Gain when transducer C2 is receiving a signal Gain when transducer C2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32940	GainC1	Gain when transducer C1 is receiving a signal Gain when transducer C1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32944	FlowVelD	Flow velocity for chord D Chord D flow velocity.	R	float	m/s	ft/s	m/s	
32946	SndVelD	Speed of sound for chord D Speed of sound for chord D including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrD).	R	float	m/s	ft/s	m/s	
32948	PctGoodD	Average performance of chord D The average performance of chord D indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path D1 (PctGoodD1) and performance of path D2 (PctGoodD2).	R	float	%	%	%	
32950	SNRD2	Average signal-to-noise ratio (D2) Average signal-to-noise ratio (D2).	R	float	dB	dB	dB	
32952	SNRD1	Average signal-to-noise ratio (D1) Average signal-to-noise ratio (D1).	R	float	dB	dB	dB	
32954	GainD2	Gain when transducer D2 is receiving a signal Gain when transducer D2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	

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The below ISO 17089 Modbus map is applicable for Gas 8-Path (DeviceNumber 3418), 4-Path (DeviceNumber 3414), 2-Path (DeviceNumber 3412) and 1-Path (DeviceNumber 3411) meters

Register	Label	Description	Access (RW/RO)	Register Type	Units System 0	Units System 1	Units System 2	Selections/Bitmap
32956	GainD1	Gain when transducer D1 is receiving a signal Gain when transducer D1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32960	FlowVelE	Flow velocity for chord E Chord E flow velocity.	R	float	m/s	ft/s	m/s	
32962	SndVelE	Speed of sound for chord E Speed of sound for chord E including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrE).	R	float	m/s	ft/s	m/s	
32964	PctGoodE	Average performance of chord E The average performance of chord E indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path E1 (PctGoodE1) and performance of path E2 (PctGoodE2).	R	float	%	%	%	
32966	SNRE2	Average signal-to-noise ratio (E2) Average signal-to-noise ratio (E2).	R	float	dB	dB	dB	
32968	SNRE1	Average signal-to-noise ratio (E1) Average signal-to-noise ratio (E1).	R	float	dB	dB	dB	
32970	GainE2	Gain when transducer E2 is receiving a signal Gain when transducer E2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32972	GainE1	Gain when transducer E1 is receiving a signal Gain when transducer E1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32976	FlowVelF	Flow velocity for chord F Chord F flow velocity.	R	float	m/s	ft/s	m/s	
32978	SndVelF	Speed of sound for chord F Speed of sound for chord F including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrF).	R	float	m/s	ft/s	m/s	
32980	PctGoodF	Average performance of chord F The average performance of chord F indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path F1 (PctGoodF1) and performance of path F2 (PctGoodF2).	R	float	%	%	%	
32982	SNRF2	Average signal-to-noise ratio (F2) Average signal-to-noise ratio (F2).	R	float	dB	dB	dB	
32984	SNRF1	Average signal-to-noise ratio (F1) Average signal-to-noise ratio (F1).	R	float	dB	dB	dB	
32986	GainF2	Gain when transducer F2 is receiving a signal Gain when transducer F2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32988	GainF1	Gain when transducer F1 is receiving a signal Gain when transducer F1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
32992	FlowVelG	Flow velocity for chord G Chord G flow velocity.	R	float	m/s	ft/s	m/s	
32994	SndVelG	Speed of sound for chord G Speed of sound for chord G including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrG).	R	float	m/s	ft/s	m/s	
32996	PctGoodG	Average performance of chord G The average performance of chord G indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path G1 (PctGoodG1) and performance of path G2 (PctGoodG2).	R	float	%	%	%	
32998	SNRG2	Average signal-to-noise ratio (G2) Average signal-to-noise ratio (G2).	R	float	dB	dB	dB	
