

Emerson DNP3 Protocol Specifications Manual (for FB1000 and FB2000 Series Flow Computers)



Application & Device Safety Considerations

▪ **Reading these Instructions**

Before operating a device or application, read these instructions carefully and understand their safety implications. In some situations, improper use may result in damage or injury. Keep this manual in a convenient location for future reference. Note that these instructions may not cover all details or variations in equipment or cover every possible situation regarding installation, operation, or maintenance. Should problems arise that are not covered sufficiently in the text, immediately contact Energy and Transportation Solutions (ETS) Customer Support for further information.

▪ **Protecting Operating Processes**

The failure of a device or application – for whatever reason – may leave an operating process without appropriate protection and could result in possible damage to property or injury to persons. To protect against this, review the need for additional backup equipment or provide alternate means of protection (such as alarm devices, output limiting, fail-safe valves, relief valves, emergency shutoffs, emergency switches, etc.). Contact ETS for additional information.

▪ **Using Qualified Personnel**

Installation, configuration, and any subsequent modifications to a device or application should only be performed by qualified, suitably trained personnel information.

▪ **System Training**

A well-trained workforce is critical to the success of your operation. Knowing how to correctly install, configure, program, calibrate, and troubleshoot your Emerson equipment provides your engineers and technicians with the skills and confidence to optimize your investment. ETS offers a variety of ways for your personnel to acquire essential system expertise. Our full-time professional instructors can conduct classroom training at several of our corporate offices, at your site, or even at your regional Emerson office. You can also receive the same quality training via our live, interactive Emerson Virtual Classroom and save on travel costs. For our complete schedule and further information, contact the ETS Training Department at 800-338-8158 or email us at education@emerson.com.

▪ **Grounding Equipment**

Ground metal enclosures and exposed metal parts of electrical instruments in accordance with relevant safety standards. For the USA, refer to OSHA rules and regulations as specified in *Design Safety Standards for Electrical Systems*, 29 CFR, Part 1910, Subpart S, dated: May 16, 1981 (OSHA rulings are in agreement with the National Electrical Code). For international locations, refer to IEC 60364-4-41: PROTECTION AGAINST ELECTRIC SHOCK. You must also ground mechanical or pneumatic instruments that include electrically operated devices such as lights, switches, relays, alarms, or chart drives. The chassis (or earth ground) lug provides a safe connection point to a customer-designated ground location for ESD and transient voltage suppression. Do not use the chassis ground lug for signal, common, or return connections. **Do not connect the chassis ground lug directly to a lightning arrester/lightning rod.**

Important: Complying with the codes and regulations of authorities having jurisdiction is essential to ensuring personnel safety. The guidelines and recommendations in this manual are intended to meet or exceed applicable codes and regulations. If differences occur between this manual and the codes and regulations of authorities having jurisdiction, those codes and regulations must take precedence.

▪ **Protecting from Electrostatic Discharge (ESD)**

Any device contains sensitive electronic components which can be damaged by exposure to an ESD voltage. Depending on the magnitude and duration of the ESD, it can result in erratic operation or complete failure of the equipment. Ensure that you correctly care for and handle ESD-sensitive components.

▪ **Ethernet Connectivity**

This automation device is intended to be used in an Ethernet network which **does not** have public access. The inclusion of this device in a publicly accessible Ethernet-based network is **not recommended**.

▪ **Returning Equipment**

If you need to return any equipment to ETS, it is your responsibility to ensure that the equipment has been cleaned to safe levels, as defined and/or determined by applicable federal, state and/or local law regulations or codes. You also agree to indemnify ETS and hold ETS harmless from any liability or damage which ETS may incur or suffer due to your failure to ensure device cleanliness.

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1. Introduction

This *DNP3 Protocol Specifications Manual (for FB1000 and FB2000 Series Flow Computers)* enables internal Emerson personnel, Emerson customers, and third-party vendors to integrate data to SCADA and other supervisory systems. SCADA vendors can use this manual and the FBxConnect™ configuration software toolset and to configure, send, and receive data to and from the Emerson FB1000 Series and FB2000 Series flow computers.

1.1 Scope

This manual covers the implementation of the DNP3 protocol in the FB1000 Series and FB2000 Series flow computers. It should assist SCADA integrators in interfacing DNP3 host-based applications with Emerson FB1000 Series and FB2000 Series flow computers for both configuration and data collection.

1.2 Glossary

Following are words, terms, and acronyms pertinent to this manual.

Term	Definition
ALSFC	Application Layer Sub Function Code
Authority	A notified body that can change certain parameters on the flow computer which cannot otherwise be changed by the customer or engineers on site.
CON	A bit in the Application Layer's control byte that specifies whether an Application Layer confirmation is required.
Control Relay Output Block (CROB)	A structured data block appearing in request and response messages associated with actuating on/off type output devices.
CRC	Cyclic Redundancy Check code that is generated according to a specific algorithm and transmitted with the message for the purpose of detecting data corruption during communication via the Physical Layer.
Deprecated	Indicates that a feature or requirement is still permitted although its use is discouraged, and it is not guaranteed to be part of future specification versions. See also <i>obsolete</i> .
DNP	Distributed Network Protocol
DNP3	The third generation of DNP
End device	A device that provides information to another ("host") device.
FIN	Final Data Link frame or final Application Layer fragment in a message
FIR	First Data Link frame or first Application Layer fragment in a message
Fragment	A packet of bytes that is sized to fit into the buffers of the receiving device's Application Layer. Each fragment has an application header and bytes containing Application Layer request, response or confirmation information.
Frame	A packet of octets transmitted from the Data Link Layer in one device to the Data Link Layer in another device over the Physical Layer. Each frame contains a link header, cyclic redundancy check (CRC) octets, and sometimes a segment from the Transport Function.

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Term	Definition
Host device	A device which controls other (“end”) devices.
IED	Intelligent Electronic Device. These are usually physically located close to sensors or actuators that are monitored or controlled.
Input	Refers to values that are measured, read, or generated by the device and are reported by an outstation to a host device.
IP	Internet Protocol
LSB	Least Significant Byte, the byte which represents that part of a value split across two or more bytes.
LMB	Lower Middle Byte
MSB	Most Significant Byte, the byte which represents the part of a value split across two or more bytes.
Octet	A group of eight contiguous digital information bits.
Output	Refers to values in an outstation or lower-level device that are controlled by commands from the host device.
Poll	A poll is a request for data from a host device.
Private	Belonging to or restricted to an individual device not generally known to other devices.
ETS	Energy and Transportation Solutions, a business unit of Emerson Automation Solutions. Energy and Transportation Solutions, a business unit of Emerson Automation Solutions.
Request	An Application Layer message from a host device that asks an end device to perform a specific action. A poll is only one type of request with multiple different types available.
Response	An Application Layer message from the end device that is returned to the host device as the result of a request from the host device.
Route	Describes how multiple flow computers can be connected so that they can be layered on top of one another.
RTU	Remote Terminal Unit. Similar to an IED, RTUs are normally placed in the field close to the sensors or actuators that they monitor or control.
SCADA	Supervisor Control and Data Acquisition. A generic term used to indicate monitoring and controlling devices that are physically located remotely from a centralized computer. Communications are implied between the central location and the outlying devices.
Segment	A packet of bytes that is sized to fit into a Link Layer frame. Each segment contains a transport header and a portion of a fragment from the Application Layer.
SEQ	Sequence number that differentiates subsequent Data Link frames or Application Layer fragments. Sequence numbers associated with unsolicited responses are distinct from sequence numbers used for solicited messages
Static Data	A DNP3 definition for “present” values; the mostly recently measured, computed, or obtained values.
TCP	Transmission Control Protocol
Unsolicited Response	An Application Layer message from a slave device to a master for which no explicit request was received. The request is implied by the act of a master enabling unsolicited reporting from slave devices.

Term	Definition
UNS	A bit in the Application Layer's control byte that specifies whether a fragment (response and confirmation) pertains to an unsolicited message. When this bit is set the sequence number in the SEQ field refers to the unsolicited sequence number.

1.3 DNP3 Protocol Overview

Emerson FB1000 Series and FB2000 Series flow computers are implemented as DNP3 outstations for communication and configuration with Emerson Field Tools software and SCADA hosts. DNP3 is an open and public protocol used to ensure standards-based interoperability between DNP3 outstations and a SCADA host.

The flow computers support physical communication over Wi-Fi®, Ethernet, and serial communications.

Note

DNP3 uses little-endian as the byte order of the messages.

The flow computers implement the DNP3 level 3 protocol subset.

Content with no highlighting (such as this paragraph) appears in the unlicensed version of this protocol manual.

2. DNP3 Application Layer Definitions

In the Emerson FB1000 and FB2000 Series flow computers DNP3 data points map statically to tags.

2.1 DNP3 Point

The DNP3 point is a uniquely identifiable physical/logical entity that applies to inputs and outputs like binaries, analogs, and inputs (such as counters).

Point type is an independent array of points having related characteristics.

2.2 Index, Groups, and Variations

Index numbers identify points having the same point type. They are zero-based and the lowest element is always zero.

Groups enable you to classify the data types within a message. Each group number shares a common point type and a common method of data generation and creation. For example, these might be the different group numbers in an analog input point type:

Group	Point Type
Group 30	Current value of the point
Group 31	Frozen value of the point
Group 32	Change of current value event
Group 33	Change of frozen value event

Variations are different encoding formats for the data types within a group. Every group number has an independent set of variations. For example, these might be the variations in group 20:

Variation	Format
Variation 1	32-bit with flag
Variation 2	16-bit with flag
Variation 3	32-bit with flag, delta
Variation 4	16-bit with flag, delta
Variation 5	32-bit without flag
Variation 6	16-bit without flag
Variation 7	32-bit without flag, delta
Variation 8	16-bit without flag, delta

2.3 DNP3 Objects

An object is an encoded representation of data from a point. The system formats data according to its group and variation number in order to transport the message.

DNP3 messages may contain multiple objects, each representing the value of a point at a given instant in time or a command to be issued to an output point.

The supported DNP3 objects and groups are:

Name	Group Number
Device Attributes	0
Binary Inputs	1, 2
Binary Outputs	10
Control Relay Output (CROB)	12
Binary Counters	20, 21, 22, 23
Analog Inputs	30, 32
Analog Outputs	40, 41
Time and Data	50
Class	60
Internal Indications	80
Octet String	110
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2.4 Static, Event, and Class Data

2.4.1 Static Data

Static data refers to a point's current or most recently recorded value. For binary input points, "static data" refers to the present on/off condition.

2.4.2 Event Data

Events are associations with changes in points, such as state changes, measurement at some threshold, or an analog input changing by more than its defined dead band.

Structured information stored in each event, including:

- Type of event
- Value
- Point index

- Time when event occurred
- Class assignment

2.4.3 DNP3 Classes Data

Classes organize events and current values into categories:

- **Class 0** data refers to static data. When a host device requests class 0 data from a flow computer, the end device reports back the most recently measured, computed, or obtained values for the different point types.
- **Class 1, 2, and 3** are event classes. DNP3 does not assign significance to these event classes. Implementations can use different strategies around these classes, such as assigning highest priority events to class 1 and lowest priority events to class 3. Host devices may request events from one or more of these classes.

2.5 Secure Authentication Version 5 (SAv5)

With firmware version 2.13.0.88 or newer, the FBx Series devices support Secure Authentication Version 5 (SAv5). Sav5 authenticates the devices with the hosts which significantly improves resistance to outside influences. The FBx Series devices support SAV5 using a pre-shared key (a single key per device) which can be updated using Field Tools.

For implementation details on SAV5 please contact the DNP3 Users Group (www.dnp.org/About/DNP-Users-Group). For additional details on getting your devices set up with SAV5, contact your local sales representative.

2.6 DNP3 Object Group Number: 70

The system supports the following variations:

- 3 – File Command Object
- 4 – File Command Status Object
- 5 – File Transfer Object
- 6 – File Transfer Status
- 7 – File Descriptor Object

2.7 Standard File Operations

DNP3 differentiates file types into two types, simple files and directory files.

DNP3 supports the following file operations:

- Open file
- Close file
- Delete file
- Read file
- Write file

The flow computer supports the following types of file operations:

1. General file operations

The system stores general files in the `\\user\\` folder. Host devices can read and write files based in `\\user\\` folder. When performing any file operations, you need to specify the **absolute** path.

The system creates the diagnostic file (*DiagnosticLog.txt*) under the user folder, which is accessible using the absolute path `\\user\\DiagnosticLog.txt`.

2. General Zip Files

The system retrieves the files using a zip format by specifying the `gz` command in front of the file path when issuing a file read.

Example:

```
gz:/protocol/dnp3/map1/AnlgIng_Group_30_32.pro
```

3. System file operations

The system considers system files to include firmware upgrade package files, configuration files, and diagnostic log files. Following is the absolute path of different system files:

- Firmware package file: `\\system\\update\\k61.pak`
- Configuration file: `\\system\\config\\Config_FB1100.cfg`

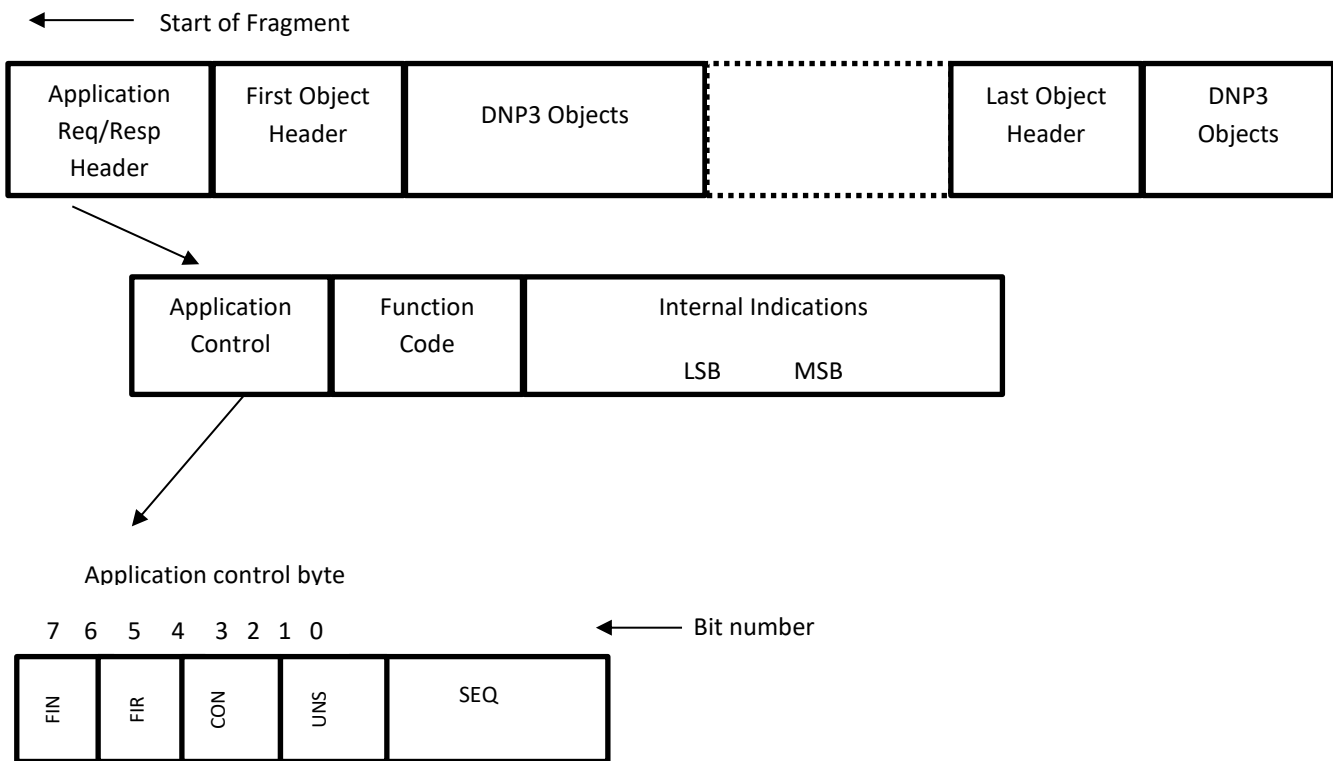
The host always specifies the absolute path while doing the file operations in the `\\user\\` and `\\system\\` folders.

3. DNP3 Application Layer Messaging

Host devices send a request fragment to an end device to execute a command or return data. The end device performs the requested action, generates the appropriate response, and transmits it back to the host device.

The end device may transmit unsolicited response messages to the host. DNP message fragments can contain header, data, and checksum bytes. *Figure 3-1* shows the response message fragment.

Figure 3-1. DNP3 Request/Response Message Fragment



Each fragment (request or response) begins with an application header that contains message control information. The application response header contains an additional field called “internal indications.”

3.1 Function Code Table

The function code octet identifies the purpose of the message. Request messages from host devices use function codes in the range of 0 to 128, and response messages from outstations use function codes with values ranging from 129 to 255. The following table describes the function codes.

Requests (Hex)	
0x00	Confirm
0x01	Read

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Requests (Hex)	
0x02	Write
0x03	Select
0x04	Operate
0x05	Direct operate
0x06	Direct operate - no response
0x07	Freeze
0x08	Freeze - no response
0x09	Freeze clear
0x0A	Freeze clear - no response
0x0B	Freeze at time
0x0C	Freeze at time - no response
0x0D	Cold start
0x0E	Warm start
0x0F	Initialize data
0x10	Initialized application
0x11	Start application
0x12	Stop application
0x13	Save configuration
0x14	Enable unsolicited messages
0x15	Disable unsolicited messages
0x16	Assign class
0x17	Delay measurements
0x18	Record measurement
0x19	Open file
0x1A	Close file
0x1B	Delete file
0x1C	Get file information
0x1D	Authenticate file
0x1E	Abort file
0x1F	Activate configuration
0x20	Authenticate request
0x21	Authenticate request - no ack

Requests (Hex)	
0x81	Response
0x82	Unsolicited response
0x83	Authenticate response

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4. DNP3 Data Point List

The Emerson FB1000 and FB2000 Series flow computers statically map DNP3 data points to tags.

4.1 Data Point Mappings: Default and Custom

The FB1000 and FB2000 Series provides a default mapping of data points which represents what a typical customer might need. The default mapping is an out-of-the-box solution that accesses information for approximately 24 instances of each type of meter and station, along with a full (7-slot) chassis of IO modules, along with other things (such as components, PIDs, and user data).

Take time to review the information in this chapter against your organization's requirements. If you need DNP3 access to additional device parameters that are not present in the default map, you can create a custom data point map using FBxConnect (refer to the *DNP3 Mapping* topic in the online help for FBxConnect) that **replaces** the default mapping. While this option would enable you to explicitly define the additional points to access, you **must also include** in the custom map **all** the standard data points present in the default map. Otherwise, those data points are **not** available when you change the Active DNP3 Map setting in FBxConnect to **User Defined**.

To obtain a report of the current data point map, issue a series of DNP3 file read requests to the device to read the binary files which define the currently active point mapping for any group. Filenames include:

- `/protocol/dnp3/activemap/AnigIn_Group30_32.pro`
- `/protocol/dnp3/activemap/AnigOut_Group40_41.pro`
- `/protocol/dnp3/activemap/BinIn_Group1_2.pro`
- `/protocol/dnp3/activemap/BinOut_Group10_12.pro`
- `/protocol/dnp3/activemap/Counters_Group20_22_21_23.pro`
- `/protocol/dnp3/activemap/String_Group110.pro`

4.2 Point Limits per group:

- Group 1 and 2 - 50
- Groups 10 and 11 - 30
- Groups 20 and 22 - 60
- Groups 30 and 32 - 220
- Groups 40 and 41 - 780
- Group 110 - 80



Important

This chapter discusses the **default** data point map provided for the FB1000 and FB2000 flow computers.

4.3 Device Attributes: DNP3 Object Group 0

This group can be read with the next possible variations:

Variation	Variation String Name
209	Secure Authentication Version
210	Number of security statistics per association
211	ID of support for user-specific attributes
212	Number of Master-Defined Data Set Prototypes
213	Number of Outstation-Defined Data Set Prototypes
214	Number of Master-Defined Data Sets
215	Number of Outstation-Defined Data Sets
216	Max number of binary outputs from object group 12 per request
217	Local timing accuracy
218	Duration of time accuracy (following a time synchronization)
219	Analog output events supported
220	Maximum analog output index
221	Number of analog output points
222	Binary output events supported
223	Maximum binary output index
224	Number of binary output points
225	Frozen counter events supported
226	Frozen counts supported
227	Counter events supported
228	Maximum counter index
229	Number of counter points
230	Frozen analog inputs supported
231	Analog input events supported
232	Maximum analog input index
233	Number of analog input points
234	Double-bit binary input events supported
235	Maximum double-bit binary input index

Variation	Variation String Name
236	Number of double-bit binary input points
237	Binary input events supported
238	Maximum binary input index
239	Number of binary input points
240	Maximum transmit fragment size
241	Maximum receive fragment size
242	Device manufacture's software version string
243	Device manufacture's hardware version string
245	User-assigned location name or code string
246	User-assigned ID code/number string
247	User-assigned name string for the outstation
248	Device serial number string
249	DNP subset level and conformance
250	Device manufacture's product name and model
252	Device manufacture's name string
254	Non-specific all attributes value request
255	List of all attribute variations

4.4 Binary Input: DNP3 Object Groups 1 (Static) & 2 (Events)

4.4.1 DNP3 Object Group 1: Binary Input Static

This group can be read with the following variations:

- **Variation 1:** Package format having single bit binary input state without status flags
- **Variation 2:** Each DNP3 point is returned with a single byte having status flags indicating the point status (such as online/offline, comm lost, over range, etc.)

4.4.2 DNP3 Object Group 2: Binary Input Events

This group can be read with the following variations:

- **Variation 1:** A single byte for reporting state of input and status flags without time
- **Variation 2:** A single byte for reporting state of input and status flags with absolute time when the event occurred.
- **Variation 3:** A single byte for reporting state of input and status flags with relative time. A preceding common time of occurrence (CTO) object, group 51, establishes the basis for relative time.

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Point Index	Tag Mapped	Name for State when value = 0	Name for State when value = 1	Default Class Assigned
0	System Pwr_1.SRAM_BATT_STATUS	Normal	Failed	Class_1
1	DI_1-1.SELECTED	OFF	ON	Class_1
2	DI_1-2.SELECTED	OFF	ON	Class_1
3	DI_1-3.SELECTED	OFF	ON	Class_1
4	DI_1-4.SELECTED	OFF	ON	Class_1
5	DI_1-5.SELECTED	OFF	ON	Class_1
6	DI_1-6.SELECTED	OFF	ON	Class_1
7	DI_1-7.SELECTED	OFF	ON	Class_1
8	DI_1-8.SELECTED	OFF	ON	Class_1
9	DI_1-9.SELECTED	OFF	ON	Class_1
10	DI_1-10.SELECTED	OFF	ON	Class_1
11	DO_1-1.SELECTED	OFF	ON	Class_1
12	DO_1-2.SELECTED	OFF	ON	Class_1
13	DO_1-3.SELECTED	OFF	ON	Class_1
14	DO_1-4.SELECTED	OFF	ON	Class_1
15	DO_1-5.SELECTED	OFF	ON	Class_1
16	DO_1-6.SELECTED	OFF	ON	Class_1
17	DO_1-7.SELECTED	OFF	ON	Class_1
18	DO_1-8.SELECTED	OFF	ON	Class_1
19	DO_1-9.SELECTED	OFF	ON	Class_1
20	DO_1-10.SELECTED	OFF	ON	Class_1
21	Station_1.FLD-TYPE	NaturalGasDry	NaturalGasSat	Class_3
22	Station_2.FLD-TYPE	NaturalGasDry	NaturalGasSat	Class_3
23	DP Mtr_1.STATION_OBJ.FLD_TYPE	NaturalGasDry	NaturalGasSat	Class_3
24	DP Mtr_2.STATION_OBJ.FLD_TYPE	NaturalGasDry	NaturalGasSat	Class_3
25	Linear Mtr_1. STATION_OBJ.FLD_TYPE	NaturalGasDry	NaturalGasSat	Class_3
26	Linear Mtr_2.STATION_OBJ.FLD_TYPE	NaturalGasDry	NaturalGasSat	Class_3
27	PID_1.OUTPUT_MODE	Manual	Auto	Class_3
28	PID_2.OUTPUT_MODE	Manual	Auto	Class_3
29	PID_3.OUTPUT_MODE	Manual	Auto	Class_3

4.5 Binary Output: DNP3 Object Groups 10 (Static) & 12 (Commands)

4.5.1 DNP3 Object Group 10: Binary Output Static

This group can be read with the following variations:

- **Variation 1:** Package format having single bit binary output state without status flags
- **Variation 2:** Each DNP3 point is returned with a single byte having status flags indicating the point status (such as online/offline, comm lost, over range, etc.)

4.5.2 DNP3 Object Group 12: Binary Output Command or Control Relay Output Block (CROB)

This group can be read with the following variations:

- **Variation 1:** Control Relay Output Block
- **Variation 2:** Pattern Control Block (PCB); this variation is **not** supported.
- **Variation 3:** Pattern Control Mask; this variation is **not** supported.

Point Index	Tag Mapped	Name for State when value = 0	Name for State when value = 1	Default Class Assigned
0	DP Mtr_1.PRESS_LOC	Upstream	Downstream	None
1	DP Mtr_1.PRESS_TYPE	Absolute	Gauge	None
2	DP Mtr_2.PRESS_LOC	Disabled	Enabled	None
3	DP Mtr_2.PRESS_TYPE	Disabled	Enabled	None
4	Linear Mtr_1.MTR_TYPE	Volume	Mass	None
5	Linear Mtr_1.PRESS_TYPE	Absolute	Gauge	None
6	Linear Mtr_2.MTR_TYPE	Volume	Mass	None
7	Linear Mtr_2.PRESS_TYPE	Absolute	Gauge	None
8	PID_1.PID_ENABLE	Disable	Enable	None
9	PID_1.OUTPUT_TYPE	Analog	Digital	None
10	PID_2.PID_ENABLE	Disable	Enable	None
11	PID_2.OUTPUT_TYPE	Analog	Digital	None
12	PID_3.PID_ENABLE	Disable	Enable	None
13	PID_3.OUTPUT_TYPE	Analog	Digital	None

4.6 Analog Input: DNP3 Object Groups 30 (Static) & 32 (Events)

4.6.1 DNP3 Object Group 30: Analog Input Static

This group can be read with the following variations:

- **Variation 1:** 32-bit with flag
- **Variation 2:** 16-bit with flag
- **Variation 3:** 32-bit without flag
- **Variation 4:** 16-bit without flag
- **Variation 5:** Single precision floating point with flag
- **Variation 6:** Double precision floating point with flag

4.6.2 DNP3 Object Group 32: Analog Input Events

This group can be read with the following variations:

- **Variation 1:** 32-bit with flag
- **Variation 2:** 16-bit with flag
- **Variation 3:** 32-bit without flag
- **Variation 4:** 16-bit without flag
- **Variation 5:** single precision floating without time
- **Variation 6:** double precision floating without time
- **Variation 7:** single precision floating with time
- **Variation 8:** double precision floating with time

Point Index	Tag Mapped	Default Class	Group 30 Default Variation	Group 32 Default Variation
0	System_1.NUM_ALM	Class_2	Variation 1	Variation 1
1	System_1.NUM_EVT	Class_2	Variation 1	Variation 1
2	System_1.NUM_WM_EVT	Class_2	Variation 1	Variation 1
3	System Pwr_1.BATT_ALM.PROCESS_ALM	Class_1	Variation 2	Variation 2
4	System Pwr_1.EXT_VOLT_ALM.PROCESS_ALM	Class_1	Variation 2	Variation 2
5	Clock_1.TIME	Class_2	Variation 1	Variation 1
6	Clock_1.YEAR	Class_2	Variation 2	Variation 2
7	Clock_1.MONTH	Class_2	Variation 2	Variation 2
8	Clock_1.DAY	Class_2	Variation 2	Variation 2
9	Clock_1.HOUR	Class_2	Variation 2	Variation 2
10	Clock_1.SECOND	Class_2	Variation 2	Variation 2

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Point Index	Tag Mapped	Default Class	Group 30 Default Variation	Group 32 Default Variation
11	Clock_1.MINUTE	Class_2	Variation 2	Variation 2
12	Log_1.LOG_ALM	Class_2	Variation 1	Variation 1
13	Log_1.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
14	Log_2.LOG_ALM	Class_2	Variation 1	Variation 1
15	Log_2.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
16	Log_3.LOG_ALM	Class_2	Variation 1	Variation 1
17	Log_3.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
18	Log_4.LOG_ALM	Class_2	Variation 1	Variation 1
19	Log_4.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
20	Log_5.LOG_ALM	Class_2	Variation 1	Variation 1
21	Log_5.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
22	Log_6.LOG_ALM	Class_2	Variation 1	Variation 1
23	Log_6.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
24	Log_7.LOG_ALM	Class_2	Variation 1	Variation 1
25	Log_7.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
26	Log_8.LOG_ALM	Class_2	Variation 1	Variation 1
27	Log_8.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
28	Log_9.LOG_ALM	Class_2	Variation 1	Variation 1
29	Log_9.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
30	Log_10.LOG_ALM	Class_2	Variation 1	Variation 1
31	Log_10.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
32	Log_11.LOG_ALM	Class_2	Variation 1	Variation 1
33	Log_11.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
34	Log_12.LOG_ALM	Class_2	Variation 1	Variation 1
35	Log_12.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
36	Log_13.LOG_ALM	Class_2	Variation 1	Variation 1
37	Log_13.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
38	Log_14.LOG_ALM	Class_2	Variation 1	Variation 1
39	Log_14.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
40	Log_15.LOG_ALM	Class_2	Variation 1	Variation 1
41	Log_15.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
42	Log_16.LOG_ALM	Class_2	Variation 1	Variation 1

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Point Index	Tag Mapped	Default Class	Group 30 Default Variation	Group 32 Default Variation
43	Log_16.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
44	Log_17.LOG_ALM	Class_2	Variation 1	Variation 1
45	Log_17.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
46	Log_18.LOG_ALM	Class_2	Variation 1	Variation 1
47	Log_18.LAST_READ_SEQ	Class_2	Variation 1	Variation 1
48	AI_1-1.SELECTED	Class_2	Variation 5	Variation 5
49	AI_1-2.SELECTED	Class_2	Variation 5	Variation 5
50	AI_1-3.SELECTED	Class_2	Variation 5	Variation 5
51	AI_1-4.SELECTED	Class_2	Variation 5	Variation 5
52	AI_1-5.SELECTED	Class_2	Variation 5	Variation 5
53	AI_1-6.SELECTED	Class_2	Variation 5	Variation 5
54	AI_1-7.SELECTED	Class_2	Variation 5	Variation 5
55	AI_1-8.SELECTED	Class_2	Variation 5	Variation 5
56	AI_1-1.INPUT_STATUS	Class_1	Variation 2	Variation 2
57	AI_1-2.INPUT_STATUS	Class_1	Variation 2	Variation 2
58	AI_1-3.INPUT_STATUS	Class_1	Variation 2	Variation 2
59	AI_1-4.INPUT_STATUS	Class_1	Variation 2	Variation 2
60	AI_1-5.INPUT_STATUS	Class_1	Variation 2	Variation 2
61	AI_1-6.INPUT_STATUS	Class_1	Variation 2	Variation 2
62	AI_1-7.INPUT_STATUS	Class_1	Variation 2	Variation 2
63	AI_1-8.INPUT_STATUS	Class_1	Variation 2	Variation 2
64	AO_1-1.SELECTED	Class_2	Variation 5	Variation 5
65	AO_1-2.SELECTED	Class_2	Variation 5	Variation 5
66	AO_1-3.SELECTED	Class_2	Variation 5	Variation 5
67	AO_1-4.SELECTED	Class_2	Variation 5	Variation 5
68	AO_1-5.SELECTED	Class_2	Variation 5	Variation 5
69	AO_1-6.SELECTED	Class_2	Variation 5	Variation 5
70	AO_1-7.SELECTED	Class_2	Variation 5	Variation 5
71	AO_1-8.SELECTED	Class_2	Variation 5	Variation 5
72	AO_1-1.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
73	AO_1-2.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
74	AO_1-3.OUTPUT_STATUS	Class_1	Variation 2	Variation 2

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75	AO_1-4.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
76	AO_1-5.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
77	AO_1-6.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
78	AO_1-7.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
79	AO_1-8.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
80	DI_1-1.INPUT_STATUS	Class_1	Variation 2	Variation 1
81	DI_1-2.INPUT_STATUS	Class_1	Variation 2	Variation 2
82	DI_1-3.INPUT_STATUS	Class_1	Variation 2	Variation 2
83	DI_1-4.INPUT_STATUS	Class_1	Variation 2	Variation 2
84	DI_1-5.INPUT_STATUS	Class_1	Variation 2	Variation 2
85	DI_1-6.INPUT_STATUS	Class_1	Variation 2	Variation 2
86	DI_1-7.INPUT_STATUS	Class_1	Variation 2	Variation 2
87	DI_1-8.INPUT_STATUS	Class_1	Variation 2	Variation 2
88	DI_1-9.INPUT_STATUS	Class_1	Variation 2	Variation 2
89	DI_1-10.INPUT_STATUS	Class_1	Variation 2	Variation 2
90	DO_1-1.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
91	DO_1-2.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
92	DO_1-3.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
93	DO_1-4.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
94	DO_1-5.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
95	DO_1-6.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
96	DO_1-7.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
97	DO_1-8.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
98	DO_1-9.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
99	DO_1-10.OUTPUT_STATUS	Class_1	Variation 2	Variation 2
100	PI_1-1.SELECTED_FREQ	Class_2	Variation 5	Variation 5
101	PI_1-2.SELECTED_FREQ	Class_2	Variation 5	Variation 5
102	PI_1-3.SELECTED_FREQ	Class_2	Variation 5	Variation 5
103	PI_1-4.SELECTED_FREQ	Class_2	Variation 5	Variation 5
104	PI_1-5.SELECTED_FREQ	Class_2	Variation 5	Variation 5
105	PI_1-6.SELECTED_FREQ	Class_2	Variation 5	Variation 5
106	PI_1-7.SELECTED_FREQ	Class_2	Variation 5	Variation 5

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107	PI_1-8.SELECTED_FREQ	Class_2	Variation 5	Variation 5
108	PI_1-9.SELECTED_FREQ	Class_2	Variation 5	Variation 5
109	PI_1-10.SELECTED_FREQ	Class_2	Variation 5	Variation 5
110	PI_1-1.INPUT_STATUS	Class_1	Variation 2	Variation 2
111	PI_1-2.INPUT_STATUS	Class_1	Variation 2	Variation 2
112	PI_1-3.INPUT_STATUS	Class_1	Variation 2	Variation 2
113	PI_1-4.INPUT_STATUS	Class_1	Variation 2	Variation 2
114	PI_1-5.INPUT_STATUS	Class_1	Variation 2	Variation 2
115	PI_1-6.INPUT_STATUS	Class_1	Variation 2	Variation 2
116	PI_1-7.INPUT_STATUS	Class_1	Variation 2	Variation 2
117	PI_1-8.INPUT_STATUS	Class_1	Variation 2	Variation 2
118	PI_1-9.INPUT_STATUS	Class_1	Variation 2	Variation 2
119	PI_1-10.INPUT_STATUS	Class_1	Variation 2	Variation 2
120	Fluid Prop_1.PCALC_ALM	Class_2	Variation 1	Variation 1
121	Fluid Prop_2.PCALC_ALM	Class_2	Variation 1	Variation 1
122	Fluid Prop_3.PCALC_ALM	Class_2	Variation 1	Variation 1
123	Fluid Prop_4.PCALC_ALM	Class_2	Variation 1	Variation 2
124	Station_1.UVOL_RATE	Class_2	Variation 6	Variation 6
125	Station_1.SVOL_RATE	Class_2	Variation 6	Variation 6
126	Station_1.MASS_RATE	Class_2	Variation 6	Variation 6
127	Station_1.ENERGY_RATE	Class_2	Variation 6	Variation 6
128	Station_1.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
129	Station_1.HIST_GRP_OBJ.CONTRACT_HR	Class_1	Variation 2	Variation 2
130	Station_2.UVOL_RATE	Class_2	Variation 6	Variation 6
131	Station_2.SVOL_RATE	Class_2	Variation 6	Variation 6
132	Station_2.MASS_RATE	Class_2	Variation 6	Variation 6
133	Station_2.ENERGY_RATE	Class_2	Variation 6	Variation 6
134	Station_2.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
135	Station_2.HIST_GRP_OBJ.CONTRACT_HR	Class_1	Variation 2	Variation 2
136	DP Mtr_1.DP_OBJ.SELECTED	Class_2	Variation 5	Variation 5
137	DP Mtr_1.PF_OBJ.SELECTED	Class_2	Variation 5	Variation 5
138	DP Mtr_1.TF_OBJ.SELECTED	Class_2	Variation 5	Variation 5

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139	DP Mtr_1.UVOL_RATE	Class_2	Variation 6	Variation 6
140	DP Mtr_1.SVOL_RATE	Class_2	Variation 6	Variation 6
141	DP Mtr_1.MASS_RATE	Class_2	Variation 6	Variation 6
142	DP Mtr_1.ENERGY_RATE	Class_2	Variation 6	Variation 6
143	DP Mtr_1.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
144	DP Mtr_1.DP_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
145	DP Mtr_1.PF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
146	DP Mtr_1.TF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
147	DP Mtr_2.DP_OBJ.SELECTED	Class_2	Variation 5	Variation 5
148	DP Mtr_2.PF_OBJ.SELECTED	Class_2	Variation 5	Variation 5
149	DP Mtr_2.TF_OBJ.SELECTED	Class_2	Variation 5	Variation 5
150	DP Mtr_2.UVOL_RATE	Class_2	Variation 6	Variation 6
151	DP Mtr_2.SVOL_RATE	Class_2	Variation 6	Variation 6
152	DP Mtr_2.MASS_RATE	Class_2	Variation 6	Variation 6
153	DP Mtr_2.ENERGY_RATE	Class_2	Variation 6	Variation 6
154	DP Mtr_2.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
155	DP Mtr_2.DP_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
156	DP Mtr_2.PF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
157	DP Mtr_2.TF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
158	Linear Mtr_1.IQ_RATE	Class_2	Variation 6	Variation 6
159	Linear Mtr_1.PF_INUSE	Class_2	Variation 6	Variation 6
160	Linear Mtr_1.TF_INUSE	Class_2	Variation 6	Variation 6
161	Linear Mtr_1.UVOL_RATE	Class_2	Variation 6	Variation 6
162	Linear Mtr_1.SVOL_RATE	Class_2	Variation 6	Variation 6
163	Linear Mtr_1.MASS_RATE	Class_2	Variation 6	Variation 6
164	Linear Mtr_1.ENERGY_RATE	Class_2	Variation 6	Variation 6
165	Linear Mtr_1.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
166	Linear Mtr_1.PF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
167	Linear Mtr_1.TF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
168	Linear Mtr_2.IQ_RATE	Class_2	Variation 6	Variation 6
169	Linear Mtr_2.PF_INUSE	Class_2	Variation 6	Variation 6
170	Linear Mtr_2.TF_INUSE	Class_2	Variation 6	Variation 6

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Point Index	Tag Mapped	Default Class	Group 30 Default Variation	Group 32 Default Variation
171	Linear Mtr_2.UVOL_RATE	Class_2	Variation 6	Variation 6
172	Linear Mtr_2.SVOL_RATE	Class_2	Variation 6	Variation 6
173	Linear Mtr_2.MASS_RATE	Class_2	Variation 6	Variation 6
174	Linear Mtr_2.ENERGY_RATE	Class_2	Variation 6	Variation 6
175	Linear Mtr_2.FLW_ALM_OBJ.PROCESS_ALM	Class_1	Variation 2	Variation 2
176	Linear Mtr_2.PF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
177	Linear Mtr_2.TF_OBJ.INPUT_STATUS	Class_1	Variation 2	Variation 2
178	PID_1.P_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5
179	PID_1.O_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5
180	PID_2.P_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5
181	PID_2.O_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5
182	PID_3.P_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5
183	PID_3.O_PROCESS_VARIABLE	Class_2	Variation 5	Variation 5

4.7 Analog Output: DNP3 Object Groups 40 (Status) & 41 (Commands)

4.7.1 DNP3 Object Group 40: Analog Output Status

This group can be read with the following variations:

- **Variation 1:** 32-bit with flag
- **Variation 2:** 16-bit with flag
- **Variation 3:** single-precision floating point with flag
- **Variation 4:** double-precision floating point with flag

4.7.2 DNP3 Object Group 41: Analog Output Commands

This group can be read with the following variations:

- **Variation 1:** Write 32-bit value
- **Variation 2:** Write 16-bit value
- **Variation 3:** Write single-precision floating point value
- **Variation 4:** Write double-precision floating point value

Note

The Supported Control Operations column of this table classifies the analog output points which **can** be written to (**Sel_Op** = "Select/Operate") and those which **cannot** be operated upon (**NA** = "Not Applicable.>").

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Point Index	Tag Mapped	Default Class	Supported Control Operations	Group 40 Default Variation	Group 41 Default Variation
0	System_1.PROD_TYPE	Class_3	NA	Variation 2	Variation 2
1	System_1.MPU_LOAD	Class_3	NA	Variation 3	Variation 3
2	System_1.MAX_PID	Class_3	NA	Variation 1	Variation 1
3	System_1.MAX_STN	Class_3	NA	Variation 1	Variation 1
4	System_1.MAX_STRM	Class_3	NA	Variation 1	Variation 1
5	Mtr Setup_1.MAX_MTRS	Class_3	NA	Variation 1	Variation 1
6	System Pwr_1.BATT_VAL	Class_3	NA	Variation 3	Variation 3
7	System Pwr_1.EXT_VOLT_VAL	Class_3	NA	Variation 3	Variation 3
8	Mtr Setup_1.NUM_DPMTRS	None	Sel_Op	Variation 2	Variation 2
9	Mtr Setup_1.NUM_LINMTRS	None	Sel_Op	Variation 2	Variation 2
10	System Pwr_1.BATT_TYPE	None	Sel_Op	Variation 2	Variation 2
11	Log_1.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
12	Log_2.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
13	Log_3.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
14	Log_4.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
15	Log_5.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
16	Log_6.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
17	Log_7.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
18	Log_8.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
19	Log_9.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
20	Log_10.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
21	Log_11.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
22	Log_12.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
23	Log_13.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
24	Log_14.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
25	Log_15.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
26	Log_16.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
27	Log_17.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
28	Log_18.LOG_TYPE	None	Sel_Op	Variation 2	Variation 2
29	AI_1-1.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
30	AI_1-2.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
31	AI_1-3.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2

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32	AI_1-4.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
33	AI_1-5.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
34	AI_1-6.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
35	AI_1-7.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
36	AI_1-8.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
37	AI_1-1.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
38	AI_1-2.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
39	AI_1-3.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
40	AI_1-4.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
41	AI_1-5.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
42	AI_1-6.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
43	AI_1-7.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
44	AI_1-8.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
45	AI_1-1.LOW_EU	None	Sel_Op	Variation 3	Variation 3
46	AI_1-2.LOW_EU	None	Sel_Op	Variation 3	Variation 3
47	AI_1-3.LOW_EU	None	Sel_Op	Variation 3	Variation 3
48	AI_1-4.LOW_EU	None	Sel_Op	Variation 3	Variation 3
49	AI_1-5.LOW_EU	None	Sel_Op	Variation 3	Variation 3
50	AI_1-6.LOW_EU	None	Sel_Op	Variation 3	Variation 3
51	AI_1-7.LOW_EU	None	Sel_Op	Variation 3	Variation 3
52	AI_1-8.LOW_EU	None	Sel_Op	Variation 3	Variation 3
53	AI_1-1.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
54	AI_1-2.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
55	AI_1-3.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
56	AI_1-4.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
57	AI_1-5.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
58	AI_1-6.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
59	AI_1-7.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
60	AI_1-8.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
61	AO_1-1.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
62	AO_1-2.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
63	AO_1-3.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2

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Point Index	Tag Mapped	Default Class	Supported Control Operations	Group 40 Default Variation	Group 41 Default Variation
64	AO_1-4.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
65	AO_1-5.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
66	AO_1-6.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
67	AO_1-7.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
68	AO_1-8.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
69	AO_1-1.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
70	AO_1-2.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
71	AO_1-3.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
72	AO_1-4.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
73	AO_1-5.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
74	AO_1-6.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
75	AO_1-7.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
76	AO_1-8.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
77	AO_1-1.LOW_EU	None	Sel_Op	Variation 3	Variation 3
78	AO_1-2.LOW_EU	None	Sel_Op	Variation 3	Variation 3
79	AO_1-3.LOW_EU	None	Sel_Op	Variation 3	Variation 3
80	AO_1-4.LOW_EU	None	Sel_Op	Variation 3	Variation 3
81	AO_1-5.LOW_EU	None	Sel_Op	Variation 3	Variation 3
82	AO_1-6.LOW_EU	None	Sel_Op	Variation 3	Variation 3
83	AO_1-7.LOW_EU	None	Sel_Op	Variation 3	Variation 3
84	AO_1-8.LOW_EU	None	Sel_Op	Variation 3	Variation 3
85	AO_1-1.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
86	AO_1-2.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
87	AO_1-3.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
88	AO_1-4.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
89	AO_1-5.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
90	AO_1-6.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
91	AO_1-7.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
92	AO_1-8.HIGH_EU	None	Sel_Op	Variation 3	Variation 3
93	DI_1-1.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
94	DI_1-2.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
95	DI_1-3.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2

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96	DI_1-4.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
97	DI_1-5.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
98	DI_1-6.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
99	DI_1-7.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
100	DI_1-8.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
101	DI_1-9.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
102	DI_1-10.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
103	DI_1-1.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
104	DI_1-2.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
105	DI_1-3.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
106	DI_1-4.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
107	DI_1-5.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
108	DI_1-6.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
109	DI_1-7.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
110	DI_1-8.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
111	DI_1-9.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
112	DI_1-10.DI_TYPE	None	Sel_Op	Variation 2	Variation 2
113	DO_1-1.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
114	DO_1-2.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
115	DO_1-3.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
116	DO_1-4.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
117	DO_1-5.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
118	DO_1-6.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
119	DO_1-7.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
120	DO_1-8.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
121	DO_1-9.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
122	DO_1-10.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
123	DO_1-1.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
124	DO_1-2.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
125	DO_1-3.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
126	DO_1-4.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
127	DO_1-5.DO_TYPE	None	Sel_Op	Variation 2	Variation 2

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128	DO_1-6.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
129	DO_1-7.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
130	DO_1-8.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
131	DO_1-9.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
132	DO_1-10.DO_TYPE	None	Sel_Op	Variation 2	Variation 2
133	PI_1-1.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
134	PI_1-2.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
135	PI_1-3.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
136	PI_1-4.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
137	PI_1-5.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
138	PI_1-6.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
139	PI_1-7.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
140	PI_1-8.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
141	PI_1-9.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
142	PI_1-10.ACTUAL_MODE	Class_3	NA	Variation 2	Variation 2
143	PI_1-1.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
144	PI_1-2.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
145	PI_1-3.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
146	PI_1-4.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
147	PI_1-5.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
148	PI_1-6.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
149	PI_1-7.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
150	PI_1-8.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
151	PI_1-9.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
152	PI_1-10.TODAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
153	PI_1-1.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
154	PI_1-2.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
155	PI_1-3.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
156	PI_1-4.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
157	PI_1-5.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
158	PI_1-6.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
159	PI_1-7.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4

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160	PI_1-8.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
161	PI_1-9.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
162	PI_1-10.YESTERDAYS_TOTAL	Class_3	NA	Variation 4	Variation 4
163	PI_1-1.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
164	PI_1-2.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
165	PI_1-3.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
166	PI_1-4.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
167	PI_1-5.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
168	PI_1-6.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
169	PI_1-7.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
170	PI_1-8.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
171	PI_1-9.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
172	PI_1-10.FREQ_ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
173	PI_1-1.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
174	PI_1-2.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
175	PI_1-3.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
176	PI_1-4.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
177	PI_1-5.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
178	PI_1-6.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
179	PI_1-7.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
180	PI_1-8.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
181	PI_1-9.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
182	PI_1-10.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
183	Sensor_1-1.XMTR_STATUS	Class_3	NA	Variation 2	Variation 2
184	Sensor_1-2.XMTR_STATUS	Class_3	NA	Variation 2	Variation 2
185	Sensor_1-3.XMTR_STATUS	Class_3	NA	Variation 2	Variation 2
186	Station_1.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
187	Station_1.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
188	Station_1.PB_SEL	None	NA	Variation 4	Variation 4
189	Station_1.TB_SEL	None	NA	Variation 4	Variation 4
190	Station_1.LATITUDE	None	Sel_Op	Variation 4	Variation 4
191	Station_1.ELEVATION	None	Sel_Op	Variation 4	Variation 4