33000	SNRG1	Average signal-to-noise ratio (G1) Average signal-to-noise ratio (G1).	R	float	dB	dB	dB	
33002	GainG2	Gain when transducer G2 is receiving a signal Gain when transducer G2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
33004	GainG1	Gain when transducer G1 is receiving a signal Gain when transducer G1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
33008	FlowVelH	Flow velocity for chord H Chord H flow velocity.	R	float	m/s	ft/s	m/s	
33010	SndVelH	Speed of sound for chord H Speed of sound for chord H including any adjustment for speed of sound correction factor (SOSGeometryCorrFctrH).	R	float	m/s	ft/s	m/s	
33012	PctGoodH	Average performance of chord H The average performance of chord H indicated as the percentage of good signals in those received from upstream and downstream transducers in a batch. It is calculated as average of performance of path H1 (PctGoodH1) and performance of path H2 (PctGoodH2).	R	float	%	%	%	
33014	SNRH2	Average signal-to-noise ratio (H2) Average signal-to-noise ratio (H2).	R	float	dB	dB	dB	
33016	SNRH1	Average signal-to-noise ratio (H1) Average signal-to-noise ratio (H1).	R	float	dB	dB	dB	
33018	GainH2	Gain when transducer H2 is receiving a signal Gain when transducer H2 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	

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The below ISO 17089 Modbus map is applicable for Gas 8-Path (DeviceNumber 3418), 4-Path (DeviceNumber 3414), 2-Path (DeviceNumber 3412) and 1-Path (DeviceNumber 3411) meters

Register	Label	Description	Access (RW/RO)	Register Type	Units System 0	Units System 1	Units System 2	Selections/Bitmap
33020	GainH1	Gain when transducer H1 is receiving a signal Gain when transducer H1 is receiving a signal. Gain is applied to the received signal in hardware in volts/volt (hardware gain units). Conversion from hardware gain to decibels is gain (db) = 20 * log10(gain(hw)). Alarm limits for gain alarms are GainLowLmt and GainHighLmt.	R	float	gain (dB)	gain (dB)	gain (dB)	
33792	Manufacturer	Manufacturer name Manufacturer name as set at the factory.	R	char[16]	-	-	-	
33800	MeterModelNamePlate	Meter model as stamped on the physical nameplate of the meter Meter model stamped on the physical nameplate of the meter as set by the user or at the factory.	R	char[16]	-	-	-	
33808	MeterSerialNumber	Meter serial number The serial number for the ultrasonic meter. The meter serial number is located on the tag attached to the ultrasonic meter body and is included in the maintenance log and reports file.	R	char[16]	-	-	-	
33816	ProductionYear	Production year Production year of the meter as set by the user or at the factory.	R	char[16]	-	-	-	
33824	ISOModbusCPUBdSwVer	ISO 17089 Modbus CPU Module firmware version This is the CPU Module software version in string format to support ISO 17089 Modbus specification. It is a 16 characters string. The format of the string is "n.ab yyyy/mm/dd", where "n.ab" is the firmware version number and "yyyy/mm/dd" is the released date of the firmware.	R	char[16]	-	-	-	
33832	ISOModbusProgramChksum	ISO 17089 Modbus program checksum This is the checksum of the meter's programs in string format to support ISO 17089 Modbus specification. It is the program checksum value (ProgramChksum) as string of 32 characters. All unused characters in the string are filled with NUL character (0x00).	R	char[32]	-	-	-	