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192	Station_1.ZF_METHOD	None	Sel_Op	Variation 2	Variation 2
193	Station_1.HV_METHOD	None	Sel_Op	Variation 2	Variation 2
194	Station_1.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
195	Station_1.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
196	Station_1.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
197	Station_1.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
198	Station_1.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
199	Station_1.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
200	Station_1.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
201	Station_1.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
202	Station_1.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
203	Station_1.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
204	Station_1.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
205	Station_1.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
206	Station_1.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
207	Station_1.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
208	Station_1.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
209	Station_1.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
210	Station_1.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
211	Station_1.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
212	Station_1.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
213	Station_1.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
214	Station_2.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
215	Station_2.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
216	Station_2.PB_SEL	None	NA	Variation 4	Variation 4
217	Station_2.TB_SEL	None	NA	Variation 4	Variation 4
218	Station_2.LATITUDE	None	Sel_Op	Variation 4	Variation 4
219	Station_2.ELEVATION	None	Sel_Op	Variation 4	Variation 4
220	Station_2.ZF_METHOD	None	Sel_Op	Variation 2	Variation 2
221	Station_2.HV_METHOD	None	Sel_Op	Variation 2	Variation 2
222	Station_2.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
223	Station_2.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4

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224	Station_2.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
225	Station_2.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
226	Station_2.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
227	Station_2.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
228	Station_2.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
229	Station_2.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
230	Station_2.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
231	Station_2.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
232	Station_2.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
233	Station_2.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
234	Station_2.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
235	Station_2.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
236	Station_2.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
237	Station_2.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
238	Station_2.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
239	Station_2.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
240	Station_2.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
241	Station_2.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
242	DP Mtr_1.MTR_TYPE	None	Sel_Op	Variation 2	Variation 2
243	DP Mtr_1.AGA3_METHOD	None	Sel_Op	Variation 2	Variation 2
244	DP Mtr_1.ISO5167_METHOD	None	Sel_Op	Variation 2	Variation 2
245	DP Mtr_1.RMT_ORIF_METHOD	None	Sel_Op	Variation 2	Variation 2
246	DP Mtr_1.CONE_METHOD	None	Sel_Op	Variation 2	Variation 2
247	DP Mtr_1.ABAR_METHOD	None	Sel_Op	Variation 2	Variation 2
248	DP Mtr_1.MTR_DIAM	None	Sel_Op	Variation 4	Variation 4
249	DP Mtr_1.PIPE_DIAM	None	Sel_Op	Variation 4	Variation 4
250	DP Mtr_1.NO_FLOW_LIM	None	Sel_Op	Variation 4	Variation 4
251	DP Mtr_1.PIPE_MAT_OPT	None	Sel_Op	Variation 2	Variation 2
252	DP Mtr_1.MTR_MAT_OPT	None	Sel_Op	Variation 2	Variation 2
253	DP Mtr_1.PIPE_DIAM_REF	None	Sel_Op	Variation 4	Variation 4
254	DP Mtr_1.MTR_DIAM_REF	None	Sel_Op	Variation 4	Variation 4
255	DP Mtr_1.FCALC_ALM	Class_3	NA	Variation 1	Variation 1

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256	DP Mtr_1.MTR_DIAM_SEL	Class_3	NA	Variation 4	Variation 4
257	DP Mtr_1.PIPE_DIAM_SEL	Class_3	NA	Variation 4	Variation 4
258	DP Mtr_1.BETA_SEL	Class_3	NA	Variation 4	Variation 4
259	DP Mtr_1.PLOSS_SEL	Class_3	NA	Variation 4	Variation 4
260	DP Mtr_1.RE_SEL	Class_3	NA	Variation 4	Variation 4
261	DP Mtr_1.CD_SEL	Class_3	NA	Variation 4	Variation 4
262	DP Mtr_1.FS_SEL	Class_3	NA	Variation 4	Variation 4
263	DP Mtr_1.Y1_SEL	Class_3	NA	Variation 4	Variation 4
264	DP Mtr_1.EV_SEL	Class_3	NA	Variation 4	Variation 4
265	DP Mtr_1.IV_SEL	Class_3	NA	Variation 4	Variation 4
266	DP Mtr_1.IMV_SEL	Class_3	NA	Variation 4	Variation 4
267	RESERVED				
268	DP Mtr_1.USER_CORR_FACTOR	Class_3	NA	Variation 4	Variation 4
269	DP Mtr_1.STATION_OBJ.PB_SEL	None	NA	Variation 4	Variation 4
270	DP Mtr_1.STATION_OBJ.TB_SEL	None	NA	Variation 2	Variation 2
271	DP Mtr_1.STATION_OBJ.LATITUDE	None	Sel_Op	Variation 4	Variation 4
272	DP Mtr_1.STATION_OBJ.ELEVATION	None	Sel_Op	Variation 4	Variation 4
273	DP Mtr_1.STATION_OBJ.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
274	DP Mtr_1.STATION_OBJ.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
275	DP Mtr_1.STATION_OBJ.HIST_GRP_OBJ.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
276	DP Mtr_1.FLUID_PROP_OBJ.N2_INUSE	Class_3	NA	Variation 4	Variation 4
277	DP Mtr_1.FLUID_PROP_OBJ.CO2_INUSE	Class_3	NA	Variation 4	Variation 4
278	DP Mtr_1.FLUID_PROP_OBJ.C1_INUSE	Class_3	NA	Variation 4	Variation 4
279	DP Mtr_1.FLUID_PROP_OBJ.C2_INUSE	Class_3	NA	Variation 4	Variation 4
280	DP Mtr_1.FLUID_PROP_OBJ.C3_INUSE	Class_3	NA	Variation 4	Variation 4
281	DP Mtr_1.FLUID_PROP_OBJ.NC4_INUSE	Class_3	NA	Variation 4	Variation 4
282	DP Mtr_1.FLUID_PROP_OBJ.IC4_INUSE	Class_3	NA	Variation 4	Variation 4
283	DP Mtr_1.FLUID_PROP_OBJ.NC5_INUSE	Class_3	NA	Variation 4	Variation 4
284	DP Mtr_1.FLUID_PROP_OBJ.IC5_INUSE	Class_3	NA	Variation 4	Variation 4
285	DP Mtr_1.FLUID_PROP_OBJ.C6_INUSE	Class_3	NA	Variation 4	Variation 4
286	DP Mtr_1.FLUID_PROP_OBJ.C7_INUSE	Class_3	NA	Variation 4	Variation 4

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287	DP Mtr_1.FLUID_PROP_OBJ.C8_INUSE	Class_3	NA	Variation 4	Variation 4
288	DP Mtr_1.FLUID_PROP_OBJ.C9_INUSE	Class_3	NA	Variation 4	Variation 4
289	DP Mtr_1.FLUID_PROP_OBJ.C10_INUSE	Class_3	NA	Variation 4	Variation 4
290	DP Mtr_1.FLUID_PROP_OBJ.H2S_INUSE	Class_3	NA	Variation 4	Variation 4
291	DP Mtr_1.FLUID_PROP_OBJ.H2O_INUSE	Class_3	NA	Variation 4	Variation 4
292	DP Mtr_1.FLUID_PROP_OBJ.HE_INUSE	Class_3	NA	Variation 4	Variation 4
293	DP Mtr_1.FLUID_PROP_OBJ.O2_INUSE	Class_3	NA	Variation 4	Variation 4
294	DP Mtr_1.FLUID_PROP_OBJ.H2_INUSE	Class_3	NA	Variation 4	Variation 4
295	DP Mtr_1.FLUID_PROP_OBJ.CO_INUSE	Class_3	NA	Variation 4	Variation 4
296	DP Mtr_1.FLUID_PROP_OBJ.AR_INUSE	Class_3	NA	Variation 4	Variation 4
297	DP Mtr_1.FLUID_PROP_OBJ.H2O_CONTENT_SEL	Class_3	NA	Variation 4	Variation 4
298	DP Mtr_1.FLUID_PROP_OBJ.HV_REAL_SEL	Class_3	NA	Variation 4	Variation 4
299	DP Mtr_1.FLUID_PROP_OBJ.RD_REAL_SEL	Class_3	NA	Variation 4	Variation 4
300	DP Mtr_1.FLUID_PROP_OBJ.ZB_SEL	Class_3	NA	Variation 4	Variation 4
301	DP Mtr_1.FLUID_PROP_OBJ.ZS_SEL	Class_3	NA	Variation 4	Variation 4
302	DP Mtr_1.FLUID_PROP_OBJ.ZF_SEL	Class_3	NA	Variation 4	Variation 4
303	DP Mtr_1.FLUID_PROP_OBJ.DENSB_SEL	Class_3	NA	Variation 4	Variation 4
304	DP Mtr_1.FLUID_PROP_OBJ.DENSF_SEL	Class_3	NA	Variation 4	Variation 4
305	DP Mtr_1.DP_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
306	DP Mtr_1.PF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
307	DP Mtr_1.TF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
308	DP Mtr_1.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
309	DP Mtr_1.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
310	DP Mtr_1.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
311	DP Mtr_1.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
312	DP Mtr_1.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
313	DP Mtr_1.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
314	DP Mtr_1.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
315	DP Mtr_1.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
316	DP Mtr_1.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
317	DP Mtr_1.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4

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318	DP Mtr_1.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
319	DP Mtr_1.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
320	DP Mtr_1.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
321	DP Mtr_1.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
322	DP Mtr_1.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
323	DP Mtr_1.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
324	DP Mtr_1.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
325	DP Mtr_1.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
326	DP Mtr_1.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
327	DP Mtr_1.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
328	DP Mtr_1.FLWTM_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
329	DP Mtr_1.FLWTM_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
330	DP Mtr_1.FLWTM_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
331	DP Mtr_1.FLWTM_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
332	DP Mtr_1.FLWTM_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
333	DP Mtr_1.IV_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
334	DP Mtr_1.IV_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
335	DP Mtr_1.IV_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
336	DP Mtr_1.IV_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
337	DP Mtr_1.IV_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
338	DP Mtr_2.MTR_TYPE	None	Sel_Op	Variation 2	Variation 2
339	DP Mtr_2.AGA3_METHOD	None	Sel_Op	Variation 2	Variation 2
340	DP Mtr_2.ISO5167_METHOD	None	Sel_Op	Variation 2	Variation 2
341	DP Mtr_2.RMT_ORIF_METHOD	None	Sel_Op	Variation 2	Variation 2
342	DP Mtr_2.CONE_METHOD	None	Sel_Op	Variation 2	Variation 2
343	DP Mtr_2.ABAR_METHOD	None	Sel_Op	Variation 2	Variation 2
344	DP Mtr_2.MTR_DIAM	None	Sel_Op	Variation 4	Variation 4
345	DP Mtr_2.PIPE_DIAM	None	Sel_Op	Variation 4	Variation 4
346	DP Mtr_2.NO_FLOW_LIM	None	Sel_Op	Variation 4	Variation 4
347	DP Mtr_2.PIPE_MAT_OPT	None	Sel_Op	Variation 2	Variation 2
348	DP Mtr_2.MTR_MAT_OPT	None	Sel_Op	Variation 2	Variation 2
349	DP Mtr_2.PIPE_DIAM_REF	None	Sel_Op	Variation 4	Variation 4

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350	DP Mtr_2.MTR_DIAM_REF	None	Sel_Op	Variation 4	Variation 4
351	DP Mtr_2.FCALC_ALM	Class_3	NA	Variation 1	Variation 1
352	DP Mtr_2.MTR_DIAM_SEL	Class_3	NA	Variation 4	Variation 4
353	DP Mtr_2.PIPE_DIAM_SEL	Class_3	NA	Variation 4	Variation 4
354	DP Mtr_2.BETA_SEL	Class_3	NA	Variation 4	Variation 4
355	DP Mtr_2.PLOSS_SEL	Class_3	NA	Variation 4	Variation 4
356	DP Mtr_2.RE_SEL	Class_3	NA	Variation 4	Variation 4
357	DP Mtr_2.CD_SEL	Class_3	NA	Variation 4	Variation 4
358	DP Mtr_2.FS_SEL	Class_3	NA	Variation 4	Variation 4
359	DP Mtr_2.Y1_SEL	Class_3	NA	Variation 4	Variation 4
360	DP Mtr_2.EV_SEL	Class_3	NA	Variation 4	Variation 4
361	DP Mtr_2.IV_SEL	Class_3	NA	Variation 4	Variation 4
362	DP Mtr_2.IMV_SEL	Class_3	NA	Variation 4	Variation 4
363	RESERVED				
364	DP Mtr_2.USER_CORR_FACTOR	Class_3	NA	Variation 4	Variation 4
365	DP Mtr_2.STATION_OBJ.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
366	DP Mtr_2.STATION_OBJ.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
367	DP Mtr_2.STATION_OBJ.PB_SEL	None	NA	Variation 4	Variation 4
368	DP Mtr_2.STATION_OBJ.TB_SEL	None	NA	Variation 2	Variation 2
369	DP Mtr_2.STATION_OBJ.LATITUDE	None	Sel_Op	Variation 4	Variation 4
370	DP Mtr_2.STATION_OBJ.ELEVATION	None	Sel_Op	Variation 4	Variation 4
371	DP Mtr_2.STATION_OBJ.HIST_GRP_OBJ. CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
372	DP Mtr_2.FLUID_PROP_OBJ.N2_INUSE	Class_3	NA	Variation 4	Variation 4
373	DP Mtr_2.FLUID_PROP_OBJ.CO2_INUSE	Class_3	NA	Variation 4	Variation 4
374	DP Mtr_2.FLUID_PROP_OBJ.C1_INUSE	Class_3	NA	Variation 4	Variation 4
375	DP Mtr_2.FLUID_PROP_OBJ.C2_INUSE	Class_3	NA	Variation 4	Variation 4
376	DP Mtr_2.FLUID_PROP_OBJ.C3_INUSE	Class_3	NA	Variation 4	Variation 4
377	DP Mtr_2.FLUID_PROP_OBJ.NC4_INUSE	Class_3	NA	Variation 4	Variation 4
378	DP Mtr_2.FLUID_PROP_OBJ.IC4_INUSE	Class_3	NA	Variation 4	Variation 4
379	DP Mtr_2.FLUID_PROP_OBJ.NC5_INUSE	Class_3	NA	Variation 4	Variation 4
380	DP Mtr_2.FLUID_PROP_OBJ.IC5_INUSE	Class_3	NA	Variation 4	Variation 4

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381	DP Mtr_2.FLUID_PROP_OBJ.C6_INUSE	Class_3	NA	Variation 4	Variation 4
382	DP Mtr_2.FLUID_PROP_OBJ.C7_INUSE	Class_3	NA	Variation 4	Variation 4
383	DP Mtr_2.FLUID_PROP_OBJ.C8_INUSE	Class_3	NA	Variation 4	Variation 4
384	DP Mtr_2.FLUID_PROP_OBJ.C9_INUSE	Class_3	NA	Variation 4	Variation 4
385	DP Mtr_2.FLUID_PROP_OBJ.C10_INUSE	Class_3	NA	Variation 4	Variation 4
386	DP Mtr_2.FLUID_PROP_OBJ.H2S_INUSE	Class_3	NA	Variation 4	Variation 4
387	DP Mtr_2.FLUID_PROP_OBJ.H2O_INUSE	Class_3	NA	Variation 4	Variation 4
388	DP Mtr_2.FLUID_PROP_OBJ.HE_INUSE	Class_3	NA	Variation 4	Variation 4
389	DP Mtr_2.FLUID_PROP_OBJ.O2_INUSE	Class_3	NA	Variation 4	Variation 4
390	DP Mtr_2.FLUID_PROP_OBJ.H2_INUSE	Class_3	NA	Variation 4	Variation 4
391	DP Mtr_2.FLUID_PROP_OBJ.CO_INUSE	Class_3	NA	Variation 4	Variation 4
392	DP Mtr_2.FLUID_PROP_OBJ.AR_INUSE	Class_3	NA	Variation 4	Variation 4
393	DP Mtr_2.FLUID_PROP_OBJ.H2O_CONTENT_SEL	Class_3	NA	Variation 4	Variation 4
394	DP Mtr_2.FLUID_PROP_OBJ.HV_REAL_SEL	Class_3	NA	Variation 4	Variation 4
395	DP Mtr_2.FLUID_PROP_OBJ.RD_REAL_SEL	Class_3	NA	Variation 4	Variation 4
396	DP Mtr_2.FLUID_PROP_OBJ.ZB_SEL	Class_3	NA	Variation 4	Variation 4
397	DP Mtr_2.FLUID_PROP_OBJ.ZS_SEL	Class_3	NA	Variation 4	Variation 4
398	DP Mtr_2.FLUID_PROP_OBJ.ZF_SEL	Class_3	NA	Variation 4	Variation 4
399	DP Mtr_2.FLUID_PROP_OBJ.DENSB_SEL	Class_3	NA	Variation 4	Variation 4
400	DP Mtr_2.FLUID_PROP_OBJ.DENSF_SEL	Class_3	NA	Variation 4	Variation 4
401	DP Mtr_2.DP_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
402	DP Mtr_2.PF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
403	DP Mtr_2.TF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
404	DP Mtr_2.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
405	DP Mtr_2.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
406	DP Mtr_2.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
407	DP Mtr_2.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
408	DP Mtr_2.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
409	DP Mtr_2.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
410	DP Mtr_2.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
411	DP Mtr_2.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4

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412	DP Mtr_2.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
413	DP Mtr_2.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
414	DP Mtr_2.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
415	DP Mtr_2.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
416	DP Mtr_2.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
417	DP Mtr_2.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
418	DP Mtr_2.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
419	DP Mtr_2.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
420	DP Mtr_2.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
421	DP Mtr_2.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
422	DP Mtr_2.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
423	DP Mtr_2.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
424	DP Mtr_2.FLWTM_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
425	DP Mtr_2.FLWTM_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
426	DP Mtr_2.FLWTM_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
427	DP Mtr_2.FLWTM_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
428	DP Mtr_2.FLWTM_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
429	DP Mtr_2.IV_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
430	DP Mtr_2.IV_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
431	DP Mtr_2.IV_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
432	DP Mtr_2.IV_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
433	DP Mtr_2.IV_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
434	Linear Mtr_1.NO_FLOW_LIM	None	Sel_Op	Variation 4	Variation 4
435	Linear Mtr_1.NO_FLOW_TIME	None	Sel_Op	Variation 1	Variation 1
436	Linear Mtr_1.FACTOR_CURVE_OPT	None	Sel_Op	Variation 2	Variation 2
437	Linear Mtr_1.USER_CORR_FACTOR	None	Sel_Op	Variation 4	Variation 4
438	Linear Mtr_1.MASS_CORR_PF_OPT	None	Sel_Op	Variation 4	Variation 4
439	Linear Mtr_1.PCAL	None	Sel_Op	Variation 4	Variation 4
440	Linear Mtr_1.MASS_CORR_PF_COEFF	None	Sel_Op	Variation 4	Variation 4
441	Linear Mtr_1.FCALC_ALM	Class_3	NA	Variation 1	Variation 1
442	Linear Mtr_1.PRESS_MULT	Class_3	NA	Variation 4	Variation 4
443	Linear Mtr_1.TEMP_MULT	Class_3	NA	Variation 4	Variation 4

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444	Linear Mtr_1.COMP_MULT	Class_3	NA	Variation 4	Variation 4
445	Linear Mtr_1.IMV_SEL	Class_3	NA	Variation 4	Variation 4
446	Linear Mtr_1.MF_SEL	Class_3	NA	Variation 4	Variation 4
447	Linear Mtr_1.KF_SEL	Class_3	NA	Variation 4	Variation 4
448	Linear Mtr_1.PF_OBJ.CAL_OBJ.USER_ZERO_VAL	None	Sel_Op	Variation 3	Variation 3
449	Linear Mtr_1.PF_OBJ.CAL_OBJ.USER_SPAN_VAL	None	Sel_Op	Variation 3	Variation 3
450	Linear Mtr_1.TF_OBJ.CAL_OBJ.USER_ZERO_VAL	None	Sel_Op	Variation 3	Variation 3
451	Linear Mtr_1.TF_OBJ.CAL_OBJ.USER_SPAN_VAL	None	Sel_Op	Variation 3	Variation 3
452	Linear Mtr_1.STATION_OBJ.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
453	Linear Mtr_1.STATION_OBJ.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
454	Linear Mtr_1.STATION_OBJ.PB_SEL	None	NA	Variation 4	Variation 4
455	Linear Mtr_1.STATION_OBJ.TB_SEL	None	NA	Variation 4	Variation 4
456	Linear Mtr_1.STATION_OBJ.LATITUDE	None	Sel_Op	Variation 4	Variation 4
457	Linear Mtr_1.STATION_OBJ.ELEVATION	None	Sel_Op	Variation 4	Variation 4
458	Linear Mtr_1.STATION_OBJ.HIST_GRP_OBJ.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
459	Linear Mtr_1.FLUID_PROP_OBJ.N2_INUSE	Class_3	Sel_Op	Variation 4	Variation 4
460	Linear Mtr_1.FLUID_PROP_OBJ.CO2_INUSE	Class_3	NA	Variation 4	Variation 4
461	Linear Mtr_1.FLUID_PROP_OBJ.C1_INUSE	Class_3	NA	Variation 4	Variation 4
462	Linear Mtr_1.FLUID_PROP_OBJ.C2_INUSE	Class_3	NA	Variation 4	Variation 4
463	Linear Mtr_1.FLUID_PROP_OBJ.C3_INUSE	Class_3	NA	Variation 4	Variation 4
464	Linear Mtr_1.FLUID_PROP_OBJ.NC4_INUSE	Class_3	NA	Variation 4	Variation 4
465	Linear Mtr_1.FLUID_PROP_OBJ.IC4_INUSE	Class_3	NA	Variation 4	Variation 4
466	Linear Mtr_1.FLUID_PROP_OBJ.NC5_INUSE	Class_3	NA	Variation 4	Variation 4
467	Linear Mtr_1.FLUID_PROP_OBJ.IC5_INUSE	Class_3	NA	Variation 4	Variation 4
468	Linear Mtr_1.FLUID_PROP_OBJ.C6_INUSE	Class_3	NA	Variation 4	Variation 4
469	Linear Mtr_1.FLUID_PROP_OBJ.C7_INUSE	Class_3	NA	Variation 4	Variation 4
470	Linear Mtr_1.FLUID_PROP_OBJ.C8_INUSE	Class_3	NA	Variation 4	Variation 4
471	Linear Mtr_1.FLUID_PROP_OBJ.C9_INUSE	Class_3	NA	Variation 4	Variation 4

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472	Linear Mtr_1.FLUID_PROP_OBJ.C10_INUSE	Class_3	NA	Variation 4	Variation 4
473	Linear Mtr_1.FLUID_PROP_OBJ.H2S_INUSE	Class_3	NA	Variation 4	Variation 4
474	Linear Mtr_1.FLUID_PROP_OBJ.H2O_INUSE	Class_3	NA	Variation 4	Variation 4
475	Linear Mtr_1.FLUID_PROP_OBJ.HE_INUSE	Class_3	NA	Variation 4	Variation 4
476	Linear Mtr_1.FLUID_PROP_OBJ.O2_INUSE	Class_3	NA	Variation 4	Variation 4
477	Linear Mtr_1.FLUID_PROP_OBJ.H2_INUSE	Class_3	NA	Variation 4	Variation 4
478	Linear Mtr_1.FLUID_PROP_OBJ.CO_INUSE	Class_3	NA	Variation 4	Variation 4
479	Linear Mtr_1.FLUID_PROP_OBJ.AR_INUSE	Class_3	NA	Variation 4	Variation 4
480	Linear Mtr_1.FLUID_PROP_OBJ.H2O_CONTENT_SEL	Class_3	NA	Variation 4	Variation 4
481	Linear Mtr_1.FLUID_PROP_OBJ.HV_REAL_SEL	Class_3	NA	Variation 4	Variation 4
482	Linear Mtr_1.FLUID_PROP_OBJ.RD_REAL_SEL	Class_3	NA	Variation 4	Variation 4
483	Linear Mtr_1.FLUID_PROP_OBJ.ZB_SEL	Class_3	NA	Variation 4	Variation 4
484	Linear Mtr_1.FLUID_PROP_OBJ.ZS_SEL	Class_3	NA	Variation 4	Variation 4
485	Linear Mtr_1.FLUID_PROP_OBJ.ZF_SEL	Class_3	NA	Variation 4	Variation 4
486	Linear Mtr_1.FLUID_PROP_OBJ.DENSB_SEL	Class_3	NA	Variation 4	Variation 4
487	Linear Mtr_1.FLUID_PROP_OBJ.DENSF_SEL	Class_3	NA	Variation 4	Variation 4
488	Linear Mtr_1.PF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
489	Linear Mtr_1.TF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
490	Linear Mtr_1.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
491	Linear Mtr_1.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
492	Linear Mtr_1.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
493	Linear Mtr_1.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
494	Linear Mtr_1.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
495	Linear Mtr_1.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
496	Linear Mtr_1.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
497	Linear Mtr_1.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
498	Linear Mtr_1.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
499	Linear Mtr_1.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4

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500	Linear Mtr_1.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
501	Linear Mtr_1.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
502	Linear Mtr_1.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
503	Linear Mtr_1.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
504	Linear Mtr_1.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
505	Linear Mtr_1.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
506	Linear Mtr_1.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
507	Linear Mtr_1.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
508	Linear Mtr_1.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
509	Linear Mtr_1.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
510	Linear Mtr_1.FLWTM_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
511	Linear Mtr_1.FLWTM_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
512	Linear Mtr_1.FLWTM_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
513	Linear Mtr_1.FLWTM_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
514	Linear Mtr_1.FLWTM_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
515	Linear Mtr_2.NO_FLOW_LIM	None	Sel_Op	Variation 4	Variation 4
516	Linear Mtr_2.NO_FLOW_TIME	None	Sel_Op	Variation 1	Variation 1
517	Linear Mtr_2.FACTOR_CURVE_OPT	None	Sel_Op	Variation 2	Variation 2
518	Linear Mtr_2.USER_CORR_FACTOR	None	Sel_Op	Variation 4	Variation 4
519	Linear Mtr_2.MASS_CORR_PF_OPT	None	Sel_Op	Variation 4	Variation 4
520	Linear Mtr_2.PCAL	None	Sel_Op	Variation 4	Variation 4
521	Linear Mtr_2.MASS_CORR_PF_COEFF	None	Sel_Op	Variation 4	Variation 4
522	Linear Mtr_2.FCALC_ALM	Class_3	NA	Variation 1	Variation 1
523	Linear Mtr_2.PRESS_MULT	Class_3	NA	Variation 4	Variation 4
524	Linear Mtr_2.TEMP_MULT	Class_3	NA	Variation 4	Variation 4
525	Linear Mtr_2.COMP_MULT	Class_3	NA	Variation 4	Variation 4
526	Linear Mtr_2.IMV_SEL	Class_3	NA	Variation 4	Variation 4
527	Linear Mtr_2.MF_SEL	Class_3	NA	Variation 4	Variation 4
528	Linear Mtr_2.KF_SEL	Class_3	NA	Variation 4	Variation 4
529	Linear Mtr_2.PF_OBJ.CAL_OBJ.USER_ZERO_VAL	None	Sel_Op	Variation 3	Variation 3

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530	Linear Mtr_2.PF_OBJ.CAL_OBJ.USER_SPAN_VAL	None	Sel_Op	Variation 3	Variation 3
531	Linear Mtr_2.TF_OBJ.CAL_OBJ.USER_ZERO_VAL	None	Sel_Op	Variation 3	Variation 3
532	Linear Mtr_2.TF_OBJ.CAL_OBJ.USER_SPAN_VAL	None	Sel_Op	Variation 3	Variation 3
533	Linear Mtr_2.STATION_OBJ.PB_SEL	None	NA	Variation 4	Variation 4
534	Linear Mtr_2.STATION_OBJ.TB_SEL	None	NA	Variation 4	Variation 4
535	Linear Mtr_2.STATION_OBJ.LATITUDE	None	Sel_Op	Variation 4	Variation 4
536	Linear Mtr_2.STATION_OBJ.ELEVATION	None	Sel_Op	Variation 4	Variation 4
537	Linear Mtr_2.STATION_OBJ.ATMPR_SEL	Class_3	NA	Variation 4	Variation 4
538	Linear Mtr_2.STATION_OBJ.GRAV_SEL	Class_3	NA	Variation 4	Variation 4
539	Linear Mtr_2.STATION_OBJ.HIST_GRP_OBJ.CONTRACT_HR	None	Sel_Op	Variation 2	Variation 2
540	Linear Mtr_2.FLUID_PROP_OBJ.N2_INUSE	Class_3	NA	Variation 4	Variation 4
541	Linear Mtr_2.FLUID_PROP_OBJ.CO2_INUSE	Class_3	NA	Variation 4	Variation 4
542	Linear Mtr_2.FLUID_PROP_OBJ.C1_INUSE	Class_3	NA	Variation 4	Variation 4
543	Linear Mtr_2.FLUID_PROP_OBJ.C2_INUSE	Class_3	NA	Variation 4	Variation 4
544	Linear Mtr_2.FLUID_PROP_OBJ.C3_INUSE	Class_3	NA	Variation 4	Variation 4
545	Linear Mtr_2.FLUID_PROP_OBJ.NC4_INUSE	Class_3	NA	Variation 4	Variation 4
546	Linear Mtr_2.FLUID_PROP_OBJ.IC4_INUSE	Class_3	NA	Variation 4	Variation 4
547	Linear Mtr_2.FLUID_PROP_OBJ.NC5_INUSE	Class_3	NA	Variation 4	Variation 4
548	Linear Mtr_2.FLUID_PROP_OBJ.IC5_INUSE	Class_3	NA	Variation 4	Variation 4
549	Linear Mtr_2.FLUID_PROP_OBJ.C6_INUSE	Class_3	NA	Variation 4	Variation 4
550	Linear Mtr_2.FLUID_PROP_OBJ.C7_INUSE	Class_3	NA	Variation 4	Variation 4
551	Linear Mtr_2.FLUID_PROP_OBJ.C8_INUSE	Class_3	NA	Variation 4	Variation 4
552	Linear Mtr_2.FLUID_PROP_OBJ.C9_INUSE	Class_3	NA	Variation 4	Variation 4
553	Linear Mtr_2.FLUID_PROP_OBJ.C10_INUSE	Class_3	NA	Variation 4	Variation 4
554	Linear Mtr_2.FLUID_PROP_OBJ.H2S_INUSE	Class_3	NA	Variation 4	Variation 4
555	Linear Mtr_2.FLUID_PROP_OBJ.H2O_INUSE	Class_3	NA	Variation 4	Variation 4
556	Linear Mtr_2.FLUID_PROP_OBJ.HE_INUSE	Class_3	NA	Variation 4	Variation 4
557	Linear Mtr_2.FLUID_PROP_OBJ.O2_INUSE	Class_3	NA	Variation 4	Variation 4
558	Linear Mtr_2.FLUID_PROP_OBJ.H2_INUSE	Class_3	NA	Variation 4	Variation 4

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559	Linear Mtr_2.FLUID_PROP_OBJ.CO_INUSE	Class_3	NA	Variation 4	Variation 4
560	Linear Mtr_2.FLUID_PROP_OBJ.AR_INUSE	Class_3	NA	Variation 4	Variation 4
561	Linear Mtr_2.FLUID_PROP_OBJ.H2O_CONTENT_SEL	Class_3	NA	Variation 4	Variation 4
562	Linear Mtr_2.FLUID_PROP_OBJ.HV_REAL_SEL	Class_3	NA	Variation 4	Variation 4
563	Linear Mtr_2.FLUID_PROP_OBJ.RD_REAL_SEL	Class_3	NA	Variation 4	Variation 4
564	Linear Mtr_2.FLUID_PROP_OBJ.ZB_SEL	Class_3	NA	Variation 4	Variation 4
565	Linear Mtr_2.FLUID_PROP_OBJ.ZS_SEL	Class_3	NA	Variation 4	Variation 4
566	Linear Mtr_2.FLUID_PROP_OBJ.ZF_SEL	Class_3	NA	Variation 4	Variation 4
567	Linear Mtr_2.FLUID_PROP_OBJ.DENSB_SEL	Class_3	NA	Variation 4	Variation 4
568	Linear Mtr_2.FLUID_PROP_OBJ.DENSF_SEL	Class_3	NA	Variation 4	Variation 4
569	Linear Mtr_2.PF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
570	Linear Mtr_2.TF_OBJ.ALM_OBJ.PROCESS_ALM	Class_3	NA	Variation 2	Variation 2
571	Linear Mtr_2.UVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
572	Linear Mtr_2.UVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
573	Linear Mtr_2.UVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
574	Linear Mtr_2.UVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
575	Linear Mtr_2.UVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
576	Linear Mtr_2.SVOL_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
577	Linear Mtr_2.SVOL_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
578	Linear Mtr_2.SVOL_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
579	Linear Mtr_2.SVOL_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
580	Linear Mtr_2.SVOL_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
581	Linear Mtr_2.MASS_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
582	Linear Mtr_2.MASS_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
583	Linear Mtr_2.MASS_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
584	Linear Mtr_2.MASS_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
585	Linear Mtr_2.MASS_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
586	Linear Mtr_2.ENERGY_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
587	Linear Mtr_2.ENERGY_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
588	Linear Mtr_2.ENERGY_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
589	Linear Mtr_2.ENERGY_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4

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590	Linear Mtr_2.ENERGY_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
591	Linear Mtr_2.FLWTM_TOT_OBJ.CURRENT	Class_3	NA	Variation 4	Variation 4
592	Linear Mtr_2.FLWTM_TOT_OBJ.CUR_PER	Class_3	NA	Variation 4	Variation 4
593	Linear Mtr_2.FLWTM_TOT_OBJ.PREV_PER	Class_3	NA	Variation 4	Variation 4
594	Linear Mtr_2.FLWTM_TOT_OBJ.CUR_DAY	Class_3	NA	Variation 4	Variation 4
595	Linear Mtr_2.FLWTM_TOT_OBJ.PREV_DAY	Class_3	NA	Variation 4	Variation 4
596	PID_1.PID_LOOP_TYPE	None	Sel_Op	Variation 2	Variation 2
597	PID_1.P_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
598	PID_1.P_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3
599	PID_1.P_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
600	PID_1.O_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
601	PID_1.O_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3
602	PID_1.O_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
603	PID_1.P_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
604	PID_1.O_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
605	PID_1.SELECTED_LOOP	Class_3	NA	Variation 2	Variation 2
606	PID_2.PID_LOOP_TYPE	None	Sel_Op	Variation 2	Variation 2
607	PID_2.P_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
608	PID_2.P_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3
609	PID_2.P_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
610	PID_2.O_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
611	PID_2.O_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3
612	PID_2.O_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
613	PID_2.P_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
614	PID_2.O_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
615	PID_2.SELECTED_LOOP	Class_3	NA	Variation 2	Variation 2
616	PID_3.PID_LOOP_TYPE	None	Sel_Op	Variation 2	Variation 2
617	PID_3.P_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
618	PID_3.P_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3
619	PID_3.P_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
620	PID_3.O_PROPORTIONAL_G	None	Sel_Op	Variation 3	Variation 3
621	PID_3.O_INTEGRAL_GAIN	None	Sel_Op	Variation 3	Variation 3

Point Index	Tag Mapped	Default Class	Supported Control Operations	Group 40 Default Variation	Group 41 Default Variation
622	PID_3.O_DERIVATIVE_GAIN	None	Sel_Op	Variation 3	Variation 3
623	PID_3.P_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
624	PID_3.O_SETPOINT	Class_3	Sel_Op	Variation 3	Variation 3
625	PID_3.SELECTED_LOOP	Class_3	NA	Variation 2	Variation 2

4.8 Binary Counter: DNP3 Object Groups 20 (Events) & 22 (Events)

4.8.1 DNP3 Object Group 20: Counters (Static)

This group can be read with the following variations:

- **Variation 1:** 32-bit with flag
- **Variation 2:** 16-bit with flag
- **Variation 3:** 32-bit with flag, delta
- **Variation 4:** 16-bit with flag, delta
- **Variation 5:** 32-bit without flag
- **Variation 6:** 16-bit without flag
- **Variation 7:** 32-bit without flag, delta
- **Variation 8:** 16-bit without flag, delta

4.8.2 DNP3 Object Group 22: Counters (Events)

This group can be read with the following variations:

- **Variation 1:** 32-bit with flag
- **Variation 2:** 16-bit with flag
- **Variation 3:** 32-bit with flag, delta
- **Variation 4:** 16-bit with flag, delta
- **Variation 5:** 32-bit with flag and time
- **Variation 6:** 16-bit with flag and time
- **Variation 7:** 32-bit with flag and time, delta
- **Variation 8:** 16-bit with flag and time, delta

Point Index	Tag Mapped	Default Class	Default variation Group 20	Default Variation Group 22
0	PI_1-1.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
1	PI_1-2.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
2	PI_1-3.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag

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Point Index	Tag Mapped	Default Class	Default variation Group 20	Default Variation Group 22
3	PI_1-4.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
4	PI_1-5.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
5	PI_1-6.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
6	PI_1-7.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
7	PI_1-8.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
8	PI_1-9.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag
9	PI_1-10.PULSE_DAY_ACCUM_32	Class_3	Variation 1-32b flag	Variation 1-32b flag

4.9 String Group: DNP3 Object Group 110 (Static)

4.9.1 DNP3 Object Group 110: Octet Strings (Static)

This group can be read with all variations:

Point Index	Tag Mapped	Default Class Assigned
0	DNP3_2.DESC	None
1	System_1.PROD_DESC	None
2	System_1.SITE_NAME	None
3	AI_1-1.DESC	None
4	AI_1-2.DESC	None
5	AI_1-3.DESC	None
6	AI_1-4.DESC	None
7	AI_1-5.DESC	None
8	AI_1-6.DESC	None
9	AI_1-7.DESC	None
10	AI_1-8.DESC	None
11	AO_1-1.DESC	None
12	AO_1-2.DESC	None
13	AO_1-3.DESC	None
14	AO_1-4.DESC	None
15	AO_1-5.DESC	None
16	AO_1-6.DESC	None
17	AO_1-7.DESC	None
18	AO_1-8.DESC	None

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Point Index	Tag Mapped	Default Class Assigned
19	DI_1-1.DESC	None
20	DI_1-2.DESC	None
21	DI_1-3.DESC	None
22	DI_1-4.DESC	None
23	DI_1-5.DESC	None
24	DI_1-6.DESC	None
25	DI_1-7.DESC	None
26	DI_1-8.DESC	None
27	DI_1-9.DESC	None
28	DI_1-10.DESC	None
29	DO_1-1.DESC	None
30	DO_1-2.DESC	None
31	DO_1-3.DESC	None
32	DO_1-4.DESC	None
33	DO_1-5.DESC	None
34	DO_1-6.DESC	None
35	DO_1-7.DESC	None
36	DO_1-8.DESC	None
37	DO_1-9.DESC	None
38	DO_1-10.DESC	None
39	PI_1-1.DESC	None
40	PI_1-2.DESC	None
41	PI_1-3.DESC	None
42	PI_1-4.DESC	None
43	PI_1-5.DESC	None
44	PI_1-6.DESC	None
45	PI_1-7.DESC	None
46	PI_1-8.DESC	None
47	PI_1-9.DESC	None
48	PI_1-10.DESC	None
49	Sensor_1-1.DESC	None
50	Sensor_1-2.DESC	None

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Point Index	Tag Mapped	Default Class Assigned
51	Sensor_1-3.DESC	None
52	Station_1.DESC	None
53	Station_2.DESC	None
54	DP Mtr_1.DESC	None
55	DP Mtr_1.SER_NUM	None
56	DP Mtr_2.DESC	None
57	DP Mtr_2.SER_NUM	None
58	Linear Mtr_1.DESC	None
59	Linear Mtr_1.SER_NUM	None
60	Linear Mtr_2.DESC	None
61	Linear Mtr_2.SER_NUM	None
62	PID_1.DESC	None
63	PID_2.DESC	None
64	PID_3.DESC	None

5. Object Parameter Listing

This chapter provides tables describing the measurement types and parameters for each DNP3 object.

5.1 Measurement Types

Table 5-1 details the unit codes associated with each measurement type. Depending on the data type, the unit code type associated with a parameter (or an instance of a parameter) may appear as a number in parentheses in the Default Measurement Type column.

- For Data Type ENUM16, the description of the Measurement Type appears as a number in parentheses [here, **(30)**] after the value in the Default Measurement Type column and the unit code number – which correlates to the Units column in Table 5-1 – appears as a number in parentheses [here, **(0)**] after the value in the Default column:

Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ACTION_BLK_ENABLE	Action Block Enable Switch: 0 - Disable 1 - Enable	ENUM16	0 -> 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	▪ Log Changes
ACTION_BLK	Action Block Activation Status	ENUM16	0 -> 1	Inactive (0)	Action Block Status	R/W:	01.00.03.03	

- For other data types (such as DOUBLE, FLOAT, or UINT), the description of the Measurement Type appears in the Default Measurement Type column as a number in parentheses with a decimal value [here, **(12.7)**]: the decimal value correlates to the unit code for that specific table (that is, table 12 and value 7):

Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AA_VOL_RATE_MECH	Auto Adjust Mechanical Rate	DOUBLE		0	MCF/d (12.7)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Legal

- Finally, for some parameters/data types, the Default Measurement Type is not applicable, and the column is blank:

Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ACTION_POINT	Output Action Point	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	▪ Log Changes

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Table 5-1. Measurement Types

Type	Description	Units
0	Unitless	
1	Differential Pressure Display	0 = inH2O 1 = inH2O 2 = kPa 3 = mbar 4 = kg/cm ² 5 = psi 6 = bar
2	Absolute Pressure	0 = psi(a) 1 = kPa(a) 2 = MPa(a) 3 = bar(a) 4 = kg/cm ² (a)
3	Temperature	0 = °F 1 = °C 2 = K
4	Gas Density	0 = lb/ft ³ 1 = kg/m ³ 2 = g/cc 3 = lb/MMCF 4 = lb/US gal 5 = kg/L 6 = lb/bbl 7 = RD(liq) 8 = °API
5	Volume Heating Value	0 = Btu/ft ³ 1 = MJ/m ³
6	Dynamic Viscosity	0 = cP 1 = lb/ft-s
7	Linear (Short)	0 = in 1 = mm
8	Linear (Long)	0 = ft 1 = m
9	Gas Volume Total	0 = ft ³ 1 = m ³ 2 = MCF 3 = (k)m ³ 4 = MMCF 5 = BCF 6 = L 7 = US gal 8 = bbl
10	Mass Total	0 = lb 1 = kg 2 = Mlb 3 = tonne

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Type	Description	Units
		4 = ton
11	Energy Total	0 = Btu 1 = MMBtu 2 = J 3 = MJ 4 = GJ 5 = Dth 6 = TJ 7 = PJ
12	Gas Volume Rate	0 = ft ³ /s 1 = ft ³ /min 2 = ft ³ /h 3 = ft ³ /d 4 = MCF/s 5 = MCF/min 6 = MCF/h 7 = MCF/d 8 = m ³ /s 9 = m ³ /min 10 = m ³ /h 11 = m ³ /d 12 = (k)m ³ /s 13 = (k)m ³ /min 14 = (k)m ³ /h 15 = (k)m ³ /d 16 = MMCF/s 17 = MMCF/min 18 = MMCF/h 19 = MMCF/d 20 = BCF/s 21 = BCF/min 22 = BCF/h 23 = BCF/d 24 = L/s 25 = L/min 26 = L/h 27 = L/d 28 = US gal/s 29 = US gal/min 30 = US gal/h 31 = US gal/d 32 = bbl/s 33 = bbl/min 34 = bbl/h 35 = bbl/d
13	Mass Rate	0 = lb/s 1 = lb/min 2 = lb/h 3 = lb/d 4 = Mlb/s

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Type	Description	Units
		5 = Mlb/min
		6 = Mlb/h
		7 = Mlb/d
		8 = kg/s
		9 = kg/min
		10 = kg/h
		11 = kg/d
		12 = tonne/s
		13 = tonne/min
		14 = tonne/h
		15 = tonne/d
		16 = ton/s
		17 = ton/min
		18 = ton/h
		19 = ton/d
14	Energy Rate	0 = Btu/s
		1 = Btu/min
		2 = Btu/h
		3 = Btu/d
		4 = MMBtu/s
		5 = MMBtu/min
		6 = MMBtu/h
		7 = MMBtu/d
		8 = J/s
		9 = J/min
		10 = J/h
		11 = J/d
		12 = MJ/s
		13 = MJ/min
		14 = MJ/h
		15 = MJ/d
		16 = GJ/s
		17 = GJ/min
		18 = GJ/h
		19 = GJ/d
		20 = Dth/s
		21 = Dth/min
		22 = Dth/h
		23 = Dth/d
		24 = TJ/s
		25 = TJ/min
		26 = TJ/h
		27 = TJ/d
		28 = PJ/s
		29 = PJ/min
		30 = PJ/h
		31 = PJ/d
15	Current	0 = mA
		1 = A
16	Voltage	0 = V

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Type	Description	Units
		1 = kV
17	Duration	0 = s 1 = min 2 = h 3 = d
18	Ratio	0 = % 1 = UNDEFINED 2 = ppm
19	Acceleration	0 = ft/s ² 1 = m/s ²
20	Latitude	0 = °
21	Water Content	0 = lb/MMSCF 1 = kg/(k)m ³
22	Joule-Thompson Coefficient	0 = °F/psi 1 = K/bar 2 = K/kPa 3 = °C/bar 4 = °C/kPa 5 = K/MPa
23	Resistance	0 = ohms
24	Frequency	0 = Hz
25	Molar Mass	0 = lb/lb-mol 1 = kg/kmol 2 = g/mol
26	Differential Pressure Selection	0 = inH ₂ O@60°F 1 = inH ₂ O@68°F 2 = kPa 3 = mbar 4 = kg/cm ² 5 = psi 6 = bar
27	Volumetric K-factor	0 = pulses/ft ³ 1 = pulses/m ³ 2 = pulses/US gal 3 = pulses/bbl
28	Mass K-factor	0 = pulses/lb 1 = pulses/kg
29	Gauge Pressure	0 = psi(g) 1 = kPa(g) 2 = MPa(g) 3 = bar(g) 4 = kg/cm ² (g)
30	Enable/Disable Selection	0 = Disable 1 = Enable
31	User Selection	0 = Live 1 = Override

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Type	Description	Units
32	Fault Selection	0 = Live / Download 1 = Fault 2 = Last Good 3 = Last Hour Average
33	Composite System Integrity	0 = Normal 1 = Alarm 2 = Fault
34	Day of Week	0 = Sunday 1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday
35	Date Format Selection	0 = MM/DD/YY 1 = MM/DD/YYYY 2 = DD/MM/YY 3 = DD/MM/YYYY 4 = YYYY/MM/DD 5 = YY/MM/DD
36	Time Format Selection	0 = 12 Hour 1 = 24 Hour
37	Language Selection	0 = English
38	Port Owner	0 = Debug 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Master Modbus 5 = BSAP 6 = ROC 7 = MVS4088 8 = HART Slave 9 = MVT3808/3508
39	Baud Rate	0 = 1200 1 = 2400 2 = 4800 3 = 9600 4 = 19.2K 5 = 38.4K 6 = 57.6K 7 = 115.2K
40	Serial Settings	0 = 7 data bits; odd parity; 1 stop bit 1 = 7 data bits; even parity; 1 stop bit 2 = 8 data bits; no parity; 1 stop bit 3 = 8 data bits; odd parity; 1 stop bit 4 = 8 data bits; even parity; 1 stop bit
41	IPv4 Address	0 = IPv4
42	48-bit MAC Address	0 = 48-bit

Type	Description	Units
43	History Type	0 = Average 1 = Total / Difference 2 = Snapshot 3 = Minimum 4 = Maximum 5 = Integration
44	Alarm Status DP SP	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Above URL 8 = Below LRL 9 = Input Frozen
45	Composite Status Alarm	0 = Normal 1 = Low 2 = Low Low 3 = High 4 = High High 5 = Rate of Change 6 = Point Fail
46	Discrete Output Types	0 = Latching 1 = Momentary 2 = Toggle 3 = Time Duration Output Momentary 4 = Time Duration Output Toggle 5 = Scaled Pulse Output
47	Output Mode	0 = Manual 1 = Auto
48	Output Action on Power Cycle	0 = Last 1 = Fault
49	CVD Curve Selection	0 = User 1 = Alpha 0.00385 DIN/IEC 2 = Alpha 0.00392

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Type	Description	Units
50	Meter Type Selection	0 = AGA3 Orifice (Flange Taps) 1 = ISO5167 Orifice (Flange Taps) 2 = ISO5167 Orifice (Corner Taps) 3 = ISO5167 Orifice (D & D/2 Taps) 4 = ISO5167 Venturi (As Cast) 5 = ISO5167 Venturi (Machined) 6 = ISO5167 Venturi (Rough Weld) 7 = ISO5167 Nozzle (Venturi) 8 = ISO5167 Nozzle (Long Radius) 9 = ISO5167 Nozzle (ISA 1932) 10 = 1595 Conditioning Orifice (Flange) 11 = 1595 Conditioning Orifice (D and D/2) 12 = 405C Compact Orifice 13 = Cone (McCrometer V-Cone) 14 = Cone (McCrometer Wafer-Cone) 15 = Cone (NUFLO)
51	AGA 3 Calculation Method	0 = AGA3 1992 Volume 1 = AGA3 1992 Mass 2 = AGA3 1992 Relative Density 3 = AGA3 2012 Volume 4 = AGA3 2012 Mass 5 = AGA3 2012 Relative Density
52	ISO 5167 Calculation Method	0 = ISO5167 1991 1 = ISO5167 1998 2 = ISO5167 2003
53	Linear Meter Type	0 = Turbine 1 = Coriolis 2 = Auto-Adjust 3 = Ultrasonic 4 = Positive Displacement
54	Density/Compress Calc Selection	0 = AGA8 1994 Detailed 1 = AGA8 1994 Gross 1 2 = AGA8 1994 Gross 2 3 = ISO 12213-2 2009 4 = SGERG 1991 CV/RD/CO2/H2 (Std) 5 = SGERG 1991 CV/RD/N2/H2 6 = SGERG 1991 RD/N2/CO2/H2) 7 = SGERG 1991 CV/N2/CO2/H2) 8 = ISO12213-3 2006 CV/RD/CO2/H2 (Perf) 9 = ISO12213-3 2006 N2/CV/RD/H2 (Set B) 10 = ISO12213-3 2006 N2/CO2/RD/H2 (Set C) 11 = ISO12213-3 2006 N2/CO2/CV/H2 (Set D) 12 = NX-19 1962 (Z VDI/VDE) 13 = NX-19 Mod 14 = NX-19 /VDI/VDE 15 = AGA8 Part 1 2017 Detailed 16 = RESERVED 17 = AGA8 Part 1 2017 Gross 1 18 = AGA8 Part 1 2017 Gross 2

Type	Description	Units
		19 = AGA8 Part 1 2017/GERG 2008 20 = NX-19 (Z Miller)
55	Heating Value Calculation Selection	0 = GPA2172 2009 Gross 1 = ISO6976 1995 Superior 2 = ISO6976 1995 Inferior 3 = AGA5 2009 Gross 4 = AGA5 2009 Net
56	Heating Value Combustion Reference	0 = 60°F 1 = 0°C 2 = 15°C 3 = 20°C 4 = 25°C
57	SP Type Selection	0 = Gauge 1 = Absolute
58	Pressure Location	0 = Upstream 1 = Downstream
59	Material Selection	0 = Carbon Steel 1 = 304 Stainless Steel 2 = 316 Stainless Steel 3 = Generic Stainless 4 = Monel 400 5 = User Entered Alpha
60	Modbus Mode Selection	0 = ASCII 1 = RTU 2 = TCP
61	Modbus Byte Order Selection	0 = LSB 1 = MSB
62	Modbus 4-byte Types	0 = 1 Register 1 = 2 Register 0-1-2-3 2 = 2 Register 1-0-3-2 3 = 2 Register 2-3-0-1 4 = 2 Register 3-2-1-0
63	Modbus 8-byte Types	0 = 1 Register 1 = 4 Register 0-1-2-3-4-5-6-7 2 = 4 Register 2-3-0-1-6-7-4-5 3 = 4 Register 4-5-6-7-0-1-2-3 4 = 4 Register 6-7-4-5-3-2-0-1 5 = 4 Register 1-0-3-2-5-4-7-6 6 = 4 Register 3-2-1-0-7-6-5-4 7 = 4 Register 5-4-7-6-1-0-3-2 8 = 4 Register 7-6-5-4-3-2-1-0
64	Data Type Select	0 = Unknown
65	Calculation Fault Option	0 = Alarm Disabled 1 = Alarm and Continue 2 = Alarm and Halt Calculation

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Type	Description	Units
66	Remote Data Types	0 = No Conversion 1 = UINT8 2 = INT8 3 = UINT16 4 = INT16 5 = UINT32 (2 Registers 0-1-2-3) 6 = UINT32 (2 Registers 1-0-3-2) 7 = UINT32 (2 Registers 2-3-0-1) 8 = UINT32 (2 Registers 3-2-1-0) 9 = INT32 (2 Registers 0-1-2-3) 10 = INT32 (2 Registers 1-0-3-2) 11 = INT32 (2 Registers 2-3-0-1) 12 = INT32 (2 Registers 3-2-1-0) 13 = UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 = UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 = UINT64 (4 Registers 4-5-6-7-0-1-2-3) 16 = UINT64 (4 Registers 6-7-4-5-2-3-0-1) 17 = UINT64 (4 Registers 1-0-3-2-5-4-7-6) 18 = UINT64 (4 Registers 3-2-1-0-7-6-5-4) 19 = UINT64 (4 Registers 5-4-7-6-1-0-3-2) 20 = UINT64 (4 Registers 7-6-5-4-3-2-1-0) 21 = INT64 (4 Registers 0-1-2-3-4-5-6-7) 22 = INT64 (4 Registers 2-3-0-1-6-7-4-5) 23 = INT64 (4 Registers 4-5-6-7-0-1-2-3) 24 = INT64 (4 Registers 6-7-4-5-2-3-0-1) 25 = INT64 (4 Registers 1-0-3-2-5-4-7-6) 26 = INT64 (4 Registers 3-2-1-0-7-6-5-4) 27 = INT64 (4 Registers 5-4-7-6-1-0-3-2) 28 = INT64 (4 Registers 7-6-5-4-3-2-1-0) 29 = FLOAT (2 Registers 0-1-2-3) 30 = FLOAT (2 Registers 1-0-3-2) 31 = FLOAT (2 Registers 2-3-0-1) 32 = FLOAT (2 Registers 3-2-1-0) 33 = DOUBLE (4 Registers 0-1-2-3-4-5-6-7) 34 = DOUBLE (4 Registers 2-3-0-1-6-7-4-5) 35 = DOUBLE (4 Registers 4-5-6-7-0-1-2-3) 36 = DOUBLE (4 Registers 6-7-4-5-2-3-0-1) 37 = DOUBLE (4 Registers 1-0-3-2-5-4-7-6) 38 = DOUBLE (4 Registers 3-2-1-0-7-6-5-4) 39 = DOUBLE (4 Registers 5-4-7-6-1-0-3-2) 40 = DOUBLE (4 Registers 7-6-5-4-3-2-1-0) 41 = SINGLE REGISTER FLOATING POINT 42 = SINGLE REGISTER DOUBLE 43 = SINGLE REGISTER INT32 44 = SINGLE REGISTER UINT32 45 = SINGLE REGISTER INT64 46 = SINGLE REGISTER UINT64 47 = STRING (10 Characters) 48 = STRING (20 Characters) 49 = STRING (30 Characters) 50 = STRING (40 Characters)

Type	Description	Units
67	Normalization Type	0 = None 1 = Full Normalization 2 = Methane Adjust
68	Port Type	0 = Serial 1 = Ethernet 2 = Wi-Fi® 3 = USB
69	Serial Port Mode	0 = RS-232 1 = RS-485(No Termination) 2 = RS-485(Terminated) 3 = RS-422(No Termination) 4 = RS-422(Terminated)
70	H2O Content Basis	0 = Dry 1 = Saturated at Base Conditions 2 = RESERVED 3 = Partially Saturated
71	Averaging Type	0 = Linear 1 = Flow Dependent Linear
72	Battery Type	0 = None 1 = Lithium 2 = Lead Acid 3 = Not Applicable
73	Fluid Type	0 = Natural Gas 1 = RESERVED 2 = Liquid
74	Base Temperature	0 = User 1 = 60°F 2 = 15°C 3 = 20°C 4 = 30°C 5 = 0°C
75	Water Content Calc Standard	0 = IGT Bulletin 8
76	Reserved	0 = RESERVED
77	Annubar Calc Selection	0 = 485-1 1 = 485-2 2 = 485-3
78	Pressure	0 = psi 1 = kPa 2 = MPa 3 = bar 4 = kg/cm ²
79	User Mode Selection 1	0 = Measured 1 = Override 2 = Calculated
80	Object Status	0 = Normal 1 = In Alarm

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Type	Description	Units
		2 = Failure 3 = Override 4 = Inactive
82	Live Trigger	0 = No Action 1 = Accept Composition
83	RTD Type	0 = 2-wire 1 = 3-wire 2 = 4-wire
84	History Group Type	0 = General History 1 = Meter History 2 = User Periodic
85	Sensor Configuration	0 = Standard Coplanar 1 = Standard Threaded 2 = Level Coplanar 3 = Reference Class Coplanar 4 = High Temp Conventional 5-251 = RESERVED 252 = Unknown
86	Sensor Type	0 = Dual Variable 1 = DP Only 2 = SP Only
87	Static Pressure Type	0 = No Static Pressure 1 = Absolute 2 = Gauge
88	RMT Sensor Range	0 = Range 0 1 = Range 1 2 = Range 2 3 = Range 3 4 = Range 4 5 = Range 5 6 = Range 6 7 = Range 7 8 = Range 8 9 = Range 9 10 = Range 10 11-252 = RESERVED 253 = Special
89	Flange Type	0-11 = RESERVED 12 = Traditional 13 = Coplanar 14 = Remote Seal 15 = Level; 3in; 150lb 16 = Level; 4in; 150lb 17 = Level; 3in; 300lb 18 = Level; 4in; 300lb 19 = Level; DN 80; PN 40 20 = Level; DN 100; PN 40 21 = Level; DN 100; PN 10/16

Type	Description	Units
		22 = Level; 2in; 150lb 23 = Level; 2in; 300lb 24 = Level; DN 50; PN 6 25 = Level; DN 50; PN 40 26-43 = RESERVED 44 = 1/2in; NPTF 45 = DIN16288G 1/2 A male 46 = 1/4in; NPTF 47-240 = RESERVED 240 = Auto Clave F-250-C 241 = Tri-Clamp 242 = Fractional Line Fit 243 = 1/8in; NPTF 244 = VCR 245 = PMC 246 = Traditional RC 1/4 247 = Traditional RC 1/2 248-251 = RESERVED 252 = Unknown 253 = Special
90	Sensor Material	0 = Carbon Steel 1 = Undefined 2 = 316 Stainless Steel 3 = Hastelloy® C 4 = Monel 5 = Tantalum 6-14 = RESERVED 15 = Gold Monel 16-23 = RESERVED 24 = Kynar 25 = Gold Monel 26-29 = RESERVED 30 = Hastelloy C276 31-33 = RESERVED 34 = PTFE Coated 316L SST 35 = Gold Plated Hastelloy C276 36-238 = RESERVED 239 = Monel 400 240-250 = RESERVED 251 = None 252 = Unknown 253 = Special

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Type	Description	Units
91	O-ring Material	0-9 = RESERVED 10 = PTFE (Teflon® R) 11 = Viton 12 = Buna-N 13 = Ethyl-Prop 14-35 = RESERVED 36 = PTFE Glass 37 = PTFE Graphite 38-250 = RESERVED 251 = None 252 = Unknown 253 = Special
92	Fill Fluid	0 = Undefined 1 = Silicone 2 = Inert 3-6 = RESERVED 7 = NEOBEE® M-20 8-251 = RESERVED 252 = Unknown 253 = Special
93	Product Type	0 = FB1100 1 = FB1200 2 = FB2100 3 = FB2200 4 = FB3000 5 = I/O Scanner
94	Heavy Gas Mode	0 = Disabled 1 = C6+ 2 = C7+ 3 = C8+ 4 = C9+
95	Wi-Fi Security Option	0 = Open 1 = WPA-2
96	Cd/Fc Curve Option	0 = Disabled 1 = Cd vs Re Curve 2 = Fc vs Flow Curve
97	User Mode Selection 2	0 = RESERVED 1 = Override 2 = Calculated
98	User Mode Selection 3	0 = Measured 1 = Override 2 = Calculated 3 = Remote Download
99	Actual Mode	0 = Measured 1 = Override 2 = Calculated 3 = Remote Download 4 = Fault

Type	Description	Units
100	Alarm Type	0 = Low 1 = Low Low 2 = High 3 = High High 4 = Rate of Change 5 = User Account Locked 6 = Log Full Limit Exceeded 7 = Log Nearly Full Limit Exceeded 8 = Log Integrity Failure 9 = Battery Status 10 = Low Voltage 11 = Override 12 = Point Fail 13 = DI ON Status Alarm 14 = No Response from Periodic History 15 = Analysis Timeout 16 = Normalization Failure 17 = Flow Calculation Alarm 18 = Properties Calculation Alarm 19 = Auto-Adjust System Alarm 20 = Auto-Adjust Flow Alarm 21 = Auto-Adjust Delta A Alarm 22 = History Point Movement Failure 23 = Door Open Status Alarm 24 = Other 25 = Flow Calc Alarm: Invalid Input(s) 26 = Flow Calc Alarm: Invalid Config 27 = Flow Calc Alarm: Calculation Error 28 = Flow Calc Alarm: Boundary Error 29 = Flow Calc Alarm: Invalid Station Assign 30-32 = Flow Calc Alarm: RESERVED 33 = Flow Calc Alarm: DP/Flow 34 = Flow Calc Alarm: Pressure 35 = Flow Calc Alarm: Temperature 36 = Flow Calc Alarm: Flowing Density/Z 37 = Flow Calc Alarm: Base Density/Z 38 = Flow Calc Alarm: Relative Density 39 = Flow Calc Alarm: HV/Enthalpy 40 = Flow Calc Alarm: Viscosity 41 = Flow Calc Alarm: User Corr Factor 42 = Flow Calc Alarm: Total/Increment 43 = Flow Calc Alarm: Integral Mult Value 44-49 = Flow Calc Alarm: RESERVED 50 = Flow Calc Alarm: Beta Ratio 51 = Flow Calc Alarm: DP/P Ratio 52 = Flow Calc Alarm: Isentropic Exponent 53 = Flow Calc Alarm: Reynolds Number 54 = Flow Calc Alarm: Pressure Loss/Ratio 55 = Flow Calc Alarm: Alpha 56 = Flow Calc Alarm: Expansion Factor 57 = Flow Calc Alarm: K-factor/Meter Factor-Gas

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Type	Description	Units
		58 = Flow Calc Alarm: Mass Press Corr Factor-Gas 59-63 = RESERVED 64 = Flow Calc Alarm: K-factor/Meter Factor Liq 65 = Flow Calc Alarm: Mass Press Corr Factor-Liq 66 = Flow Calc Alarm Water Cut 67 = Flow Calc Alarm: Shrinkage Factor 68 = Flow Calc Alarm: CTL 69 = Flow Calc Alarm: NGL Factor/Flash Fctr 70 = Flow Calc Alarm: RESERVED 71 = Prop Calc Alarm: Invalid Input(s) 72 = Prop Calc Alarm: Invalid Config 73 = Prop Calc Alarm: Calculation Error 74 = Prop Calc Alarm: Boundary Error 75-79 = Prop Calc Alarm: Reserved 80 = Prop Calc Alarm: Temperature 81 = Prop Calc Alarm: Flowing Density/Z 82 = Prop Calc Alarm: Base Density/Z 83 = Prop Calc Alarm: Relative Density 84 = Prop Calc Alarm: HV/Enthalpy 85 = Prop Calc Alarm: Composition 86 = Prop Calc Alarm: Water Constant 87 = Prop Calc Alarm: Atm Press/Grav Accel 88 = Prop Calc Alarm: Viscosity 89 = Prop Calc Alarm: Isentropic Exponent 90 = Prop Calc Alarm: Speed of Sound 91 = Prop Calc Alarm: Critical Temp/Press 92-102 = Prop Calc Alarm: RESERVED 103 = Parameter Health Status 104 = Meter Task Detected Fatal Error 105 = External Accumulator High Increment 106 = Transaction Trigger Limit Reached 107 = No response From Trans History
101	Alarm Direction	0 = Clear 1 = Set
102	User Alarm Type	0 = Low 1 = Low Low 2 = High 3 = High High 4 = Rate of Change 5 = Discrete 6 = Calculation 7 = Manual 8 = Scanning Disabled 9 = Calibration 10 = Failure 11 = Failssafe 12 = Permanent Shutdown 13 = Temporary Shutdown 14 = Action on Failure 15 = Other

103	Event Type	<ul style="list-style-type: none"> 0 = RESERVED 1 = Power Applied 2 = Power Removed 3 = Battery Changed 4 = Firmware Update Start 5 = Firmware Apply Package Version 6 = Firmware Update Complete 7 = Firmware Update Package Restore Fail 8 = Event Type 8 9 = Event Type 9 10 = Event Type 10 11 = Event Type 11 12 = Event Type 12 13 = Event Type 13 14 = Event Type 14 15 = Event Type 15 16 = Login Success 17 = Login Fail Invalid Credentials 18 = Account Locked 19 = Logout 20 = Account Added 21 = Account Removed 22 = Account Modified 23 = Log Clear 24 = Log Clear Due to CRC Corrupt 25 = History Point Cleared 26 = System Down 27 = Action Block Trip Status Changed 28 = Database Initialized 29 = Daylight Saving Time Change 30 = Total Rollover 31 = System Restart 32 = Pulse Accum Rollover 33 = Firmware Apply Image Version 34 = Firmware I/O Board Disabled 35 = Restart during Calc Cycle 36 = Configuration Counter Changed 37 = Log Clear for Combined Event Log 38 = Log Clear for Separate Event Logs 39 = History Clear 40 = Alarm Clear 41 = Event Clear 42 = History Records Lost 43 = Alarm Records Lost 44 = Event Records Lost 45 = Standard History Point Archival Reset 46 = GC Data Read Failed 47 = Hist Group Read Failed 48 = Application Clear 49 = Users Clear 50 = Counts Dropped 51 = FBxNet Watchdog 52 = Legal Event Exported/Event Exported
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Type	Description	Units
		53 = User Defined Protocol Maps Clear 54 = FW Checksum Error on IO Card 55 = FW Checksum Error 56 = Configuration Checksum Mismatch 57 = Configuration Checksum Saved 58 = Application Restarted 59 = External Accumulator Rollover 60 = Transaction History Clear 61 = Trans History Record Lost 62 = DNP3 SAV5 Enabled 63 = DNP3 SAV5 Disabled 64 = DNP3 SAV5 Keys Updated
104	Calibration Event Type	0 = Verification 1 = Calibration Start 2 = Set Zero 3 = Set Span 4 = Set Midpoint1 5 = Set Midpoint2 6 = Set Midpoint3 7 = Calibration Done 8 = Calibration Cancel 9 = Calibration Restore Defaults 10 = Set Zero Shift 11 = Input Frozen 12 = Input Unfrozen 13 = Calibration Timeout
105	User Event Type	0 = Informational 1 = Error 2 = Status 3 = Calculated Factor 4 = Message 5 = Data 6 = Notice 7 = Feedback 8 = Confirmation 9 = Program Adjusted 10 = Estimated Result 11 = User Input 12 = System Change 13 = HMI Input 14 = Other
106	Alarm Record Type	0 = Parameter 1 = Application 2 = User Application 3 = User Parameter
107	Event Record Type	0 = Parameter Change 1 = Application 2 = Calibration 3 = User Application 4 = String

Type	Description	Units
		5 = VTE Parameter Change 6 = VTE Application 7 = VTE Calibration 8 = Parameter Alarm 9 = Application Alarm
110	Sensor Transmitter Status	0 = Normal 1 = SP Out of Low Limits 2 = SP Below Low Alr Limits 3 = SP Above Upr Alr Limits 4 = SP Out of Hi Limits 5 = DP Out of Low Limits 6 = DP Below Low Alr Limits 7 = DP Above Upr Alr Limits 8 = DP Out of Hi Limits 9 = Warning Set 10 = Critical Alr Set 11 = 4088B Calib in Progress 12 = Sensor Module Fail 13 = LCD Comm Error 14 = RTD Sensor Mismatch 15 = ST Below Low Alr Limits 16 = ST Above Upr Alr Limits 17 = ST Out of Low Limits 18 = ST Out of Hi Limits 19 = PT Sensor Fail 20 = PT Out of Low Limits 21 = PT Below Low Alr Limits 22 = PT Above Upr Alr Limits 23 = PT Out of Hi Limits 24 = ST Simulation Enable 25 = Write Protect Switch Lock 26 = PT Simulation Enable 27 = Feature Board Fail 28 = SP Simulation Enable 29 = DP Simulation Enable 30 = Sensor Module Incompatible 31 = Power Fail 32 = Sensor Module Comm Fail
111	Idle Action	0 = Sleep 1 = Always On
112	PID Control Type	0 = Primary Only 1 = Override Only 2 = Dual Control
113	PID Output Type	0 = Analog 1 = Discrete
114	PID Control Action	0 = Forward 1 = Reverse
115	PID Switch Logic	0 = Lesser 1 = Greater

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Type	Description	Units
116	PID Selected Loop	0 = Disabled 1 = Primary 2 = Override
117	Data Quality	0 = Healthy 1 = Unhealthy
118	PID Action on Unhealthy Data	0 = Continue 1 = Manual Mode
119	QTR Log Break Options	0 = Disabled 1 = Hourly Only 2 = All Standard Periodic Logs
120	Temperature Correction Selection	0 = No Correction 1 = Isentropic 2 = Isenthalpic (Joule-Thomson)
121	Lockout Type	0 = Disabled 1 = Timed
123	Enclosure Door Status	0 = Enclosure Door Closed 1 = Enclosure Door Open
124	AI Resistor Selection	0 = Current 1 = Voltage 2 = Disabled
125	Actual Mode	0 = Live 1 = Auto 2 = Auto Read 3 = Override 4 = Calibration 5 = Fault 6 = Last Good 7 = Last Hour Average 8 = Ramp to Fault Value 9 = Ramp to Last Hour Avg
126	Reserved for future use	
127	Raw Counts	0 = A/D Counts 1 = D/A Counts
128	Factory Calibration Status	0 = Invalid 1 = Valid
129	AI Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Above URL 8 = Below LRL 9 = Input Frozen 10 = Input Clipped 11 = Factory Calibration Invalid

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Type	Description	Units
		12 = User Calibration Invalid 13 = Disabled 14 = Termination Missing 15 = Hardware Fail 16 = HART Device Fail
130	AO Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Above URL 8 = Below LRL 9 = Output Frozen 10 = Output Clipped 11 = Factory Calibration Invalid 12 = Auto Read Parameter Invalid 13 = AO Readback Failure 14 = Termination Missing 15 = Disabled 16 = Hardware Fail
131	IO Output User Selection	0 = Auto 1 = Override 2 = Auto Read
132	DI Type	0 = Normal 1 = Latched
133	Logic Level	0 = 66 microamps 1 = 2 milliamps
134	Digital Status	0 = Off 1 = On
135	DI Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Status Alarm 8 = Hardware Failure
136	IO Fault Selection	0 = Fault 1 = Last Good 2 = Last Hour Average 3 = Ramp to Fault Value 4 = Ramp to Last Hour Avg
137	1x00/2x00 DO Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive

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Type	Description	Units
		3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Auto Read Parameter Invalid 8 = SPO Parameter Invalid 9 = Status Alarm 10 = Hardware Failure
138	PI Filter Mode	0 = Low Speed Filter 1 = High Speed Filter
139	PI Conversion Factor	0 = Pulses/EU
140	PI Rate Period	0 = Seconds 1 = Minutes 2 = Hours 3 = Days
141	Pulses	0 = Pulses
142	PI Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Above URL 8 = Below LRL 9 = Termination Missing 10 = Hardware Fail
143	Module Mode	0 = Not Installed 1 = Boot 2 = Normal 3 = Not Licensed 4 = Communication Failure 5 = Module Failure 6 = Power Off 7 = Termination Failure 8 = Firmware Mismatch 9 = Module Mismatch 10 = Firmware Error 11 = Termination Missing
144	AI/DI/PD Channel Type Select	0 = AI 1 = DI 2 = PI
145	Channel Type Select None	0 = None
146	Channel Type Select DO Only	0 = DO Only
147	AI/AO Channel Type Select	0 = AI 1 = AO
148	DI/DO/PI Channel Type Select	0 = DI

Type	Description	Units
		1 = DO 2 = PI
149	Calibration Command	0 = None 1 = Freeze 2 = Start Calibration 3 = Set Zero 4 = Set Span 5 = Set Mid1 6 = Set Mid2 7 = Set Mid3 8 = Set Zero Shift 9 = Save Calibration 10 = Unfreeze 11 = Cancel Calibration 12 = Restore Factory Defaults 13 = Start Verification 14 = Set Verification Pt1 15 = Set Verification Pt2 16 = Set Verification Pt3 17 = Set Verification Pt4 18 = Set Verification Pt5 19 = Set Verification Pt6 20 = Set Verification Pt7 21 = Verification Done 22 = Restored Successfully 23 = Restore Failed
150	Calibration Status	0 = Calibration Not in Progress 1 = Input Frozen 2 = Calibration in Progress 3 = Reserved 4 = Set Command Failed 5 = Timeout Occurred 6 = Span Too Small 7 = Excess Correction 8 = Passed Parameter Too Small 9 = Passed Parameter Too Large 10 = Ideal Value Too Small 11 = Ideal Value Too Large 12 = Wrong Command 13 = Verification in Progress
151	Week of Month	0 = First Week 1 = Second Week 2 = Third Week 3 = Fourth Week 4 = Last Week
152	Battery Status	0 = Battery Not in Use 1 = Lead Acid Fault 2 = Lead Acid Charging 3 = Lead Acid Standby 4 = Lithium Battery on Reserve C Cell

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Type	Description	Units
		5 = Lithium Battery Error 6 = Lithium Battery on Main D Cell
153	SRAM Battery Status	0 = Battery Normal 1 = Battery Failure or Removal
154	Battery Change	0 = No Change 1 = Battery Replaced 2 = CPU SRAM Battery Replaced 3 = PB SRAM Battery Replaced
155	Operational Trip Point 1X00	0 = 6 Volts 1 = 12 Volts 2 = 24 Volts
156	Log Type	0 = Undefined 1 = Legal Event 2 = Non Legal Event 3 = Legal Alarm 4 = Non Legal Alarm 5 = Legal History 6 = Non Legal History

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Type	Description	Units
157	Contract Day of Month	0 = RESERVED 1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 10 = 10 11 = 11 12 = 12 13 = 13 14 = 14 15 = 15 16 = 16 17 = 17 18 = 18 19 = 19 20 = 20 21 = 21 22 = 22 23 = 23 24 = 24 25 = 25 26 = 26 27 = 27 28 = 28 29 = 3rd from Last Day of Month 30 = 2nd to Last Day of Month 31 = Last Day of Month
158	Start Poll	0 = Cancel 1 = Start
159	Continuous Poll	0 = Disabled 1 = Enabled
160	Indexing Used	0 = Point 1 = Parameter
161	Function Code	0 = Polling Disabled 1 = Read Coil Status 2 = Read Input Status 3 = Read Holding Registers 4 = Read Input Registers 5 = Force Single Coil 6 = Set Single Register 7-14 = RESERVED 15 = Force Multiple Coils 16 = Set Multiple Registers

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Type	Description	Units
162	Comm Status	0 = Inactive or Start of Transmission 1 = Response Timeout 2 = Function Code Error 3 = Invalid Register Error 4 = Invalid Request Data Error 5 = Exception Error Code Received 6 = Mapping Table Error 7 = Invalid Response Received 8 = CRC or LRC Check Error 9 = Database Read Error 10 = Valid Response Received 11 = Request Framing Error 12 = Transmit Timeout Error 13 = Database Write Error 14 = Broadcast Request Transmitted 15 = Unable to Connect Error
163	Comm Port Instance	0 = Serial Port 1 1 = Serial Port 2 2 = Serial Port 3 3 = Wi-Fi Port 4 = Ethernet Port
164	Operational Trip Point 2X00	0 = RESERVED 1 = 12 Volts 2 = 24 Volts
165	Master Byte Order	0 = LSB First 1 = MSB First
166	Action Block Status	0 = Inactive 1 = Active
167	Action Block Operators	0 = Greater Than 1 = Less Than 2 = Equal To 3 = Greater Than Or Equal To 4 = Not Equal To 5 = Less Than Or Equal To 6 = AND (Bitwise) 7 = OR (Bitwise) 8 = Watchdog 9 = Soft Timer
168	Action Block Bypass Type	0 = Latched 1 = Class B 2 = Class C 3 = Class B / C
169	Action Block Alarm Option	0 = None 1 = Alarm on Active 2 = Alarm on Inactive
170	Action Block Event Option	0 = None 1 = Event on Active 2 = Event on Inactive

Type	Description	Units
171	Action Block Trip Logic	0 = True If Block True 1 = True If Chain True 2 = True If Either True 3 = True If Both True
172	Action Block Action Type	0 = No Action 1 = Effect 2 = Binary Action 3 = Move Value 4 = Load Value 5 = Write Value
173	Discrete Action Type	0 = Force 1 True & 0 False 1 = Force 0 True & 1 False 2 = Poke 1 True 3 = Poke 0 True 4 = Poke 1 True & 0 False 5 = Poke 0 True & 1 False 6 = Force 1 True & Poke 0 False 7 = Force 0 True & Poke 1 False 8 = Force 1 True 9 = Force 0 True
174	Math Block Equation State	0 = Invalid 1 = Valid
175	Effect Output Assert Type	0 = Neither State 1 = Active State Only 2 = Inactive State Only 3 = Both States
176	Effect Reset Option	0 = No Reset Required 1 = Reset Required
177	Effect Reset Ready Values	0 = No Reset Needed 1 = Ready for Reset
178	AI Units Type	0 = Unitless 1 = RESERVED 2 = Absolute Pressure 3 = Temperature 4 = Gas Density 5 = Volume Heating Value 6 = Dynamic Viscosity 7 = Linear (Short) 8 = Linear (Long) 9-11 = RESERVED 12 = Gas Volume Rate 13 = Mass Rate 14 = Energy Rate 15 = Current 16 = Voltage 17 = RESERVED 18 = Percentage 19 = Acceleration 20 = RESERVED

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Type	Description	Units
		21 = Water Content
		22 = RESERVED
		23 = Resistance
		24-25 = RESERVED
		26 = Differential Pressure
		27-28 = RESERVED
		29 = Gauge Pressure
		30-224 = RESERVED
		225 = Mass Heating Value
		226-293 = RESERVED
		294 = Liquid Density
		295 = Water Density
		296 = Liquid Volume
		297 = Water Volume
		298 = Liquid Rate
		299 = Water Rate
		300-305 = RESERVED
		306 = Relative Density

Type	Description	Units
179	AO Units Type	0 = Unitless 1 = RESERVED 2 = Absolute Pressure 3 = Temperature 4 = Gas Density 5 = Volume Heating Value 6 = Dynamic Viscosity 7 = Linear (Short) 8 = Linear (Long) 9-11 = RESERVED 12 = Gas Volume Rate 13 = Mass Rate 14 = Energy Rate 15 = Current 16 = Voltage 17 = RESERVED 18 = Percentage 19 = Acceleration 20-22 = RESERVED 23 = Resistance 24-25 = RESERVED 26 = Differential Pressure 27-28 = RESERVED 29 = Gauge Pressure 30-224 = RESERVED 225 = Mass Heating Value 226-293 = RESERVED 294 = Liquid Density 295 = Water Density 296 = Liquid Volume 297 = Liquid Density 298 = Liquid Rate 299 = Water Rate 300-305 = RESERVED 306 = Relative Density
180	PI Units Type	0 = Unitless 1-8 = RESERVED 9 = Gas Volume Total 10 = Mass Total 11-23 = RESERVED 24 = Frequency 25-295 = RESERVED 296 = Liquid Volume Total 297 = Water Volume Total
181	HV Measurement Basis	0 = Volume 1 = Mass
182	Water Adjustment Option	0 = No Adjustment 1 = Adjust Composition
183	Factor Curve Option	0 = Single Meter Factor / Single K-factor 1 = Meter Factor Curve / Single K-factor

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Type	Description	Units
		2 = Single Meter Factor / K-factor Curve
184	Pipe Schedule	0 = Schedule 10 1 = Schedule 40 2 = Schedule 80
185	Meter Averaging Type	0 = Flow Dependent Linear 1 = Flow Dependent Formulaic 2 = Flow Weighted Linear 3 = Flow Weighted Formulaic
186	Rosemount Orifice Method	0 = Based on ISO5167 2003
187	Velocity	0 = ft/s 1 = m/s
188	User Mode Selection 4	0 = Measured 1 = Override 2 = RESERVED 3 = Remote Download
189	GC Component Update	0 = None 1 = Methane 2 = Nitrogen 3 = Carbon Dioxide 4 = Ethane 5 = Propane 6 = Water 7 = Hydrogen Sulfide 8 = Hydrogen 9 = Carbon Monoxide 10 = Oxygen 11 = i-Butane 12 = n-Butane 13 = i-Pentane 14 = n-Pentane 15 = Hexane 16 = Heptane 17 = Octane 18 = Nonane 19 = Decane 20 = Helium 21 = Argon 22 = neo-Pentane 23 = Benzene 24 = Toluene 25 = Undecane (C11) 26 = Dodecane (C12)
190	Components Alarm	0 = Normal 1 = Analysis Timeout 2 = Normalization Failure
191	Cx Split Type	0 = Hexane Plus Split 1 = Heptane Plus Split 2 = Octane Plus Split

Type	Description	Units
		3 = Nonane Plus Split
192	GC Validation Alarm	0 = Normal 1 = Component Limit Alarm 2 = Heating Value Limit Alarm 3 = Relative Density Limit Alarm 4 = Un-normalized Mole Sum Alarm 5 = Total Mole Sum Alarm 6 = Composition Deviation Alarm 7 = Alarm 1 8 = Alarm 2
193	Auto Configure	0 = No Action 1 = Auto Configure
194	Daylight Saving Time Status	0 = Standard Time 1 = Saving Time 2 = Gift Time
195	Rate of Change Mode Alarm	0 = Disabled 1 = Alarm on Positive Changes 2 = Alarm on Negative Changes 3 = Alarm on Both
196	LCD Bit Masks	0 = None 1 = Differential Pressure 2 = Absolute Pressure 3 = Temperature 4 = Baud Rate 5 = Gage Pressure 6 = Sensor Temperature 7 = RESERVED 8 = Slave Address 9 = Host Parameter 1 10 = Host Parameter 2 11 = Host Parameter 3 12 = Host Parameter 4 13 = Host Parameter 5 14 = Host Parameter 6 15-16 = RESERVED 17 = Host Variable 1 18 = Host Variable 2 19 = Host Variable 3
197	Transmitter Status Option	0 = None 1 = DP Sensor Present 2 = AP Sensor Present 3 = GP Sensor Present 4 = PT Sensor Present 5 = LCD Available
198	User Commands	0 = No Command 1 = On Demand Connect 2 = On Demand Synchronize 3 = Transmitter Reset

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Type	Description	Units
199	Calibration Status of 4088	0 = No Measurement In Calibration 1 = DP Measurement In Calibration 2 = SP Measurement In Calibration 3 = PT Measurement In Calibration
200	Status	0 = Success 1 = Failure 2 = Disabled
201	4088 Input Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Communication Failed 4 = Config. Issue Due To Write Protect 5 = DP Failed 6 = Pressure Failed 7 = RTD Failed 8 = Synchronization In Progress 9 = Scan Disabled 10 = Writing Failed 11 = RESERVED 12 = 4088 in Mode A 13 = Reading Device 14 = Writing Device 15 = Baud Too Low 16 = Writing Baud Failed 17 = Sensor Disconnected 18 = Scanning Baud Rate 1200 19 = Scanning Baud Rate 2400 20 = Scanning Baud Rate 4800 21 = Scanning Baud Rate 9600 22 = Scanning Baud Rate 19200
202	Variable Status	0 = Good - Not Limited 1 = Poor Accuracy-Low Limited 2 = Poor Accuracy-High Limited 3 = Poor Accuracy-No Limited 4 = Manual/Fixed - Constant 5 = Bad -Constant 6 = Unknown
203	GC Type	0 = American 1 = European
204	GC US Alarm 1	0 = Normal 1 = A/D 0 Low 2 = A/D 0 High 3 = A/D 1 Low 4 = A/D 1 High 5 = A/D 2 Low 6 = A/D 2 High 7 = A/D Cal Low 8 = A/D Cal High 9 = D/A 1 Low

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Type	Description	Units
		10 = D/A 1 High 11 = D/A 2 Low 12 = D/A 2 High 13 = D/A 3 Low 14 = D/A 3 High 15 = Analyzer Failure 16 = Checksum Failure
205	GC US Alarm 2	0 = Normal 1 = Power Failure 2 = RF % Deviation 3 = Preamp Failure 4 = Adjust Preamp
206	DP Flow Calculation Alarm	0 = RESERVED 1 = Invalid Input(s) 2 = Invalid Configuration 3 = Calculation Error 4 = Boundary Error 5 = Invalid Station Assignment 6-8 = RESERVED 9 = Differential Pressure 10 = Pressure 11 = Temperature 12 = Flowing Density/Compressibility 13 = Base Density/Compressibility 14 = Relative Density 15 = Heating Value/Enthalpy 16 = Viscosity 17 = User Correction Factor 18 = Total/Increment 19 = Integral Multiplier Value 20-25 = RESERVED 26 = Beta Ratio 27 = DP/P Ratio 28 = Isentropic Exponent 29 = Reynolds Number 30 = Pressure Loss/Pressure Loss Ratio 31 = Alpha 32 = Expansion Factor
207	Property Calculation Alarm	0 = RESERVED 1 = Invalid Input(s) 2 = Invalid Configuration 3 = Calculation Error 4 = Boundary Error 5-8 = RESERVED 9 = Pressure 10 = Temperature 11 = Flow Density/Compressibility 12 = Base Density/Compressibility 13 = Relative Density 14 = Heating Value/Enthalpy

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Type	Description	Units
		15 = Composition 16 = Water Content 17 = Atmospheric Press/Gravitational Accel 18 = Viscosity 19 = Isentropic Exponent 20 = Speed of Sound 21-32 = RESERVED
208	Yes/No Option	0 = No 1 = Yes
209	Module Type	0 = Unknown 1 = HMI 0 = Unknown 1 = HMI 2 = On-Board I/O 3 = Optional I/O 4 = Expanded I/O 5 = I/O Module 6-253 = RESERVED 254 = I/O Scan CPU 255 = Main CPU
210	Module Subtype	0 = None 1 = 8AIDIPI 2AO 2DO 4 = AODO 5-48 = RESERVED 49 = HART 4 50 = 4 COMM
211	Option Not Applicable	0 = Not Applicable
212	LCD Installed	0 = LCD Not Found 1 = LCD Detected
213	WiFi Installed	0 = WiFi Not Found 1 = WiFi Detected
214	Serial Port Module	0 = RS-232 1 = RS-485 2-Wire (No Termination) 2 = RS-485 2-Wire (Terminated)
215	Action Block Alarm Type	0 = Low 1 = Low Low 2 = High 3 = High High 4 = Rate of Change 5 = Other
216	Action Block Chain Type	0 = AND 1 = OR 2 = NAND
217	Action Block Chain to Status	0 = Block Status 1 = Chain Status 2 = Output Status

Type	Description	Units
218	Current Bypasses Active	0 = None 1 = Local Latched 2 = Remote Latched 3 = Class B 4 = Class C 5 = Class B/C
219	4088 RTD Type	0 = RESERVED 1 = 3-wire 2 = 4-wire
220	Alarm Status RTD	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Above URL 8 = Below LRL 9 = Input Frozen 10 = Type Mismatch
221	EU Scaling Mode	0 = Multi-Point Calibration 1 = EU Scaling
222	Alpha	0 = in./in.-°F 1 = mm/mm-°C 2 = mm/mm-K
223	Calculated Cd	0 = Flow Equation Standard 1 = Calibrated Discharge Coefficient Curve
224	Ethernet Support	0 = No Ethernet Support 1 = Ethernet Supported
225	Mass Heating Value	0 = Btu/lb 1 = MJ/kg
226	WiFi Antenna Type	0 = Internal Antenna 1 = External Antenna
227	Auto Adjust Initial Cycle	0 = Initial Cycle Complete 1 = Initial Cycle In Progress
228	Auto Adjust System Alarm	0 = Normal Flow 1 = No Flow / Loss of Both Pulses 2 = Leakage or Resonant No-Net Flow 3 = No Main Rotor Pulses 4 = No Sensing Rotor Pulses
229	Auto Adjust Flow Alarm	0 = Normal Flow 1 = Non-steady Flow
230	Auto Adjust Delta A Alarm	0 = Normal 1 = Low Warning 2 = High Warning 3 = Low Alarm 4 = High Alarm

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Type	Description	Units
231	Serial Port 1 Owner	0 = 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Master Modbus 5 = BSAP 6 = ROC 7 = RESERVED
232	Serial Port 2 Owner	0 = 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Master Modbus 5 = BSAP 6 = ROC 7 = RESERVED
233	Serial Port 3 Owner	0 = 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Master Modbus 5 = BSAP 6 = ROC 7 = MVS4088B
234	WiFi Port Owner	0-1 = RESERVED 2 = DNP3 3-7 = RESERVED
235	RESERVED	
236	Months of Year	1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December
237	GC Poll Alarm	0 = Normal 1 = Poll Failed 2 = Comp Code Match Error 3 = Poll Disabled 4 = Auto-config Fail
238	No Flow Option	0 = Time Between Pulses 1 = Flow Cut-off 2 = Flow Cut-off with accumulation

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Type	Description	Units
239	No Flow Status	0 = Not Flowing 1 = Flowing
240	Protocol	0 = None 1 = DNP3 2 = Modbus 3 = ROC 4 = BSAP 5 = FBxNet
241	String Type	0 = None 1 = Password
242	4088 Temperature	0 = °F 1 = °C
243	GC EU Alarm 1	0 = Normal 1 = Peak Overflow 2 = Unknown Error 3 = Peak Analysis Failure 4 = Chromat I/O Failure 5 = Controller Stack Overflow 6-7 = RESERVED 8 = Peak Analysis Start 9 = Chromat I/O Start Failure 10 = Analog Input Failure 11 = Analog Input Failure 12 = Analog Input Failure 13 = Chromat Buffer Overflow 14 = Inputs Out of Range 15 = Preamp Failure 16 = Preamp Adjust
244	GC EU Alarm 2	0 = Normal 1 = Calibration Failure 2 = Auto Start Fail 3 = Alarm on 24Hr Averages 4 = Analysis Failure 5 = Auto Start Alarm
245	Pulse Rate	0 = Pulses/sec 1 = Pulses/min 2 = Pulses/hr 3 = Pulses/day
246	Event Log Config Type	0 = Combined Event Log 1 = Separate Legal and Non-Legal Event Logs 2 = Separate Verifiable & Exportable Logs 3 = BSAP Combined Alarm Event Log
247	Pressure Effect	0 = %/psi 1 = %/bar
248	IP Connection 1 2 3 Owner	0 = DNP3 Protocol 1 = Modbus Slave Protocol 2 = ROC Protocol

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Type	Description	Units
		3 = BSAP Protocol
249	IP Connection 4 5 6 Owner	0 = Modbus Slave Protocol 1 = ROC Protocol 2 = BSAP Protocol
250	Screen Saver Password	0 = No Password Required 1 = Password Required
251	Alarm Format	0 = Standard Alarm Format 1 = Extended Alarm Format
252	Signal Name Format	0 = ControlWave 1 = Native 2 = ACCOL 3
253	Meter Direction	0 = Forward 1 = Reverse
254	Alarm Status	0 = Normal 1 = In Alarm
255	Low Power Option	0 = Low Power Mode Not Available 1 = Low Power Mode Available
256	Database Recovery Option	0 = Restore to Database Defaults 1 = Restore from Flash Config File
257	Power Control Comm Port Option	0-2 = RESERVED 3 = All Comm Ports Enabled
258	Override Type Select	0 = Low 1 = High
259	Power Control Status	0 = Power Control Inactive 1 = Power Control Active 2 = Power Control Low Voltage 3 = Power Control Held by Comms
260	IP Connection 7 Owner	0 = Modbus Master Protocol
261	CPU Frequency Level	0 = Low Frequency 1 = Medium Frequency 2 = High Frequency
262	Log/Archive Array Format	0 = Logs as arrays not available 1 = Field Data Values 2 = TimeStamp (TS) + Field Data Values 3 = TS+Local/Global Seq#+Field Data Values 4 = TS2 (Days+Secs+20ms)+Field Data Values 5 = TS2+Seq#+Field Data Values 6 = Seq#+Field Data Values 7 = Field Data Values (Oldest -> Newest) 8 = TS+Field Data Values (Oldest -> Newest) 9 = TS+S#+Field Data Values (Oldest -> Newest) 10 = TS2+Field Data Values (Oldest -> Newest) 11 = TS2+S#+Field Data Values (Oldest -> Newest) 12 = S#+Field Data Values (Oldest -> Newest)
263	Base Pressure	0 = User 1 = 14.65 psi(a)

Type	Description	Units
		2 = 14.696 psi(a) 3 = 14.73 psi(a) 4 = 15.025 psi(a) 5 = 101.325 kPa(a) 6 = 0.101325 MPa(a) 7 = 1.01325 bar(a)
264	Linear Flow Calculation Alarm	0 = RESERVED 1 = Invalid Input(s) 2 = Invalid Configuration 3 = Calculation Error 4 = Boundary Error 5 = Invalid Station Assignment 6-8 = RESERVED 9 = Flow 10 = Pressure 11 = Temperature 12 = Flow Density/Compressibility 13 = Base Density/Compressibility 14 = Relative Density 15 = Heating Value/Enthalpy 16 = Viscosity 17 = User Correction Factor 18 = Total/Increment 19 = Integral Multiplier Value 20-25 = RESERVED 26 = K-factor/Meter Factor 27 = Mass Pressure Correction Factor 28-32 = RESERVED
265	Active DNP3 Map	0 = Default 1 = User Defined
266	Alarm Suppress State	0 = Off 1 = On
267	Memory Size	0 = Bytes 1 = Kilobytes 2 = Megabytes
268	Channel Type Select AO Only	0 = AO Only
269	Poll Intervals	0 = 1 second 1 = 500 ms 2 = 200 ms 3 = 100 ms 4 = 50 ms 5 = 20 ms 6 = 10 ms
270	Rack Size	0 = 8 Modules 1 = 16 Modules 2 = 24 Modules 3 = 32 Modules
271	Application Status	0 = Unloded

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Type	Description	Units
		1 = Load Required 2 = Loaded 3 = Start Requested 4 = Running 5 = Stop Requested 6 = Stopped 7 = Terminate Requested 8 = Terminated 9 = RESERVED
272	Application Exception Code	0 = None 1 = String Error 2 = Watchdog Exceeded 3 = Max CPU Load Exceeded 4 = System Error 5 = End Error
273	Application Control	0 = Idle 1 = Start 2 = Stop 3 = Load 4 = Clear
274	Task Status	0 = Stopped 1 = Started 2 = No License 3 = Library Version Error
275	RESERVED	
276	DI/PI Resistor Selection	0 = Pull Up 1 = Pull Down
277	RESERVED	
278	Flow Type	0 = Mass 1 = Volume
279	Liq LinMtr Linear Meter Type	0 = Turbine 1 = Coriolis 2 = Ultrasonic 3 = Positive Displacement
280	Rounding Option	0 = Rounding 1 = Rounding According to API 12.2.2
281	Liq LinMtr Flow Calculation Alarm	0 = RESERVED 1 = Invalid Input(s) 2 = Invalid Configuration 3 = Calculation Error 4 = Boundary Error 5 = Invalid Station Assignment 6-8 = RESERVED 9 = Flow 10 = Pressure 11 = Temperature 12 = Flowing Density 13 = Base Density

Type	Description	Units
		14-17 = RESERVED 18 = Total/Increment 19-25 = RESERVED 26 = K-factor/Meter Factor 27 = Mass Pressure Correction Factor 28 = Water Cut 29 = Shrinkage Factor 30 = CTL/CPL 31 = NGL Factor/Flash Gas Factor 32 = RESERVED
282	LIq LinMtr Property Calculation Alarm	0 = RESERVED 1 = Invalid Input(s) 2 = Invalid Configuration 3 = Calculation Error 4 = Boundary Error 5-8 = RESERVED 9 = Pressure 10 = Temperature 11 = Flowing Density 12 = Base Density 13-16 = RESERVED 17 = Atmospheric Press/Gravitational Accel 18-20 = RESERVED 21 = Critical Temp/Press 22-32 = RESERVED
283	Water Cut Method	0 = Dynamic 1 = Statics
284	DO Low Side Switch	0 = Disable grounded output 1 = Enable grounded output
285	User Mode Selection 5	0 = Measured 1 = Override
286	PI Filter Mode	0 = Low Speed Filter 1 = Medium Speed Filter 2 = High Speed Filter
287	Busy Status	0 = Idle 1 = Busy
288	Personality Module Status	0 = Module inserted and valid 1 = Module not present 2 = Module not valid in this slot 3 = Module not calibrated 4 = Module EEPROM data corrupted
289	Personality Module Type	0 = Invalid personality board type 1 = CPU Personality Module 2 = CPU PM with WiFi 3-9 = RESERVED 10 = 12-point point mixed I/O PM 11 = 10-point DI/DO PM 12 = 8-point AI/DI/PI PM