33848	ISOModbusUnitsSystem	ISO 17089 Modbus unit system Selects the units for the Modbus communication for the ISO 17089 Modbus registers block (32678 to 34112). When set to 0, units for ISO 17089 Modbus registers block for read and write operation is bar (Bar), C (Degree Celsius), m3 (cubic meters), m3/hr (cubic meters per hour) and m/s (meter per second). When set to 1, units for ISO 17089 Modbus registers block for read and write operation is psi (Pounds per square inch), F (Degree Fahrenheit), ft3 (cubic feet), ft3/hr (cubic feet per hour) and ft/s (feet per second). When set to 2, units for ISO 17089 Modbus registers block for read and write operation is MPa (Megapascal), K (Kelvin), m3 (cubic meters), m3/hr (cubic meters per hour) and m/s (meter per second). This configuration is different from the units system (UnitsSystem) and volumetric flow rate time unit for Modbus communication (VolFlowRateTimeUnit) which determines units for the Modbus communication for non-ISO 17089 Modbus registers.	RW	long	-	-	-	bar, C, m3, m3/hr, m/s (0) psi, F, ft3, ft3/hr, ft/s (1) MPa, K, m3, m3/hr, m/s (2)
33850	ISOModbusMeterFunctionalityIdentifier	ISO 17089 Modbus meter functionality identifier This is a 32-bit bitfield value where each bit represents meter functionality as per ISO 17089 Modbus specification. Bit 0 is set to 1 if meter is configured to use written values of the process data for pressure and temperature through ISO 17089 Modbus registers (34050 & 34052). Other bits, bit 1 to bit 31, are reserved for future use and are set to 0.	R	long	-	-	-	
33852	QMin	Minimum volumetric flow rate as stamped on the physical nameplate of the meter Minimum volumetric flow rate as set by the user or at the factory.	R	float	m3/hr	ft3/hr	m3/hr	
33854	QMax	Maximum volumetric flow rate as stamped on the physical nameplate of the meter Maximum volumetric flow rate as set by the user or at the factory.	R	float	m3/hr	ft3/hr	m3/hr	
33856	PressureMinOperating	Minimum operating pressure as stamped on the physical nameplate of the meter Minimum operating pressure as set by the user or at the factory in gage.	R	float	bar	psi	MPa	
33858	PressureMaxOperating	Maximum operating pressure as stamped on the physical nameplate of the meter Maximum operating pressure as set by the user or at the factory in gage.	R	float	bar	psi	MPa	
33860	TemperatureMinOperating	Minimum operating temperature as stamped on the physical nameplate of the meter Minimum operating temperature as set by the user or at the factory.	R	float	deg C	deg F	K	
33862	TemperatureMaxOperating	Maximum operating temperature as stamped on the physical nameplate of the meter Maximum operating temperature as set by the user or at the factory.	R	float	deg C	deg F	K	
34048	ISOModbusProcessStatus	ISO 17089 Modbus process value status This is a 32-bit bitfield value where each bit represents process value status as per ISO 17089 Modbus specification. Bit 0 is set to 1 if flow-condition absolute pressure validity (PressureValidity) is TRUE (1). Bit 1 is set to 1 if flow-condition temperature validity (TemperatureValidity) is TRUE (1). Other bits, bit 2 to bit 31, are reserved for future use and are set to 0.	R	long	-	-	-	
34050	AbsFlowPressure	Flow-condition absolute pressure Flow-condition absolute pressure. If input pressure absolute/gage selector (InputPressureUnit) is "Gage", flow-condition absolute pressure = flow-condition pressure (FlowPressure) + specified atmospheric pressure (AtmosphericPress). Otherwise, if input pressure absolute/gage selector (InputPressureUnit) is "Absolute", flow-condition absolute pressure = flow-condition pressure (FlowPressure).	RW	float	bar	psi	MPa	
34052	FlowTemperature	Flow-condition temperature If flow-condition temperature input selector (EnableTemperatureInput) is "Fixed", flow-condition temperature = specified (fixed) flow-condition temperature (SpecFlowTemperature) when written via a Modbus register or via the HART Command-132 or via DB API protocol. Otherwise, if flow-condition temperature input selector is "Live", flow-condition temperature = average of live flow-condition temperature (LiveFlowTemperature) values for the past five seconds. If flow-condition temperature input selector is "Transmitter Head 1", flow-condition temperature is read from Transmitter Head 1 of a Dual-Configuration meter (ColocMeterIPAddress).	RW	float	deg C	deg F	K	