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Type	Description	Units
		13 = 8-point AO/DO PM 14-31 = RESERVED 32 = 16-point DI PM 33 = 16-point DIPI PM 34-48 = RESERVED 49 = 4-channel HART PM 50 = 4-port Comm PM
290	IP Connection Owner	0 = DNP3 Protocol 1 = Modbus Slave Protocol
291	Serial Port Owner	0 = RESERVED 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Modbus Master 5-7 = RESERVED
292	Serial Port Owner	0 = RESERVED 1 = DNP3/Modbus Slave 2 = DNP3 3 = Modbus Slave 4 = Modbus Master 5-6 = RESERVED 7 = MVS4088B 8 = RESERVED 9 = MVT3808/3508
293	Protocol	0 = None 1 = DNP3 2 = Modbus 3-4 = RESERVED 5 = FBxNet
294	Liquid Density	0 = lb/ft ³ 1 = kg/m ³ 2 = g/cc 3 = lb/MMCF 4 = lb/US gal 5 = kg/L 6 = lb/bbl 7 = RD 8 = °API
295	Water Density	0 = lb/ft ³ 1 = kg/m ³ 2 = g/cc 3 = lb/MMCF 4 = lb/US gal 5 = kg/L 6 = lb/bbl 7 = RD 8 = °API
296	Liquid Volume Total	0 = ft ³ 1 = m ³

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Type	Description	Units
		2 = MCF 3 = (k)m ³ 4 = MMCF 5 = BCF 6 = L 7 = US gal 8 = bbl
297	Water Volume Total	0 = ft ³ 1 = m ³ 2 = MCF 3 = (k)m ³ 4 = MMCF 5 = BCF 6 = L 7 = US gal 8 = bbl
298	Liquid Volume Rate	0 = ft ³ /s 1 = ft ³ /min 2 = ft ³ /h 3 = ft ³ /d 4 = MCF/s 5 = MCF/min 6 = MCF/h 7 = MCF/d 8 = m ³ /s 9 = m ³ /min 10 = m ³ /h 11 = m ³ /d 12 = (k)m ³ /s 13 = (k)m ³ /min 14 = (k)m ³ /h 15 = (k)m ³ /d 16 = MMCF/s 17 = MMCF/min 18 = MMCF/h 19 = MMCF/d 20 = BCF/s 21 = BCF/min 22 = BCF/h 23 = BCF/d 24 = L/s 25 = L/min 26 = L/h 27 = L/d 28 = US gal/sUS 29 = US gal/min 30 = US gal/h 31 = US gal/d 32 = bbl/s 33 = bbl/min 34 = bbl/h

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Type	Description	Units
		35 = bbl/d
299	Volume Water Rate	0 = ft ³ /s 1 = ft ³ /min 2 = ft ³ /h 3 = ft ³ /d 4 = MCF/s 5 = MCF/min 6 = MCF/h 7 = MCF/d 8 = m ³ /s 9 = m ³ /min 10 = m ³ /h 11 = m ³ /d 12 = (k)m ³ /s 13 = (k)m ³ /min 14 = (k)m ³ /h 15 = (k)m ³ /d 16 = MMCF/s 17 = MMCF/min 18 = MMCF/h 19 = MMCF/d 20 = BCF/s 21 = BCF/min 22 = BCF/h 23 = BCF/d 24 = L/s 25 = L/min 26 = L/h 27 = L/d 28 = US gal/sUS 29 = US gal/min 30 = US gal/h 31 = US gal/d 32 = bbl/s 33 = bbl/min 34 = bbl/h 35 = bbl/d
300	Serial Port Owner	0-1 = RESERVED 2 = DNP3 3-7 = RESERVED
301	Operational Trip Point	0 = RESERVED 1 = Solar Supply 2 = DC Supply
302	Comm Port Instance	0 = Serial Port 1 1 = Serial Port 2 2 = Serial Port 3 3 = Serial Port 4 4 = Ethernet Port 1 5 = Ethernet Port 2

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Type	Description	Units
303	FB3000 DO Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Auto Read Parameter Invalid 8 = SPO Parameter Invalid 9 = Termination Missing 10 = Status Alarm 11 = Hardware Fail
304	FB3000 DI Status	0 = Normal 1 = Not Licensed 2 = Instance Inactive 3 = Comm Fail 4 = Override Active 5 = In Alarm 6 = Point Fail 7 = Termination Missing 8 = Status Alarm 9 = Hardware Fail
305	4088 Config Type	0 = None 1 = EMV4088B
306	Relative Density	0 = RD
307	Calc Availability	0 = Not Available 1 = Available
308	Serial Port Mode	0 = RESERVED 1 = RS-485 2-Wire (No Termination) 2 = RS-485 2-Wire (Terminated)
309	Application Package Status	0 = Unloaded 1 = Loaded
310	Time Synchronization Deadband	0 = Seconds 1 = Milliseconds
311	Reset Counter	0 = Idle 1 = Reset
312	HART Comm Mode	0 = Disabled 1 = Point to Point 2 = MultiDrop
313	HART Master Type	0 = Primary 1 = Secondary
314	HART Scan Status	0 = Not Scanning 1 = Scanning 2 = Dual Master 3 = Pass thru 4 = Burst Mode
315	HART Passthru Mode	0 = Disable

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Type	Description	Units
		1 = Strip 2 = Full
316	HART Poll Mode	0 = Skip 1 = PV only 2 = All Process 3 = All Dynamic
317	HART Fault Selection	0 = Fault 1 = Last Good
318	Module Subtype – Extended Rack	0 = None 1 = 8AIDIPI 2AO 2DO 2-3 = RESERVED 4 = 8AODO
319	Historical Log Timestamp Mode	0 = Start of Period 1 = End of Period
320	Density Option	0 = Station Base Density 1 = Meter Observed Density 2 = Station Header Density
321	RESERVED	
322	Product Type	0 = Crude Oil 1 = Refined Products 2 = RESERVED 3 = Lubricating Oil 4-5 = RESERVED 6 = Light Hydrocarbon
323	Oil Flow Calculation Method	0 = API Ch. 12.2 1 = API Ch. 20.1
324	API Ch 11 Volume Correction Method	0 = API 11.1 2007
325	Water Option	0 = Use Oil Correction Factor for Water 1 = Use Separate Correction Factor for Water
326	IBP Timesynch Option	0 = Disable 1 = Enable 2 = Require NHP
327	FBxNet Device Connection Status	0 = Not Started 1 = Connecting 2 = Resolving 3 = Online 4 = Offline 5 = Invalid 6 = Connection Timeout 7 = Transmit Error 8 = Response Timeout 9 = Resolving Failure 10 = Read Failure 11 = Disabled 12 = Online with Parameter Error(s) 13 = No Account Found 14 = Authentication Failed

Type	Description	Units
		15 = Authenticating
328	RESERVED	
329	Module Mode	0 = Not Installed 1 = Boot 2 = Normal 3 = Not Licensed 4 = Communication Failure 5 = Module Failure 6 = Power Off 7 = Firmware Mismatch 8 = Module Mismatch
330	Meter Runs	RESERVED
331	Meter Runs	RESERVED
332	Meter Runs	RESERVED
333	Meter Runs	RESERVED
334	Meter Runs	RESERVED
335	Meter Runs	RESERVED
336	Meter Runs	RESERVED
337	Meter Runs	RESERVED
338	Meter Runs	RESERVED
339	Meter Runs	RESERVED
340	Connection File Status	0 = No Error 1 = File Open Fail 2 = Column Mismatch 3 = Missing Req Column 4 = Exceeded Max Data 5 = Empty Subscriber Tag 6 = Invalid FBxNet Data Instance 7 = Missing or Invalid Required Value 8 = Duplicate FBxNet Data Instance 9 = Not Configured 10 = Exceeded Publisher Fault
341	FBxNet Poll Cycle	0 = Off 1 = On
342	Device Status	0 = Normal 1 = PV Override 2 = Point Fail 3 = Device Comm Fail 4 = PV Above URL 5 = PV Below LRL 6 = Termination Missing 7 = Module Comm Fail 8 = Not Scanning 9 = In Alarm 10 = Device Malfunction 11 = SV Override

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Type	Description	Units
		12 = TV Override 13 = QV Override
343	HART Object Status	0 = Normal 1 = In Alarm 2 = Fault 3 = Override 4 = No Device 5 = Device Comm Error
344	HART Units	0 = Undef 1 = inH2O 2 = inHg 3 = ftH2O 4 = mmH2O 5 = mmHg 6 = psi 7 = bar 8 = mbar 9 = g/cm ² 10 = kg/cm ² 11 = Pa 12 = kPa 13 = Torr 14 = at 15 = ft ³ /min 16 = gal/mibn 17 = l/min 18 = gal(UK)/min 19 = m ³ /h 20 = ft/s 21 = m/s 22 = gal/s 23 = Mgal/d 24 = l/s 25 = Ml/d 26 = ft ³ /s 27 = ft ³ /d 28 = m ³ /s 29 = m ³ /d 30 = gal(UK)/h 31 = gal(UK)/d 32 = °C 33 = °F 34 = °R 35 = K 36 = mV 37 = ohms 38 = Hz 39 = mA 40 = gal 41 = l 42 = gal(UK)

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Type	Description	Units
		43 = m ³
		44 = ft
		45 = m
		46 = bbl
		47 = in
		48 = cm
		49 = mm
		50 = min
		51 = s
		52 = h
		53 = d
		54 = cSt
		55 = cP
		56 = uSiemen
		57 = %
		58 = V
		59 = pH
		60 = g
		61 = kg
		62 = t
		63 = lb
		64 = ton
		65 = ton(KU)
		66 = mSiemen/cm
		67 = uSiemen/cm
		68 = N
		69 = J
		70 = g/s
		71 = g/min
		72 = g/h
		73 = kg/s
		74 = kg/min
		75 = kg/h
		76 = kg/d
		77 = t/min
		78 = t/h
		79 = t/d
		80 = lb/s
		81 = lb/min
		82 = lb/h
		83 = lb/d
		84 = ton/min
		85 = ton/h
		86 = ton/d
		87 = ton(UK)/h
		88 = ton(UK)/d
		89 = DTH
		90 = SG
		91 = g/cm ³
		92 = kg/m ³
		93 = lb/gal

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Type	Description	Units
		94 = lb/ft ³
		95 = g/ml
		96 = kg/l
		97 = g/l
		98 = lb/in ³
		99 = ton/yd ³
		100 = °Tw
		101 = °Bx
		102 = B°
		103 = B°(light)
		104 = Degrees API
		105 = % sol/wt
		106 = % sol/vol
		107 = °Bg
		108 = proof/vol
		109 = proof/mass
		110 = bu
		111 = yd ³
		112 = ft ³
		113 = in ³
		114 = in/sd
		115 = in/min
		116 = ft/min
		117 = °/s
		118 = rps
		119 = rpm
		120 = m/h
		121 = Nm ³ /h
		122 = NI/hr
		123 = SCF/min
		124 = bbl(US)
		125 = oz
		126 = ftlbf
		127 = kW
		128 = kWh
		129 = hp
		130 = ft ³ /h
		131 = m ³ /min
		132 = bbl/s
		133 = bbl/min
		134 = bbl/h
		135 = bbl/d
		136 = gal/h
		137 = gal(UK)/s
		138 = l/h
		139 = ppm
		140 = Mcal(th)/h
		141 = MJ/h
		142 = Btu/h
		143 = degrees
		144 = radian

Type	Description	Units
		145 = inH2O(60°F)
		146 = ug/l
		147 = ug/m ³
		148 = %
		149 = vol%
		150 = % Stm Qual
		151 = ft-16
		152 = ft ³ /lb
		153 = pF
		154 = ml/l
		155 = ul/l
		156 = dB
		157-159 = RESERVED
		160 = %P
		161 = %LEL
		162 = Mcal(th)
		163 = Kilo ohms
		164 = MJ
		165 = Btu
		166 = Nm ³
		167 = NI
		168 = SCF
		169 = ppb
		170-234 = RESERVED
		235 = gal/d
		236 = hl
		237 = MPa
		238 = inH2O(4° C)
		239 = mmH2O(4° C)
		240-249 = RESERVED
		250 = Not Used
		251 = None
		252 = RESERVED
		253 = Special
345	EFM Hist Time Format	0 = HHMM 1 = HHMMSS
346	Publisher Comm Enable	0 = Disabled 1 = Enable Read/Write 2 = Enable Read Only
347	AO/DO Channel Type Select	0 = AO 1 = DO
348	FBxNData Input Status	0 = Normal 1 = Fault 2 = Override 3 = RESERVED 4 = Alarm 5-16 = RESERVED 17 = Comm Failure
349	Apply Resize Values	0 = Good 1 = Invalid User Config

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Type	Description	Units
		2 = Resize in Progress 3 = Last Resize Failed 4 = Transaction In Progress 5 = Database Instance Full
350	System Verification Status	0 = System Unverified 1 = System Verified
351	Base Density Units & Temperature	0-10 = RESERVED 11 = kg/m ³ @60°F 12 = kg/m ³ @15°C 13 = kg/m ³ @20°C 14 = kg/m ³ @30°C 15 = kg/m ³ @0°C 16-21 = RESERVED 22 = g/cc@15°C 23 = g/cc@20°C 24 = g/cc@30°C 25 = g/cc@0°C 26-70 = RESERVED 71 = RD@60°F 72 = RD@15°C 73 = RD@20°C 74 = RD@30°C 75 = RD@0°C 76-80 = RESERVED 81 = °API@60°F
352	License Control	0 = Licensed 1 = Unlicensed
353	HART Pressure Units	0 = psi 1 = kPa 2 = MPa 3 = bar 4 = kg/cm ³ 5 = inH2O@60°F 6 = inH2O@68°F 7 = mbar
354	Shrinkage Factor Option	0 = Apply to Gross Standard Volume 1 = Apply to Net Standard Volume
355	Legal Event Lock Status	0 = Unlocked 1 = Locked
357	Compressibility Factor	0 = 1/psi 1 = 1/kPa 2 = 1/MPa 3 = 1/bar 4 = 1/(kg/cm ²)
358	Flow Input Option	0 = Flow Input Only 1 = External Accumulator Only 2 = External Accumulator with Flow Rate
359	Flow Time Units	0 = s

Type	Description	Units
		1 = min
360	Fault Health Configuration	0 = Normal 1 = Primary Inputs - Fault 2 = Primary Inputs - Alarm 3 = Primary Inputs - Override 4 = Calculation Alarms 5 = Flow Rate Alarms 6 = Config Checksum Fault 7 = System Fault
361	RESERVED	
362	RESERVED	
363	RESERVED	
364	RESERVED	
365	RESERVED	
366	RESERVED	
367	CSV Option	0 = Database Objects 1 = Use CSV Files
368	CSV Parse Status	0 = No Error 1 = No Mapping Found 2 = Column Mismatch 3 = Missing Required Column 4 = Exceeded Max Data 5 = Invalid Row Data 6 = Misc Error 7 = Duplicate Data 8 = In Progress
369	Reloading Maps	0 = Ready 1 = In Progress
370	Integrity Status	0 = Disabled 1 = Not Checked 2 = Valid 3 = Fail
371	IBP Header Option	0 = Expanded Header 1 = Expanded Header Ignore Address 2 = Short Header
372	Integrity Status	0 = Disabled 1 = Not Checked 2 = Computing 3 = Valid 4 = Fail
373	Hexadecimal Data	0 = Hex
374	Trans Hist Data Format	0 = Numeric 1 = String
375	Trans Grp Conf Stat	0 = Done 1 = In Progress
376	RESERVED	

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Type	Description	Units
377	Trans Trigger Subtype	0 = None 1 = Batch 2 = Hourly 3 = Daily
378	Trans Trigger Status	0 = Not Started 1 = In Progress 2 = Stopped 3 = Invalid Trigger 4 = Short Trigger 5 = Trigger Limit Reached 6 = No Points Added
379	Trans Trigger Signal	0 = None 1 = Start 2 = Next 3 = Stop
380	Trans Hist Status	0 = Stopped 1 = In Progress
381	Trace Status	0 = Ready 1 = Start 2 = Create File 3 = Busy 4 = Clean Up
382	Transactional History Group Use	0 = General 1 = Liquid Linear Meter Batching 2-100 = RESERVED 101 = PMWT Well Test Report 102 = PMWO Cycle Record 103 = PMWO Gas Lift Test Record 104 = PMFL Auto-Haul Record 105 = PMFL LoadOut Record
383	ROC Long Credentials	0 = ROC Short Credentials 1 = ROC Long Credentials
384	Trans History Type	0 = Average 1 = Total / Difference 2 = End Snapshot 3 = Minimum 4 = Maximum 5 = Integration 6 = Start Snapshot

5.2 Object Parameters



Important

The system determines all object references (parameter names that include “_OBJ” such as *ALM_OBJ*, *CAL_OBJ*, *STATION_OBJ*, and so on) **only** at startup and does not dynamically update these object references until the next time you restart the device. If you assign a meter to a different station, you **must** restart that device – which causes a system reinitialization – before the system can acknowledge, for example, that Linear Mtr_1.STATION_OBJ should now point to Station_2.PB-SEL.

The tables in this section list the parameters associated with each object. Parameters include:

Field	Description																
Name	The parameter’s system identifier.																
Description	Description for the parameter, including (if appropriate) any values.																
Data Type	Type of data associated with the parameter. Valid values include: <table border="1" style="margin-left: 20px;"> <tbody> <tr> <td>BIN</td> <td>Binary value; the numeric value indicates the number of bits (for example, BIN32 is a 32-bit binary)</td> </tr> <tr> <td>BYTE</td> <td>Byte array; the numeric value indicates the number of bytes (for example, BYTE32 is a 32-byte array)</td> </tr> <tr> <td>DOUBLE</td> <td>64-bit FLOATING point number</td> </tr> <tr> <td>ENUM</td> <td>Enumeration; the numeric value indicates the number of bits (for example, ENUM16 is a 16-bit long enumeration)</td> </tr> <tr> <td>FLOAT</td> <td>32-bit FLOATING point number</td> </tr> <tr> <td>INT</td> <td>Signed integer; the numeric value indicates the number of bits (for example, INT16 is a 16-bit signed integer)</td> </tr> <tr> <td>OBJREF</td> <td>Object reference</td> </tr> <tr> <td>PRMREF</td> <td>Parameter reference</td> </tr> </tbody> </table>	BIN	Binary value; the numeric value indicates the number of bits (for example, BIN32 is a 32-bit binary)	BYTE	Byte array; the numeric value indicates the number of bytes (for example, BYTE32 is a 32-byte array)	DOUBLE	64-bit FLOATING point number	ENUM	Enumeration; the numeric value indicates the number of bits (for example, ENUM16 is a 16-bit long enumeration)	FLOAT	32-bit FLOATING point number	INT	Signed integer; the numeric value indicates the number of bits (for example, INT16 is a 16-bit signed integer)	OBJREF	Object reference	PRMREF	Parameter reference
BIN	Binary value; the numeric value indicates the number of bits (for example, BIN32 is a 32-bit binary)																
BYTE	Byte array; the numeric value indicates the number of bytes (for example, BYTE32 is a 32-byte array)																
DOUBLE	64-bit FLOATING point number																
ENUM	Enumeration; the numeric value indicates the number of bits (for example, ENUM16 is a 16-bit long enumeration)																
FLOAT	32-bit FLOATING point number																
INT	Signed integer; the numeric value indicates the number of bits (for example, INT16 is a 16-bit signed integer)																
OBJREF	Object reference																
PRMREF	Parameter reference																

Field	Description
TIME	Number of seconds since 01 January 2000 @ 00:00:00 (taking into account the 2038 issue)
UC	Character string with null termination. Valid values are:
UC10	10-character string with null termination (11 bytes max)
UC20	20-character string with null termination (21 bytes max)
UC30	30-character string with null termination (31 bytes max)
UC40	40-character string with null termination (41 bytes max)
UINT	Unsigned integer; the numeric value indicates the number of bits (for example, UINT16 is a 16-bit unsigned integer)
Unknown	Data type is unknown
Range	Indicates the range of possible values for the parameter (if applicable)
Default	Indicates the default value for the parameter.
Default Measurement Type	Indicates (for ENUM16 and BIN data types) the measurement type used for possible values. For other data types, indicates the default units for the parameter and the associated measurement type.
Access (by Role)	Indicates the overall accessibility of the parameter by role. Valid values are R/O (the parameter can only be read), R/W (the parameter can be modified if the user has the proper role access), and N/A the parameter does not apply to this role).
Version	Indicates the version at which the parameter was introduced.
Other Attributes	Identifies any other attributes associated with the parameter. Values can include:
Log Changes	The system logs any changes to the parameter in the Event log.
Legal	This parameter affects the calculation of flow rates, totals, and/or averages. The system logs any user changes to this parameter to the legal event log.
Verified	Changing the parameter value requires additional verification by the system (beyond range checking). When a new value is written to the

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Field	Description
	parameter, it updates the parameter status to indicate the value is undergoing verification. Once verification is complete, the system updates the parameter status to indicate the value has been verified.

5.2.1 Action Block Parameters

Description: The Action Block object provides the parameters for configuring programming components that check a basic logic condition and use the result to activate effects or perform other actions.

Number of Instances: 30 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-2: Action Block Parameters

Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: Action Block X (where X is instance number)		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
DESC	Description	UC20		Instance: Action Block X (where X is instance number)		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ACTION_BLK_ENABLE	Action Block Enable Switch: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ACTION_BLK_STAT_US	Action Block Activation Status: 0 - Inactive 1 - Active	ENUM16	0 → 1	Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
VAR_1_DESC	Variable 1 Param Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
VAR_1_POINT	Input 1 DB point	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
VAR_1_VAL	Variable 1 Live Value	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
VAR_2_DESC	Variable 2 Param Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
VAR_2_POINT	Input 2 DB point	ParamRef		Undefined		R/W: Admin; Engineer R/O:	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		
VAR_2_VAL	Variable 2 Live Value Or Entered	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
OPERATOR	Operator Selection: 0 - Greater Than 1 - Less Than 2 - Equal To 3 - Greater Than Or Equal To 4 - Not Equal To 5 - Less Than Or Equal To 6 - AND (Bitwise) 7 - OR (Bitwise) 8 - Watchdog 9 - Soft Timer	ENUM16	0 → 9	Greater Than (0)	Action Block Operators (167)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
RESULT_DEADBAND	Deadband EU	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
TRIP_STATUS	Basic Logic Block Status 0 - Inactive 1 - Active	ENUM16	0 → 1	Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
DELAY_SEC	Activation Delay	UINT16		0	s (17.0)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ELAPSED_SEC	Elapsed Delay	UINT16		0	s (17.0)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
BYPASSES_ACTIVE	Current Bypasses Active: 0 - Local Latched 1 - Remote Latched 2 - Class B 3 - Class C 4 - Class B/C	BIN8		Local Latched	Action Block Chain To Status (218)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
BYPASS_LOCAL	On Demand Local Bypass: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
REMOTE_BYPASS_BLK_1	Remote Bypass Block Number 1	UINT16	0 → 30	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
REMOTE_BYPASS_TYPE_1	Remote Bypass Type 1: 0 - Latched 1 - Class B 2 - Class C 3 - Class B / C	ENUM16	0 → 3	Latched (0)	Action Block Bypass Types (168)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
REMOTE_BYPASS_BLK_2	Remote Bypass Block Number 2	UINT16	0 → 30	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
REMOTE_BYPASS_TYPE_2	Remote Bypass Type 2: 0 - Latched 1 - Class B 2 - Class C 3 - Class B / C	ENUM16	0 → 3	Latched (0)	Action Block Bypass Types (168)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
REMOTE_BYPASS_BLK_3	Remote Bypass Block Number 3	UINT16	0 → 30	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
REMOTE_BYPASS_YPE_3	Remote Bypass Type 3: 0 - Latched 1 - Class B 2 - Class C 3 - Class B / C	ENUM16	0 → 3	Latched (0)	Action Block Bypass Types (168)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CLASS_B_DELAY_SEC	Class B Preset Delay Time	UINT16		300	s (17.0)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CLASS_B_ELAPSED_SEC	Class B Elapsed Time	UINT16		0	s (17.0)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
CLASS_C_DEADBAND	Class C Deadband EU Value	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CLASS_C_DELAY_SEC	Class C Preset Delay Time	UINT16		10	s (17.0)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CLASS_C_ELAPSED_SEC	Class C Elapsed Time	UINT16		0	s (17.0)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
BYPASS_BLK_STATUS	Bypass Block Trip Status: 0 - Inactive 1 - Active	ENUM16	0 → 1	Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
CHAIN_BLK	Chain To Action Block Selection	UINT8	0 → 30	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CHAIN_TO_BLK_STATUS	Chain Selected Block Status: 0 - Block Status 1 - Chain Status 2 - Output Status	ENUM16	0 → 2	Output Status (2)	Action Block Chain To Status (217)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
CHAIN_TYPE	Chain Logic Type: 0 - AND 1 - OR 2 - NAND	ENUM16	0 → 2	AND (0)	Action Block Chain Type (216)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CHAIN_FIRST_OUT	Chain First Out Block	UINT16		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHAIN_IS_END	This Block Is The End Of The Chain: 0 - No 1 - Yes	ENUM16	0 → 1	No (0)	Yes/No Option (208)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CHAIN_DELAY_SEC	Chain Preset Delay Time	UINT16		0	s (17.0)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
CHAIN_ELAPSED_SEC	Chain Elapsed Delay Time	UINT16		0	s (17.0)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
CHAIN_BLK_STATUS	Chain Block Trip Status: 0 - Inactive 1 - Active	ENUM16	0 → 1	Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
ALARM_LOG_OPTION	Alarm Logging Option: 0 - None 1 - Alarm on Active 2 - Alarm on Inactive	BIN8		None	Action Block Alarm Option (169)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ALARM_TYPE	Alarm Type To Log: 0 - Low 1 - Low Low 2 - High 3 - High High 4 - Rate of Change 5 - Other	ENUM16	0 → 5	Low (0)	Action Block Alarm Type (215)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
EVENT_LOG_OPTION	Event Logging Option: 0 - None 1 - Event on Active 2 - Event on Inactive	BIN8		None	Action Block Event Option (170)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
EVENT_LOG_MESSAGE	Event Log Message To Write	UC40		Instance: Action Block X (where X is instance number)		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ACTION_TRIP_EVENT	Condition to Trip Action Block: 0 - True If Block True 1 - True If Chain True 2 - True If Either True 3 - True If Both True	ENUM16	0 → 3	True If Block True (0)	Action Block Trip Logic (171)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ACTION_TRIP_STATUS	Output Block Trip Status: 0 - Inactive 1 - Active	ENUM16	0 → 1	Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
ACTION_TYPE	Output Type Triggered: 0 - No Action 1 - Effect 2 - Binary Action 3 - Move Value 4 - Load Value 5 - Write Value	ENUM16	0 → 5	No Action (0)	Action Block Action Type (172)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ACTION_POINT	Output Action Point	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ACTION_DO_BEHAVIOR	Output Boolean Behavior: 0 - Force 1 True & 0 False 1 - Force 0 True & 1 False	ENUM16	0 → 9	Force 1 True & 0 False (0)	Discrete Action Type (173)	R/W: Admin; Engineer R/O:	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - Poke 1 True 3 - Poke 0 True 4 - Poke 1 True & 0 False 5 - Poke 0 True & 1 False 6 - Force 1 True & Poke 0 False 7 - Force 0 True & Poke 1 False 8 - Force 1 True 9 - Force 0 True					Meas. Tech; Operator; Auditor		
LINK_1_EFFECT	Selected Effect Link 1: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_2_EFFECT	Selected Effect Link 2: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_3_EFFECT	Selected Effect Link 3: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_4_EFFECT	Selected Effect Link 4: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_5_EFFECT	Selected Effect Link 5: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LINK_6_EFFECT	Selected Effect Link 6: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_7_EFFECT	Selected Effect Link 7: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_8_EFFECT	Selected Effect Link 8: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_9_EFFECT	Selected Effect Link 9: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
LINK_10_EFFECT	Selected Effect Link 10: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
DELAY_SEC_LOG	Activation Delay Long	UINT32		0	s (17)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	2.1.0.XXX	Log Changes

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Action Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ELAPSED_SEC_LON G	Elapsed Delay Long	UINT32		0	s (17)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	2.1.0.XXX	

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5.2.2 AI Parameters

Description: The AI object provides the parameters for configuring analog inputs.

Number of Instances: 8 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-3: AI Parameters

AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - AI_1-1 2 - AI_1-2 3 - AI_1-3 4 - AI_1-4 5 - AI_1-5 6 - AI_1-6 7 - AI_1-7 8 - AI_1-8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHANNEL	Channel	UINT8		Instance: 1-1 2-2 3-3 4-4 5-5 6-6 7-7 8-8		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - AI_1-1 2 - AI_1-2 3 - AI_1-3 4 - AI_1-4 5 - AI_1-5 6 - AI_1-6 7 - AI_1-7 8 - AI_1-8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UNITS	Units: 0 - %	ENUM16	0 → 23	0%	Percentage (18)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
UNITS_TYPE	Unit Enumeration Selection: 0 - Unitless 2 - Absolute Pressure 3 - Temperature 4 - Density 5 - Volume Heating Value 6 - Dynamic Viscosity 7 - Linear (Short) 8 - Linear (Long) 12 - Volume Rate 13 - Mass Rate 14 - Energy Rate 15 - Current 16 - Voltage 18 - Percentage 19 - Acceleration 21 - Water Content 23 - Resistance 26 - Differential Pressure 29 - Gauge Pressure 225 - Mass Heating Value	ENUM16	0 → 225	Percentage (18)	AI Units Type (178)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CONV_TYPE	Current/Voltage Selection: 0 - Current 1 - Voltage 2 - Disabled	ENUM16	0 → 2	Disabled (2)	AI Resistor Selection (124)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RAW	Raw Value	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LIVE	Live Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
OVRD	Override Value	FLOAT		0	%(18.0)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
FAULT	Fault Value	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LAST_GOOD	Last Good Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SELECTED	Selected Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT_MODE	Fault Mode: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Fault (0)	IO Fault Selection (136)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ACTUAL_MODE	Actual Mode: 0 - Live 1 - Auto 2 - Auto Read 3 - Override 4 - Calibration 5 - Fault 6 - Last Good	ENUM16		Live (0)	Actual Mode (125)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DAMPING_FACTOR	Damping Time	FLOAT	0 → 60	0	s (17.0)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		▪ Legal
CLIP_MODE	Clipping Mode: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
CLIP_HIGH_LIMIT	High Clipping Limit	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Change ▪ Legal ▪ Verified
CLIP_LOW_LIMIT	Low Clipping Limit	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Change ▪ Legal ▪ Verified
AVG_PERIOD	Averaging Period	FLOAT	0.25 → 60	1	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
ALM_OBJ	Alarm Reference	ObjectRef		Instance: 1 - Alarm_14 2 - Alarm_15 3 - Alarm_16 4 - Alarm_17 5 - Alarm_18 6 - Alarm_19 7 - Alarm_20 8 - Alarm_21		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
URL	Upper Range Limit	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LOW_EU	Low Reading EU	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal ▪ Verified
HIGH_EU	High Reading EU	FLOAT		100	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal ▪ Verified
AI_RAW_0_PERCENT	Adjusted A/D 0 Percent	UINT32		0	A/D Counts (127.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AI_RAW_100_PERCENT	Adjusted A/D 100 Percent	UINT32		0	A/D Counts (127.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MFG_STATUS	Factory Calibration Status: 0 - Invalid 1 - Valid	ENUM16		Invalid (0)	Factory Calibration Status (128)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MFG_DATE_TIME	Factory Calibration Date	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SCALE_MODE	EU Scaling Mode: 0 - Multi-Point Calibration 1 - EU Scaling	ENUM16	0 → 1	Multi-Point Calibration (0)	EU Scaling Mode (221)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CAL_OBJ	Calibration Reference	ObjectRef		Instance: 1 - AICal_1 2 - AICal_2 3 - AICal_3 4 - AICal_4 5 - AICal_5 6 - AICal_6 7 - AICal_7 8 - AICal_8		R/O: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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AI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL 9 - Input Frozen 10 - Input Clipped 11 - Factory Calibration Invalid 12 - User Calibration Invalid 13 - Disabled	BIN16		Normal	AI Status (129)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LAST_HOUR_AVERAGE	Last Hour Average Value	Float		0	% (18-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	Legal
RAMP_DURATION	Ramp Duration	Float	0 → 60	0	s (17-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Legal ▪ Log Changes

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5.2.3 AICal Parameters

Description: The AICal object provides the parameters for analog input calibration.

Number of Instances: 8 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-4: AICal Parameters

AICal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - AICal_1 2 - AICal_2 3 - AICal_3 4 - AICal_4 5 - AICal_5 6 - AICal_6 7 - AICal_7 8 - AICal_8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		2		R/O: Admin; Engineer;	01.00.03.03	Legal

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AICal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech Operator; Auditor		
DESC	Description	UC20		Instance: 1 - AICal_1 2 - AICal_2 3 - AICal_3 4 - AICal_4 5 - AICal_5 6 - AICal_6 7 - AICal_7 8 - AICal_8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TIMEOUT	Inactivity Timeout	UINT16	1 → 1440	60	min (17.1)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TO_TIME_REMAINING	Remaining Time Before Timeout	UINT16		0	min (17.1)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
LAST_CAL	Time of Last Calibration	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ZERO_SHIFT	Zero Shift	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_ZERO_VAL	Calibrated Zero	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_SPAN_VAL	Calibrated Span	FLOAT		0	%(18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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AICal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
USER_MID1_VAL	Calibrated Midpoint 1	FLOAT		0	%(18.0)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_MID2_VAL	Calibrated Midpoint 2	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_MID3_VAL	Calibrated Midpoint 3	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IDEAL_ZERO_VAL	Ideal Zero	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IDEAL_SPAN_VAL	Ideal Span	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IDEAL_MID1_VAL	Ideal Midpoint 1	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IDEAL_MID2_VAL	Ideal Midpoint 2	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IDEAL_MID3_VAL	Ideal Midpoint 3	UINT32		0	A/D Counts (127.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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AICal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CAL_STATUS	Calibration Status: 0 - Calibration Not In Progress 1 - Input Frozen 2 - Calibration In Progress 3 - Reserved 4 - Set Command Failed 5 - Timeout Occurred 6 - Span Too Small 7 - Excess Correction 8 - Passed Parameter Too Small 9 - Passed Parameter Too Large 10 - Ideal Value Too Small 11 - Ideal Value Too Large 12 - Wrong Command 13 - Verification In Progress	BIN16		Calibration Not In Progress	Calibration Status (150)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_DATE	Time of Last Verification	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT1_FOUND	Verification Point 1 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT2_FOUND	Verification Point 2 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT3_FOUND	Verification Point 3 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT4_FOUND	Verification Point 4 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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AICaI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
VER_PT5_FOUND	Verification Point 5 As Found	FLOAT		0	%(18.0)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT6_FOUND	Verification Point 6 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT7_FOUND	Verification Point 7 As Found	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT1_LEFT	Verification Point 1 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT2_LEFT	Verification Point 2 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT3_LEFT	Verification Point 3 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT4_LEFT	Verification Point 4 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT5_LEFT	Verification Point 5 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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AICal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
VER_PT6_LEFT	Verification Point 6 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT7_LEFT	Verification Point 7 As Left	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CAL_COMMAND	Calibration command 0 - None 1 - Freeze 2 - Start Calibration 3 - Set Zero 4 - Set Span 5 - Set Mid1 6 - Set Mid2 7 - Set Mid3 8 - Set Zero Shift 9 - Save Calibration 10 - Unfreeze 11 - Cancel Calibration 12 - Restore Factory Defaults 13 - Start Verification 14 - Set Verification Pt1 15 - Set Verification Pt2 16 - Set Verification Pt3 17 - Set Verification Pt4 18 - Set Verification Pt5 19 - Set Verification Pt6 20 - Set Verification Pt7 21 - Verification Done 22 - Restored Successfully 23 - Restore Failed	ENUM16		Unfreeze (10)	Calibration Command (149)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.1.0.XXX	Legal

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5.2.4 Alarm Parameters

Description: The Alarm object provides the parameters for configuring and viewing alarms.

Number of Instances: 47 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-5: Alarm Parameters

Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: Alarm_X (where X is instance number)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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ALM_DESC	Alarm Description	UC20	Instance: 1 - Differential Press 1 2 - Static Press 1 3 - Temperature 1 4 - Differential Press 2 5 - Static Press 2 6 - Temperature 2 7 - Differential Press 3 8 - Static Press 3 9 - Temperature 3 10 - Mtr 1 SVOL Rate 11 - Stn 1 SVOL Rate 12 - Mtr 2 SVOL Rate 13 - Stn 2 SVOL Rate 14 - Analog 1-1 15 - Analog 1-2 16 - Analog 1-3 17 - Analog 1-4 18 - Analog 1-5 19 - Analog 1-6 20 - Analog 1-7 21 - Analog 1-8 22 - Pulse Input 1-1 23 - Pulse Input 1-2 24 - Pulse Input 1-3 25 - Pulse Input 1-4 26 - Pulse Input 1-5 27 - Pulse Input 1-6 28 - Pulse Input 1-7 29 - Pulse Input 1-8 30 - Pulse Input 1-9 31 - Pulse Input 1-10	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				32 - Battery Voltage				
				33 - External Voltage				
				34 - Lin Mtr 1 SVOL Rate				
				35 - Lin Mtr 2 SVOL Rate				
				36-45: Undefined				

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ALM_VAL_PARAM	Value to Alarm	ParamRef	Instance:	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
			1 - DP_1- 1.SELECTED	Admin; Engineer; Meas. Tech		
			2 - Press_1- 1.SELECTED	R/O: Operator; Auditor		
			3 - RTD_1- 1.SELECTED			
			4 - DP_1- 2.SELECTED			
			5 - Press_1- 2.SELECTED			
			6 - RTD_1- 2.SELECTED			
			7 - DP_1- 3.SELECTED			
			8 - Press_1- 3.SELECTED			
			9 - RTD_1- 3.SELECTED			
			10 - DP Mtr_1.SVOL_ RATE			
			11 - Station_1.SVOL - RATE			
			12 - DP Mtr_2.SVOL_ RATE			
			13 - Station_2.SVOL - RATE			
			14 - AI_1-1. SELECTED			
			15 - AI_1-2. SELECTED			
			16 - AI_1-3. SELECTED			
			17 - AI_1-4. SELECTED			

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18 - AI_1-5.
SELECTED

19 - AI_1-6.
SELECTED

20 - AI_1-7.
SELECTED

21 - AI_1-8.
SELECTED

22 - PI_1-1.
SELECTED_
FREQ

23 - PI_1-2.
SELECTED_
FREQ

24 - PI_1-3.
SELECTED_
FREQ

25 - PI_1-4.
SELECTED_
FREQ

26 - PI_1-5.
SELECTED_
FREQ

27 - PI_1-6.
SELECTED_
FREQ

28 - PI_1-7.
SELECTED_
FREQ

29 - PI_1-8.
SELECTED_
FREQ

30 - PI_1-9.
SELECTED_
FREQ

31 - PI_1-10.
SELECTED_
FREQ

32 - System Pwr_1.
BATT_VAL

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				33 - System Pwr_1. EXT_VOLT_VAL				
				34 - Linear Mtr_1. SVOL_RATE				
				35 - Linear Mtr_2. SVOL_RATE				
				36 - 45: Undefined				
LO_ENB	Low Alarm Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LO_LIM	Low Alarm Limit	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0) 10 - ft ³ /s (12.0) 11 - ft ³ /s (12.0) 12 - ft ³ /s (12.0) 13 - ft ³ /s (12.0) 14 - % (18.0) 15 - % (18.0) 16 - % (18.0) 17 - % (18.0) 18 - % (18.0) 19 - % (18.0) 20 - % (18.0) 21 - % (18.0) 22 - Hz (24.0) 23 - Hz (24.0) 24 - Hz (24.0) 25 - Hz (24.0) 26 - Hz (24.0) 27 - Hz (24.0) 28 - Hz (24.0) 29 - Hz (24.0) 30 - Hz (24.0) 31 - Hz (24.0) 32 - V (16.0) 33 - V (16.0) 34 - ft ³ /s (12.0) 35 - ft ³ /s (12.0) 36-45: RESERVED-	R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LO_ST	Low Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LO_PRI	Low Alarm Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Change
LOLO_ENB	Low Low Alarm Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOLO_LIM	Low Low Alarm Limit	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0) 10 - ft³/s (12.0) 11 - ft³/s (12.0) 12 - ft³/s (12.0) 13 - ft³/s (12.0) 14 - % (18.0) 15 - % (18.0) 16 - % (18.0) 17 - % (18.0) 18 - % (18.0) 19 - % (18.0) 20 - % (18.0) 21 - % (18.0) 22 - Hz (24.0) 23 - Hz (24.0) 24 - Hz (24.0) 25 - Hz (24.0) 26 - Hz (24.0) 27 - Hz (24.0) 28 - Hz (24.0) 29 - Hz (24.0) 30 - Hz (24.0) 31 - Hz (24.0) 32 - V (16.0) 33 - V (16.0) 34 - ft³/s (12.0) 35 - ft³/s (12.0) 36-45: RESERVED-	R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOLO_ST	Low Low Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LOLO_PRI	Low Low Alarm Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HI_ENB	High Alarm Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HI_LIM	High Alarm Limit	FLOAT		Instance: 1 - 10000 2 - 10000 3 - 10000 4 - 10000 5 - 10000 6 - 10000 7 - 10000 8 - 10000 9 - 10000 10 - 10000 11 - 10000 12 - 10000 13 - 10000 14 - 10000 15 - 10000 16 - 10000 17 - 10000 18 - 10000 19 - 10000 20 - 10000 21 - 10000	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0) 10 - ft ³ /s (12.0) 11 - ft ³ /s (12.0) 12 - ft ³ /s (12.0) 13 - ft ³ /s (12.0) 14 - % (18.0) 15 - % (18.0) 16 - % (18.0) 17 - % (18.0) 18 - % (18.0) 19 - % (18.0) 20 - % (18.0) 21 - % (18.0)	R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				22 - 10000	22 - Hz (24.0)			
				23 - 10000	23 - Hz (24.0)			
				24 - 10000	24 - Hz (24.0)			
				25 - 10000	25 - Hz (24.0)			
				26 - 10000	26 - Hz (24.0)			
				27 - 10000	27 - Hz (24.0)			
				28 - 10000	28 - Hz (24.0)			
				29 - 10000	29 - Hz (24.0)			
				30 - 10000	30 - Hz (24.0)			
				31 - 10000	31 - Hz (24.0)			
				32 - 10000	32 - V (16.0)			
				33 - 10000	33 - V (16.0)			
				34 - 10000	34 - ft ³ /s (12.0)			
				35 - 10000	35 - ft ³ /s (12.0)			
				36 - 10000	36 - 45:			
				37 - 10000	RESERVED-			
				38 - 10000				
				39 - 10000				
				40 - 10000				
				41 - 10000				
				42 - 10000				
				43 - 10000				
				44 - 10000				
				45 - 10000				
HI_ST	High Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
HI_PRI	High Alarm Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
HIHI_ENB	High High Alarm Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
HIHI_LIM	High High Alarm Limit	FLOAT		Instance:	Instance:	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
				1 - 10000	1 - inH2O (1.0)			
				2 - 10000	2 - psi(a) (2.0)			
				3 - 10000	3 - °F (3.0)			
				4 - 10000	4 - inH2O (1.0)			
				5 - 10000	5 - psi(a) (2.0)			
				6 - 10000	6 - °F (242.0)			
				7 - 10000	7 - inH2O (1.0)			
				8 - 10000	8 - psi(a) (2.0)			
				9 - 10000	9 - °F (242.0)			
				10 - 10000	10 - ft³/s (12.0)			
				11 - 10000	11 - ft³/s (12.0)			
				12 - 10000	12 - ft³/s (12.0)			
				13 - 10000	13 - ft³/s (12.0)			
				14 - 10000	14 - % (18.0)			
				15 - 10000	15 - % (18.0)			
				16 - 10000	16 - % (18.0)			
				17 - 10000	17 - % (18.0)			
				18 - 10000	18 - % (18.0)			
				19 - 10000	19 - % (18.0)			
				20 - 10000	20 - % (18.0)			
				21 - 10000	21 - % (18.0)			
				22 - 10000	22 - Hz (24.0)			
				23 - 10000	23 - Hz (24.0)			
				24 - 10000	24 - Hz (24.0)			
				25 - 10000	25 - Hz (24.0)			
				26 - 10000	26 - Hz (24.0)			
				27 - 10000	27 - Hz (24.0)			
				28 - 10000	28 - Hz (24.0)			
				29 - 10000	29 - Hz (24.0)			
				30 - 10000	30 - Hz (24.0)			
				31 - 10000	31 - Hz (24.0)			
				32 - 10000	32 - V (16.0)			
				33 - 10000	33 - V (16.0)			
34 - 10000	34 - ft³/s (12.0)							

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				35 - 10000	35 - ft ³ /s (12.0)			
				36 - 10000	36-45: RESERVED			
				37 - 10000				
				38 - 10000				
				39 - 10000				
				40 - 10000				
				41 - 10000				
				42 - 10000				
				43 - 10000				
				44 - 10000				
				45 - 10000				
HIHI_ST	High High Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
HIHI_PRI	High High Alarm Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ROC_MODE	Rate of Change Alarm Mode: 0 - Disabled 1 - Alarm on Positive Changes 2 - Alarm on Negative Changes 3 - Alarm on Both	ENUM16	0 → 3	Disabled (0)	Rate of Change Alarm Mode (195)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
ROC_LIM	Rate of Change Limit	FLOAT	>= 0	Instance: 1 - 100 2 - 100 3 - 100 4 - 100 5 - 100 6 - 100 7 - 100 8 - 100	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				9 - 100	9 - °F (242.0)			
				10 - 100	10 - ft ³ /s (12.0)			
				11 - 100	11 - ft ³ /s (12.0)			
				12 - 100	12 - ft ³ /s (12.0)			
				13 - 100	13 - ft ³ /s (12.0)			
				14 - 100	14 - % (18.0)			
				15 - 100	15 - % (18.0)			
				16 - 100	16 - % (18.0)			
				17 - 100	17 - % (18.0)			
				18 - 100	18 - % (18.0)			
				19 - 100	19 - % (18.0)			
				20 - 100	20 - % (18.0)			
				21 - 100	21 - % (18.0)			
				22 - 100	22 - Hz (24.0)			
				23 - 100	23 - Hz (24.0)			
				24 - 100	24 - Hz (24.0)			
				25 - 100	25 - Hz (24.0)			
				26 - 100	26 - Hz (24.0)			
				27 - 100	27 - Hz (24.0)			
				28 - 100	28 - Hz (24.0)			
				29 - 100	29 - Hz (24.0)			
				30 - 100	30 - Hz (24.0)			
				31 - 100	31 - Hz (24.0)			
				32 - 100	32 - V (16.0)			
				33 - 100	33 - V (16.0)			
				34 - 100	34 - ft ³ /s (12.0)			
				35 - 100	35 - ft ³ /s (12.0)			
				36 - 100	36-45: RESERVED			
				37 - 100				
				38 - 100				
				39 - 100				
				40 - 100				
				41 - 100				
				42 - 100				
				43 - 100				
				44 - 100				
				45 - 100				

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ROC_TM	Rate of Change Time Period	FLOAT	≥ 1	1	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
ROC_ST	Rate of Change Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ROC_PRI	Rate of Change Alarm Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
PF_ENB	Point Failure Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_ST	Point Failure Alarm Status: 0 - Normal 1 - In Alarm	ENUM16	0 → 1	Normal (0)	Alarm Status (254)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PF_PRI	Point Failure Priority	UINT8	0 → 6	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DEADBAND	Alarm Deadband	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PROCESS_ALM	Composite Alarm Status: 0 - Normal 1 - Low	BIN8		Normal	Composite Alarm Status (45)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Alarm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - Low Low 3 - High 4 - High High 5 - Rate of Change 6 - Point Fail					Meas. Tech Operator; Auditor		

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5.2.5 AO Parameters

Description: The AO object provides the parameters for configuring analog outputs.

Number of Instances: 8 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-6: AO Parameters

AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - AO_1-1 2 - AO_1-2 3 - AO_1-3 4 - AO_1-4 5 - AO_1-5 6 - AO_1-6 7 - AO_1-7 8 - AO_1-8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - AO_1-1 2 - AO_1-2 3 - AO_1-3 4 - AO_1-4 5 - AO_1-5 6 - AO_1-6 7 - AO_1-7 8 - AO_1-8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNITS	Units: 0 - %	ENUM16	0 → 23	0%	Percentage (18)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNITS_TYPE	Unit Enumeration Selection: 0 - Unitless 2 - Absolute Pressure 3 - Temperature 4 - Density 5 - Volume Heating Value 6 - Dynamic Viscosity 7 - Linear (Short) 8 - Linear (Long) 12 - Volume Rate 13 - Mass Rate 14 - Energy Rate 15 - Current	ENUM16	0 → 225	Percentage (18)	AO Units Type (179)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	16 - Voltage 18 - Percentage 19 - Acceleration 23 - Resistance 26 - Differential Pressure 29 - Gauge Pressure 225 - Mass Heating Value							
RAW	Raw Value	UINT32		0	D/A Counts (127.1)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
AUTO	Auto Value	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
OVRD	Override Value	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
AUTO_READ_VAL	Auto Read Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
AUTO_READ_PARAMETER	Auto Read Parameter Reference	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FAULT	Fault Value	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LAST_GOOD	Last Good Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
SELECTED	Selected Value	FLOAT		0	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
USER_MODE	Operation Mode: 0 - Auto 1 - Override 2 - Auto Read	ENUM16	0 → 2	Auto (0)	IO Output User Selection (131)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FAULT_MODE	Fault Mode: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Last Good (1)	IO Fault Selection (136)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ACTUAL_MODE	Actual Mode: 0 - Live 1 - Auto 2 - Auto Read 3 - Override 4 - Calibration 5 - Fault 6 - Last Good	ENUM16		Live (0)	Actual Mode (125)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
CLIP_MODE	Clipping Mode: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
CLIP_HIGH_LIMIT	High Clipping Limit	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CLIP_LOW_LIMIT	Low Clipping Limit	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
ALM_OBJ	Alarm Reference	ObjectRef		Instance: 1 - Alarm_14 2 - Alarm_15 3 - Alarm_16 4 - Alarm_17 5 - Alarm_18 6 - Alarm_19 7 - Alarm_20 8 - Alarm_21		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
URL	Upper Range Limit	UINT32		0	D/A Counts (127.1)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
LRL	Lower Range Limit	UINT32		0	D/A Counts (127.1)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
LOW_EU	Low Reading EU	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
HIGH_EU	High Reading EU	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
AO_RAW_0_PERCENT	Adjusted D/A 0 Percent	UINT32		0	D/A Counts (127.1)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Log Changes

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AO_RAW_100_PERCENT	Adjusted D/A 100 Percent	UINT32		0	D/A Counts (127.1)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
MFG_STATUS	Factory Calibration Status: 0 - Invalid 1 - Valid	ENUM16		Invalid (0)	Factory Calibration Status (128)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MFG_DATE_TIME	Factory Calibration Date	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
SCALE_MODE	EU Scaling Mode: 0 - Multi-Point Calibration 1 - EU Scaling	ENUM16	0 → 1	Multi-Point Calibration (0)	EU Scaling Mode (221)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OUTPUT_STATUS	Output Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL 9 - Output Frozen 10 - Output Clipped 11 - Factory Calibration Invalid 12 - Auto Read Parameter Invalid	BIN16		Normal	AO Status (130)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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AO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	13 - AO Readback Failure							
RESET_MODE	Action on Power Cycle: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Last Good (1)	IO Fault Selection (136)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LAST_HOUR_AVERAGE	Last Hour Average Value	FLOAT		0	% (18-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.1.0.XXX	
RAMP_DURATION	Ramp Duration	FLOAT	0→60	0	S (17-0)	R/W: Admin; Engineer; Meas. Tech; Operator; Auditor	2.3.0.XXX	Log Changes

5.2.6 Average Parameters

Description: The Average object provides the parameters for configuring which inputs the system uses to calculate averages and viewing the periodic minimum, maximum, and average values.

Number of Instances: 32 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-7: Average Parameters

Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: Average_X (where X is instance number)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - DP Avg 2 - Press Avg 3 - Temp Avg 4 - IMV Avg 5 - 32: Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SAMPLE_PARAM	Input to Average	ParamRef		Instance: 1 - DP Mtr_1.DP_ OBJ.SELECTED 2 - DP Mtr_1.PF_ OBJ.SELECTED 3 - DP Mtr_1.TF_ OBJ.SELECTED 4 - DP Mtr_1.IMV_ SEL 5-32: Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SNAPSHOT	Value of Input at Last Period End	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SNAP_TIME	Timestamp of Last Period End	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_PER_AVG	Current Hour Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal
PREV_PER_AVG	Previous Hour Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_DAY_AVG	Current Day Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PREV_DAY_AVG	Previous Day Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_WK_AVG	Current Week Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_WK_AVG	Previous Week Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_MNTH_AVG	Current Month Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_MNTH_AVG	Previous Month Average	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_PER_MIN	Current Hour Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_PER_MIN	Previous Hour Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CUR_DAY_MIN	Current Day Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_DAY_MIN	Previous Day Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_WK_MIN	Current Week Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_WK_MIN	Previous Week Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_MNTH_MIN	Current Month Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_MNTH_MIN	Previous Month Minimum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_PER_MAX	Current Hour Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PREV_PER_MAX	Previous Hour Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_DAY_MAX	Current Day Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_DAY_MAX	Previous Day Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_WK_MAX	Current Week Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_WK_MAX	Previous Week Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CUR_MNTH_MAX	Current Month Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PREV_MNTH_MAX	Previous Month Maximum	DOUBLE		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 -RESERVED	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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Average								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
WEIGHT_OBJ	Input to Weight	ObjectRef		Instance: 1-32: Undefined		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal

5.2.7 BSAP Parameters

Description: The BSAP object provides the parameters for configuring BSAP protocol communications.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-8: BSAP Parameters

BSAP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		BSAP		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
BSAP_ADDR	BSAP Local Address	UINT8	1 → 127	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
BSAP_GROUP	BSAP Group Address	UINT8	0 → 127	0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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BSAP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ALARM_FORMAT	Alarm Format: 0 - Standard Alarm Format 1 - Extended Alarm Format	ENUM16	0 → 1	Extended Alarm Format (1)	Alarm Format (251)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
TIME_SYNCH	Time Synch: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SIG_NAME_FORMAT	Signal Name Format: 0 - ACCOLB 1 - Native	ENUM16	0 → 1	Native (1)	Signal Name Format (252)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
LOGIN_TMOU	Inactivity Timeout	UINT32	30 → 86400	300	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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BSAP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ARCH_ARRAY_FORMAT	Array format for Historical Logs: 0 - Logs as arrays not available 1 - Field Data Values 2 - TimeStamp (TS) + Field Data Values 3 - TS+Local/Global Seq#+Field Data Values 4 - TS2 (Days+Secs+20ms)+Field Data Values 5 - TS2+Seq#s+Field Data Values 6 - Seq#s+Field Data Values 7 - Field Data Values (Oldest->Newest) 8 - TS+Field Data Values (Oldest->Newest) 9 - TS+Seq#+Data Values (Oldest->Newest) 10 - TS2+Field Data Values (Oldest->Newest) 11 - TS2+S#+Field Data Values(Oldest->Newest) 12 - S#+Field Data Values (Oldest->Newest)	ENUM16	0 → 12	Logs as arrays not available (0)	Log/Archive Array Format (262)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.01.00.25	Log Changes
OLDEST_EVENT_SEQ	Oldest BSAP Event Seq Number	UINT32		1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.01.00.25	
UDP_ENABLE	Enable UDP for BSAP: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech	01.01.00.25	Log Changes

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BSAP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
UDP_IBP_PORT	UDP IBP PORT Number	UJINT16		1234		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes
POLL_PERIOD	Poll Period	UJINT32	0 → 86400	300	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes
REQUIRE_LOGIN	Require Login: 0 - No 1 - Yes	ENUM16	0 → 1	Yes (1)	Yes/No Option (208)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes
NHP_PRIMARY	Primary Network Host IP Address	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes
NHP_SECONDARY	Secondary Network Host IP Address	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes
ARCH_TS_MODE	Historical Log Timestamp Mode: 0 - Start of Period 1 - End of Period	ENUM16	0 → 1	Start of Period (0)	Historical Log Timestamp Mode (265)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Log Changes

5.2.8 Clock Parameters

Description: The Clock object provides the parameters for viewing information on, and configuring, the clock and daylight savings time.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-9: Clock Parameters

Clock								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Clock		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
TIME	Current Time	Time				R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
YEAR	Current Year	UINT16		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Clock								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MONTH	Current Month: 1 - January 2 - February 3 - March 4 - April 5 - May 6 - June 7 - July 8 - August 9 - September 10 - October 11 - November 12 - December	ENUM16			Months of the Year (236)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DAY	Current Day	UINT8		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HOUR	Current Hour	UINT8		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SECOND	Current Second	UINT8		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MINUTE	Current Minute	UINT8		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
WEEK_DY	Current Day of the Week: 0 - Sunday 1 - Monday 2 - Tuesday 3 - Wednesday 4 - Thursday	ENUM16		Sunday (0)	Day of Week (34)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Clock								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - Friday 6 - Saturday							
DST_MODE	Auto Daylight Saving Time Mode: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_STATUS	Daylight Saving Time Status: 0 - Standard Time 1 - Saving Time 2 - Gift Time	ENUM16		Standard Time (0)	Daylight Saving Time Status (194)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DST_ST_HR	DST Start Hour	UINT8	0 → 23	2		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_ST_DW	DST Start Day of Week; 0 - Sunday 1 - Monday 2 - Tuesday 3 - Wednesday 4 - Thursday 5 - Friday 6 - Saturday	ENUM16	0 → 6	Sunday (0)	Day of Week (34)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_ST_OCR	DST Start Occurrence in Month: 0 - First Week 1 - Second Week 2 - Third Week 3 - Fourth Week 4 - Last Week	ENUM16	0 → 4	Second Week (1)	Week of Month (151)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_ST_MTH	DST Start Month: 1 - January 2 - February 3 - March 4 - April	ENUM16	1 → 12	March (3)	Months of the Year (236)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Clock								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - May 6 - June 7 - July 8 - August 9 - September 10 - October 11 - November 12 - December							
DST_ST_TM	DST Start Date / Time	Time				R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DST_EN_HR	DST End Hour	UINT8	0 → 23	2		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_EN_DW	DST End Day of Week: 0 - Sunday 1 - Monday 2 - Tuesday 3 - Wednesday 4 - Thursday 5 - Friday 6 - Saturday	ENUM16	0 → 6	Sunday (0)	Day of Week (34)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_EN_OCR	DST Occurrence in Month: 0 - First Week 1 - Second Week 2 - Third Week 3 - Fourth Week 4 - Last Week	ENUM16	0 → 4	First Week (0)	Week of Month (151)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DST_EN_MTH	DST End Month: 1 - January 2 - February 3 - March 4 - April	ENUM16	1 → 12	November (11)	Months of the Year (236)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Clock								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - May 6 - June 7 - July 8 - August 9 - September 10 - October 11 - November 12 - December							
DST_EN_TM	DST End Date / Time	Time				R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	Legal
TIME_SYNC_DEADBAND	Time Synchronization Deadband	UINT16	0→30	2	Seconds (310-0)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	2.3.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLOAT_DATE_TIME_EN	Enabled for date/time events as a float	ENUM16	0→1	1	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	2.3.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLOAT_DATE	Floating Point Date	FLOAT		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	2.3.0.XXX	Legal
FLOAT_TIME	Floating Point Time	FLOAT		0		R/O: Admin; Engineer Meas. Tech; Operator; Auditor	2.3.0.XXX	Legal

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5.2.9 Comm Parameters

Description: The Comm object provides the parameters for configuring the communications ports.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-10: Comm Parameters

Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - COM1 2 - COM2 3 - COM3 4 - WiFi 5 - Ethernet		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
PORT_DESC	Port Description	UC20		Instance: 1 - Serial Port 1 2 - Serial Port 2 3 - Serial Port 3 4 - WiFi 5 - Ethernet		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PORT_ENABLE	Port Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OWNER	Port Owner: 0 - Debug 1 - DNP3/Modbus Slave 2 - DNP3 3 - Modbus Slave 4 - Master Modbus 5 - BSAP 6 - ROC	ENUM16	Instance: 1 - 0 → 6 2 - 0 → 6 3 - 0 → 7 4 - 2 → 2 5 - 0 → 6	Instance: 1 - DNP3 (2) 2 - DNP3 (2) 3 - DNP3 (2) 4 - DNP3 (2) 5 - DNP3 (2)	Instance: 1 - Serial Port 1 Owner (231) 2 - Serial Port 2 Owner (232) 3 - Serial Port 3 Owner (233) 4 - Wi-Fi Port Owner (234) 5 - Ethernet Port Owner (235)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
PORT_TYPE	Port Type: 0 - Serial 1 - Ethernet 2 - WiFi	ENUM16	0 -> 2	Instance: 1 - Serial (0) 2 - Serial (0) 3 - Serial (0) 4 - WiFi (2) 5 - Ethernet (1)	Port Type (68)	R/O: Admin; Engineer Meas. Tech; Operator; Auditor	01.00.03.03	
SER_MODE	Serial Mode: 0 - RS-232 1 - RS-485 (No Termination) 2 - RS-485 (Terminated) 3 - RS-422 (No Termination) 4 - RS-422 (Terminated)	ENUM16	Instance: 1 - 0 → 4 2 - 0 → 2 3 - 0 → 2 4 - 0 → 4 5 - 0 → 4	RS-232 (0)	Instance: 1 - Serial Port Mode (69) 2 - Serial Port Mode (214) 3 - Serial Port Mode (214) 4 - Serial Port Mode (69) 5 - Serial Port Mode (69)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BAUD	Baud Rate: 0 - 1200 1 - 2400	ENUM16	0 -> 7	115.2K (7)	Baud Rate (39)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Log Changes

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Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - 4800 3 - 9600 4 - 19.2K 5 - 38.4K 6 - 57.6K 7 - 115.2K					R/O: Operator; Auditor		
SER_SETTING	Serial Settings: 0 - 7 data bits odd parity 1 stop bit 1 - 7 data bits even parity 1 stop bit 2 - 8 data bits no parity 1 stop bit 3 - 8 data bits odd parity 1 stop bit 4 - 8 data bits even parity 1 stop bit	ENUM16	0 → 4	8 data bits no parity 1 stop bit (2)	Serial Settings (40)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IPV4_ADDRESS	IPv4 IP Address	ByteArray 4			IPv4 Address (41)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
MAC48_ADDRESS	MAC 48-bit Address	ByteArray 6			48-bit MAC Address (42)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MAX_CONNECT	Maximum Number of Connections	UINT8		Instance: 1 - 1 2 - 1 3 - 1 4 - 1 5 - 1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
CUR_CONNECT	Current Number of Connections	UINT8		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SSID	WiFi SSID	UC30		FBXX00		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SECURE_TYPE	Wireless Security Type: 0 - Open 1 - WPA-2	ENUM16	0 → 1	WPA-2 (1)	WiFi Security Option (95)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
KEY	Wireless Security Key	UC40		EmersonFBXX00	Password (241.1)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
WIFI_CHANNEL	Wireless Channel	UINT8	1 → 11	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
IPV4_GATEWAY_ADDR	Gateway Address (IPv4)	ByteArray 4			IPv4 Address (41)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IPV4_SUBNET_MASK	Subnet Mask (IPv4)	ByteArray 4			IPv4 Address (41)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
WIFI_ANTENNA	WiFi Antenna Type: 0 - Internal Antenna 1 - External Antenna	ENUM16	0 → 1	Internal Antenna (0)	WiFi Antenna Type (226)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	

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Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
IP_CONN1_OWNER	IP Connection 1 Owner: 0 - DNP3 Protocol 1 - Modbus Slave Protocol 2 - ROC Protocol 3 - BSAP Protocol	ENUM16	0 → 3	DNP3 Protocol (0)	IP Connection 1 2 3 Owner (248)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN2_OWNER	IP Connection 2 Owner: 0 - DNP3 Protocol 1 - Modbus Slave Protocol 2 - ROC Protocol 3 - BSAP Protocol	ENUM16	0 → 3	DNP3 Protocol (0)	IP Connection 1 2 3 Owner (248)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN3_OWNER	IP Connection 3 Owner: 0 - DNP3 Protocol 1 - Modbus Slave Protocol 2 - ROC Protocol 3 - BSAP Protocol	ENUM16	0 → 3	DNP3 Protocol (0)	IP Connection 1 2 3 Owner (248)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN4_OWNER	IP Connection 4 Owner: 0 - Modbus Slave Protocol 1 - ROC Protocol 2 - BSAP Protocol	ENUM16	0 → 2	Modbus Slave Protocol (0)	IP Connection 4 5 6 Owner (249)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN5_OWNER	IP Connection 5 Owner: 0 - Modbus Slave Protocol 1 - ROC Protocol 2 - BSAP Protocol	ENUM16	0 → 2	Modbus Slave Protocol (0)	IP Connection 4 5 6 Owner (249)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN6_OWNER	IP Connection 6 Owner: 0 - Modbus Slave Protocol 1 - ROC Protocol 2 - BSAP Protocol	ENUM16	0 → 2	ROC Protocol (1)	IP Connection 4 5 6 Owner (249)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
IP_CONN7_OWNER	IP Connection 7 Owner: 0 - Modbus Master Protocol	ENUM16	0 → 0	Modbus Master Protocol (0)	IP Connection 7 Owner (260)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.01.00.25	Log Changes
KEY_ON_DELAY	Key On Delay	FLOAT	0 → 3	0	s (17.0)	R/W: Admin; Engineer;	01.00.03.03	Log Changes

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Comm								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
KEY_OFF_DELAY	Key Off Delay	FLOAT	0 → 3	0	s (17.0)	Meas. Tech R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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5.2.10 Components Parameters

Description: The Components object provides the parameters for configuring fluid components.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-11: Components Parameters

Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Components 1 2 - Components 2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USER_MODE	Operation Mode: 0 - Measured 1 - Override 3 - Remote Download	ENUM16	0 → 3	Override (1)	User Mode Selection 4 (188)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FAULT_MODE	Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 2	Live (0)	Fault Selection (32)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ANALYSIS_TIMEOUT_ENB	Analysis Timeout Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ANALYSIS_TIMEOUT	Analysis Timeout Value	FLOAT	0 → 4000000	900	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIVE_ANALYSIS_TIME	Last Good Analysis Time	Time				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal
NORMALIZATION_OPT	Normalization Option: 0 - None 1 - Full Normalization 2 - Methane Adjust	ENUM16	0 → 2	Full Normalization (1)	Normalization Type (67)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COMPONENTS_ALARM	Components Alarm: 0 - Normal 1 - Analysis Timeout 2 - Normalization Failure	BIN32		Normal	Components Alarm (190)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal
APPLY_COMP	Apply Composition Values: 0 - No Action 1 - Accept Composition	ENUM16	0 → 1	No Action (0)	Live Trigger (82)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_DATA_OBJ	GC Data Object	ObjectRef	GC Data	Instance: 1 - GC Data_1-1 2 - GC Data_1-1		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C1_LIVE	Live Methane	DOUBLE	0 → 100	0	% (18.0)	R/O: Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
N2_LIVE	Live Nitrogen	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CO2_LIVE	Live Carbon Dioxide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C2_LIVE	Live Ethane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C3_LIVE	Live Propane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
H2O_LIVE	Live Water	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
H2S_LIVE	Live Hydrogen Sulfide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
H2_LIVE	Live Hydrogen	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CO_LIVE	Live Carbon Monoxide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
O2_LIVE	Live Oxygen	DOUBLE	0 → 100	0	% (18.0)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IC4_LIVE	Live i-Butane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NC4_LIVE	Live n-Butane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IC5_LIVE	Live i-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NC5_LIVE	Live n-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C6_LIVE	Live n-Hexane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C7_LIVE	Live n-Heptane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C8_LIVE	Live n-Octane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C9_LIVE	Live n-Nonane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C10_LIVE	Live n-Decane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
HE_LIVE	Live Helium	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AR_LIVE	Live Argon	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NEOC5_LIVE	Live Neopentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
BENZENE_LIVE	Live Benzene	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
TOLUENE_LIVE	Live Toluene	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C1_OVRD	Override Methane	DOUBLE	0 → 100	100	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
N2_OVRD	Override Nitrogen	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CO2_OVRD	Override Carbon Dioxide	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C2_OVRD	Override Ethane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C3_OVRD	Override Propane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_OVRD	Override Water	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2S_OVRD	Override Hydrogen Sulfide	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2_OVRD	Override Hydrogen	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CO_OVRD	Override Carbon Monoxide	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
O2_OVRD	Override Oxygen	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
IC4_OVRD	Override i-Butane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NC4_OVRD	Override n-Butane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
IC5_OVRD	Override i-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NC5_OVRD	Override n-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C6_OVRD	Override n-Hexane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C7_OVRD	Override n-Heptane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C8_OVRD	Override n-Octane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C9_OVRD	Override n-Nonane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C10_OVRD	Override n-Decane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HE_OVRD	Override Helium	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AR_OVRD	Override Argon	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NEOC5_OVRD	Override Neopentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BENZENE_OVRD	Override Benzene	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TOLUENE_OVRD	Override Toluene	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C1_SEL	Selected Methane	DOUBLE	0 → 100	100	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
N2_SEL	Selected Nitrogen	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CO2_SEL	Selected Carbon Dioxide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C2_SEL	Selected Ethane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C3_SEL	Selected Propane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
H2O_SEL	Selected Water	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
H2S_SEL	Selected Hydrogen Sulfide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech Operator; Auditor		
H2_SEL	Selected Hydrogen	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CO_SEL	Selected Carbon Monoxide	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
O2_SEL	Selected Oxygen	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IC4_SEL	Selected i-Butane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NC4_SEL	Selected n-Butane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IC5_SEL	Selected i-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NC5_SEL	Selected n-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C6_SEL	Selected n-Hexane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C7_SEL	Selected n-Heptane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C8_SEL	Selected n-Octane	DOUBLE	0 → 100	0	% (18.0)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C9_SEL	Selected n-Nonane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C10_SEL	Selected n-Decane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
HE_SEL	Selected Helium	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AR_SEL	Selected Argon	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NEOC5_SEL	Selected Neopentane	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
BENZENE_SEL	Selected Benzene	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
TOLUENE_SEL	Selected Toluene	DOUBLE	0 → 100	0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
C1_FAULT	Fault Methane	DOUBLE	0 → 100	100	% (18.0)	R/W: Admin; Engineer;	01.00.03.03	Legal

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N2_FAULT	Fault Nitrogen	DOUBLE	0 → 100	0	% (18.0)	Meas. Tech R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CO2_FAULT	Fault Carbon Dioxide	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C2_FAULT	Fault Ethane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C3_FAULT	Fault Propane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2O_FAULT	Fault Water	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2S_FAULT	Fault Hydrogen Sulfide	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2_FAULT	Fault Hydrogen	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CO_FAULT	Fault CO	DOUBLE	0 → 100	0	% (18.0)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
O2_FAULT	Fault Oxygen	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
IC4_FAULT	Fault i-Butane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NC4_FAULT	Fault n-Butane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
IC5_FAULT	Fault i-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NC5_FAULT	Fault n-Pentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C6_FAULT	Fault n-Hexane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C7_FAULT	Fault n-Heptane	DOUBLE	0 → 100	0	% (18.0)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C8_FAULT	Fault n-Octane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C9_FAULT	Fault n-Nonane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C10_FAULT	Fault n-Decane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
HE_FAULT	Fault Helium	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
AR_FAULT	Fault Argon	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NEOC5_FAULT	Fault Neopentane	DOUBLE	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Legal

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Components								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BENZENE_FAULT	Fault Benzene	DOUBLE	0 → 100	0	%(18.0)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
TOLUENE_FAULT	Fault Toluene	DOUBLE	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
TOTAL_SEL	Total Selected	DOUBLE		0	%(18-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Legal
TOTAL_LIVE	Total Live	DOUBLE		0	%(18-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Legal
TOTAL_OVRD	Total Override	DOUBLE		0	%(18-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Legal
TOTAL_FAULT	Total Fault	DOUBLE		0	%(18-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Legal

5.2.11 DI Parameters

Description: The DI object provides the parameters for configuring digital inputs.

Number of Instances: 10 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-12: DI Parameters

DI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - DI_1-1 2 - DI_1-2 3 - DI_1-3 4 - DI_1-4 5 - DI_1-5 6 - DI_1-6 7 - DI_1-7 8 - DI_1-8 9 - DI_1-9 10 - DI_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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DI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8 9 - 9 10 - 10		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - DI_1-1 2 - DI_1-2 3 - DI_1-3 4 - DI_1-4 5 - DI_1-5 6 - DI_1-6 7 - DI_1-7 8 - DI_1-8 9 - DI_1-9 10 - DI_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ZERO_DESC	Description of Off State	UC10		OFF		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ONE_DESC	Description of On State	UC10		ON		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Log Changes

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DI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FAULT_MODE	Fault Mode: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Fault (0)	IO Fault Selection (136)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ACTUAL_MODE	Actual Mode: 0 - Live 1 - Auto 2 - Auto Read 3 - Override 4 - Calibration 5 - Fault 6 - Last Good	ENUM16		Live (0)	Actual Mode (125)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DI_TYPE	Digital Input Type: 0 - Normal 1 - Latched	ENUM16	0 → 1	Normal (0)	DI Type (132)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
INVERT	Digital Input Inversion Mode: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FILTER_TIME	Digital Input Filter Time	FLOAT	0 → 300	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
LOGIC_LEVEL	Logic Level: 0 - 66 microamps 1 - 2 milliamps	ENUM16	0 → 1	66 microamps (0)	Logic Level (133)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LIVE	Live Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
SELECTED	Selected Value: 0 - Off 1 - On	ENUM16		Off (0)	Digital Status (134)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
OVRD	Override Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FAULT	Fault Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LAST_GOOD	Last Good Value: 0 - Off 1 - On	ENUM16		Off (0)	Digital Status (134)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
ALARM_MODE	Digital Input Alarm Mode: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OFF_ON_COUNT	Digital Input Off-On Transition Count	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
ACCUM_ONTIME	DI Accumulated On Time	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	

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DI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ACCUM_OFFTIME	DI Accumulated Off Time	UINT32		0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail	BIN16		Normal	DI Status (135)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
RESET_LATCH	Reset Latch: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	

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5.2.12 Display Parameters

Description: The Display object provides the parameters for configuring the device LCD and the values shown on the screen saver.

Number of Instances: 1 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-13: Display Parameters

Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Device LCD		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Device LCD		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CONTRAST	Contrast	UINT8	0 → 100	50	%(18.0)	R/W: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BRIGHTNESS	Brightness	UINT8	0 → 100	50	%(18.0)	R/W: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SS_PRM_DESC_1	Item 1 User Description	UC20		Differential Press.		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_1	Item 1 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_1	Item 1 Parameter	ParamRef		DP_1-1.SELECTED		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_1	Item 1 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_2	Item 2 User Description	UC20		Static Pressure		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_2	Item 2 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_2	Item 2 Parameter	ParamRef		Press_1-1. SELECTED		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_2	Item 2 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_3	Item 3 User Description	UC20		Temperature		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_3	Item 3 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_3	Item 3 Parameter	ParamRef		RTD_1-1. SELECTED		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_3	Item 3 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_4	Item 4 User Description	UC20		Svol Flow Rate		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_4	Item 4 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_4	Item 4 Parameter	ParamRef		DP Mtr_1.SVOL_ RATE		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_4	Item 4 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_5	Item 5 User Description	UC20		Uvol Flow Rate		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_5	Item 5 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_5	Item 5 Parameter	ParamRef		DP Mtr_1.UVOL_ RATE		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_5	Item 5 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_6	Item 6 User Description	UC20		Mass Flow Rate		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_6	Item 6 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_6	Item 6 Parameter	ParamRef		DP Mtr_1.MASS_RATE		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_6	Item 6 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_7	Item 7 User Description	UC20		Energy Flow Rate		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_7	Item 7 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_7	Item 7 Parameter	ParamRef		DP Mtr_1.ENERGY_RATE		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_7	Item 7 Enable:	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_8	Item 8 User Description	UC20		Svol Today Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_8	Item 8 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_8	Item 8 Parameter	ParamRef		DP Mtr_1.SVOL_ TOT_OBJ.CUR_ DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_8	Item 8 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_9	Item 9 User Description	UC20		Mass Today Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_9	Item 9 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_REF_9	Item 9 Parameter	ParamRef		DP Mtr_1.MASS_TOT_OBJ.CUR_DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_9	Item 9 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_10	Item 10 User Description	UC20		Energy Today Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_10	Item 10 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_10	Item 10 Parameter	ParamRef		DP Mtr_1.ENERGY_TOT_OBJ.CUR_DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_10	Item 10 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_11	Item 11 User Description	UC20		Svol YDA Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_DESC_EN_11	Item 11 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_11	Item 11 Parameter	ParamRef		DP Mtr_1. SVOL_TOT_ OBJ.PREV_DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_11	Item 11 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_12	Item 12 User Description	UC20		Mass YDA Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_12	Item 12 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_12	Item 12 Parameter	ParamRef		DP Mtr_1.MASS_ TOT_OBJ.PREV_ DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_12	Item 12 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_DESC_13	Item 13 User Description	UC20		Energy YDA Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_13	Item 13 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_13	Item 13 Parameter	ParamRef		DP Mtr_1. ENERGY_TOT_ OBJ.PREV_DAY		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_13	Item 13 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_14	Item 14 User Description	UC20		Svol Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_14	Item 14 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_14	Item 14 Parameter	ParamRef		DP Mtr_1. SVOL_TOT_ OBJ.CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_ENABLE_1 4	Item 14 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_15	Item 15 User Description	UC20		Mass Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_15	Item 15 User Description Enable; 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_15	Item 15 Parameter	ParamRef		DP Mtr_1.MASS_ TOT_OBJ. CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_1 5	Item 15 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_16	Item 16 User Description	UC20		Energy Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_16	Item 16 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_REF_16	Item 16 Parameter	ParamRef		DP Mtr_1. ENERGY_TOT_ OBJ.CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_16	Item 16 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_17	Item 17 User Description	UC20		HV Real		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_17	Item 17 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_17	Item 17 Parameter	ParamRef		Fluid Prop_1.HV_ REAL_SEL		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> Log Changes Legal
SS_PRM_ENABLE_17	Item 17 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_18	Item 18 User Description	UC20		RD Real		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SS_PRM_DESC_EN_18	Item 18 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_18	Item 18 Parameter	ParamRef		Fluid Prop_1.RD_REAL_SEL		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_18	Item 18 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_19	Item 19 User Description	UC20		Mass Total		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_19	Item 19 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_19	Item 19 Parameter	ParamRef		Station_1.MASS_TOT_OBJ.CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_19	Item 19 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_20	Item 20 User Description	UC20		Energy Total		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		▪ Legal
SS_PRM_DESC_EN_20	Item 20 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
SS_PRM_REF_20	Item 20 Parameter	ParamRef		Station_1. ENERGY_TOT_ OBJ.CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
SS_PRM_ENABLE_20	Item 20 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
SS_PRM_DESC_21	Item 21 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_21	Item 21 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	▪ Log Changes ▪ Legal
SS_PRM_REF_21	Item 21 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	▪ Log Changes ▪ Legal
SS_PRM_ENABLE_21	Item 21 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_22	Item 22 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_22	Item 22 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_22	Item 22 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_22	Item 22 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_23	Item 23 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_23	Item 23 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_23	Item 23 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_23	Item 23 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_24	Item 24 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_24	Item 24 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_24	Item 24 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_24	Item 24 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_25	Item 25 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_25	Item 25 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_25	Item 25 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_25	Item 25 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_26	Item 26 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_26	Item 26 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_26	Item 26 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_26	Item 26 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_27	Item 27 User Description	UC20				R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_27	Item 27 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_27	Item 27 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_27	Item 27 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_28	Item 28 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_28	Item 28 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_28	Item 28 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_28	Item 28 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_29	Item 29 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_29	Item 29 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_29	Item 29 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_29	Item 29 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_30	Item 30 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_30	Item 30 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_30	Item 30 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_30	Item 30 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_31	Item 31 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_31	Item 31 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_31	Item 31 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_31	Item 31 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_32	Item 32 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_32	Item 32 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_32	Item 32 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_32	Item 32 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_33	Item 33 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_33	Item 33 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_33	Item 33 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_33	Item 33 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_34	Item 34 User Description	UC20				R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_34	Item 34 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_34	Item 34 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_34	Item 34 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_35	Item 35 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_35	Item 35 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_35	Item 35 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_35	Item 35 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_36	Item 36 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_36	Item 36 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_36	Item 36 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_36	Item 36 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_37	Item 37 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_37	Item 37 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_37	Item 37 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_37	Item 37 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_38	Item 38 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_38	Item 38 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_38	Item 38 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_38	Item 38 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_39	Item 39 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_39	Item 39 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_39	Item 39 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_39	Item 39 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_40	Item 40 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_40	Item 40 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_40	Item 40 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_40	Item 40 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_41	Item 41 User Description	UC20				R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_41	Item 41 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_41	Item 41 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_41	Item 41 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_42	Item 42 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_42	Item 42 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_42	Item 42 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_42	Item 42 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_43	Item 43 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_43	Item 43 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_43	Item 43 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_43	Item 43 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_44	Item 44 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_44	Item 44 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_44	Item 44 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_44	Item 24 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_45	Item 45 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_45	Item 45 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_45	Item 45 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_45	Item 45 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_46	Item 46 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_46	Item 46 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_46	Item 46 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_46	Item 46 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_47	Item 47 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_47	Item 47 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_47	Item 47 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_47	Item 47 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_48	Item 48 User Description	UC20				R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_48	Item 48 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_48	Item 48 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_48	Item 48 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_49	Item 49 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_49	Item 49 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_49	Item 49 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_49	Item 49 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_50	Item 50 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_50	Item 50 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_50	Item 50 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_50	Item 50 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_51	Item 51 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_51	Item 51 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_51	Item 51 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_51	Item 51 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_52	Item 52 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_52	Item 52 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_52	Item 52 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_52	Item 52 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_53	Item 53 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_53	Item 53 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_53	Item 53 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_53	Item 53 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_54	Item 54 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_54	Item 54 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_54	Item 54 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_54	Item 54 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_55	Item 55 User Description	UC20				R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_EN_55	Item 55 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_55	Item 55 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_55	Item 55 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_56	Item 56 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_56	Item 56 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_56	Item 56 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_56	Item 56 Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_DESC_57	Item 57 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_57	Item 57 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_57	Item 57 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_57	Item 57 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_58	Item 58 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_58	Item 58 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_58	Item 58 Parameter	ParamRef		Undefined		R/W:	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_ENABLE_58	Item 58 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_59	Item 59 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_59	Item 59 User Description Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_REF_59	Item 59 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_59	Item 59 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_60	Item 60 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_DESC_EN_60	Item 60 User Description Enable:	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SS_PRM_REF_60	Item 60 Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_PRM_ENABLE_60	Item 60 Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LEADING_ZERO_ENABLE	Leading Zero Enable	ENUM16	0 -> 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AUTO_SCROLL_TIME	Auto Scroll Time	UINT8	0 -> 60		Duration (17)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_DESC_1	Default Item 1 User Description	UC20	Svol Total			R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_DESC_ENABLE_1	Default Item 1 User Description Enable	UINT8	0 -> 1	0	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Display								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DEF_PRM_REF_1	Default Item 1 Parameter	PRMREF		Total_2.CURRENT		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_ENABLE_1	Default Item 1 Enable	ENUM16	0 -> 1	0	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_DESC_2	Default Item 1 User Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_DESC_EN_2	Default Item 1 User Description Enable	UINT8	0 -> 1	0	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_REF_2	Default Item 1 Parameter	PRMREF		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DEF_PRM_ENABLE_2	Default Item 1 Enable	ENUM16	0 -> 1	0	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.13 DNP3 Parameters

Description: The DNP3 object provides the parameters for configuring DNP3 communications.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-14: DNP3 Parameters

DNP3								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		DNP3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
LOGIN_TMOUT	Inactivity Timeout	UINT16	30 → 1440	120	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOLICIT_MODE	Unsolicited Message Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DNP3								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DNP_TCP_ENABLE	Enable TCP for DNP3: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Disable (0) 2 - Disable (0) 3 - Disable (0) 4 - Disable (0) 5 - Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TCPIP_PORT	TCP/IP Port	UINT16		20000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ADDRESS	Flow Computer Address	UINT16	0 → 65519	Instance: 1 - 1 2 - 1 3 - 1 4 - 1 5 - 1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BIN_IN_SCAN_PRD	Binary Input Scan Period	UINT32	0 → 60	Instance: 1 - 0 2 - 0 3 - 0 4 - 0 5 - 0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ANLG_IN_SCAN_PRD	Analog Input Scan Period	UINT32	0 → 60	Instance: 1 - 0 2 - 0 3 - 0 4 - 0 5 - 0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BIN_CNTR_SCAN_PRD	Binary Counter Scan Period	UINT32	0 → 60	Instance: 1 - 0 2 - 0 3 - 0 4 - 0 5 - 0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DNP3								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CONFIRM_TIMEOUT	Master Confirmation Timeout	UINT32	1000 → 20000	10000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_CFM_TIMEOUT	Unsolicited Confirmation Timeout	UINT32	1000 → 20000	10000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_NUM_RETRIES	Unsolicited Number of retries	UINT16	1 → 65535	3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_RETRY_DELAY	Delay between unsolicited retries	UINT32	1 → 65535	30000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_CLASS1	Class 1 Unsolicited Msg enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_CLASS2	Class 2 Unsolicited Msg enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_CLASS3	Class 3 Unsolicited Msg enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DNP3								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
UNSQL_CLASS1_MAX	Class 1 Unsolicited Max Events	UINT8	0 → 255	Instance: 1 - 5 2 - 5 3 - 5 4 - 5 5 - 5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSQL_CLASS2_MAX	Class 2 Unsolicited Max Events	UINT8	0 → 255	Instance: 1 - 5 2 - 5 3 - 5 4 - 5 5 - 5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSQL_CLASS3_MAX	Class 3 Unsolicited Max Events	UINT8	0 → 255	Instance: 1 - 5 2 - 5 3 - 5 4 - 5 5 - 5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSQL_CLASS1_DELAY	Class 1 Unsolicited Max Delay	UINT32	1000 → 10000	5000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSQL_CLASS2_DELAY	Class 2 Unsolicited Max Delay	UINT32	1000 → 10000	5000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSQL_CLASS3_DELAY	Class 3 Unsolicited Max Delay	UINT32	1000 → 10000	5000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BIN_EVT_MAX	Maximum Binary Input events	UINT16	0 → 17	Instance: 1 - 17 2 - 17		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Log Changes

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DNP3								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				3 - 17 4 - 0 5 - 17		R/O: Operator; Auditor		
ANLG_EVT_MAX	Maximum Analog Input events	UINT16	0 → 115	Instance: 1 - 115 2 - 115 3 - 115 4 - 0 5 - 115		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BIN_CNTR_EVT_MAX	Maximum Binary Counter events	UINT16	0 → 10	Instance: 1 - 10 2 - 10 3 - 10 4 - 0 5 - 10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FRZN_CNTR_EVT	Maximum Frozen Counter events	UINT16	0 → 1	Instance: 1 - 0 2 - 0 3 - 0 4 - 0 5 - 0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
UNSOL_DEST_ADDRESS	Unsolicited Destination Address	UINT16	0 → 65519	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
REQUIRE_LOGIN	Require Login: 0 - No 1 - Yes	ENUM16	0 → 1	Instance: 1 - Yes (1) 2 - Yes (1) 3 - Yes (1) 4 - Yes (1) 5 - Yes (1)	Yes/No Option (208)	R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.04.01	Log Changes

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5.2.14 DNPSAV5 Parameters

Description: The DNPSAV5 object provides the parameters for configuring security authentication

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory

Table 5-15: DNPSAV5 Parameters

DNPSAV5								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		DNP SAV5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.12.0.XXX	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.12.0.XXX	Log Changes
OBJ_STATUS	Status: 0 – Normal 1 –In Alarm 2 – Failure 3 – Override 4 – Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Log Changes
SA_STATUS	DNP3 Secure Authentication Status	ENUM16	0->1	0	Enable/Disable Selection (30)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Log Changes
KEY_REQ_TIMEOUT	Reply Timeout	FLOAT	0->120	2	Duration (17)	R/W: Admin; Engineer;	2.12.0.XXX	Log Changes

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DNPSAV5								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
MAX_SES_KEY_STAT_CNT	Max session key status count	UINT8	2->255	5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.12.0.XXX	Log Changes

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5.2.15 DO Parameters

Description: The DO object provides the parameters for configuring digital outputs.

Number of Instances: 10 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-16: DO Parameters

DO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - DO_1-1 2 - DO_1-2 3 - DO_1-3 4 - DO_1-4 5 - DO_1-5 6 - DO_1-6 7 - DO_1-7 8 - DO_1-8 9 - DO_1-9 10 - DO_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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DO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8 9 - 9 10 - 10		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - DO_1-1 2 - DO_1-2 3 - DO_1-3 4 - DO_1-4 5 - DO_1-5 6 - DO_1-6 7 - DO_1-7 8 - DO_1-8 9 - DO_1-9 10 - DO_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DO_TYPE	Digital Output Type: 0 - Latching 1 - Momentary 2 - Toggle 3 - Time Duration Output Momentary 4 - Time Duration Output Toggle 5 - Scaled Pulse Output	ENUM16	0 → 5	Latching (0)	Discrete Output Type (46)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
USER_MODE	Operation Mode: 0 - Auto 1 - Override 2 - Auto Read	ENUM16	0 → 2	Auto (0)	IO Output User Selection (131)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FAULT_MODE	Fault Mode: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Last Good (1)	IO Fault Selection (136)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ACTUAL_MODE	Actual Mode: 0 - Live 1 - Auto 2 - Auto Read 3 - Override 4 - Calibration 5 - Fault 6 - Last Good	ENUM16		Live (0)	Actual Mode (125)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
SELECTED	Selected Value: 0 - Off 1 - On	ENUM16		Off (0)	Digital Status (134)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
AUTO	Auto Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
AUTO_EU	Auto EU Value	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
AUTO_READ_VAL	Auto Read Value	UINT8		0	Off (134.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
AUTO_READ_PARAM	Auto Read Parameter Reference	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OVRD	Override Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ZERO_DESC	Description of Off State	UC10		OFF		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ONE_DESC	Description of On State	UC10		ON		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FAULT	Fault Value: 0 - Off 1 - On	ENUM16	0 → 1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_ON	Time On	FLOAT	0 → 3600	1	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
TIME_OFF	Time Off	FLOAT	0 → 3600	1	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
ACCUM	Number of Off-On Transitions	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
TDO_CYCLE_TIME	Time Duration Output Cycle Time	FLOAT	1 → 3600	15	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TDO_LOW_EU	Time Duration Output Low EU	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TDO_HIGH_EU	Time Duration Output High EU	FLOAT		100		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TDO_0%_TIME	Time Duration Output 0% Time	FLOAT		3	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
TDO_100%_TIME	Time Duration Output 100% Time	FLOAT		12	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified
TDO_TIME_ON	TDO Time On	FLOAT		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
TDO_TIME_OFF	TDO Time Off	FLOAT		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
SPO_INPUT_PRM	Scaled Pulse Output Parameter Reference	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Log Changes

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SPO_INPUT_VAL	Scaled Pulse Output Value	DOUBLE		0		R/O: Operator; Auditor	01.00.03.03	
SPO_ACCUM_LIMIT	Pulse Output Significance	FLOAT		0		R/W: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Log Changes
OUTPUT_STATUS	Output Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Auto Read Parameter Invalid 8 - SPO Parameter Invalid	BIN16		Normal	DO Status (137)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
RESET_MODE	Action on Power Cycle: 0 - Fault 1 - Last Good	ENUM16	0 → 1	Last Good (1)	IO Fault Selection (136)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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DO								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ALARM_MODE	Digital Status Alarm Mode 0 - Off 1 - On	ENUM16	0→1	Off (0)	Digital Status (134)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.1.0.XXX	Log Changes

5.2.16 DP Parameters

Description: The DP object provides the parameters for configuring differential pressure sensors.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-17: DP Parameters

DP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Integral Sensor DP 2 - 4088B-1 DP 3 - 4088B-2 DP		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - Integral Sensor DP		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				2 - 4088B-1 DP 3 - 4088B-2 DP		R/O: Operator; Auditor		
UNITS	Units: 0 - inH2O@60°F 1 - inH2O@68°F 2 - kPa 3 - mbar 4 - kg/cm ² 5 - psi 6 - bar	ENUM16	0 → 6	inH2O@60°F (0)	Differential Pressure Selection (26)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIVE	Live Value	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
OVRD	Override Value	FLOAT		0	inH2O (1.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT	Fault Value	FLOAT		0	inH2O (1.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LAST_GOOD	Last Good Value	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SELECTED	Selected Value	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
FAULT_MODE	Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 3	Live (0)	Fault Selection (32)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
REV_DP	Reverse Differential Pressure	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DAMPING	Damping Time	FLOAT	0 → 60	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ALM_OBJ	Alarm Reference	ObjectRef		Instance: 1 - Alarm_1 2 - Alarm_4 3 - Alarm_7		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
URL	Upper Range Limit	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	FLOAT		0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MONITOR_MAX	Monitor Maximum	FLOAT		250	inH2O (1.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MONITOR_MIN	Monitor Minimum	FLOAT		0	inH2O (1.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MIN_SPAN	Minimum Span	FLOAT		0	inH2O (1.0)	R/O: Operator; Auditor	01.00.03.03	Legal
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL 9 - Input Frozen	BIN16		Normal	Alarm Status DP SP (44)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CAL_OBJ	Calibration Reference	ObjectRef		Instance: 1 - FLTCa_1 2 - FLTCa_4 3 - FLTCa_7		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LAST_HOUR_AVERAGE	Last Hour Average Value	FLOAT		0	inH2O (1-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	

5.2.17 DP Meter Parameters

Description: The DP Meter object provides the parameters for configuring differential pressure meters.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-18: DP Meter Parameters

DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - DP Mtr_1 2 - DP Mtr_2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
STATION_OBJ	Station Assignment	ObjectRef	Station	Station_1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FLUID_PROP_OBJ	Fluid Properties Reference	ObjectRef	Fluid Prop	Instance: 1 - Fluid Prop_1 2 - Fluid Prop_2		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MTR_TYPE	Meter Type: 0 - AGA3 Orifice (Flange Taps) 1 - ISO5167 Orifice (Flange Taps) 2 - ISO5167 Orifice (Corner Taps) 3 - ISO5167 Orifice (D & D/2 Taps) 4 - ISO5167 Venturi (As Cast) 5 - ISO5167 Venturi (Machined) 6 - ISO5167 Venturi (Rough Weld) 7 - ISO5167 Nozzle (Venturi) 8 - ISO5167 Nozzle (Long Radius) 9 - ISO5167 Nozzle (ISA 1932) 10 - 1595 Conditioning Orifice (Flange) 11 - 1595 Conditioning Orifice (D and D/2) 12 - 405C Compact Orifice 13 - Cone (McCrometer V-Cone) 14 - Cone (McCrometer Wafer-Cone) 15 - Cone (NUFLO)	ENUM16	0 → 16	AGA3 Orifice (Flange Taps) (0)	Meter Type Selection (50)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLW_DIR	Flow Direction: 0 - Forward 1 - Reverse	ENUM16	0 → 1	Forward (0)	Meter Direction (253)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SER_NUM	Serial Number	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AGA3_METHOD	AGA 3 Calculation Selection: 0 - AGA3 1992 Volume 1 - AGA3 1992 Mass 2 - AGA3 1992 Relative Density 3 - AGA3 2012 Volume 4 - AGA3 2012 Mass 5 - AGA3 2012 Relative Density	ENUM16	0 → 5	AGA3 1992 Volume (0)	AGA 3 Calculation Method (51)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ISO5167_METHOD	ISO 5167 Calculation Selection: 0 - ISO5167 1991 1 - ISO5167 1998 2 - ISO5167 2003	ENUM16	0 → 2	ISO5167 2003 (2)	ISO 5167 Calculation Method (52)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RMT_ORIF_METHOD	Rosemount Orifice Calculation: 0 - Based on ISO5167 2003	ENUM16	0 → 0	Based on ISO5167 2003 (0)	Rosemount Orifice Method (186)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ABAR_METHOD	Annubar Calc Selection: 0 - 485-1 1 - 485-2 2 - 485-3	ENUM16	0 → 2	485-1 (0)	Annubar Calc Selection (77)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MTR_DIAM	Meter Diameter	DOUBLE	≥0.0001	4	in (7.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PIPE_DIAM	Pipe Diameter	DOUBLE	≥0.0001	8	in (7.0)	R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
PRESS_LOC	Static Pressure Location: 0 - Upstream 1 - Downstream	ENUM16	0 → 1	Upstream (0)	Pressure Location (58)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PRESS_TYPE	Pressure Transmitter Type: 0 - Gauge 1 - Absolute	ENUM16	0 → 1	Absolute (1)	SP Type Selection (57)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TEMP_CORR_METHOD	Temperature Correction: 0 - No Correction 1 - Isentropic 2 - Isenthalpic (Joule-Thomson)	ENUM16	0 → 2	No Correction (0)	Temperature Correction Selection (120)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_LIM	No Flow Cut-off Limit	DOUBLE	≥ 0	0	inH2O (1.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DP_OBJ	Differential Pressure Object	ObjectRef		Instance: 1 - DP_1-1 2 - Undefined		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_OBJ	Static Pressure Object	ObjectRef		Instance: 1 - Press_1-1 2 - Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TF_OBJ	Flowing Temperature Object	ObjectRef		Instance: 1 - RTD_1-1 2 - Undefined		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DP_INUSE	Differential Pressure In Use	DOUBLE		0	inH2O (1.0)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
PF_INUSE	Flowing Pressure In Use	DOUBLE		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
TF_INUSE	Flowing Temperature In Use	DOUBLE		0	°F (3.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PIPE_MAT_OPT	Pipe Material Option: 0 - Carbon Steel 1 - 304 Stainless Steel 2 - 316 Stainless Steel 3 - Generic Stainless 4 - Monel 400 5 - User Entered Alpha	ENUM16	0 → 5	Carbon Steel (0)	Material Selection (59)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MTR_MAT_OPT	Meter Material Option: 0 - Carbon Steel 1 - 304 Stainless Steel 2 - 316 Stainless Steel 3 - Generic Stainless 4 - Monel 400 5 - User Entered Alpha	ENUM16	0 → 5	316 Stainless Steel (2)	Material Selection (59)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PIPE_DIAM_REF	Pipe Diameter Reference Temperature	DOUBLE		68	°F (3.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MTR_DIAM_REF	Meter Diameter Reference Temperature	DOUBLE		68	°F (3.0)	R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MTR_ALPHA_OVRD	Meter Material User Alpha	DOUBLE		0.00000889	in./in.-°F (222.0)	Meas. Tech R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MTR_ALPHA_SEL	Meter Material Alpha	DOUBLE		0.00000889	in./in.-°F (222.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
PIPE_ALPHA_OVRD	Pipe Material User Alpha	DOUBLE		0.0000062	in./in.-°F (222.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PIPE_ALPHA_SEL	Pipe Material Alpha	DOUBLE		0.0000062	in./in.-°F (222.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
FLW_ALM_OBJ	Flow Alarm Object	ObjectRef		Instance: 1 - Alarm_10 2 - Alarm_12		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FCALC_ALM	Flow Calculation Alarm Code: 0 - Normal 1 - Invalid Input(s) 2 - Invalid Configuration 3 - Calculation Error 4 - Boundary Error 9 - Differential Pressure 10 - Pressure 11 - Temperature 12 - Flowing Density/Compressibility 13 - Base Density/Compressibility 14 - Relative Density 15 - Heating Value/Enthalpy 16 - Viscosity 17 - User Correction Factor 18 - Total/Increment 19 - Integral Multiplier Value 26 - Beta Ratio 27 - DP/P Ratio 28 - Isentropic Exponent 29 - Reynolds Number 30 - Pressure Loss/Pressure Loss Ratio 31 - Alpha 32 - Expansion Factor	BIN32		Normal	DP Flow Calculation Alarm (206)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MTR_DIAM_SEL	Corrected Meter Diameter	DOUBLE	≥0.0001	4	in (7.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
PIPE_DIAM_SEL	Corrected Pipe Diameter	DOUBLE	≥0.0001	8	in (7.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BETA_SEL	Selected Diameter Ratio	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PLOSS_SEL	Selected Pressure Loss	DOUBLE	≥ 0	0	inH2O (1.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
REL_PLOSS_RATIO	Relative Pressure Loss Ratio	DOUBLE	≥0	0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
RE_SEL	Reynolds Number	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CD_OVRD	Discharge Coefficient Override	DOUBLE	0.1 -> 1	0.6		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CD_CALC	Discharge Coefficient Calculated	DOUBLE		0.6		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CD_UMODE	Discharge Coefficient User Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CD_SEL	Selected Discharge Coefficient	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PIPE_SCHED	Pipe Schedule: 0 - Schedule 10 1 - Schedule 40 2 - Schedule 80	ENUM16	0 → 2	Schedule 10 (0)	Pipe Schedule (184)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FS_SEL	Pipe Schedule Adjustment Factor	DOUBLE		1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal
COEFF_CURVE_OPT	Discharge Coefficient Option: 0 - Flow Equation Standard 1 - Calibrated Discharge Coefficient Curve	ENUM16	0 → 1	Flow Equation Standard (0)	Calculated Cd (223)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_1	Discharge/Flow Coefficient 1	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_1_FLOW	Reynolds Number / Flowrate 1	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_2	Discharge/Flow Coefficient 2	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_2_FLOW	Reynolds Number / Flowrate 2	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_3	Discharge/Flow Coefficient 3	DOUBLE	≥ 0	0		R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
COEFF_3_FLOW	Reynolds Number / Flowrate 3	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_4	Discharge/Flow Coefficient 4	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_4_FLOW	Reynolds Number / Flowrate 4	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_5	Discharge/Flow Coefficient 5	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_5_FLOW	Reynolds Number / Flowrate 5	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_6	Discharge/Flow Coefficient 6	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_6_FLOW	Reynolds Number / Flowrate 6	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
COEFF_7	Discharge/Flow Coefficient 7	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_7_FLOW	Reynolds Number / Flowrate 7	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_8	Discharge/Flow Coefficient 8	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_8_FLOW	Reynolds Number / Flowrate 8	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_9	Discharge/Flow Coefficient 9	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_9_FLOW	Reynolds Number / Flowrate 9	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_10	Discharge/Flow Coefficient 10	DOUBLE	≥0	0		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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COEFF_10_FLOW	Reynolds Number / Flowrate 10	DOUBLE	≥ 0	0		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_11	Discharge/Flow Coefficient 11	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_11_FLOW	Reynolds Number / Flowrate 11	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_12	Discharge/Flow Coefficient 12	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_12_FLOW	Reynolds Number / Flowrate 12	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_13	Discharge/Flow Coefficient 13	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_13_FLOW	Reynolds Number / Flowrate 13	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
COEFF_14	Discharge/Flow Coefficient 14	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_14_FLOW	Reynolds Number / Flowrate 14	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_15	Discharge/Flow Coefficient 15	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_15_FLOW	Reynolds Number / Flowrate 15	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_16	Discharge/Flow Coefficient 16	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_16_FLOW	Reynolds Number / Flowrate 16	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COEFF_17	Discharge/Flow Coefficient 17	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_17_FLOW	Reynolds Number / Flowrate 17	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_18	Discharge/Flow Coefficient 18	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_18_FLOW	Reynolds Number / Flowrate 18	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_19	Discharge/Flow Coefficient 19	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_19_FLOW	Reynolds Number / Flowrate 19	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COEFF_20	Discharge/Flow Coefficient 20	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COEFF_20_FLOW	Reynolds Number / Flowrate 20	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
Y1_SEL	Upstream Expansion Factor	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
EV_SEL	Velocity of Approach	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IV_SEL	Integral Value	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IMV_SEL	Integral Multiplier Value (IMV/C-Factor)	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_CORR_FACTOR	User Correction Factor	DOUBLE	≥ 0	1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UVOL_RATE	Uncorrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SVOL_RATE	Corrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASS_RATE	Mass Flow Rate	DOUBLE		0	Mlb/d (13.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ENERGY_RATE	Energy Flow Rate	DOUBLE		0	MMBtu/d (14.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
UVOL_RAW_TOT	Uncorrected Volume Total	DOUBLE		0	MCF (9.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SVOL_RAW_TOT	Corrected Volume Total	DOUBLE		0	MCF (9.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MASS_RAW_TOT	Mass Total	DOUBLE		0	Mlb (10.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ENERGY_RAW_TOT	Energy Total	DOUBLE		0	MMBtu (11.1)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
FLWTM_RAW_TOT	Flow Time Total	DOUBLE		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IV_RAW_TOT	Integral Value Total	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
UVOL_TOT_OBJ	Uncorrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_1 2 - Total_21		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SVOL_TOT_OBJ	Corrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_2 2 - Total_22		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_TOT_OBJ	Mass Total Object	ObjectRef	Total	Instance: 1 - Total_3 2 - Total_23		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_TOT_OBJ	Energy Total Object	ObjectRef	Total	Instance: 1 - Total_4 2 - Total_24		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLWTM_TOT_OBJ	Flow Time Total Object	ObjectRef	Total	Instance: 1 - Total_5 2 - Total_25		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
IV_TOT_OBJ	Integral Value Total Object	ObjectRef	Total	Instance: 1 - Total_6 2 - Total_26		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
INSPECT_TIME	Last Meter Inspection Time	Time				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CALIB_FACTOR	Calibration Factor	DOUBLE	≥0.0001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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DP Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
UVOL_FLT_TOT_OBJ	Uncorrected Volume Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_FLT_TOT_OBJ	Corrected Volume Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_FLT_TOT_OBJ	Mass Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_FLT_TOT_OBJ	Energy Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
Y1-OVRD	Override Upgrade Expansion Factor	DOUBLE	0.1 -> 2	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
Y1 UMODE	Upstream Expansion Factor	ENUM16		2	User Mode Selection 3 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_INUSE_G	Flowing Pressure In Use (Gauge)	DOUBLE		0	Gauge Pressure (29)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.17.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.18 Effect Parameters

Description: The Effect object provides the parameters for configuring custom logic components.

Number of Instances: 10 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-19: Effect Parameters

Effect								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Effect 1 2 - Effect 2 3 - Effect 3 4 - Effect 4 5 - Effect 5 6 - Effect 6 7 - Effect 7 8 - Effect 8 9 - Effect 9 10 - Effect 10		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Effect								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DESC	Description	UC20		Instance: 1 - Effect 1 2 - Effect 2 3 - Effect 3 4 - Effect 4 5 - Effect 5 6 - Effect 6 7 - Effect 7 8 - Effect 8 9 - Effect 9 10 - Effect 10		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
EFFECT_ENABLE	User Enable Switch: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OUT_POINT	Output Variable Param Reference	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OUT_DESC	Output Param Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OUT_VALUE	Output Live Value	FLOAT		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
ACTIVE_VALUE	Output Active Value to Write	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Effect								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INACTIVE_VALUE	Output Inactive Value to Write	FLOAT		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INACTIVE_VAL_SET	Inactive Value Set Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
ASSERT_OUTVAL_TYPE	Assert Output Continuously: 0 - Neither State 1 - Active State Only 2 - Inactive State Only 3 - Both States	ENUM16	0 → 3	Both States (3)	Effect Output Assert Type (175)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
EFFECT_TRIP_STATUS	Effect Trip Status: 0 - Inactive 1 - Active	ENUM16		Inactive (0)	Action Block Status (166)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
FIRST_OUT_INST	First Out Effect Instance	UINT16		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
FIRST_OUT_TAG	First Out Effect Desc	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
REQUIRES_RESET	Effect Requires Reset When Tripped: 0 - No Reset Required 1 - Reset Required	ENUM16	0 → 1	No Reset Required (0)	Effect Reset Option (176)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
RESET_POINT	Reset Parameter Reference	ParamRef		Undefined		R/W: Admin; Engineer R/O:	01.00.03.03	Log Changes

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Effect								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RESET_READY	Effect Ready for Reset: 0 - No Reset Needed 1 - Ready for Reset	ENUM16	0 → 1	No Reset Needed (0)	Effect Reset Ready Values (177)	Meas. Tech; Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
RESET_CMD_VALUE	Reset Command Value	UINT8		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

5.2.19 FBxNConfig Parameters

Description: The FBxNConfig object provides the parameters for configuring a communication port for FBxNet data transfer.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-20: FBxNConfig Parameters

FBxNConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		FBxNet Config		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	Log Changes
OBJ_AREA	Area Assignment	UINT8	0→5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	Log Changes
OBJ_STATUS	Status: 0 – Normal 1 – In Alarm 2 – Failure 3 – Override 4 – Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	
PUB_COMM_ENABLE	Enable Communications as a Pub Device 0 – Disabled	ENUM16	0→2	0	Publisher Comm Enable (30)	R/W: Admin; Engineer; Meas. Tech	2.5.0.XXX	Log Changes

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FBxNConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	1 – Enable Read/Write 2 – Enable Read Only					R/O: Operator; Auditor		
PUB_WATCHDOG_TIMER	Publisher Watchdog Timer	UNIT16	0 ->300	10	Duration (17-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	Log Changes

5.2.20 FLTCal Parameters

Description: The FLTCal object provides the parameters for DP, Press, and RTD calibrations.

Number of Instances: 9 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-21: FLTCal Parameters

FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - FLTCal_1 2 - FLTCal_2 3 - FLTCal_3 4 - FLTCal_4 5 - FLTCal_5 6 - FLTCal_6 7 - FLTCal_7 8 - FLTCal_8 9 - FLTCal_9		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		2		R/O: Admin; Engineer;	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DESC	Description	UC20		Instance: 1 - FLTCal_1 2 - FLTCal_2 3 - FLTCal_3 4 - FLTCal_4 5 - FLTCal_5 6 - FLTCal_6 7 - FLTCal_7 8 - FLTCal_8 9 - FLTCal_9		Meas. Tech; Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TIMEOUT	Inactivity Timeout	UINT16	1 → 1440	60	min (17.1)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TO_TIME_REMAINING	Remaining Time Before Timeout	UINT16		0	min (17.1)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
LAST_CAL	Time of Last Calibration	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ZERO_SHIFT	Zero Shift	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
USER_ZERO_VAL	Calibrated Zero	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
USER_SPAN_VAL	Calibrated Span	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
USER_MID1_VAL	Calibrated Midpoint 1	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
USER_MID2_VAL	Calibrated Midpoint 2	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)			
USER_MID3_VAL	Calibrated Midpoint 3	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IDEAL_ZERO_VAL	Ideal Zero	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - ohms (23.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - ohms (23.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - ohms (23.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IDEAL_SPAN_VAL	Ideal Span	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - ohms (23.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - ohms (23.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - ohms (23.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IDEAL_MID1_VAL	Ideal Midpoint 1	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - ohms (23.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - ohms (23.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - ohms (23.0)			
IDEAL_MID2_VAL	Ideal Midpoint 2	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - ohms (23.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - ohms (23.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - ohms (23.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IDEAL_MID3_VAL	Ideal Midpoint 3	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - ohms (23.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - ohms (23.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - ohms (23.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_DATE	Time of Last Verification	Time				R/W: Admin; Engineer; R/O: Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT1_FOUND	Verification Point 1 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)			
VER_PT2_FOUND	Verification Point 2 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VER_PT3_FOUND	Verification Point 3 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT4_FOUND	Verification Point 4 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT5_FOUND	Verification Point 5 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	Meas. Tech; Operator; Auditor		
VER_PT6_FOUND	Verification Point 6 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT7_FOUND	Verification Point 7 As Found	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT1_LEFT	Verification Point 1 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
VER_PT2_LEFT	Verification Point 2 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT3_LEFT	Verification Point 3 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT4_LEFT	Verification Point 4 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT5_LEFT	Verification Point 5 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)			
VER_PT6_LEFT	Verification Point 6 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
VER_PT7_LEFT	Verification Point 7 As Left	FLOAT		0	Instance: 1 - inH2O (1.0) 2 - psi(a) (2.0) 3 - °F (3.0) 4 - inH2O (1.0) 5 - psi(a) (2.0) 6 - °F (242.0) 7 - inH2O (1.0) 8 - psi(a) (2.0) 9 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CAL_STATUS	Calibration Status: 0 - Calibration Not In Progress 1 - Input Frozen 2 - Calibration In Progress 3 - Reserved 4 - Set Command Failed 5 - Timeout Occurred 6 - Span Too Small 7 - Excess Correction 8 - Passed Parameter Too Small	BIN16		Calibration Not In Progress	Calibration Status (150)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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FLTCal								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	9 - Passed Parameter Too Large 10 - Ideal Value Too Small 11 - Ideal Value Too Large 12 - Wrong Command 13 - Verification In Progress							

5.2.21 Fluid Prop Parameters

Description: The Fluid Prop object provides the parameters for configuring the physical properties of the fluid flowing through each meter.

Number of Instances: 4 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-22: Fluid Prop Parameters

Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Fluid Prop 1 2 - Fluid Prop 2 3 - Fluid Prop 3 4 - Fluid Prop 4		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
COMPONENTS_OBJ	Components Object	ObjectRef		Instance: 1 - Components_1 2 -		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				Components_1 3 - Components_1 4 - Components_1		R/O: Operator; Auditor		
C1_INUSE	In-use Methane	DOUBLE		100	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
N2_INUSE	In-use Nitrogen	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CO2_INUSE	In-use Carbon Dioxide	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C2_INUSE	In-use Ethane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C3_INUSE	In-use Propane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2O_INUSE	In-use Water	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2S_INUSE	In-use Hydrogen Sulfide	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2_INUSE	In-use Hydrogen	DOUBLE		0	% (18.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CO_INUSE	In-use Carbon Monoxide	DOUBLE		0	% (18.0)	Meas. Tech; Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
O2_INUSE	In-use Oxygen	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IC4_INUSE	In-use i-Butane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
NC4_INUSE	In-use n-Butane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IC5_INUSE	In-use i-Pentane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
NC5_INUSE	In-use n-Pentane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C6_INUSE	In-use n-Hexane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C7_INUSE	In-use n-Heptane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C8_INUSE	In-use n-Octane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C9_INUSE	In-use n-Nonane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C10_INUSE	In-use n-Decane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HE_INUSE	In-use Helium	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
AR_INUSE	In-use Argon	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
NEOC5_INUSE	In-use Neopentane	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BENZENE_INUSE	In-use Benzene	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
TOLUENE_INUSE	In-use Toluene	DOUBLE		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
H2O_CONTENT_UMODE	Water Content Mode: 0 - Measured 1 - Override 2 - Calculated	ENUM16	0 → 3	Calculated (2)	User Mode Selection 1 (79)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_PARAM	Water Content Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_OVRD	Override Water Content	DOUBLE	≥ 0	0	lb/MMSCF (21.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_CALC	Calculated Water Content	DOUBLE		0	lb/MMSCF (21.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2O_CONTENT_SEL	Selected Water Content	DOUBLE		0	lb/MMSCF (21.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HV_REAL_UMODE	Heating Value Mode: 0 - Measured 1 - Override 2 - Calculated	ENUM16	0 → 2	Calculated (2)	User Mode Selection 1 (79)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HV_REAL_PARAM	Heating Value Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
HV_REAL_OVRD	Override Heating Value	DOUBLE	≥ 0	0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
HV_REAL_CALC	Calculated Heating Value	DOUBLE		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HV_REAL_SEL	Selected Heating Value	DOUBLE		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HV_REAL_FAULT	Heating Value Fault Value	DOUBLE	≥ 0	0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HV_REAL_FAULT_MODE	Heating Value Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 2	Live (0)	Fault Selection (32)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RD_REAL_UMODE	Relative Density Mode: 0 - Measured 1 - Override 2 - Calculated	ENUM16	0 → 2	Calculated (2)	User Mode Selection 1 (79)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RD_REAL_PARAM	Relative Density Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
RD_REAL_OVRD	Override Relative Density	DOUBLE	≥0.0001	0.573538		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RD_REAL_CALC	Calculated Relative Density	DOUBLE		0.573538		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
RD_REAL_SEL	Selected Relative Density	DOUBLE		0.573538		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
RD_REAL_FAULT	Relative Density Fault Value	DOUBLE	≥0.0001	0.6		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RD_REAL_FAULT_MODE	Relative Density Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 2	Live (0)	Fault Selection (32)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZB_UMODE	Base Compressibility Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZB_OVRD	Override Base Compressibility	DOUBLE	≥0.0001	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZB_CALC	Calculated Base Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ZB_SEL	Selected Base Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ZS_UMODE	Standard Compressibility Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZS_OVRD	Override Standard Compressibility	DOUBLE	≥0.0001	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZS_CALC	Calculated Standard Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ZS_SEL	Selected Standard Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ZF_UMODE	Flowing Compressibility Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZF_OVRD	Override Flowing Compressibility	DOUBLE	≥0.0001	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZF_CALC	Calculated Flowing Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ZF_SEL	Selected Flowing Compressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ZFPV_SEL	Supercompressibility	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DENSB_UMODE	Base Density Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_OVRD	Override Base Density	DOUBLE	≥ 0	0.0001	lb/ft ³ (4.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_CALC	Calculated Base Density	DOUBLE		0	lb/ft ³ (4.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
DENSB_SEL	Selected Base Density	DOUBLE		0	lb/ft ³ (4.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DENSF_UMODE	Flowing Density Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSF_OVRD	Override Flowing Density	DOUBLE	≥ 0	0.0001	lb/ft ³ (4.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSF_CALC	Calculated Flowing Density	DOUBLE		0	lb/ft ³ (4.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DENSF_SEL	Selected Flowing Density	DOUBLE		0	lb/ft ³ (4.0)	R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MOLAR_MASS	Molar Mass	DOUBLE		0	lb/lb-mol (25.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DYN_VISC_OVRD	Dynamic Viscosity	DOUBLE	≥0.0000 01	0.0000069	lb/ft-s (6.1)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
JT_OVRD	Override Joule-Thomson	DOUBLE	≥ 0	0	°F/psi (22.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
JT_CALC	Calculated Joule-Thomson	DOUBLE		0	°F/psi (22.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
JT_SEL	Selected Joule-Thomson	DOUBLE		0	°F/psi (22.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
JT_UMODE	Joule-Thomson Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ISENTR_OVRD	Override Isentropic Exponent	DOUBLE	≥0.0001	1.3		R/O: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ISENTR_CALC	Calculated Isentropic Exponent	DOUBLE		0		Meas. Tech; Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
ISENTR_SEL	Selected Isentropic Exponent	DOUBLE		1.3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
ISENTR_UMODE	Isentropic Exponent User Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
WOBBE_INDEX_CALC	Calculated Wobbe Index	DOUBLE		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SOS_CALC	Calculated Speed Of Sound	DOUBLE		0	ft/s (187.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
PCALC_ALM	Property Calculation Alarm Code: 0 - Normal 1 - Invalid Input(s) 2 - Invalid Configuration 3 - Calculation Error 4 - Boundary Error 9 - Pressure 10 - Temperature 11 - Flowing Density/Compressibility	BIN32		Normal	Property Calculation Alarm (207)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	12 - Base Density/Compressibility 13 - Relative Density 14 - Heating Value/Enthalpy 15 - Composition 16 - Water Content 17 - Atmospheric Press/Gravitational Accel 18 - Viscosity 19 - Isentropic Exponent 20 - Speed of Sound							
ZB_HV_SEL	Base Compressibility for Heating Value	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.01.00.25	Legal
HV_COMP_SEL	Selected Heating Value	DOUBLE		0	Btu/ft ³ (5-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.1.0.XXX	Legal
TOTAL_INUSE	Total In Use	DOUBLE	0->100	0	Ration (18)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	Legal
ISEINTR_PARAM	Isentropic Exponent Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DYN_VISC_DEL	Selected Dynamic Viscosity	DOUBLE		0.0000069		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Fluid Prop								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DYN_VISC_UMODE	Dynamic Viscosity Mode	ENUM16	0 -> 1	1	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DYN_VISC_PARAM	Dynamic Viscosity Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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5.2.22 GC Config Parameters

Description: The Gas Chromatograph (GC) Config object provides the parameters for configuring gas chromatographs.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-23: GC Config Parameters

GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		GC Config		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
COMM_PORT_OBJ	Comm Port to GC	ObjectRef	Comm	Undefined		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
GC_MODBUS_ADD R	GC Device Address	UINT8	1 → 247	1		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_SERVER_IP_ADDR	GC Server IP Address	ByteArray 4			IPv4 Address (41)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_SERVER_PORT_NUM	GC Server Port Number	UINT16		502		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
POLL_INTERVAL	Polling Interval	UINT16	10 → 65535	60	s (17.0)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LAST_POLL_TIME	Last Poll Time	Time				Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
GC_POLL_ALM	GC Polling Alarm: 0 - Normal 1 - Poll Failed 2 - Comp Code Match Error 3 - Poll Disabled 4 - Auto-config Fail	BIN32		Normal	GC Poll Alarm (237)	Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
COMM_TIMEOUT	Modbus polling timeout	FLOAT	1 → 300	3	s (17.0)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMM_RETRIES	Number of Modbus polling retries	UINT8	0 → 255	0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SEL_MAPTABLE_NUM	Mappable number	UINT8	1 → 12	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_TYPE	Chromat Type: 0 - American 1 - European	ENUM16	0 → 1	American (0)	GC Type (203)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AUTO_CONFIG	Auto Configure Command: 0 - No Action 1 - Auto Configure	ENUM16	0 → 1	No Action (0)	Auto Configure (193)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
POLL_MODE	Enable communication to the GC: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ALM_1_CHK	Alarm 1 Check: 0 - Normal 1 - A/D 0 Low 2 - A/D 0 High 3 - A/D 1 Low 4 - A/D 1 High 5 - A/D 2 Low 6 - A/D 2 High 7 - A/D Cal Low 8 - A/D Cal High	BIN16		Normal	GC US Alarm 1 (204)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	9 - D/A 1 Low 10 - D/A 1 High 11 - D/A 2 Low 12 - D/A 2 High 13 - D/A 3 Low 14 - D/A 3 High 15 - Analyzer Failure 16 - Checksum Failure							
ALM_2_CHK	Alarm 2 Check: 0 - Normal 1 - Power Failure 2 - RF % Deviation 3 - Preamp Failure 4 - Adjust Preamp	BIN16		Normal	GC US Alarm 2 (205)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CX_SPLIT_TYPE	Cx+ Split Type: 0 - Hexane Plus Split 1 - Heptane Plus Split 2 - Octane Plus Split 3 - Nonane Plus Split	ENUM16	0 → 3	Hexane Plus Split (0)	Cx Split Type (191)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AUTO_SPLIT_OPT	Split based on Code: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C1_CODE	Methane Component Code	UINT16	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C2_CODE	Ethane Component Code	UINT16	0 → 255	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C3_CODE	Propane Component Code	UINT16	0 → 255	2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
IC4_CODE	i-Butane Component Code	UINT16	0 → 255	3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NC4_CODE	n-Butane Component Code	UINT16	0 → 255	4		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NEOC5_CODE	Neopentane Component Code	UINT16	0 → 255	7		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
IC5_CODE	i-Pentane Component Code	UINT16	0 → 255	5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NC5_CODE	n-Pentane Component Code	UINT16	0 → 255	6		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C6_CODE	n-Hexane Component Code	UINT16	0 → 255	39		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CX+_CODE	Composite Component Code	UINT16	0 → 255	10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
N2_CODE	Nitrogen Component Code	UINT16	0 → 255	14		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CO2_CODE	Carbon Dioxide Component Code	UINT16	0 → 255	17		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2S_CODE	Hydrogen Sulfide Component Code	UINT16	0 → 255	40		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CODE	Water Component Code	UINT16	0 → 255	44		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HE_CODE	Helium Component Code	UINT16	0 → 255	13		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
O2_CODE	Oxygen Component Code	UINT16	0 → 255	16		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CO_CODE	Carbon Monoxide Component Code	UINT16	0 → 255	15		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2_CODE	Hydrogen Component Code	UINT16	0 → 255	12		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C7_CODE	n-Heptane Component Code	UINT16	0 → 255	45		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C8_CODE	n-Octane Component Code	UINT16	0 → 255	20		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C9_CODE	n-Nonane Component Code	UINT16	0 → 255	19		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C10_CODE	n-Decane Component Code	UINT16	0 → 255	25		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C11_CODE	C11 component Code	UINT16	0 → 255	255		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C12_CODE	C12 component Code	UINT16	0 → 255	255		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AR_CODE	Argon Component Code	UINT16	0 → 255	46		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
BENZENE_CODE	Benzene Component Code	UINT16	0 → 255	255		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TOLUENE_CODE	Toluene Component Code	UINT16	0 → 255	255		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C6_SPLIT	Heavy Gas % n-Hexane	FLOAT	0 → 100	60	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C7_SPLIT	Heavy Gas % n-Heptane	FLOAT	0 → 100	30	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C8_SPLIT	Heavy Gas % n-Octane	FLOAT	0 → 100	10	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Config								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C9_SPLIT	Heavy Gas % n-Nonane	FLOAT	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C10_SPLIT	Heavy Gas % n-Decane	FLOAT	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C11_SPLIT	Heavy Gas % C11	FLOAT	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
C12_SPLIT	Heavy Gas % C12	FLOAT	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.23 GC Data Parameters

- Description:** The GC Data object provides the parameters for viewing data and configuring validation limits for a specific gas chromatograph stream.
- Number of Instances:** 2 instances may exist.
- Storage Location:** Saved to internal configuration memory.

Table 5-24: GC Data Parameters

GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - GC Data_1-1 2 - GC Data_1-2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_OBJ	GC Configuration Object	ObjectRef	GC Config	GC Config_1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
STREAM_NUMBER	Stream Number	UINT16	0 → 65535	Instance: 1 - 1 2 - 2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DRY_SUPERIOR_HV	Dry Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DRY_SUPERIOR_HV_HI	High Dry Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
DRY_SUPERIOR_HV_LO	Low Dry Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_SUPERIOR_HV	Saturated Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SAT_SUPERIOR_HV_HI	High Saturated Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_SUPERIOR_HV_LO	Low Saturated Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
DRY_INFERIOR_HV	Dry Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech Operator; Auditor		
DRY_INFERIOR_HV_HI	High Dry Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
DRY_INFERIOR_HV_LO	Low Dry Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_INFERIOR_HV	Saturated Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SAT_INFERIOR_HV_HI	High Saturated Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_INFERIOR_HV_LO	Low Saturated Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
RD	Relative Density	FLOAT		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RD_HI	High Relative Density	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RD_LO	Low Relative Density	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
WOBBE_INDEX	Wobbe Index	FLOAT		0	Btu/ft ³ (5.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
UNNORMAL_SUM	Unnormalized Sum	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
COMP_SUM	Normalized Component Sum	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ALARM_1	Alarm 1 Code: 0 - Normal 1 - A/D 0 Low 2 - A/D 0 High 3 - A/D 1 Low 4 - A/D 1 High 5 - A/D 2 Low 6 - A/D 2 High 7 - A/D Cal Low 8 - A/D Cal High 9 - D/A 1 Low 10 - D/A 1 High 11 - D/A 2 Low 12 - D/A 2 High 13 - D/A 3 Low 14 - D/A 3 High 15 - Analyzer Failure 16 - Checksum Failure	BIN16		Normal	GC US Alarm 1 (204)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ALARM_2	Alarm 2 Code: 0 - Normal 1 - Power Failure 2 - RF % Deviation 3 - Preamp Failure 4 - Adjust Preamp	BIN16		Normal	GC US Alarm 2 (205)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
VALIDATION_ALM	Composition Validation Alarm: 0 - Normal 1 - Component Limit Alarm 2 - Heating Value Limit Alarm 3 - Relative Density Limit Alarm 4 - Un-normalized Mole Sum Alarm 5 - Total Mole Sum Alarm 6 - Composition Deviation Alarm 7 - Alarm 1 8 - Alarm 2	BIN32		Normal	GC Validation Alarm (192)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
UNNORMAL_DEV_LIM	Unnormalized Deviation Limit	FLOAT	0 → 5	2	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_SUM_DEV_LIM	Component Sum Deviation Limit	FLOAT	0 → 5	2	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_DEV_LIM	Component Deviation Alarm Limit % of %	FLOAT	≥ 0	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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C1_HI_LIM	Methane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C1_LO_LIM	Methane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
N2_HI_LIM	Nitrogen High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
N2_LO_LIM	Nitrogen Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CO2_HI_LIM	Carbon Dioxide High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CO2_LO_LIM	Carbon Dioxide Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C2_HI_LIM	Ethane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C2_LO_LIM	Ethane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C3_HI_LIM	Propane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C3_LO_LIM	Propane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2O_HI_LIM	Water High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2O_LO_LIM	Water Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2S_HI_LIM	Hydrogen Sulfide High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2S_LO_LIM	Hydrogen Sulfide Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
H2_HI_LIM	Hydrogen High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
H2_LO_LIM	Hydrogen Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CO_HI_LIM	Carbon Monoxide High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CO_LO_LIM	Carbon Monoxide Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
O2_HI_LIM	Oxygen High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
O2_LO_LIM	Oxygen Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
IC4_HI_LIM	i-Butane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
IC4_LO_LIM	i-Butane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NC4_HI_LIM	n-Butane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NC4_LO_LIM	n-Butane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
IC5_HI_LIM	i-Pentane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
IC5_LO_LIM	i-Pentane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NC5_HI_LIM	n-Pentane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
NC5_LO_LIM	n-Pentane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C6_HI_LIM	n-Hexane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C6_LO_LIM	n-Hexane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C7_HI_LIM	n-Heptane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C7_LO_LIM	n-Heptane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C8_HI_LIM	n-Octane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C8_LO_LIM	n-Octane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C9_HI_LIM	n-Nonane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C9_LO_LIM	n-Nonane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C10_HI_LIM	n-Decane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C10_LO_LIM	n-Decane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
HE_HI_LIM	Helium High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
HE_LO_LIM	Helium Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
AR_HI_LIM	Argon High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AR_LO_LIM	Argon Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NEOC5_HI_LIM	Neopentane High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NEOC5_LO_LIM	Neopentane Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
BENZENE_HI_LIM	Benzene High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
BENZENE_LO_LIM	Benzene Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
TOLUENE_HI_LIM	Toluene High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
TOLUENE_LO_LIM	Toluene Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C11_HI_LIM	C11 High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C11_LO_LIM	C11 Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C12_HI_LIM	C12 High Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C12_LO_LIM	C12 Low Limit	FLOAT	0 → 100	0	% (18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
C1_VAL	Methane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
N2_VAL	Nitrogen	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CO2_VAL	Carbon Dioxide	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C2_VAL	Ethane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
C3_VAL	Propane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2O_VAL	Water	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2S_VAL	Hydrogen Sulfide	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
H2_VAL	Hydrogen	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CO_VAL	Carbon Monoxide	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
O2_VAL	Oxygen	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IC4_VAL	i-Butane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
NC4_VAL	n-Butane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
IC5_VAL	i-Pentane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
NC5_VAL	n-Pentane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C6_VAL	n-Hexane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C7_VAL	n-Heptane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C8_VAL	n-Octane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C9_VAL	n-Nonane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C10_VAL	n-Decane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HE_VAL	Helium	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
AR_VAL	Argon	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
NEOC5_VAL	Neopentane	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BENZENE_VAL	Benzene	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
TOLUENE_VAL	Toluene	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C11_VAL	C11	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
C12_VAL	C12	FLOAT		0	% (18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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GC Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMP_UPDATE	Components Updated by Chromatograph: 0 - None 1 - Methane 2 - Nitrogen 3 - Carbon Dioxide 4 - Ethane 5 - Propane 6 - Water 7 - Hydrogen Sulfide 8 - Hydrogen 9 - Carbon Monoxide 10 - Oxygen 11 - i-Butane 12 - n-Butane 13 - i-Pentane 14 - n-Pentane 15 - Hexane 16 - Heptane 17 - Octane 18 - Nonane 19 - Decane 20 - Helium 21 - Argon 22 - neo-Pentane 23 - Benzene 24 - Toluene 25 - Undecane (C11) 26 - Dodecane (C12)	BIN32		None	GC Component Update (189)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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5.2.24 GC Stream Parameters

Description: The GC Stream object provides the parameters for viewing the data directly from the most recent gas chromatograph analysis.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-25: GC Stream Parameters

GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		GC Stream		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GC_OBJ	GC Configuration Object	ObjectRef	GC Config	GC Config_1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CYCLE_STREAM_NUM	Current Stream Number	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DRY_SUPERIOR_HV	Dry Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
DRY_INFERIOR_HV	Dry Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_SUPERIOR_HV	Saturated Superior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAT_INFERIOR_HV	Saturated Inferior Heating Value	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
RD	Relative Density	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
WOBBE_INDEX	Wobbe Index	FLOAT		0	Btu/ft ³ (5.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
UNNORMAL_SUM	Unnormalized Sum	FLOAT		0	%(18.0)	R/W:	01.00.03.03	Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
COMPRESSIBILITY	Compressibility	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SAMPLE_MINUTE	Sample Minute of Last Analysis	UINT16	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NEW_ANALYSIS_FL AG	New Analysis Flag	UINT16	0 → 1	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
STREAM_LAST_ANALYZED	Stream Last Analyzed	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ALARM_1	Alarm 1 Code: 0 - Normal 1 - A/D 0 Low 2 - A/D 0 High 3 - A/D 1 Low 4 - A/D 1 High 5 - A/D 2 Low 6 - A/D 2 High 7 - A/D Cal Low 8 - A/D Cal High 9 - D/A 1 Low 10 - D/A 1 High	BIN16		Normal	GC US Alarm 1 (204)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	11 - D/A 2 Low 12 - D/A 2 High 13 - D/A 3 Low 14 - D/A 3 High 15 - Analyzer Failure 16 - Checksum Failure							
ALARM_2	Alarm 2 Code: 0 - Normal 1 - Power Failure 2 - RF % Deviation 3 - Preamp Failure 4 - Adjust Preamp	BIN16		Normal	GC US Alarm 2 (205)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
CAL_FLAG	Calibration Flag	UINT16	0 → 255	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_1_CODE	Component 1 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_2_CODE	Component 2 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_3_CODE	Component 3 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_4_CODE	Component 4 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMP_5_CODE	Component 5 Code	UINT16		0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_6_CODE	Component 6 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_7_CODE	Component 7 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_8_CODE	Component 8 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_9_CODE	Component 9 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_10_CODE	Component 10 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_11_CODE	Component 11 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMP_12_CODE	Component 12 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_13_CODE	Component 13 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_14_CODE	Component 14 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_15_CODE	Component 15 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_16_CODE	Component 16 Code	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_1_RAW	Component 1 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_2_RAW	Component 2 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_3_RAW	Component 3 Raw	FLOAT		0	%(18.0)	R/W:	01.00.03.03	▪ Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
COMP_4_RAW	Component 4 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_5_RAW	Component 5 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_6_RAW	Component 6 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_7_RAW	Component 7 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_8_RAW	Component 8 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_9_RAW	Component 9 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_10_RAW	Component 10 Raw	FLOAT		0	%(18.0)	R/W:	01.00.03.03	Legal

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GC Stream								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
COMP_11_RAW	Component 11 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_12_RAW	Component 12 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_13_RAW	Component 13 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_14_RAW	Component 14 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_15_RAW	Component 15 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
COMP_16_RAW	Component 16 Raw	FLOAT		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal

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5.2.25 Hist Parameters

Description: The Hist object provides the parameters for configuring the individual history points in each group.

Number of Instances: 140 instances may exist.

Storage Location: Saved saves to internal configuration memory.

Table 5-26: Hist Parameters

Hist								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		History		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HIST_GRP_OBJ	History Group	ObjectRef	Hist Grp	Instance: 1 - 10: Hist Grp_1 11 - 30: Hist Grp_2 31 - 40: Hist		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Hist								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				Grp_3				
				41 - 65:-Hist				
				Grp_4				
				66 - 90: Hist				
				Grp_5				

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Hist								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
HIST_PARAM	Parameter to Archive	ParamRef		Instance: 1 - 40: Undefined 41 - Total_5.RAW_PARAM 42 - Average_1.SAMPLE_PAR 43 - Average_2.SAMPLE_PAR 44 - Average_3.SAMPLE_PAR 45 - Average_4.SAMPLE_PAR 46 - Total_6.RAW_PARAM 47 - Total_2.RAW_PARAM 48 - Total_4.RAW_PARAM 49 - Total_2.RAW_PARAM 50 - Total_4.RAW_PARAM 51 - 90: Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

Hist								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
HIST_TYPE	Archive Type: 0 - Average 1 - Total / Difference 2 - Snapshot 3 - Minimum 4 - Maximum 5 - Integration	ENUM16	0 → 5	Instance: 1 - 40: Undefined (0) 41 - Total/ Difference (1) 42 - Average (0) 43 - Average (0) 44 - Average (0) 45 - Average (0) 46 - Total/ Difference (1) 47 - Total/ Difference (1) 48 - Total/ Difference (1) 49 - Snapshot (2) 50 - Snapshot (2) 51 - Average (0)	History Type (43)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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5.2.26 HistConfig Parameters

Description: The HistConfig object provides the parameters for moving history points between the three standard periodic groups (general history, station 1 history, and station 2 history).

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-27: HistConfig Parameters

HistConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Hist Config		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20		History Config		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
NUM_AVAIL_USER_PTS	Total Num of Available User Points	UINT16	0 → 30	30		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	

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HistConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
NUM_AVAIL_STD_PTS	Total Num of Available Standard Points	UINT16	0 → 110	60		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
GRP1_CUR_NUM_PTS	User Periodic1 Current Num of Pts	UINT16	0 → 10	10		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
GRP2_CUR_NUM_PTS	User Periodic2 Current Num of Pts	UINT16	0 → 20	20		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
GRP3_CUR_NUM_PTS	Standard General Current Num of Pts	UINT16	0 → 110	10		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
GRP3_REQ_NUM_PTS	Standard General Requested Num of Pts	UINT16	0 → 110	10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
GRP4_CUR_NUM_PTS	Standard Station1 Current Num of Pts	UINT16	0 → 110	25		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
GRP4_REQ_NUM_PTS	Standard Station1 Requested Num of Pts	UINT16	0 → 110	25		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GRP5_CUR_NUM_PTS	Standard Station2 Current Num of Pts	UINT16	0 → 110	25		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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HistConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
GRP5_REQ_NUM_PTS	Standard Station2 Requested Num of Pts	UINT16	0 → 110	25		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
APPLY_CONFIG	Apply Config: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENHANCE_ROC_HIST	ROC Enhanced Mode-History: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.02.00.43	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NUM_REQ_STD_PTS	Total Num of Requested Standard Points	UINT16	1- >1350	610		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
NUM_CUR_PER_RC D	Num of Current Hourly Records	UINT16	0- >26325	4380		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	02.09.00.XXX	Legal
NUM_REQ_PER_RC D	Num of Requested Hourly Records	UINT16	0- >26325	4380		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
NUM_CUR_DAY_RC D	Num of Current Daily Records	UINT16	0- >26325	730		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	02.09.00.XXX	Legal
NUM_REQ_DAY_RC D	Num of Requested Daily Records	UINT16	0- >26325	730		R/W: Admin; Engineer; Meas. Tech	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal

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HistConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
NUM_CUR_WK_RCD	Num of Current Weekly Records	UINT16	0- >26325	260		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	02.09.00.XXX	Legal
NUM_REQ_WK_RCD	Num of Requested Weekly Records	UINT16	0- >26325	260		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
NUM_CUR_MNTH_RCD	Num of Current Monthly Records	UINT16	0- >26325	60		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	02.09.00.XXX	Legal
NUM_REQ_MNTH_RCD	Num of Requested Monthly Records	UINT16	0- >26325	60		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
APPLY_RESIZE	Apply Resize	ENUM16	0->1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.09.00.XXX	<ul style="list-style-type: none"> ▪ Log Change ▪ Legal
APPLY_RESIZE_STATUS	Std History Resizing Status	ENUM16	0->5		Apply Resize Values (349)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	02.09.00.XXX	Legal

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5.2.27 Hist Grp Parameters

Description: The Hist Grp object provides the parameters for configuring history groups.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-28: Hist Grp Parameters

Hist Grp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Hist Grp_1 2 - Hist Grp_2 3 - Hist Grp_3 4 - Hist Grp_4 5 - Hist Grp_5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - User Periodic 2 - User Periodic 2 3 - General History 4 - Station History 1 5 - Station History 2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

Hist Grp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
GRP_TYPE	History Group Type: 0 - General History 1 - Meter History 2 - User Periodic	ENUM16	0 → 2	Instance: 1 - User Periodic (2) 2 - User Periodic (2) 3 - General History (0) 4 - Meter History (1) 5 - Meter History (1)	History Group Type (84)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
STATION_OBJ	Station Assignment	ObjectRef	Station	Instance: 1 - 3: Undefined 4 - Station_1 5 - Station_2		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NUM_PTS	Number of History Points	UINT16	0 → 110	Instance: 1 - 10 2 - 20 3 - 10 4 - 25 5 - 25		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CONTRACT_HR	Contract Hour	UINT8	0 → 23	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CONTRACT_WKDAY	Contract Day of Week: 0 - Sunday 1 - Monday 2 - Tuesday 3 - Wednesday 4 - Thursday 5 - Friday 6 - Saturday	ENUM16	0 → 6	Sunday (0)	Day of Week (34)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Hist Grp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CONTRACT_DAY	Contract Day of Month: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8 9 - 9 10 - 10 11 - 11 12 - 12 13 - 13 14 - 14 15 - 15 16 - 16 17 - 17 18 - 18 19 - 19 20 - 20 21 - 21 22 - 22 23 - 23 24 - 24 25 - 25 26 - 26 27 - 27 28 - 28 29 - 3rd from Last Day of Month 30 - 2nd to Last Day of Month 31 - Last Day of Month	ENUM16	1 → 31	1 (1)	Contract Day of Month (157)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USER_PERIOD	User Period	UINT32	1 → 720000	60	s (17.0)	R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Hist Grp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
PER_OPT	Hourly History Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DAY_OPT	Daily History Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
WK_OPT	Weekly History Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MNTH_OPT	Monthly History Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PER_LOG_OBJ	Hourly Log	ObjectRef		Instance: 1 - 2: Undefined 3 - Log_7 4 - Log_11 5 - Log_15		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DAY_LOG_OBJ	Daily Log	ObjectRef		Instance: 1 - 2: Undefined 3 - Log_8 4 - Log_12 5 - Log_16		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
WK_LOG_OBJ	Weekly Log	ObjectRef		Instance: 1 - 2: Undefined 3 - Log_9		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Hist Grp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MNTH_LOG_OBJ	Monthly Log	ObjectRef		4 - Log_13 5 - Log_17 Instance: 1 - 2: Undefined 3 - Log_10 4 - Log_14 5 - Log_18		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
USER_LOG_OBJ	User Periodic Log	ObjectRef		Instance: 1 - Log_5 2 - Log_6 3 - 5: Undefined		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CONFIG_CHNG_CNTR	Config change counter	UINT8		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.1.0.XXX	Legal

5.2.28 HostLink Parameters

Description: The HostLink object allows for the configuration of DNP3 hosts that need to receive DNP3 events

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-29: HostLink Parameters

HostLink								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - IoConfig1 2 - IoConfig2 3 - IoConfig3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.8.0.XXX	
ASSIGN_PORT	Port to retrieve events	OBJREF				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	Log Changes
IP_ADDR	IP address of host	ByteArray 4			IPv4 Address (41)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	Log Changes

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HostLink								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SA_ENABLE	DNP3 Secure Authentication Enable	ENUM16	0->1	1	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.12.0.XXX	Log Changes

5.2.29 IoConfig Parameters

Description: The IoConfig object provides the parameters for configuring Input and output types.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-30: IoConfig Parameters

IoConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - IoConfig1 2 - IoConfig2 3 - IoConfig3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - On-Board I/O 2 - Optional I/O 3 - Expanded I/O		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AUX_REF	Auxiliary System Reference	ObjectRef		0		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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IoConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
INSTALLED	Installed: 0 - No 1 - Yes	ENUM16		No (0)	Yes/No Option (208)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LICENSED	Module Licensed: 0 - No 1 - Yes	ENUM16		No (0)	Yes/No Option (208)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MODULE_MODE	Module Mode: 0 - Not Installed 1 - Boot 2 - Normal 3 - Not Licensed 4 - Communication Failure 5 - Module Failure 6 - Power Off	ENUM16		Not Installed (0)	Module Mode (143)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MODULE_TYPE	Module Type: 0 - Unknown 1 - HMI 2 - On-Board I/O 3 - Optional I/O 4 - Expanded I/O 255 - Main CPU	ENUM16		Unknown (0)	Module Type (209)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NUM_CHANNELS	Number of Channels	UINT8		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
NUM_GOOD_MSG	Number of Good Messages	UINT32		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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IoConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
NUM_BAD_MSG	Number of Bad Messages	UINT32		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RESET_MSG_COUNT	Reset Message Counters: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal ▪ Verified
POWER_CONTROL	Module Power Control: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_1_SELECT	Channel 1 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_2_SELECT	Channel 2 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_3_SELECT	Channel 3 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_4_SELECT	Channel 4 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_5_SELECT	Channel 5 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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IoConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
CHAN_6_SELECT	Channel 6 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_7_SELECT	Channel 7 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_8_SELECT	Channel 8 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_9_SELECT	Channel 9 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_10_SELECT	Channel 10 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_11_SELECT	Channel 11 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_12_SELECT	Channel 12 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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IoConfig								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
CHAN_13_SELECT	Channel 13 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_14_SELECT	Channel 14 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_15_SELECT	Channel 15 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHAN_16_SELECT	Channel 16 Selected IO Type: 0 - None	ENUM16	0 → 2	None (0)	Channel Type Select None (145)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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5.2.30 Linear Meter Parameters

Description: The Linear Meter object provides the parameters for configuring linear meters.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-31: Linear Meter Parameters

Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Linear Mtr_1 2 - Linear Mtr_2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
STATION_OBJ	Station Assignment	ObjectRef	Station	Station_1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FLUID_PROP_OBJ	Fluid Properties Reference	ObjectRef	Fluid Prop	Instance: 1 - Fluid Prop_3 2 - Fluid Prop_4		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MTR_TYPE	Meter Type 0 - Turbine 1 - Coriolis 2 - Auto-Adjust 3 - Ultrasonic 4 - Positive Displacement	ENUM16	0 → 4	Turbine (0)	Linear Meter Type (53)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SER_NUM	Serial Number	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PRESS_TYPE	Pressure Transmitter Type: 0 - Gauge 1 - Absolute	ENUM16	0 → 1	Absolute (1)	SP Type Selection (57)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_TIME	No Flow Time	DOUBLE	≥ 0	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_LIM	No Flow Cut-off Limit	DOUBLE	≥ 0	0	Hz (24.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_OPT	No Flow Option: 0 - Time Between Pulses 1 - Flow Cut-off	ENUM16	0 → 1	Time Between Pulses (0)	No Flow Option (238)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
NO_FLOW_STATUS	No Flow Status: 0 - Not Flowing 1 - Flowing	ENUM16		Not Flowing (0)	No Flow Status (239)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FLOW_OBJ	Indicated Flow	ObjectRef		Instance: 1 - 2: Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLOW_SEC_OBJ	Secondary Flow Input Object	ObjectRef	PI	Instance: 1 - 2: Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_OBJ	Static Pressure Object	ObjectRef		Instance: 1 - Press_1-1 2 - AI_1-1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TF_OBJ	Flowing Temperature Object	ObjectRef		Instance: 1 - RTD_1-1 2 - AI_1-2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_INUSE	Flowing Pressure In Use	DOUBLE		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
TF_INUSE	Flowing Temperature In Use	DOUBLE		0	°F (3.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FLW_ALM_OBJ	Flow Alarm Object	ObjectRef	Alarm	Instance: 1 - Alarm_34 2 - Alarm_35		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FCALC_ALM	Flow Calculation Alarm Code: 0 - Normal 1 - Invalid Input(s) 2 - Invalid Configuration 3 - Calculation Error 4 - Boundary Error 9 - Flow 10 - Pressure 11 - Temperature 12 - Flowing Density/ Compressibility 13 - Base Density/ Compressibility 14 - Relative Density 15 - Heating Value/Enthalpy 16 - Viscosity 17 - User Correction Factor 18 - Total/Increment 19 - Integral Multiplier Value 26 - K-factor/Meter Factor 27 - Mass Pressure Correction Factor	BIN32		Normal	Linear Flow Calculation Alarm (264)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
IMV_SEL	Integral Multiplier Value (IMV/C-Factor)	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FACTOR_CURVE_OPT	Meter Factor / K-factor Curve Option: 0 - Single Meter Factor / Single K-factor 1 - Meter Factor Curve / Single K-factor 2 - Single Meter Factor / K- factor Curve	ENUM16	0 → 2	Single Meter Factor / Single K- factor (0)	Factor Curve Option (183)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MF_OVRD	Override Meter Factor	DOUBLE	≥0.0000 01	1		R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
MF_CALC	Calculated Meter Factor	DOUBLE	≥ 0	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MF_SEL	Selected Meter Factor	DOUBLE	≥ 0	1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MF_UMODE	Meter Factor Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
KF_OVRD	Override K-factor	DOUBLE	≥0.0000 01	1	pulses/ft ³ (27.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
KF_CALC	Calculated K-factor	DOUBLE	≥ 0	1	pulses/ft ³ (27.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
KF_SEL	Selected K-factor	DOUBLE	≥ 0	1	pulses/ft ³ (27.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
KF_UMODE	K-Factor Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USER_CORR_FACTOR	User Correction Factor	DOUBLE	≥ 0	1		R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
IQ_RATE	Indicated Quantity Flow Rate	DOUBLE		0	MCF/d (12.7)	Meas. Tech R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
UVOL_RATE	Uncorrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SVOL_RATE	Corrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MASS_RATE	Mass Flow Rate	DOUBLE		0	Mlb/d (13.7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ENERGY_RATE	Energy Flow Rate	DOUBLE		0	MMBtu/d (14.7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
UVOL_RAW_TOT	Uncorrected Volume Total	DOUBLE		0	MCF (9.2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SVOL_RAW_TOT	Corrected Volume Total	DOUBLE		0	MCF (9.2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MASS_RAW_TOT	Mass Total	DOUBLE		0	Mlb (10.2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Linear Meter								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ENERGY_RAW_TOT	Energy Total	DOUBLE		0	MMBtu (11.1)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FLWTM_RAW_TOT	Flow Time Total	DOUBLE		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PULSE_RAW_TOT	Pulse Total	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
UVOL_TOT_OBJ	Uncorrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_11 2 - Total_27		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_TOT_OBJ	Corrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_12 2 - Total_28		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_TOT_OBJ	Mass Total Object	ObjectRef	Total	Instance: 1 - Total_13 2 - Total_29		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_TOT_OBJ	Energy Total Object	ObjectRef	Total	Instance: 1 - Total_14 2 - Total_30		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLWTM_TOT_OBJ	Flow Time Total Object	ObjectRef	Total	Instance: 1 - Total_15 2 - Total_31		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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PULSE_TOT_OBJ	Pulse Total Object	ObjectRef	Total	Instance: 1 - Total_16 2 - Total_32		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PRESS_MULT	Pressure Multiplier	DOUBLE		1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
TEMP_MULT	Temperature Multiplier	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
COMP_MULT	Compressibility Multiplier	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FACTOR_1	K-factor/MF 1	DOUBLE	≥-100	1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_1_FLOW	Frequency/Flowrate 1	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_2	K-factor/MF 2	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_2_FLOW	Frequency/Flowrate 2	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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FACTOR_3	K-factor/MF 3	DOUBLE	≥ -100	1		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_3_FLOW	Frequency/Flowrate 3	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_4	K-factor/MF 4	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_4_FLOW	Frequency/Flowrate 4	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_5	K-factor/MF 5	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_5_FLOW	Frequency/Flowrate 5	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_6	K-factor/MF 6	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
FACTOR_6_FLOW	Frequency/Flowrate 6	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_7	K-factor/MF 7	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_7_FLOW	Frequency/Flowrate 7	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_8	K-factor/MF 8	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_8_FLOW	Frequency/Flowrate 8	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_9	K-factor/MF 9	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_9_FLOW	Frequency/Flowrate 9	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_10	K-factor/MF 10	DOUBLE	≥ -100	1		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_10_FLOW	Frequency/Flowrate 10	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_11	K-factor/MF 11	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_11_FLOW	Frequency/Flowrate 11	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_12	K-factor/MF 12	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_12_FLOW	Frequency/Flowrate 12	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_13	K-factor/MF 13	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_13_FLOW	Frequency/Flowrate 13	DOUBLE	≥ 0	0		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_14	K-factor/MF 14	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_14_FLOW	Frequency/Flowrate 14	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_15	K-factor/MF 15	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_15_FLOW	Frequency/Flowrate 15	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_16	K-factor/MF 16	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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FACTOR_16_FLOW	Frequency/Flowrate 16	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_17	K-factor/MF 17	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_17_FLOW	Frequency/Flowrate 17	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_18	K-factor/MF 18	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_18_FLOW	Frequency/Flowrate 18	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_19	K-factor/MF 19	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_19_FLOW	Frequency/Flowrate 19	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_20	K-factor/MF 20	DOUBLE	≥ -100	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_20_FLOW	Frequency/Flowrate 20	DOUBLE	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_CORR_PF_OPT	Mass Pressure Effect Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PCAL	Calibration Pressure	DOUBLE		0	psi(g) (29.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_CORR_PF_COEFF	Mass Pressure Effect	DOUBLE	≤ 0	-0.0002	%/psi (247.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_CAL_MODE_ENB	Auto Adjust Calibration Mode Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AA_VOL_RATE_MECH	Auto Adjust Mechanical Rate	DOUBLE		0	MCF/d (12.7)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
AA_KF_MECH	Auto Adjust Mechanical K-factor	DOUBLE	≥0.0000 01	1	pulses/ft ³ (27.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_KF_MAIN	Auto Adjust Main Rotor K-factor	DOUBLE	≥0.0000 01	1	pulses/ft ³ (27.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_KF_SENS	Auto Adjust Sensing Rotor K-factor	DOUBLE	≥0.0000 01	1	pulses/ft ³ (27.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_RESET_ALG	Auto Adjust Algorithm Reset Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PIPE_DIAM	Pipe Diameter	DOUBLE	≥0.0000 01	8	in (7.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_AVG_REL_ADJ	Auto Adjust Relative Adjustment	DOUBLE	0 → 100	0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_MAX_FREQ	Auto Adjust Maximum Frequency	DOUBLE	≥0.0000 01	1000	Hz (24.0)	R/W: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AA_DELTA_A_BASE	Auto Adjust Base Delta A	DOUBLE		0	%(18.0)	Meas. Tech R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_DELTA_A_CALC	Auto Adjust Calculated Delta A	DOUBLE		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
AA_NORMAL_BAND	Auto Adjust Normal Band	DOUBLE	0 → 100	0.2	%(18.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_ABNORMAL_BAND	Auto Adjust Abnormal Band	DOUBLE	0 → 100	0.3	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
AA_LOAD_CALC	Auto Adjust Calculated Load	DOUBLE		0	%(18.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
AA_BLADE_FACTOR	Auto Adjust Blade Factor	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_TIMER	Auto Adjust Test Timer	DOUBLE		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
AA_TEST_PULSE_ACCUM	Auto Adjust Pulse Accum	DOUBLE		0	Pulses (141.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_FREQ_MAIN	Auto Adjust Main Rotor Frequency	DOUBLE		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_FREQ_SENS	Auto Adjust Sensing Rotor Frequency	DOUBLE		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_RATE_MAIN	Auto Adjust Main Rotor Test Flowrate	DOUBLE		0	ft ³ /s (12.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_RATE_SENS	Auto Adjust Sensing Rotor Test Flowrate	DOUBLE		0	ft ³ /s (12.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_ACCUM_MAIN	Auto Adjust Main Rotor Test Accum	DOUBLE		0	ft ³ (9.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_TEST_ACCUM_SENS	Auto Adjust Sensing Rotor Test Accum	DOUBLE		0	ft ³ (9.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_INITIAL_CYCLE	Auto Adjust Initial Cycle Status: 0 - Initial Cycle Complete 1 - Initial Cycle In Progress	ENUM16		Initial Cycle In Progress (1)	Auto Adjust Initial Cycle (227)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_SYSTEM_ALARM	Auto Adjust System Alarm: 0 - Normal Flow 1 - No Flow / Loss of Both Pulses	ENUM16		Normal Flow (0)	Auto Adjust System Alarm (228)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - Leakage or Resonant No-Net Flow 3 - No Main Rotor Pulses 4 - No Sensing Rotor Pulses							
AA_FLOW_ALARM	Auto Adjust Flow Alarm: 0 - Normal Flow 1 - Non-steady Flow	ENUM16		Normal Flow (0)	Auto Adjust Flow Alarm (229)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_DELTA_A_ALARM	Auto Adjust Delta A Alarm" 0 - Normal 1 - Low Warning 2 - High Warning 3 - Low Alarm 4 - High Alarm	ENUM16		Normal (0)	Auto Adjust Delta A Alarm (230)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
AA_ALARM_LOG_OPT	Auto-Adjust Alarm Log Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UVOL_FLT_TOT_OBJ	Uncorrected Volume Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_FLT_TOT_OBJ	Corrected Volume Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_FLT_TOT_OBJ	Mass Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_FLT_TOT_OBJ	Energy Fault Total Object	ObjectRef	Total	Varies by instance		R/W: Admin; Engineer; Meas. Tech	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PF_INUSE_G	Flowing Pressure In Use (Gauge)	DOUBLE		0	Gauge Pressure (29)	R/O: Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.17.0.XXX	<ul style="list-style-type: none">Log ChangesLegal

5.2.31 Liq Dens Parameters

Description: The Liq Dens object provides the parameters for liquid density measurement.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-32: Liq Dens Parameters

Liq Dens								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: "Liq Dens_X" (where X is instance number between 1 and 1)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Log Changes
OBJ_STATUS	Status 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq Dens								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DENS_PARAM	Density Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TD_PARAM	Density Temperature Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PD_PARAM	Density Pressure Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENS_FACTOR	Density Correction Factor	Double	□ 0	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.32 Liq FIProp Parameters

Description: The Liq FIProp object provides the parameters for liquid fluid properties.

Number of Instances: 4 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-33: Liq FIProp Parameters

Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: "LiqLinMtr X FIProp" (where X is instance number between 1 and 2)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Log Changes
OBJ_STATUS	Status 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
WC_METHOD	Water Cut Method 0 - Dynamic 1 - Static	ENUM16	0 → 1	Dynamic (0)	Water Cut Method (283)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
WC_T_OVRD	Static Water Cut Temperature	DOUBLE		68	°F (3-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
WC_LAB	Static Water Cut	DOUBLE	□ 0	0	% (18-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_W_PARAM	Water Base Density Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Legal
DENSB_W_OVRD	Override Water Base Density	DOUBLE	□ 0	1	g/cc (295-2)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_W_UMODE	Water Base Density Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
DENSB_W_SEL	Selected Water Base Density	DOUBLE		1	g/cc (295-2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
DENSB_O_PARAM	Oil Base Density Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
DENSB_O_OVRD	Override Oil Base Density	DOUBLE	□ 0	30	°API (294-8)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_O_CALC	Calculated Oil Base Density	DOUBLE		0	°API (294-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
DENSB_O_UMODE	Oil Base Density Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_O_SEL	Selected Oil Base Density	DOUBLE		0	°API (294-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DENSF_PARAM	Flowing Density Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
DENSF_OVRD	Override Flowing Density	DOUBLE	□ 0	0.0001	°API (294-8)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSF_UMODE	Flowing Density Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSF_SEL	Selected Flowing Density	DOUBLE		0.0001	°API (294-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
WC_PARAM	Water Cut Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
WC_OVRD	Water Cut Override	DOUBLE	□ 0	0	% (18-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
WC_UMODE	Water Cut Mode 0 - Measured 1 - Override	ENUM16	0 -> 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
WC_SEL	Selected Water Cut	DOUBLE		0	% (18-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
WC_FRAC_INUSE	Water Cut at Metering Conditions	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SF_PARAM	Shrinkage Factor Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
SF_OVRD	Override Shrinkage Factor	DOUBLE	□ 0	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SF_UMODE	Shrinkage Factor Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SF_SEL	Selected Shrinkage Factor	DOUBLE		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
NGLF_PARAM	NGL Factor Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
NGLF_OVRD	Override NGL Factor	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NGLF_UMODE	NGL Factor Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NGLF_SEL	Selected NGL Factor	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
GASF_PARAM	Flash Gas Factor Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal

Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
GASF_OVRD	Override Flash Gas Factor	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GASF_UMODE	Flash Gas Factor Mode 0 - Measured 1 - Override	ENUM16	0 → 1	Override (1)	User Mode Selection 5 (285)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GASF_SEL	Selected Flash Gas Factor	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
PCALC_ALM	Property Calculation Alarm Code 0 - Undefined 1 - Invalid Input(s) 2 - Invalid Configuration 3 - Calculation Error 4 - Boundary Error 9 - Pressure 10 - Temperature 12 - Base Density/Compressibility 13-16: Undefined 17 - Atmospheric Press/Gravitational Accel	BIN32			Aloc Property Calculation Alarm (282)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq FIProp								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DENSF_CALC	Calculated Flowing Density	DOUBLE		0	°API (294-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
PE_INUSE	Equilibrium Pressure In Use (Absolute)	DOUBLE			psi(a) (2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.8.0.XXX	Legal
FP_INUSE	Compressibility Factor In Use	DOUBLE			1/psi (357)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.8.0.XXX	Legal

5.2.33 Liq LinMtr Parameters

Description: The Liq LinMtr object provides the parameters for configuring liquid linear meters.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-34: Liq LinMtr Parameters

Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: "Liq LinMtr_X" (where X is instance number between 1 and 2)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Log Changes
OBJ_STATUS	Status 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	
DESC	Description	UC20		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
STATION_OBJ	Station Assignment	ObjectRef	Station	Station_1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal
FLUID_PROP_OBJ	Fluid Properties Reference	ObjectRef	Liq FIProp	Instance: "Liq FIProp_1XX" (where X is instance number between 1 and 24)		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal
MTR_TYPE	Meter Type 0 – Turbine 1 – Coriolis 2 – Ultrasonic 3 – Positive Displacement	ENUM16	0 → 3	Turbine (0)	Liquid Linear Meter Type (279)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal
SER_NUM	Serial Number	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal
PRESS_TYPE	Pressure Transmitter Type 0 - Gauge 1 - Absolute	ENUM16	0 → 1	Absolute (1)	SP Type Selection (57)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal
NO_FLOW_TIME	No Flow Time	DOUBLE	□ 1	1	s (17-0)	R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> Log Changes Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
NO_FLOW_LIM	No Flow Cut-off Limit	DOUBLE	0	0	Hz (24-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_OPT	No Flow Option 0 - Time Between Pulses 1 - Flow Cut-off 2 - Flow Cut-off with accumulation	ENUM16	0 → 1	Time Between Pulses (0)	No Flow Option (238)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
NO_FLOW_STATUS	No Flow Status 0 - Not Flowing 1 - Flowing	ENUM16		Not Flowing (0)	No Flow Status (239)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
RATE_PARAM	Flow Rate Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PF_OBJ	Static Pressure Object	ObjectRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TF_OBJ	Flowing Temperature Object	ObjectRef		Undefined		R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FREQ_INUSE	Frequency In Use	DOUBLE		0	Hz (24-0)	R/O: Operator; Auditor	2.4.0.XXX	Legal
PF_INUSE	Flowing Pressure In Use	DOUBLE		0	psi(a) (2-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
TF_INUSE	Flowing Temperature In Use	DOUBLE		0	°F (3-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
FLW_ALM_Obj	Flow Alarm Object	ObjectRef	Alarm	Instance: "Alarm_3XX" (where X is instance number between 1 and 24)		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FCALC_ALM	Flow Calculation Alarm Code 0 - Undefined 1 - Invalid Input(s) 2 - Invalid Configuration 3 - Calculation Error 4 - Boundary Error 5 - Invalid Station Assignment 6-8: Undefined 9 - Flow 10 - Pressure 11 - Temperature 12 - Flowing Density 13 - Base Density 18 - Total/Increment 19-25: Undefined 26 - K-factor/Meter Factor Correction Factor 27 - Mass Pressure 28 - Water Cut 29 - Shrinkage Factor 30 - CTL 31 - NGL Factor/Flash Gas Factor	BIN32			Liq LinMtr Flow Calculation Alarm (281)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
FACTOR_CURVE_OPT	Meter Factor / K-factor Curve Option 0 - Single Meter Factor / Single K-factor 1 - Meter Factor Curve / Single K-factor	ENUM16	0 → 2	Single Meter Factor / Single K-factor (0)	Factor Curve Option (183)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - Single Meter Factor / K-factor Curve							
MF_OVRD	Override Meter Factor	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MF_CALC	Calculated Meter Factor	DOUBLE	□ 0	1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
MF_UMODE	Meter Factor Mode 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MF_SEL	Selected Meter Factor	DOUBLE	□ 0	1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
KF_OVRD	Override K-factor	DOUBLE	□ 0.000001	1	pulses/ft ³ (27-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
KF_CALC	Calculated K-factor	DOUBLE	□ 0	1	pulses/ft ³ (27-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
KF_UMODE	K-Factor Mode 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
KF_SEL	Selected K-factor	DOUBLE	□ 0	1	pulses/ft ³ (27-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CTLM_W_PARAM	Water CTLM Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Legal
CTLM_W_OVRD	Override Water CTLM	DOUBLE	□ 0	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLM_W_CALC	Calculated Water CTLM	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CTLM_W_UMODE	Water CTLM Mode 0 - Measured 1 - Override 2 - Calculated	ENUM16	0 → 2	Calculated (2)	User Mode Selection 1 (79)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CTLM_W_SEL	Selected Water CTLM	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
IQ_RATE	Indicated Quantity Flow Rate	DOUBLE		0	MCF/d (12-7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
GVOL_RATE	Gross Volume Flow Rate	DOUBLE		0	MCF/d (12-7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
UVOL_O_RATE	Oil Unshrunk Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_O_RATE	Oil Net Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
UVOL_W_RATE	Water Uncorrected Volume Flow Rate	DOUBLE		0	bbl/d (299-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_W_RATE	Water Net Volume Flow Rate	DOUBLE		0	bbl/d (299-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SVOL_FG_RATE	Flash Gas Net Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_NGL_RATE	NGL Net Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
UVOL_O_RAW_TOT	Oil Unshrunk Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_O_RAW_TOT	Oil Net Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
IQ_RAW_TOT	Indicated Quantity Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
GVOL_RAW_TOT	Gross Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
UVOL_W_RAW_TOT	Water Metered Volume Total	DOUBLE		0	bbl (297-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SVOL_W_RAW_TOT	Water Net Volume Total	DOUBLE		0	bbl (297-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_FG_RAW_TOT	Flash Gas Net Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
SVOL_NGL_RAW_TOT	NGL Net Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
PULSE_RAW_TOT	Pulse Total	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
IQ_TOT_OBJ	Indicated Quantity Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GVOL_TOT_OBJ	Gross Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UVOL_O_TOT_OBJ	Oil Unshrunk Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SVOL_O_TOT_OBJ	Oil Net Volume Total Object	ObjectRef	Total	Varies by Instance		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UVOL_W_TOT_OBJ	Water Metered Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_W_TOT_OBJ	Water Net Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_FG_TOT_OBJ	Flash Gas Net Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_NGL_TOT_OBJ	NGL Net Volume Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PULSE_TOT_OBJ	Pulse Total Object	ObjectRef	Total	Varies by Instance		R/W: Admin; Engineer;	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
FACTOR_1	K-factor/MF 1	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	▪ Log Changes ▪ Legal
FACTOR_1_FLOW	Frequency/Flowrate 1	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	▪ Log Changes ▪ Legal
FACTOR_2	K-factor/MF 2	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	▪ Log Changes ▪ Legal
FACTOR_2_FLOW	Frequency/Flowrate 2	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	▪ Log Changes ▪ Legal
FACTOR_3	K-factor/MF 3	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_3_FLOW	Frequency/Flowrate 3	DOUBLE	[] 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_4	K-factor/MF 4	DOUBLE	[] 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_4_FLOW	Frequency/Flowrate 4	DOUBLE	[] 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_5	K-factor/MF 5	DOUBLE	[] 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_5_FLOW	Frequency/Flowrate 5	DOUBLE	[] 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_6	K-factor/MF 6	DOUBLE	[] 0.000001	1		R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_6_FLOW	Frequency/Flowrate 6	DOUBLE	□ 0	0		R/O: Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_7	K-factor/MF 7	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_7_FLOW	Frequency/Flowrate 7	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_8	K-factor/MF 8	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_8_FLOW	Frequency/Flowrate 8	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_9	K-factor/MF 9	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer;	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
FACTOR_9_FLOW	Frequency/Flowrate 9	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_10	K-factor/MF 10	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_10_FLOW	Frequency/Flowrate 10	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_11	K-factor/MF 11	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_11_FLOW	Frequency/Flowrate 11	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_12	K-factor/MF 12	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_12_FLOW	Frequency/Flowrate 12	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_13	K-factor/MF 13	DOUBLE	□ 0.000001	1	RESERVED	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_13_FLOW	Frequency/Flowrate 13	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_14	K-factor/MF 14	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_14_FLOW	Frequency/Flowrate 14	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
FACTOR_15	K-factor/MF 15	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_15_FLOW	Frequency/Flowrate 15	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_16	K-factor/MF 16	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_16_FLOW	Frequency/Flowrate 16	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_17	K-factor/MF 17	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_17_FLOW	Frequency/Flowrate 17	DOUBLE	□ 0	0		R/W: Admin; Engineer;	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech R/O: Operator; Auditor		
FACTOR_18	K-factor/MF 18	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_18_FLOW	Frequency/Flowrate 18	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_19	K-factor/MF 19	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_19_FLOW	Frequency/Flowrate 19	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FACTOR_20	K-factor/MF 20	DOUBLE	□ 0.000001	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FACTOR_20_FLOW	Frequency/Flowrate 20	DOUBLE	□ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_CORR_PF_OPT	Mass Pressure Effect Option 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PCAL	Calibration Pressure	DOUBLE		0	psi(g) (29-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_CORR_PF_COEFF	Mass Pressure Effect	DOUBLE	□ 0	-0.0002	%/psi (247-0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLO_PARAM	CTL Observed to Base Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CTLO_OVRD	Override CTL Observed to Base	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLO_CALC	Calculated CTL Observed to Base	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Legal
CTLO_UMODE	CTL Observed to Base Mode 0 - External 1 - Override 2 - Calculated	ENUM16	0 → 2	2	User Mode Selection 6 (321)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLO_SEL	Selected CTL Observed to Base	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Legal
CPLO_PARAM	CPL Observed to Base Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CPLO_OVRD	Override CPL Observed to Base	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CPLO_CALC	Calculated CPL Observed to Base	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CPLO_UMODE	CPL Observed to Base Mode 0 - External 1 - Override 2 - Calculated	ENUM16	0 → 2	2	User Mode Selection 6 (321)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CPLO_SEL	Selected CPL Observed to Base	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CTLM_PARAM	CTL Base to Meter Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLM_OVRD	Override CTL Base to Meter	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLM_CALC	Calculated CTL Base to Meter	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Liq LinMtr								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CTLM_UMODE	CTL Base to Meter Mode 0 - External 1 - Override 2 - Calculated	ENUM16	0 → 2	2	User Mode Selection 6 (321)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CTLM_SEL	Selected CTL Base to Meter	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CPLM_PARAM	CPL Base to Meter Parameter	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CPLM_OVRD	Override CPL Base to Meter	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CPLM_CALC	Calculated CPL Base to Meter	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CPLM_UMODE	CPL Base to Meter Mode 0 - External 1 - Override 2 - Calculated	ENUM16	0 → 2	2	User Mode Selection 6 (321)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CPLM_SEL	Selected CPL Base to Meter	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CTL_INUSE	CTL In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CPL_INUSE	CPL In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CCF_INUSE	CCF In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CSW_INUSE	Sediment & Water Correction Factor In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
GSVOL_RATE	Gross Standard Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
MASS_RATE	Mass Flow Rate	DOUBLE		0	Mlb/d (13-7)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
GSVOL_RAW_TOT	Gross Standard Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
MASS_RAW_TOT	Mass Total	DOUBLE		0	Mlb (10-2)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
GSVOL_TOT_OBJ	Gross Standard Volume Total Object	ObjectRef		Varies by Instance		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
MASS_TOT_OBJ	Mass Total Object	ObjectRef		Varies by Instance		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
FLWTM_RAW_TOT	Flow Time Total	DOUBLE		0	Seconds (17-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
FLWTM_TOT_OBJ	Flow Time Total Object	ObjectRef		Varies by Instance		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal
CTPL_INUSE	CTPL In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.4.0.XXX	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MF_INUSE	Meter Factor In Use	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.5.0.XXX	Legal
PF_INUSE_G	Flowing Pressure In Use (Gauge)	DOUBLE		0	psi(g) (29-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.7.X.XXX	Legal
FLOW_INPUT_OPT	Flow Input Option 0 – Flow Input 1 – External Accumulator 2 – External Accumulator with Flow Rate	ENUM16	0-2	Flow Input (0)	Flow Input Option (358)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ACCUM_PARAM	External Accumulator Parameter	PRMREF				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ACCUM_CURRENT	External Accumulator Value	DOUBLE			bbl (296-8)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.9.0.XXX	Legal
ACCUM_ROLLOVER	External Accumulator Rollover	DOUBLE			bbl (296-8)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MAX_IQ_RATE	Maximum Indicated Quantity Flow Rate	DOUBLE			bbl/d (298-35)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLOW_TYPE	Flow Type	ENUM16	0 -> 1	0	Flow Type (278)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.15.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CFPS_INUSE	Pressure Effect Correction Factor	DOUBLE	0 -> 1	1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.15.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.34 Liq Prod Parameters

Description: The Liq Prod object provides the parameters for configuring Liquid Product parameters.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-35: Liq Prod Parameters

Local								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: "Liq Prod_X" (where X is instance number between 1 and 2)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Log Changes
OBJ_STATUS	Status 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	
DESC	Description	UC20		0 (Crude Oil)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIQ_TYPE	Product Type	ENUM16	0 → 6	Undefined	Product Type (322)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Local								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
API11_METHOD	API Ch 11 Volume Correction Method	ENUM16	0 → 0	0 (2004/2007)	API Ch 11 Volume Correction Method (324)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB	Base Density	DOUBLE	Min = -50	30	°API (294-8)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_UNITS_TB	Base Density Units & Temperature 11 - kg/m ³ @60°F 12 - kg/m ³ @15°C 13 - kg/m ³ @20°C 14 - kg/m ³ @30°C 15 - kg/m ³ @0°C 22 - g/cc@15°C 23 - g/cc@20°C 24 - g/cc@30°C 25 - g/cc@0°C 71 - RD@60°F 72 - RD@15°C 73 - RD@20°C 74 - RD@30°C 75 - RD@0°C 81 - °API@60°F	Enum16	11→81	°API@60°F (81)	Base Density Units & Temperature (351)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.35 Local Parameters

Description: The Local object provides the parameters for configuring localization profiles.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-36: Local Parameters

Local								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Local_1 2 - Local_2 3 - Local_3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
LANGUAGE	Language: 0 - English	ENUM16	0 → 0	English (0)	Language Selection (37)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TM_DSP_PREF	Time Display Format Pref: 0 - 12 Hour 1 - 24 Hour	ENUM16	0 → 8	12 Hour (0)	Time Format Selection (36)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Local								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DT_DSP_PREF	Date Display Format Pref: 0 - MM/DD/YY 1 - MM/DD/YYYY 2 - DD/MM/YY 3 - DD/MM/YYYY 4 - YYYY/MM/DD 5 - YY/MM/DD	ENUM16	0 → 8	MM/DD/YY (0)	Date Format Selection (35)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.36 Log Parameters

Description: The Log object provides the parameters for configuring and viewing logs.

Number of Instances: 18 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-37: Log Parameters

Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: Log_X (where X is the instance)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DESC	Description	UC20		Instance: 1 - Legal Event Log 2 - Non Legal Event Log 3 - Alarm Log 4 - Undefined 5 - User Periodic1 Log 6-User Periodic2 Log 7-General Hourly Log 8-General Daily Log 9-General Weekly Log 10-General Monthly Log 11-Station1 Hourly Log 12-Station1 Daily Log 13-Station1 Weekly Log 14-Station1 Monthly Log 15-Station2 Hourly Log 16-Station2 Daily Log 17-Station2 Weekly Log 18-Station2 Monthly Log		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOG_TYPE	Type of Log: 0 - Undefined 1 - Legal Event 2 - Non Legal Event 3 - Legal Alarm 4 - Non Legal Alarm 5 - Legal History 6 - Non Legal History	ENUM16		Instance: 1 - Legal Event (1) 2 - Non Legal Event (2) 3 - Legal Alarm (3) 4 - Undefined (0) 5 - Non Legal History (6) 6 - Non Legal History (6) 7 - Non Legal History (6) 8 - Non Legal History (6) 9 - Non Legal History (6) 10 - Non Legal History (6) 11 - Legal History (5) 12 - Legal History (5) 13 - Legal History (5) 14 - Legal History (5) 15 - Legal History (5) 16 - Legal History (5) 17 - Legal History (5) 18 - Legal History (5)	Log Type (156)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOG_ENB	Logging: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Enable (1) 6 - Enable (1) 7 - Enable (1) 8 - Enable (1) 9 - Enable (1) 10 - Enable (1) 11 - Enable (1) 12 - Enable (1) 13 - Enable (1) 14 - Enable (1) 15 - Enable (1) 16 - Enable (1) 17 - Enable (1) 18 - Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
HIST_GRP_OBJ	History Group	ObjectRef	Hist Grp	Instance: 1 - Undefined 2 - Undefined 3 - Undefined 4 - Undefined 5 - Hist Grp_1 6 - Hist Grp_2 7 - Hist Grp_3 8 - Hist Grp_3 9 - Hist Grp_3 10 - Hist Grp_3 11 - Hist Grp_4 12 - Hist Grp_4 13 - Hist Grp_4 14 - Hist Grp_4 15 - Hist Grp_5 16 - Hist Grp_5		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				17 - Hist Grp_5 18 - Hist Grp_5				
LAST_READ_SEQ	Sequence Number Last Read Record	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
FULL_LIM	Log Full Remaining Records	UINT16	Instance: 1 - 10 → 5000 2 - 10 → 5000 3 - 10 → 5000 4 - 10 → 5000 5 - 0 → 5000 6 - 0 → 5000 7 - 0 → 5000 8 - 0 → 5000 9 - 0 → 5000 10 - 0 → 5000 11 - 0 → 5000 12 - 0 → 5000 13 - 0 → 5000 14 - 0 → 5000 15 - 0 →	Instance: 1 - 100 2 - 100 3 - 100 4 - 100 5 - 100 6 - 100 7 - 100 8 - 37 9 - 6 10 - 6 11 - 100 12 - 37 13 - 6 14 - 6 15 - 100 16 - 37 17 - 6 18 - 6		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
			5000					
			16 - 0 →					
			5000					
			17 - 0 →					
			5000					
			18 - 0 →					
			5000					

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Log									
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes	
NEAR_LIM	Log Nearly Full Remaining Records	UINT16	Instance: 1 - 10 → 5000 2 - 10 → 5000 3 - 10 → 5000 4 - 10 → 5000 5 - 0 → 5000 6 - 0 → 5000 7 - 0 → 5000 8 - 0 → 5000 9 - 0 → 5000 10 - 0 → 5000 11 - 0 → 5000 12 - 0 → 5000 13 - 0 → 5000 14 - 0 → 5000 15 - 0 → 5000 16 - 0 → 5000 17 - 0 → 5000 18 - 0 → 5000	Instance: 1 - 200 2 - 200 3 - 200 4 - 200 5 - 200 6 - 200 7 - 200 8 - 73 9 - 11 10 - 12 11 - 200 12 - 73 13 - 11 14 - 12 15 - 200 16 - 73 17 - 11 18 - 12			R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Log								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOG_ALM	Log Full Alarm Status	BIN32				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
LOG_BUSY	Log Busy 0 - Disable 1 - Enable	ENUM16	0→1	Disable (0)	Enable/Disable Selection (30)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.1.0.XXX	<ul style="list-style-type: none"> ▪ Instance: 1=Legal 2=Undefined 3=Legal 4- 6=Undefined 7-18=Legal
NUM_LOST_RECORDS	Num Of Lost Records	UINT32		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.1.0.XXX	<ul style="list-style-type: none"> ▪ Instance: 1=Legal 2=Undefined 3=Legal 4- 6=Undefined 7-18=Legal
LATEST_SEQ_NUM	Latest Sequence Number	UINT32		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.14.0.XXX	<ul style="list-style-type: none"> ▪ Instance: 1=Legal 2=Undefined 3=Legal 4- 6=Undefined 7-106=Legal

5.2.37 MapTable Parameters

Description: The MapTable object provides the parameters for configuring Modbus map tables.

Number of Instances: 12 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-38: MapTable Parameters

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Register Table		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	
TABLE_NO	Table Number / Register Mapping	UINT8		Instance: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8 9 - 9 10 - 10		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				11 - 11 12 - 12				
REG_TABLE_TAG	Reg Table Identification Tag	UC20		Instance: 1 - Reg Map 1 2 - Reg Map 2 3 - Reg Map 3 4 - Reg Map 4 5 - Reg Map 5 6 - Reg Map 6 7 - Reg Map 7 8 - Reg Map 8 9 - Reg Map 9 10 - Reg Map 10 11 - Reg Map 11 12 - Reg Map 12		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_REG_1	Starting Register 1	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_1	Ending Register 1	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_1	Starting Parameter 1	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INDEXING_1	Point/Param Index Option 1: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_1	Remote Data Type 1: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3) 16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_2	Starting Register 2	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
END_REG_2	Ending Register 2	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_2	Starting Parameter 2	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_2	Point/Param Index Option 2: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_2	Remote Data Type 2: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
46 - SINGLE REGISTER UINT64								
START_REG_3	Starting Register 3	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_3	Ending Register 3	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_3	Starting Parameter 3	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_3	Point/Param Index Option 3: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_3	Remote Data Type 3: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - UINT32 (2 Registers 0-1-2-3)					Auditor		
	6 - UINT32 (2 Registers 1-0-3-2)							
	7 - UINT32 (2 Registers 2-3-0-1)							
	8 - UINT32 (2 Registers 3-2-1-0)							
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	41 - SINGLE REGISTER FLOATING POINT 42 - SINGLE REGISTER DOUBLE 43 - SINGLE REGISTER INT32 44 - SINGLE REGISTER UINT32 45 - SINGLE REGISTER INT64 46 - SINGLE REGISTER UINT64							
START_REG_4	Starting Register 4	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_4	Ending Register 4	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_4	Starting Parameter 4	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_4	Point/Param Index Option 4: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
REM_DTYPE_4	Remote Data Type 4: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3) 16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1) 17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6) 18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_5	Starting Register 5	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_5	Ending Register 5	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
START_PARAM_5	Starting Parameter 5	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_5	Point/Param Index Option 5: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_5	Remote Data Type 5: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_6	Starting Register 6	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
END_REG_6	Ending Register 6	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_6	Starting Parameter 6	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_6	Point/Param Index Option 6: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_6	Remote Data Type 6: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
46 - SINGLE REGISTER UINT64								
START_REG_7	Starting Register 7	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_7	Ending Register 7	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_7	Starting Parameter 7	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_7	Point/Param Index Option 7: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_7	Remote Data Type 7: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - UINT32 (2 Registers 0-1-2-3)					Auditor		
	6 - UINT32 (2 Registers 1-0-3-2)							
	7 - UINT32 (2 Registers 2-3-0-1)							
	8 - UINT32 (2 Registers 3-2-1-0)							
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	41 - SINGLE REGISTER FLOATING POINT 42 - SINGLE REGISTER DOUBLE 43 - SINGLE REGISTER INT32 44 - SINGLE REGISTER UINT32 45 - SINGLE REGISTER INT64 46 - SINGLE REGISTER UINT64							
START_REG_8	Starting Register 8	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_8	Ending Register 8	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_8	Starting Parameter 8	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_8	Point/Param Index Option 8: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
REM_DTYPE_8	Remote Data Type 8: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3) 16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1) 17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6) 18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_9	Starting Register 9	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_9	Ending Register 9	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_9	Starting Parameter 9	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INDEXING_9	Point/Param Index Option 9: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_9	Remote Data Type 9: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_10	Starting Register 10	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_10	Ending Register 10	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
START_PARAM_10	Starting Parameter 10	ParamRef		Undefined		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_10	Point/Param Index Option 10: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_10	Remote Data Type 10: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_11	Starting Register 11	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
END_REG_11	Ending Register 11	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_11	Starting Parameter 11	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_11	Point/Param Index Option 11: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_11	Remote Data Type 11: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	6 - UINT32 (2 Registers 1-0-3-2)							
	7 - UINT32 (2 Registers 2-3-0-1)							
	8 - UINT32 (2 Registers 3-2-1-0)							
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_12	Starting Register 12	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_12	Ending Register 12	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_12	Starting Parameter 12	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_12	Point/Param Index Option 12: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
REM_DTYPE_12	Remote Data Type 12: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3) 16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1) 17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6) 18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4) 19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_13	Starting Register 13	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_13	Ending Register 13	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_13	Starting Parameter 13	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INDEXING_13	Point/Param Index Option 13: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_13	Remote Data Type 13: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1) 12 - INT32 (2 Registers 3-2-1-0) 13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7) 14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5) 15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_14	Starting Register 14	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
END_REG_14	Ending Register 14	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
START_PARAM_14	Starting Parameter 14	ParamRef		Undefined		Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_14	Point/Param Index Option 14: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_14	Remote Data Type 14: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1) 8 - UINT32 (2 Registers 3-2-1-0) 9 - INT32 (2 Registers 0-1-2-3) 10 - INT32 (2 Registers 1-0-3-2) 11 - INT32 (2 Registers 2-3-0-1)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER UINT64							
START_REG_15	Starting Register 15	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
END_REG_15	Ending Register 15	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_PARAM_15	Starting Parameter 15	ParamRef		Undefined		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
INDEXING_15	Point/Param Index Option 15: 0 - Point 1 - Parameter	ENUM16	0 → 1	Point (0)	Indexing Used (160)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REM_DTYPE_15	Remote Data Type 15: 0 - No Conversion 1 - UINT8 2 - INT8 3 - UINT16 4 - INT16 5 - UINT32 (2 Registers 0-1-2-3) 6 - UINT32 (2 Registers 1-0-3-2) 7 - UINT32 (2 Registers 2-3-0-1)	ENUM16	0 → 50	No Conversion (0)	Remote Data Types (66)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	8 - UINT32 (2 Registers 3-2-1-0)							
	9 - INT32 (2 Registers 0-1-2-3)							
	10 - INT32 (2 Registers 1-0-3-2)							
	11 - INT32 (2 Registers 2-3-0-1)							
	12 - INT32 (2 Registers 3-2-1-0)							
	13 - UINT64 (4 Registers 0-1-2-3-4-5-6-7)							
	14 - UINT64 (4 Registers 2-3-0-1-6-7-4-5)							
	15 - UINT64 (4 Registers 4-5-6-7-0-1-2-3)							
	16 - UINT64 (4 Registers 6-7-4-5-2-3-0-1)							
	17 - UINT64 (4 Registers 1-0-3-2-5-4-7-6)							
	18 - UINT64 (4 Registers 3-2-1-0-7-6-5-4)							
	19 - UINT64 (4 Registers 5-4-7-6-1-0-3-2)							
	20 - UINT64 (4 Registers 7-6-5-4-3-2-1-0)							
	21 - INT64 (4 Registers 0-1-2-3-4-5-6-7)							
	22 - INT64 (4 Registers 2-3-0-1-6-7-4-5)							
	23 - INT64 (4 Registers 4-5-6-7-0-1-2-3)							
	24 - INT64 (4 Registers 6-7-4-5-2-3-0-1)							
	25 - INT64 (4 Registers 1-0-3-2-5-4-7-6)							

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Map Table								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	26 - INT64 (4 Registers 3-2-1-0-7-6-5-4)							
	27 - INT64 (4 Registers 5-4-7-6-1-0-3-2)							
	28 - INT64 (4 Registers 7-6-5-4-3-2-1-0)							
	29 - FLOAT (2 Registers 0-1-2-3)							
	30 - FLOAT (2 Registers 1-0-3-2)							
	31 - FLOAT (2 Registers 2-3-0-1)							
	32 - FLOAT (2 Registers 3-2-1-0)							
	33 - DOUBLE (4 Registers 0-1-2-3-4-5-6-7)							
	34 - DOUBLE (4 Registers 2-3-0-1-6-7-4-5)							
	35 - DOUBLE (4 Registers 4-5-6-7-0-1-2-3)							
	36 - DOUBLE (4 Registers 6-7-4-5-2-3-0-1)							
	37 - DOUBLE (4 Registers 1-0-3-2-5-4-7-6)							
	38 - DOUBLE (4 Registers 3-2-1-0-7-6-5-4)							
	39 - DOUBLE (4 Registers 5-4-7-6-1-0-3-2)							
	40 - DOUBLE (4 Registers 7-6-5-4-3-2-1-0)							
	41 - SINGLE REGISTER FLOATING POINT							
	42 - SINGLE REGISTER DOUBLE							
	43 - SINGLE REGISTER INT32							
	44 - SINGLE REGISTER UINT32							

Map Table

Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	45 - SINGLE REGISTER INT64							
	46 - SINGLE REGISTER							
	UINT64							

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5.2.38 MasterConf Parameters

Description: The MasterConf object provides the parameters for Modbus master configuration.

Number of Instances: 4 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-39: MasterConf Parameters

MasterConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Master Config		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	
COMM_PORT_TYPE	Comm Port Type	UC20		Instance: 1 - Serial Port 1 2 - Serial Port 2 3 - Serial Port 3 4 - Ethernet Port		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
COMM_PORT_NUM	Comm Port Number: 0 - Serial Port 1 1 - Serial Port 2 2 - Serial Port 3 3 - Wi Fi Port 4 - Ethernet Port	ENUM16		Instance: 1 - Serial Port 1 (0) 2 - Serial Port 2 (1)	Comm Port Instance (163)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	

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MasterConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				3 - Serial Port 3 (2)				
				4 - Ethernet Port (4)				
MASTER_COMM_MODE	Modbus Transmission Mode: 0 - ASCII 1 - RTU 2 - TCP	ENUM16	Instance: 1 - 0 → 1 2 - 0 → 1 3 - 0 → 1 4 - 0 → 2	Instance: 1 - RTU (1) 2 - RTU (1) 3 - RTU (1) 4 - TCP (2)	Modbus Mode Selection (60)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_BYTE_ORD	Byte Order: 0 - LSB 1 - MSB	ENUM16	0 → 1	LSB (0)	Modbus Byte Order Selection (61)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
START_POLL	Start Modbus Poll: 0 - Cancel 1 - Start	ENUM16	0 → 1	Cancel (0)	Start Poll (158)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	
START_REQ_NUM	Starting Request Number	UINT8	1 → 50	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	
NUM_REQ	Number of Requests	UINT8	0 → 50	0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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MasterConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RX_TIMEOUT	Receive Timeout	UINT16	1 → 300	30	s (17.0)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RETRIES_NUM	Number of Retries	UINT8	0 → 255	2		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
CONT_POLL	Enable Continuous Polling: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
REQ_DELAY	Delay Between Individual Requests	FLOAT	0 → 86400	0	s (17.0)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
POLL_DELAY	Delay after a Single Sequence of Polls	UINT32	1 → 86400	1	s (17.0)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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MasterConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
TCP_CONN_TIMEOUT	TCP Connection Timeout	UINT16	1 → 75	3	s (17.0)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_TCP_ENABLE	Enable TCP for Modbus Master: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ACTUAL_POLL_TIME	Actual Poll Time	FLOAT			s (17-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.5.1.XXX	

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5.2.39 Math Block Parameters

Description: The Math Block object provides the parameters for configuring mathematical equations using live variables from the system as inputs.

Number of Instances: 10 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-40: Math Block Parameters

Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Math Block 1 2 - Math Block 2 3 - Math Block 3 4 - Math Block 4 5 - Math Block 5 6 - Math Block 6 7 - Math Block 7 8 - Math Block 8 9 - Math Block 9 10 - Math Block 10		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	

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Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DESC	Description	UC20		Instance: 1 - Math Block 1 2 - Math Block 2 3 - Math Block 3 4 - Math Block 4 5 - Math Block 5 6 - Math Block 6 7 - Math Block 7 8 - Math Block 8 9 - Math Block 9 10 - Math Block 10		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
MATH_ENABLE	User Enable Switch: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_A_DESC	Var A Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_A_POINT	Var A Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_A_VAL	Variable A Value	DOUBLE		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
INPUT_VAR_B_DESC	Var B Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes

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Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INPUT_VAR_B_POINT	Var B Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_B_VAL	Variable B Value	DOUBLE		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
INPUT_VAR_C_DESC	Var C Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_C_POINT	Var C Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_C_VAL	Variable C Value	DOUBLE		0		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	
INPUT_VAR_D_DESC	Var D Desc	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_D_POINT	Var D Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
INPUT_VAR_D_VAL	Variable D Value	DOUBLE		0		R/W:	01.00.03.03	

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Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer R/O: Meas. Tech; Operator; Auditor		
R1_EQUATION	R1 Math Equation	UC40				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R1_VALIDATE	R1 Validity Check: 0 - Invalid 1 - Valid	ENUM16		Invalid (0)	Math Block Equation State (174)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R2_EQUATION	R2 Math Equation	UC40				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R2_VALIDATE	R2 Validity Check: 0 - Invalid 1 - Valid	ENUM16		Invalid (0)	Math Block Equation State (174)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R3_EQUATION	R3 Math Equation	UC40				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R3_VALIDATE	R3 Validity Check: 0 - Invalid 1 - Valid	ENUM16		Invalid (0)	Math Block Equation State (174)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R1_VALUE	Result 1 Value	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R1_DESC	Result 1 Description	UC20				R/W:	01.00.03.03	▪ Log Changes

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Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer R/O: Meas. Tech; Operator; Auditor		
R1_OUTPUT_POINT	Result 1 Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R2_VALUE	Result 2 Value	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R2_DESC	Result 2 Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R2_OUTPUT_POINT	Result 2 Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R3_VALUE	Result 3 Value	DOUBLE		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
R3_DESC	Result 3 Description	UC20				R/W: Admin; Engineer R/O: Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
R3_OUTPUT_POINT	Result 3 Param Ref	ParamRef		Undefined		R/W: Admin; Engineer R/O:	01.00.03.03	Log Changes

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Math Block								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		

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5.2.40 Module Parameters

Description: The Module object provides the parameters that contain information on each of the hardware modules that make up the system.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-41: Module Parameters

Module								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Module_1 2 - Module_2 3 - Module_3 4 - Module_4 5 - Module_5		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none">Log ChangesLegal

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Module								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INSTALLED	Installed: 0 - No 1 - Yes	ENUM16	0 → 1	No (0)	Yes/No Option (208)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MOD_MODE	Module Mode: 0 - Not Installed 1 - Boot 2 - Normal 3 - Not Licensed 4 - Communication Failure 5 - Module Failure 6 - Power Off	ENUM16		Not Installed (0)	Module Mode (143)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MOD_TYPE	Module Type: 0 - Unknown 1 - HMI 2 - On-Board I/O 3 - Optional I/O 4 - Expanded I/O 255 - Main CPU	ENUM16		Unknown (0)	Module Type (209)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SUBTYPE	Module Subtype: 0 - None	ENUM16		None (0)	Module Subtype (210)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HW_SER_NUM	Serial Number	UC30				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
HW_TEST_DATE	Hardware Test Date	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
APP_DESC	Firmware Description	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
APP_SER_NUM	Firmware Serial Number	UC30				R/O:	01.00.03.03	Legal

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Module								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech; Operator; Auditor		
APP_PART_NUM	Firmware Part Number	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
APP_VER	Firmware Version	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
APP_DATE	Firmware Creation Date	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BOOT_PART_NUM	Boot Part Number	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BOOT_VER	Boot Version	UC20				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BOOT_DATE	Boot Creation Date	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CFG_OPT_1	Configuration Option 1: 0 - Not Applicable	ENUM16		Not Applicable (0)	Option Not Applicable (211)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CFG_OPT_2	Configuration Option 2: 0 - Not Applicable	ENUM16		Not Applicable (0)	Option Not Applicable (211)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CFG_STR_1	Configuration String 1	UC40				R/O:	01.00.03.03	Legal

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Module								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech; Operator; Auditor		
CFG_STR_2	Configuration String 2	UC40				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CFG_STR_3	Configuration String 3	UC40				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SET_UINT64_1	UINT64 Setting 1	UINT64		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
SET_ENUM16_1	ENUM16 Setting 1: 0 - Not Applicable	ENUM16		Not Applicable (0)	Option Not Applicable (211)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	Legal

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5.2.41 Mtr Setup Parameters

Description: The Mtr Setup object provides the parameters for configuring general meter run parameters.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-42: Mtr Setup Parameters

Mtr Setup								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Mtr Setup_1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0	2	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Meter Setup		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MAX_MTRS	Maximum Meters	UINT8		1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
NUM_DPMTRS	Number of Active DP Meters	UINT8		1		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes

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Mtr Setup								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		▪ Legal
NUM_LINMTRS	Number of Active Linear Meters	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
LOG_BRK_OPT	QTR Log Break Option: 0 - Disabled 1 - Hourly Only 2 - All Standard Periodic Logs	ENUM16	0 → 2	Disabled (0)	QTR Log Break Options (119)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
AVG_METHOD	Meter Averaging Method: 0 - Flow Dependent Linear 1 - Flow Dependent Formulaic 2 - Flow Weighted Linear 3 - Flow Weighted Formulaic	ENUM16	0 → 3	Flow Dependent Linear (0)	Meter Averaging Method (185)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	▪ Log Changes ▪ Legal
BUSY_STATUS	Busy Status 0 - Idle 1 - Busy	ENUM16	0→1	Idle (0)	Busy Status (287)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.1.0.XXX	Legal
LIQ_CALCS		ENUM16	0->1	Not Available (0)	Calc Availability (307)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.6.0.XXX	Legal
NUM_LIQLMTRS		UINT8				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.6.0.XXX	▪ Log Changes ▪ Legal

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5.2.42 PI Parameters

Description: The PI object provides the parameters for configuring pulse inputs.

Number of Instances: 10 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-43: PI Parameters

PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - PI_1-1 2 - PI_1-2 3 - PI_1-3 4 - PI_1-4 5 - PI_1-5 6 - PI_1-6 7 - PI_1-7 8 - PI_1-8 9 - PI_1-9 10 - PI_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3 4 - 4 5 - 5 6 - 6 7 - 7 8 - 8 9 - 9 10 - 10		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - PI_1-1 2 - PI_1-2 3 - PI_1-3 4 - PI_1-4 5 - PI_1-5 6 - PI_1-6 7 - PI_1-7 8 - PI_1-8 9 - PI_1-9 10 - PI_1-10		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SCAN_PERIOD	PI Scan Period	FLOAT	1 → 86400	1	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LOGIC_LEVEL	Logic Level: 0 - 66 microamps 1 - 2 milliamps	ENUM16	0 → 1	66 microamps (0)	Logic Level (133)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FILTER	Filter Mode: 0 - Low Speed Filter 1 - High Speed Filter	ENUM16	0 → 1	High Speed Filter (1)	PI Filter Mode (138)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ACTUAL_MODE	Actual Mode: 0 - Live 1 - Auto 2 - Auto Read 3 - Override 4 - Calibration 5 - Fault 6 - Last Good	ENUM16		Live (0)	Actual Mode (125)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
UNITS	Units: 0 - ft ³ 1 - m ³ 2 - MCF 3 - (k)m ³ 4 - MMCF 5 - BCF	ENUM16	0 → 5	ft ³ (0)	Volume Total (9)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UNITS_TYPE	Unit Enumeration Selection: 0 - Unitless 9 - Volume Total 10 - Mass Total 24 - Frequency	ENUM16	0 → 24	Volume Total (9)	PI Units Type (180)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CONV_FACTOR	Conversion Factor	FLOAT	≥ 0.001	1	Pulses/EU (139.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CONTRACT_HR	Contract Hour	UINT8	0 → 23	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LIVE_FREQ	Live Frequency	FLOAT		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
OVRD_FREQ	Override Frequency	FLOAT	≥ 0	0	Hz (24.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SELECTED_FREQ	Selected Frequency	FLOAT		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PERIOD	Period	FLOAT		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RATE_PERIOD	Rate Period: 0 - Seconds 1 - Minutes 2 - Hours 3 - Days	ENUM16	0 → 3	Seconds (0)	PI Rate Period (140)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RATE	Rate	FLOAT		0	ft ³ /s (12.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PULSE_ACCUM	Accumulated Pulses	UINT32		0	Pulses (141.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PULSE_DAY_ACCUM_32	Today's Accumulated Pulses (32-bit)	UINT32		0	Pulses (141.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PULSE_DAY_ACCUM_64	Today's Accumulated Pulses (64-bit)	UINT64		0	Pulses (141.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
TODAYS_TOTAL	Today's Total	DOUBLE		0	ft ³ (9.0)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
YESTERDAYS_TOTAL	Yesterday's Total	DOUBLE		0	ft ³ (9.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RESET_TOTAL_COUNTS	Reset the PI Counts: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal ▪ Verified
URL	Upper Range Limit	FLOAT		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	FLOAT		0	Hz (24.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MONITOR_MAX	Monitor Maximum	FLOAT		10000	Hz (24.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MONITOR_MIN	Monitor Minimum	FLOAT		0	Hz (24.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FREQ_ALM_OBJ	Frequency Alarm Reference	ObjectRef		Instance: 1 - Alarm_22 2 - Alarm_23		R/O: Admin; Engineer;	01.00.03.03	Legal

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PI								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				3 - Alarm_24 4 - Alarm_25 5 - Alarm_26 6 - Alarm_27 7 - Alarm_28 8 - Alarm_29 9 - Alarm_30 10 - Alarm_31		Meas. Tech Operator; Auditor		
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL	BIN16		Normal	PI Status (142)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RST_PULSE_ACCUM	Resettable Accumulated Pulses	UINT32		0	Pulses (141)	R/W: Admin; Engineer; Meas. Tech R/O:Operator; Auditor	02.12.00.XX	Legal

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5.2.43 PID Parameters

Description: The PID object provides the parameters for configuring Proportional, Integral, and Derivative control loops.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-44: PID Parameters

PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - PID Loop 1 2 - PID Loop 2 3 - PID Loop 3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03
DESC	Description	UC20		Instance: 1 - PID Loop 1 2 - PID Loop 2 3 - PID Loop 3		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
PID_LOOP_TYPE	PID Loop Type: 0 - Primary Only 1 - Override Only 2 - Dual Control	ENUM16	0 → 2	Primary Only (0)		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03 Log Changes

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
PID_ENABLE	PID Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
LOOP_PERIOD	Loop Period	FLOAT	1 → 3600	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_PV_POINT	Primary Process Variable Input	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_PROCESS_VARIABLE	Primary Process Variable Value	FLOAT		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03
P_PV_HIGH_LIMIT	Primary Process Variable High Limit	FLOAT	≥ 0	10000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_PV_LOW_LIMIT	Primary Process Variable Low Limit	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_CONTROL_ACTION	Primary Control Action Direction: 0 - Forward 1 - Reverse	ENUM16	0 → 1	Reverse (1)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
P_SETPOINT_TRACK_EN	Primary Setpoint Tracking: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_SETPOINT_POINT	Primary Setpoint Input	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_SETPOINT	Primary Setpoint Value	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_SETPOINT_RAMP	Primary Setpoint Ramp Rate Per Second	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_PROPORTIONAL_G	Primary Proportional Gain	FLOAT	≥ 0	0.5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_INTEGRAL_GAIN	Primary Integral Gain	FLOAT	≥ 0	4		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
P_DERIVATIVE_GAIN	Primary Derivative Gain	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
P_CHANGE_IN_OUTPUT	Primary Change In Output	FLOAT		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03
P_CONTROL_DEADBAND	Primary Control Deadband	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_PV_POINT	Override Process Variable	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_PROCESS_VARIABLE	Override Process Variable Value	FLOAT		0		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03
O_PV_HIGH_LIMIT	Override Process Variable High Limit	FLOAT	≥ 0	10000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_PV_LOW_LIMIT	Override Process Variable Low Limit	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_CONTROL_ACTION	Override Control Action Direction: 0 - Forward 1 - Reverse	ENUM16	0 → 1	Reverse (1)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_SETPOINT_TRAC K_EN	Override Setpoint Tracking: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)		R/W:	01.00.03.03 Log Changes

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor	
O_SETPOINT_POINT	Override Setpoint Input	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_SETPOINT	Override Setpoint Value	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_SETPOINT_RAMP	Override Setpoint Ramp Rate Per Second	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_PROPORTIONAL_G	Override Proportional Gain	FLOAT	≥ 0	0.5		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_INTEGRAL_GAIN	Override Integral Gain	FLOAT	≥ 0	4		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_DERIVATIVE_GAIN	Override Derivative Gain	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
O_CHANGE_IN_OUTPUT	Override Change In Output	FLOAT		0		R/O: Admin; Engineer;	01.00.03.03

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
O_CONTROL_DEADBAND	Override Control Deadband	FLOAT	≥ 0	0		Meas. Tech Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
SWITCH_SELECT	Override Type Select: 0 - Low 1 - High	ENUM16	0 → 1	Low (0)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
OVERRIDE_THRESHOLD	Override Threshold Value	FLOAT	≥ 0	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
OUTPUT_TYPE	Output Type: 0 - Analog 1 - Discrete	ENUM16	0 → 1	Analog (0)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
ANALOG_OUT_POINT	Analog Output Point	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
DIGITAL_OUT_POINT1	Digital Output Point 1 (Raise)	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
DIGITAL_OUT_POINT2	Digital Output Point 2 (Lower)	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03 Log Changes

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
OUTPUT_SLEW_RATE	Output Ramp Rate Per Second	FLOAT	≥ 0	0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
CLAMP_ENABLE	Output Clamping Mode: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
CLAMP_HIGH_LIMIT	Output Clamping High Limit Value	FLOAT	≥ 0	100		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
CLAMP_LOW_LIMIT	Output Clamping Low Limit Value	FLOAT	≥ 0	0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
OUTPUT_VALUE	Current Output of PID	FLOAT		0		Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03
OUTPUT_MODE	Output Mode: 0 - Manual 1 - Auto	ENUM16	0 → 1	Manual (0)		Operator; Auditor R/W: Admin; Engineer; Meas. Tech; Operator R/O: Auditor	01.00.03.03 Log Changes
MANUAL_POSITION	Manual Position % (In Manual Mode)	FLOAT		0		Operator; Auditor R/W: Admin; Engineer; Meas. Tech; Operator R/O:	01.00.03.03

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PID							
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Other Attributes
RESUME_ON_RESET	Resume PID Control On System Restart: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)		Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
ACTION_ON_QUALITY	Action Of Output On Data Quality: 0 - Continue 1 - Manual Mode	ENUM16	0 → 1	Manual Mode (1)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03 Log Changes
SELECTED_LOOP	Selected Loop: 0 - Disabled 1 - Primary 2 - Override	ENUM16		Disabled (0)		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03

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5.2.44 PollTable Parameters

Description: The PollTable object provides the parameters for configuring Modbus poll tables.

Number of Instances: 8 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-45: PollTable Parameters

PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Polling Table		R/W Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	
COMM_PORT_TYPE	Comm Port Type	UC20		Instance: 1 - Serial Port 1 2 - Serial Port 1 3 - Serial Port 2 4 - Serial Port 2 5 - Serial Port 3 6 - Serial Port 3 7 - Ethernet Port 8 - Ethernet Port		R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
COMM_PORT_NUM	Comm Port Number:	ENUM16		Instance:	Comm Port Instance (163)	R/O:	01.00.03.03	

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Serial Port 1 1 - Serial Port 2 2 - Serial Port 3 3 - Wi Fi Port 4 - Ethernet Port			1 - Serial Port 1 (0) 2 - Serial Port 1 (0) 3 - Serial Port 2 (1) 4 - Serial Port 2 (1) 5 - Serial Port 3 (2) 6 - Serial Port 3 (2) 7 - Ethernet Port (4) 8 - Ethernet Port (4)		Admin; Engineer; Meas. Tech Operator N/A: Auditor		
POLL_TABLE_TAG	Poll Table Identification Tag	UC20		Instance: 1 - PollTbl1 (Comm 1) 2 - PollTbl2 (Comm 1) 3 - PollTbl3 (Comm 2) 4 - PollTbl4 (Comm 2) 5 - PollTbl5 (Comm 3) 6 - PollTbl6 (Comm 3) 7 - PollTbl7 (Ethernet) 8 - PollTbl8 (Ethernet)		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_IP_ADD_1	Slave Server IP Address for Request 1	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SERVER_PORT_NO_1	Slave Server Port Number for Request 1	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_1	Slave Address for Request 1	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_1	Function code for Request 1: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_1	Starting Slave Register in Request 1	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_1	Number of Registers for Request 1	UINT16	1 → 120	1		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
MASTER_REG_1	Starting Master Register for Request 1	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_1	Comm Status for Request 1	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_2	Slave Server IP Address for Request 2	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_2	Slave Server Port Number for Request 2	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_2	Slave Address for Request 2	UINT8	0 → 255	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
FUNC_CODE_2	Function code for Request 2: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_2	Starting Slave Register in Request 2	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_2	Number of Registers for Request 2	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_2	Starting Master Register for Request 2	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMM_STATUS_2	Comm Status for Request 2	UINT8		0	Inactive or Start of Transmission (162.0)	Auditor R/O: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_3	Slave Server IP Address for Request 3	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_3	Slave Server Port Number for Request 3	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RTU_ADD_3	Slave Address for Request 3	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_3	Function code for Request 3: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_3	Starting Slave Register in Request 3	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_3	Number of Registers for Request 3	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_3	Starting Master Register for Request 3	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMM_STATUS_3	Comm Status for Request 3	UINT8		0	Inactive or Start of Transmission (162.0)	Operator N/A: Auditor R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_4	Slave Server IP Address for Request 4	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_4	Slave Server Port Number for Request 4	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_4	Slave Address for Request 4	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_4	Function code for Request 4: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers					Auditor		
SLAVE_REG_4	Starting Slave Register in Request 4	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_4	Number of Registers for Request 4	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_4	Starting Master Register for Request 4	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_4	Comm Status for Request 4	UINT8		0	Inactive or Start of Transmission (162.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_5	Slave Server IP Address for Request 5	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SERVER_PORT_NO_5	Slave Server Port Number for Request 5	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_5	Slave Address for Request 5	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_5	Function code for Request 5: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_5	Starting Slave Register in Request 5	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_5	Number of Registers for Request 5	UINT16	1 → 120	1		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
MASTER_REG_5	Starting Master Register for Request 5	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_5	Comm Status for Request 5	UINT8		0	Inactive or Start of Transmission (162.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_6	Slave Server IP Address for Request 6	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_6	Slave Server Port Number for Request 6	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_6	Slave Address for Request 6	UINT8	0 → 255	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
FUNC_CODE_6	Function code for Request 6: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_6	Starting Slave Register in Request 6	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_6	Number of Registers for Request 6	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_6	Starting Master Register for Request 6	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMM_STATUS_6	Comm Status for Request 6	UINT8		0	Inactive or Start of Transmission (162.0)	Auditor R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_7	Slave Server IP Address for Request 7	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_7	Slave Server Port Number for Request 7	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_7	Slave Address for Request 7	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FUNC_CODE_7	Function code for Request 7: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_7	Starting Slave Register in Request 7	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_7	Number of Registers for Request 7	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_7	Starting Master Register for Request 7	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
COMM_STATUS_7	Comm Status for Request 7	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_8	Slave Server IP Address for Request 8	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_8	Slave Server Port Number for Request 8	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_8	Slave Address for Request 8	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_8	Function code for Request 8: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	15 - Force Multiple Coils 16 - Set Multiple Registers							
SLAVE_REG_8	Starting Slave Register in Request 8	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_8	Number of Registers for Request 8	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_8	Starting Master Register for Request 8	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_8	Comm Status for Request 8	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_9	Slave Server IP Address for Request 9	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SERVER_PORT_NO_9	Slave Server Port Number for Request 9	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_9	Slave Address for Request 9	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_9	Function code for Request 9: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_9	Starting Slave Register in Request 9	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_9	Number of Registers for Request 9	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASTER_REG_9	Starting Master Register for Request 9	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_9	Comm Status for Request 9	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_10	Slave Server IP Address for Request 10	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_10	Slave Server Port Number for Request 10	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_10	Slave Address for Request 10	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Auditor		
FUNC_CODE_10	Function code for Request 10: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_10	Starting Slave Register in Request 10	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_10	Number of Registers for Request 10	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_10	Starting Master Register for Request 10	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_10	Comm Status for Request 10	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech	01.00.03.03	

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Operator N/A: Auditor		
SERVER_IP_ADD_11	Slave Server IP Address for Request 11	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_1	Slave Server Port Number for Request 11	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_11	Slave Address for Request 11	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_11	Function code for Request 11: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_11	Starting Slave Register in Request 11	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_11	Number of Registers for Request 11	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_11	Starting Master Register for Request 11	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_11	Comm Status for Request 11	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_12	Slave Server IP Address for Request 12	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_12	Slave Server Port Number for Request 12	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_12	Slave Address for Request 12	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_12	Function code for Request 12: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_12	Starting Slave Register in Request 12	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_12	Number of Registers for Request 12	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_12	Starting Master Register for Request 12	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_12	Comm Status for Request 12	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_13	Slave Server IP Address for Request 13	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_13	Slave Server Port Number for Request 13	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_13	Slave Address for Request 13	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_13	Function code for Request 13: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_13	Starting Slave Register in Request 13	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_13	Number of Registers for Request 13	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASTER_REG_13	Starting Master Register for Request 13	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_13	Comm Status for Request 13	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_14	Slave Server IP Address for Request 14	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_1 4	Slave Server Port Number for Request 14	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_14	Slave Address for Request 14	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Auditor		
FUNC_CODE_14	Function code for Request 14: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_14	Starting Slave Register in Request 14	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_14	Number of Registers for Request 14	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_14	Starting Master Register for Request 14	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_14	Comm Status for Request 14	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech	01.00.03.03	

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SERVER_IP_ADD_15	Slave Server IP Address for Request 15	ByteArray 4				Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_15	Slave Server Port Number for Request 15	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_15	Slave Address for Request 15	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_15	Function code for Request 15: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_15	Starting Slave Register in Request 15	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_15	Number of Registers for Request 15	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_15	Starting Master Register for Request 15	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_15	Comm Status for Request 15	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_16	Slave Server IP Address for Request 16	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_16	Slave Server Port Number for Request 16	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_16	Slave Address for Request 16	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_16	Function code for Request 16: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_16	Starting Slave Register in Request 16	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_16	Number of Registers for Request 16	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_16	Starting Master Register for Request 16	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_16	Comm Status for Request 16	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_17	Slave Server IP Address for Request 17	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_17	Slave Server Port Number for Request 17	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_17	Slave Address for Request 17	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_17	Function code for Request 17: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_17	Starting Slave Register in Request 17	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_17	Number of Registers for Request 17	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASTER_REG_17	Starting Master Register for Request 17	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_17	Comm Status for Request 17	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_18	Slave Server IP Address for Request 18	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_18	Slave Server Port Number for Request 18	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_18	Slave Address for Request 18	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FUNC_CODE_18	Function code for Request 18: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_18	Starting Slave Register in Request 18	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		Log Changes
NUM_REG_18	Number of Registers for Request 18	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_18	Starting Master Register for Request 18	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_18	Comm Status for Request 18	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech	01.00.03.03	

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Operator N/A: Auditor		
SERVER_IP_ADD_19	Slave Server IP Address for Request 19	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_19	Slave Server Port Number for Request 19	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_19	Slave Address for Request 19	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_19	Function code for Request 19: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_19	Starting Slave Register in Request 19	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_19	Number of Registers for Request 19	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_19	Starting Master Register for Request 19	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_19	Comm Status for Request 19	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_20	Slave Server IP Address for Request 20	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_20	Slave Server Port Number for Request 20	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_20	Slave Address for Request 20	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_20	Function code for Request 20: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_20	Starting Slave Register in Request 20	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_20	Number of Registers for Request 20	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_20	Starting Master Register for Request 20	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_20	Comm Status for Request 20	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_21	Slave Server IP Address for Request 21	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_21	Slave Server Port Number for Request 21	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_21	Slave Address for Request 21	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_21	Function code for Request 21: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_21	Starting Slave Register in Request 21	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_21	Number of Registers for Request 21	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASTER_REG_21	Starting Master Register for Request 21	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_21	Comm Status for Request 21	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_22	Slave Server IP Address for Request 22	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_2	Slave Server Port Number for Request 22	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_22	Slave Address for Request 22	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Auditor		
FUNC_CODE_22	Function code for Request 22: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_22	Starting Slave Register in Request 22	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_22	Number of Registers for Request 22	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_22	Starting Master Register for Request 22	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_22	Comm Status for Request 22	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech	01.00.03.03	

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SERVER_IP_ADD_23	Slave Server IP Address for Request 23	ByteArray 4				Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_23	Slave Server Port Number for Request 23	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
RTU_ADD_23	Slave Address for Request 23	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_23	Function code for Request 23: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_23	Starting Slave Register in Request 23	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_23	Number of Registers for Request 23	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_23	Starting Master Register for Request 23	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_23	Comm Status for Request 23	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_24	Slave Server IP Address for Request 24	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_24	Slave Server Port Number for Request 24	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_24	Slave Address for Request 24	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_24	Function code for Request 24: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes

PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SLAVE_REG_24	Starting Slave Register in Request 24	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_24	Number of Registers for Request 24	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
MASTER_REG_24	Starting Master Register for Request 24	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_24	Comm Status for Request 24	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	
SERVER_IP_ADD_25	Slave Server IP Address for Request 25	ByteArray 4				R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SERVER_PORT_NO_25	Slave Server Port Number for Request 25	UINT16	0 → 65535	0		R/W:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor		
RTU_ADD_25	Slave Address for Request 25	UINT8	0 → 255	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
FUNC_CODE_25	Function code for Request 25: 0 - Polling Disabled 1 - Read Coil Status 2 - Read Input Status 3 - Read Holding Registers 4 - Read Input Registers 5 - Force Single Coil 6 - Set Single Register 15 - Force Multiple Coils 16 - Set Multiple Registers	ENUM16		Polling Disabled (0)	Function Code (161)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
SLAVE_REG_25	Starting Slave Register in Request 25	UINT16	0 → 65535	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
NUM_REG_25	Number of Registers for Request 25	UINT16	1 → 120	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PollTable								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASTER_REG_25	Starting Master Register for Request 25	UINT16	0 → 65535	0		Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
COMM_STATUS_25	Comm Status for Request 25	UINT8		0	Inactive or Start of Transmission (162.0)	R/O: Admin; Engineer; Meas. Tech Operator N/A: Auditor	01.00.03.03	

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5.2.45 PowerCtrl Parameters

Description: The PowerCtrl object provides the parameters for configuring power control to allow scheduled radio or SCADA operations.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-46: PowerCtrl Parameters

PowerCtrl								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Power Control		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Power Control		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
PWR_CTRL_ENABLE	Power Control Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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PowerCtrl								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
PWR_CTRL_STATUS	Power Control Status: 0 - Power Control Inactive 1 - Power Control Active 2 - Power Control Low Voltage 3 - Power Control Held By Comms	ENUM16		Power Control Inactive (0)	Power Control Status (259)	Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
COMM_ENABLE_OPTION	Communication Port Enable Option: 3 - All Comm Ports Enabled	ENUM16	3 → 3	All Comm Ports Enabled (3)	Power Control Comm Port Option (257)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OUT_REF	Output Ref	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
START_TIME_1	Power Control Timer 1 Start Time	UINT16	0 → 9999	9999		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_ON_1	Power Control Timer 1 Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_OFF_1	Power Control Timer 1 Off Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
START_TIME_2	Power Control Timer 2 Start Time	UINT16	0 → 9999	9999		R/W:	01.00.03.03	Log Changes

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PowerCtrl								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
TIME_ON_2	Power Control Timer 2 Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_OFF_2	Power Control Timer 2 Off Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
START_TIME_3	Power Control Timer 3 Start Time	UINT16	0 → 9999	9999		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_ON_3	Power Control Timer 3 Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_OFF_3	Power Control Timer 3 Off Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
START_TIME_4	Power Control Timer 4 Start Time	UINT16	0 → 9999	9999		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_ON_4	Power Control Timer 4 Duration	UINT16	0 → 14400	0	s (17.0)	R/W:	01.00.03.03	Log Changes

PowerCtrl								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
TIME_OFF_4	Power Control Timer 4 Off Duration	UINT16	0 → 14400	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LOW_BAT_SHUTOFF	Low Battery Shutoff	FLOAT		0	V (16.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LOW_BAT_DEADBAND	Low Battery Deadband	FLOAT		0	V (16.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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5.2.46 Press Parameters

Description: The Press object provides the parameters for configuring static pressure sensors.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-47: Press Parameters

Press								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Integral Sensor Pr 2 - 4088B-1 Press 3 - 4088B-2 Press		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - Integral Sensor Pr		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Press								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				2 - 4088B-1 Press 3 - 4088B-2 Press		Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
UNITS	Units: 0 - psi 1 - kPa 2 - MPa 3 - bar 4 - kg/cm ²	ENUM16	0 → 4	psi (0)	Pressure (78)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIVE	Live Value	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
OVRD	Override Value	FLOAT		0	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT	Fault Value	FLOAT		0	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LAST_GOOD	Last Good Value	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SELECTED	Selected Value	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Press								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FAULT_MODE	Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 3	Live (0)	Fault Selection (32)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DAMPING	Damping Time	FLOAT	0 → 60	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ALM_OBJ	Alarm Reference	ObjectRef		Instance: 1 - Alarm_2 2 - Alarm_5 3 - Alarm_8		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
URL	Upper Range Limit	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MONITOR_MAX	Monitor Maximum	FLOAT		4000	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
MONITOR_MIN	Monitor Minimum	FLOAT		0	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
MIN_SPAN	Minimum Span	FLOAT		0	psi(a) (2.0)	R/O: Admin; Engineer;	01.00.03.03	Legal

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Press								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL 9 - Input Frozen	BIN16		Normal	Alarm Status DP SP (44)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CAL_OBJ	Calibration Reference	ObjectRef		Instance: 1 - FLTCal_2 2 - FLTCal_5 3 - FLTCal_8		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LAST_HOUR_AVERAGE	Last Hour Average Value	FLOAT		0	psi(a) (2-0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.5.0.XXX	Legal

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5.2.47 ROC Parameters

Description: The ROC object provides the parameters for configuring ROC protocol communications.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-48: ROC Parameters

ROC								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		ROC		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech N/A: Operator; Auditor	01.00.03.03	
ROC_ADDR	ROC Device Address	UINT8	1 → 255	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
ROC_GROUP	ROC Group Number	UINT8	1 → 255	1		R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Log Changes

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ROC								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ROC_SECURITY_EN	ROC Security Enable" 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	Operator N/A: Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
ROC_SECURITY_TIME	ROC Security Time out	UINT16	0 → 65535	0	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator N/A: Auditor	01.00.03.03	Log Changes
ROC_TCP_ENABLE	Enable TCP for ROC: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Disable (0) 2 - Disable (0) 3 - Disable (0) 4 - Disable (0) 5 - Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ROC_TCP_PORT_NUM	ROC TCP/IP Port	UINT16		4000		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
ROC_HIST_TIME_STAMP	Timestamp Mode	ENUM16	0 → 1	1	Historical Log Timestamp Mode (319)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	Log Changes

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5.2.48 Role Parameters

Description: The Role object provides the parameters for configuring roles assigned to different users.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-49: Role Parameters

Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Role		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
ROLE_NAME	Role Name	UC20		Instance: 1 - Admin 2 - Engineer 3 - Measurement Tech 4 - Operator 5 - Auditor		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FW_PERM	Permit Firmware Update:	ENUM16	0 → 1	Instance:	Enable/Disable Selection (30)	Instance: 1:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Disable 1 - Enable			1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Disable (0)		R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor		
USR_PERM	Permit User Management: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Disable (0) 3 - Disable (0) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CFG_PERM	Permit Configuration Download: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor		
SYS_RST_PERM	Permit System Restart: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DAT_COLL_PERM	Permit Data Collection: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Enable (1) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DAT_MGMT_PERM	Permit Data Management: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CALIB_PERM	Permit Calibration: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
TIME_SYNC_PERM	Permit Time Synchronization: 0 - Disable 1 - Enable	ENUM16	0 → 1	Instance: 1 - Enable (1) 2 - Enable (1) 3 - Enable (1) 4 - Enable (1) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DNP3_READ_PERM	Permit DNP3 File Read 0 - Disable 1 - Enable	ENUM16	0→1	Instance: 1-5: Enable (1)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	2.1.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Role								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SYS_VERIFY_PERM	System Verify Permission 0 - Disable 1 - Enable	ENUM16	0→1	Instance: 1 - Enable (1) 2 - Disable (0) 3 - Disable (0) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin; Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	Log Changes
KEY_UPDATE_PERM	Key Update Permissions	ENUM16	0→1	Instance: 1 - Enable (1) 2 - Disable (0) 3 - Disable (0) 4 - Disable (0) 5 - Disable (0)	Enable/Disable Selection (30)	Instance: 1: R/O: Admin; Engineer; Meas. Tech; Operator; Auditor 2-5: R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	2.13.0.XXX	Log Changes

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5.2.49 RTD Parameters

Description: The RTD object provides the parameters for configuring remote temperature detectors.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-50: RTD Parameters

RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Local RTD 2 - 4088B-1 RTD 3 - 4088B-2 RTD		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		1		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		Instance: 1 - 1 2 - 2 3 - 3		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance:		R/W:	01.00.03.03	Log Changes Legal

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RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				1 - Local RTD 2 - 4088B-1 RTD 3 - 4088B-2 RTD		Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
UNITS	Units: 0 - °F 1 - °C 2 - K	ENUM16	Instance: 1 - 0 → 2 2 - 0 → 1 3 - 0 → 1	°F (0)	Instance: 1 - Temperature (3) 2 - 4088 Temperature (242) 3 - 4088 Temperature (242)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIVE	Live Value	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
OVRD	Override Value	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT	Fault Value	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LAST_GOOD	Last Good Value	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SELECTED	Selected Value	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OHMS	RTD Ohms	FLOAT		0	ohms (23.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USER_MODE	Operation Mode: 0 - Live 1 - Override	ENUM16	0 → 1	Live (0)	User Selection (31)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT_MODE	Fault Mode: 0 - Live 1 - Fault 2 - Last Good	ENUM16	0 → 3	Live (0)	Fault Selection (32)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RTD_TYPE	RTD Type: 0 - 2-wire 1 - 3-wire 2 - 4-wire	ENUM16	Instance: 1 - 0 → 2 2 - 1 → 2 3 - 1 → 2	4-wire (2)	Instance: 1 - RTD Type (83) 2 - 4088 RTD Type (219) 3 - 4088 RTD Type (219)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CVD_CURVE	CVD Curve Selection: 0 - User 1 - Alpha 0.00385 DIN/IEC 2 - Alpha 0.00392	ENUM16	0 → 2	User (0)	CVD Curve Selection (49)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
RTD_ACOEFF	CVD A Coeff In Use	FLOAT		0.0039083		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RTD_BCOEFF	CVD B Coeff In Use	FLOAT		-5.78E-07		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
RTD_R0COEFF	CVD R0 Coeff in Use	FLOAT		100		R/O: Admin; Engineer;	01.00.03.03	Legal

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RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
RTD_CCOEFF	CVD C Coeff In Use	FLOAT		-4.18E-12		Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
USR_ACOEFF	CVD A Coeff Entered	FLOAT	3.9083E-4 → 3.9083E-2	0.0039083		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_BCOEFF	CVD B Coeff Entered	FLOAT	-5.7750E-6 → - 5.7750E-8	-5.78E-07		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_R0COEFF	CVD R0 Coeff Entered	FLOAT	95 → 105	100		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_CCOEFF	CVD C Coeff Entered	FLOAT	-4.1830E-11 → 4.1830E-11	-4.18E-12		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DAMPING	Damping Time	FLOAT	0 → 60	5	s (17.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
ALM_OBJ	Alarm Reference	ObjectRef		Instance: 1 - Alarm_3 2 - Alarm_6 3 - Alarm_9		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
URL	Upper Range Limit	FLOAT		1562	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	FLOAT		-328	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
MONITOR_MAX	Monitor Maximum	FLOAT		250	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MONITOR_MIN	Monitor Minimum	FLOAT		-50	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MIN_SPAN	Minimum Span	FLOAT		50	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Override Active 5 - In Alarm 6 - Point Fail 7 - Above URL 8 - Below LRL 9 - Input Frozen 10 - Type Mismatch	BIN16		Normal	Alarm Status RTD (220)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
CAL_OBJ	Calibration Reference	ObjectRef		Instance:		R/O: Admin; Engineer;	01.00.03.03	Legal

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RTD								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				1 - FLTCal_3 2 - FLTCal_6 3 - FLTCal_9		Meas. Tech Operator; Auditor		
LAST_HOUR_AVERAGE	Last Hour Average Value	FLOAT		Instance: 1 - °F (242-0) 2 - °F (242-0) 3 - °F (242-0)		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	2.5.0.XXX	

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5.2.50 Security Parameters

Description: The Security object provides the parameters for configuring user login requirements and logout settings.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-51: Security Parameters

Security								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Security Policy		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Security Policy		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Security								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LOCKOUT_TYPE	Lockout Type: 0 - Disabled 1 - Timed	ENUM16	0 → 1	Timed (1)	Lockout Type (121)	R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LOCKOUT_THRESHOLD	Lockout Threshold	UINT8	1 → 10	5		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LOCKOUT_DURATION	Lockout Duration	UINT16	1 → 20160	15	min (17.1)	R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SUG_MIN_PASS_LEN	Minimum Password Length	UINT8	0 → 32	8		R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SS_REQUIRE_LOGIN	Screen Saver: 0 - No Password Required 1 - Password Required	ENUM16	0 → 1	No Password Required (0)	Screen Saver Password (250)	R/W: Admin R/O: Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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5.2.51 Sensor Parameters

Description: The Sensor object provides the parameters for configuring multivariable sensors.

Number of Instances: 3 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-52: Sensor Parameters

Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Integral_Sensor-1 2 - 4088B_Sensor-1 3 - 4088B_Sensor-2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - Integral_Sensor-1 2 - 4088B_Sensor-1 3 - 4088B_Sensor-2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SER_NUM	Serial Number	UINT32	0 → 16777216	0		R/O: Admin; Engineer;	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
XMTR_STATUS	Transmitter Status: 0 - Normal 1 - SP Out of Low Limits 2 - SP Below Low Alr Limits 3 - SP Above Upr Alr Limits 4 - SP Out of Hi Limits 5 - DP Out of Low Limits 6 - DP Below Low Alr Limits 7 - DP Above Upr Alr Limits 8 - DP Out of Hi Limits 9 - Warning Set 10 - Critical Alr Set 11 - 4088B Calib in Progress 12 - Sensor Module Fail 13 - LCD Comm Error 14 - RTD Sensor Mismatch 15 - ST Below Low Alr Limits 16 - ST Above Upr Alr Limits 17 - ST Out of Low Limits 18 - ST Out of Hi Limits 19 - PT Sensor Fail 20 - PT Out of Low Limits 21 - PT Below Low Alr Limits 22 - PT Above Upr Alr Limits 23 - PT Out of Hi Limits 24 - ST Simulation Enable 25 - Write Protect Switch Lock 26 - PT Simulation Enable 27 - Feature Board Fail 28 - SP Simulation Enable 29 - DP Simulation Enable 30 - Sensor Module Incompatible 31 - Power Fail	BIN32		Normal	Sensor Transmitter Status (110)	Meas. Tech Operator; Auditor R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	32 - Sensor Module Comm Fail							
DP	Differential Pressure Object	ObjectRef	DP	Instance: 1-DP_1-1 2-DP_1-2 3-DP_1-3		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SP	Static Pressure Object	ObjectRef	Press	Instance: 1 - Press_1-1 2 - Press_1-2 3 - Press_1-3		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
PT	Flowing Temperature Object	ObjectRef	RTD	Instance: 1 - RTD_1-1 2 - RTD_1-2 3 - RTD_1-3		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SENS_TEMP	Sensor Temperature	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
TEMP_UNITS	Temperature Units 0 - °F 1 - °C 2 - K	ENUM16	Instance: 1 - 0 → 2 2 - 0 → 1 3 - 0 → 1	°F (0)	Instance: 1 - Temperature (3) 2 - 4088 Temperature (242) 3 - 4088 Temperature (242)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
URL	Upper Range Limit	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
LRL	Lower Range Limit	FLOAT		0	Instance: 1 - °F (3.0) 2 - °F (242.0) 3 - °F (242.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SW_REV	Sensor App FW Revision	ByteArray 4				R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SENS_CFG	Sensor Configuration: 0 - Standard Coplanar 1 - Standard Threaded 2 - Level Coplanar 3 - Reference Class Coplanar 4 - High Temp Conventional 252 - Unknown	ENUM16		Standard Coplanar (0)	Sensor Configuration (85)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SENS_TYPE	Sensor Type: 0 - Dual Variable 1 - DP Only 2 - SP Only	ENUM16		Dual Variable (0)	Sensor Type (86)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SP_TYPE	Static Pressure Type: 0 - No Static Pressure 1 - Absolute 2 - Gauge	ENUM16		Absolute (1)	Static Pressure Type (87)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
DP_RANGE	DP Range: 0 - Range 0 1 - Range 1 2 - Range 2 3 - Range 3 4 - Range 4 5 - Range 5 6 - Range 6 7 - Range 7 8 - Range 8 9 - Range 9 10 - Range 10 253 - Special	ENUM16		Range 0 (0)	RMT Sensor Range (88)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
SP_RANGE	SP Range: 0 - Range 0 1 - Range 1 2 - Range 2	ENUM16		Range 0 (0)	RMT Sensor Range (88)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	3 - Range 3 4 - Range 4 5 - Range 5 6 - Range 6 7 - Range 7 8 - Range 8 9 - Range 9 10 - Range 10 253 - Special							
FLNG_TYPE	Flange Type: 12 - Traditional 13 - Coplanar 14 - Remote Seal 15 - Level; 3in; 150lb 16 - Level; 4in; 150lb 17 - Level; 3in; 300lb 18 - Level; 4in; 300lb 19 - Level; DN 80; PN 40 20 - Level; DN 100; PN 40 21 - Level; DN 100; PN 10/16 22 - Level; 2 in; 150lb 23 - Level; 2in; 300lb 24 - Level; DN 50; PN 6 25 - Level; DN 50; PN 40 44 - 1/2in; NPTF 45 - DIN16288G 1/2 A male 46 - 1/4in; NPTF 240 - Auto Clave F-250-C 241 - Tri-Clamp 242 - Fractional Line Fit 243 - 1/8in; NPTF 244 - VCR 245 - PMC 246 - Traditional RC 1/4 247 - Traditional RC 1/2 252 - Unknown 253 - Special	ENUM16		Traditional (12)	Flange Type (89)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FLNG_MAT	Flange Material: 0 - Carbon Steel 1 - Undefined 2 - 316 Stainless Steel 3 - Hastelloy C 4 - Monel 5 - Tantalum 15 - Gold Monel 24 - Kynar 25 - Gold Monel 30 - Hastelloy C276 34 - PTFE Coated 316L SST 35 - Gold Plated Hastelloy C276 239 - Monel 400 251 - None 252 - Unknown 253 - Special	ENUM16		316 Stainless Steel (2)	Sensor Material (90)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ORING_MTL	O-ring Material: 10 - PTFE (Teflon R) 11 - Viton 12 - Buna-N 13 - Ethyl-Prop 36 - PTFE Glass 37 - PTFE Graphite 251 - None 252 - Unknown 253 - Special	ENUM16		PTFE Graphite (37)	O-ring Material (91)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
DRN_VNT_MTL	Drain Vent Material: 0 - Carbon Steel 1 - Undefined 2 - 316 Stainless Steel 3 - Hastelloy C 4 - Monel 5 - Tantalum 15 - Gold Monel 24 - Kynar 25 - Gold Monel 30 - Hastelloy C276 34 - PTFE Coated 316L SST 35 - Gold Plated Hastelloy C276 239 - Monel 400 251 - None 252 - Unknown 253 - Special	ENUM16		316 Stainless Steel (2)	Sensor Material (90)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ISO_MTL	Module Isolate Material: 0 - Carbon Steel 1 - Undefined 2 - 316 Stainless Steel 3 - Hastelloy C 4 - Monel 5 - Tantalum 15 - Gold Monel 24 - Kynar 25 - Gold Monel 30 - Hastelloy C276 34 - PTFE Coated 316L SST 35 - Gold Plated Hastelloy C276 239 - Monel 400 251 - None 252 - Unknown 253 - Special	ENUM16		Carbon Steel (0)	Sensor Material (90)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Sensor								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FILL_FLD	Module Fill Fluid: 0 - Undefined 1 - Silicone 2 - Inert 7 - NEOBEE 252 - Unknown 253 - Special	ENUM16		Undefined (0)	Fill Fluid (92)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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5.2.52 SlaveConf Parameters

Description: The SlaveConf object provides the parameters for Modbus slave configuration.

Number of Instances: 5 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-53: SlaveConf Parameters

SlaveConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Slave Config		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
T_MODE	Modbus Transmission Mode: 0 - ASCII 1 - RTU 2 - TCP	ENUM16	Instance: 1 - 0 → 1 2 - 0 → 1 3 - 0 → 1 4 - 0 → 1 5 - 0 → 2	Instance: 1 - RTU (1) 2 - RTU (1) 3 - RTU (1) 4 - RTU (1) 5 - TCP (2)	Modbus Mode Selection (60)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_ORD	Byte Order: 0 - LSB 1 - MSB	ENUM16	0 → 1	LSB (0)	Modbus Byte Order Selection (61)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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SlaveConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
EFM_ENB	EFM Modbus Option: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DATE_REG	EFM Date Register	UINT16		7046		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TIME_REG	EFM Time Register	UINT16		7047		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
EVT_REG	Alarm/Event Register	UINT16		32		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DAY_IDX_1	Station 1 - Day Idx Reg	UINT16		7160		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
HR_IDX_1	Station 1 - Hr Idx Reg	UINT16		7161		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DAY_REG_1	Station 1 - Day Hist Reg	UINT16		703		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
HR_REG_1	Station 1 - Hr Hist Reg	UINT16		704		R/W:	01.00.03.03	Log Changes

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SlaveConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
EFM1_HIST1	Station 1 - EFM Hist Val 1	ObjectRef	Hist	Hist_4-1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
EFM1_NUM_HIST	Station 1 - Num of Hist Points	UINT16	1 → 60	8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DAY_IDX_2	Station 2 - Day Idx Reg	UINT16		7211		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
HR_IDX_2	Station 2 - Hr Idx Reg	UINT16		7212		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DAY_REG_2	Station 2 - Day Hist Reg	UINT16		705		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
HR_REG_2	Station 2 - Hr Hist Reg	UINT16		706		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
EFM2_HIST1	Station 2 - EFM Hist Val 1	ObjectRef	Hist	Hist_5-1		R/W:	01.00.03.03	Log Changes

SlaveConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
EFM2_NUM_HIST	Station 2 - Num of Hist Points	UINT16	1 → 60	8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
MODBUS_ADDR	Modbus Slave Address	UINT8	1 → 247	1		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TCP_ENABLE	Modbus TCP Enable/Disable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
TCP_PORT_NUM	Modbus TCP Port Num	UINT16		502		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
EFM_APP_EVNT_EN B	EFM Application Event Enable	ENUM16	0 → 1	Disable(0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.02.02.01	Log Changes
ENRON_EVNT_REG_ENB	Enable Enron Event Register Format	ENUM16	0 → 1	Disable(0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	02.02.02.01	Log Changes
EFM_HIST_TIME_FORMAT	EFM History Time Format (EFM Hist Time Format)	ENUM16	0 → 1	HHMM(0)	EFM Hist Time Format (345)	R/W:	02.02.02.01	Log Changes

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SlaveConf								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
MBS_HIST_TIME_STAMP	Timestamp Mode	ENUM16	0 → 1	1	Historical Log Timestamp Mode (319)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.14.0.XXX	Log Changes

5.2.53 Station Parameters

Description: The Station object provides the parameters for configuring stations.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-54: Station Parameters

Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - Station 1 2 - Station 2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	
DESC	Description	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HIST_GRP_OBJ	History Group	ObjectRef	Hist Grp	Instance: 1 - Hist Grp_4 2 - Hist Grp_5		R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
FLD_TYPE	Fluid Type: 0 - Natural Gas	ENUM16	0 → 0	Natural Gas (0)	Fluid Type (73)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
PB_OPT	Base Pressure Selection: 0 - User 1 - 14.65 psi(a) 2 - 14.696 psi(a) 3 - 14.73 psi(a) 4 - 15.025 psi(a) 5 - 101.325 kPa(a) 6 - 0.101325 MPa(a) 7 - 1.01325 bar(a)	ENUM16	0 → 7	14.73 psi(a) (3)	Base Pressure (263)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PB_USER	User Base Pressure	DOUBLE	≥ 0.0001	14.73	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PB_SEL	Selected Base Pressure	DOUBLE		14.73	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.01.00.25	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TB_OPT	Base Temperature Selection: 0 - User 1 - 60°F 2 - 15°C 3 - 20°C 4 - 30°C 5 - 0°C	ENUM16	0 → 5	60°F (1)	Base Temperature (74)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TB_USER	User Base Temperature	DOUBLE	-200 - >400	60	°F (3.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TB_SEL	Selected Base Temperature	DOUBLE		60	°F (3.0)	R/O: Admin; Engineer;	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
LATITUDE	Latitude	DOUBLE	-90 → 90	45	° (20.0)	Meas. Tech Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ELEVATION	Elevation	DOUBLE	-100 → 20000	0	ft (8.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ZF_METHOD	Compressibility/Density Calc: 0 - AGA8 1994 Detailed 1 - AGA8 1994 Gross 1 2 - AGA8 1994 Gross 2 3 - ISO 12213-2 2009 4 - SGERG 1991 CV/RD/CO2/H2 (Std) 5 - SGERG 1991 CV/RD/N2/H2 6 - SGERG 1991 RD/N2/CO2/H2 7 - SGERG 1991 CV/N2/CO2/H2 8 - ISO12213-3 2006 CV/RD/CO2/H2 (Pref) 9 - ISO12213-3 2006 N2/CV/RD/H2 (Set B) 10 - ISO12213-3 2006 N2/CO2/RD/H2 (Set C) 11 - ISO12213-3 2006 N2/CO2/CV/H2 (Set D) 12 - NX-19 1962 13 - NX-19 Mod 14 - NX-19 VDE/VDI	ENUM16	0 → 14	AGA8 1994 Detailed (0)	Density/Compress Calc Selection (54)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
HV_METHOD	Heating Value Calc Standard: 0 - GPA2172 2009 Gross 1 - ISO6976 1995 Superior 2 - ISO6976 1995 Inferior 3 - AGA5 2009 Gross 4 - AGA5 2009 Net	ENUM16	0 → 2	GPA2172 2009 Gross (0)	Heating Value Calculation Selection (55)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HV_MEAS_BASIS	Heating Value Measurement Basis: 0 - Volume 1 - Mass	ENUM16	0 → 1	Volume (0)	HV Measurement Basis (181)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HV_COMB_REF	Heating Value Combustion Temperature: 0 - 60°F 1 - 0°C 2 - 15°C 3 - 20°C 4 - 25°C	ENUM16	0 → 4	60°F (0)	Heating Value Combustion Reference (56)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_BASIS	Water Content Basis: 0 - Dry 1 - Saturated at Base Conditions 3 - Partially Saturated	ENUM16	0 → 3	Dry (0)	H2O Content Basis (70)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_METHOD	Water Content Calculation: 0 - IGT Bulletin 8	ENUM16	0 → 0	IGT Bulletin 8 (0)	Water Content Calc Standard (75)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_ADJ_OPT	Water Adjustment Option: 0 - No Adjustment 1 - Adjust Composition	ENUM16	0 → 1	No Adjustment (0)	Water Adjustment Option (182)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ATMPR_UMODE	Atm Pressure Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Override (1)	User Mode Selection 2 (97)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
ATMPR_CALC	Calculated Atm Pressure	DOUBLE	≥ 0	14.696	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
ATMPR_OVRD	Override Atm Pressure	DOUBLE	≥ 0	14.696	psi(a) (2.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ATMPR_SEL	Selected Atm Pressure	DOUBLE	≥ 0	14.696	psi(a) (2.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
GRAV_UMODE	Local Grav Acceleration Mode: 1 - Override 2 - Calculated	ENUM16	1 → 2	Calculated (2)	User Mode Selection 2 (97)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GRAV_CALC	Calc Local Grav Acceleration	DOUBLE	>= 0	32.14398	ft/s ² (19.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal
GRAV_OVRD	Override Local Grav Acceleration	DOUBLE	>= 0	32.14398	ft/s ² (19.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
GRAV_SEL	Selected Local Grav Acceleration	DOUBLE	>= 0	32.14398	ft/s ² (19.0)	R/O: Admin; Engineer; Meas. Tech Operator; Auditor	01.00.03.03	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CALC_FAIL_OPT	Calculation Failure Option: 0 - Alarm Disabled 1 - Alarm and Continue 2 - Alarm and Halt Calculation	ENUM16	0 → 2	Alarm and Continue (1)	Calculation Fault Option (65)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DIFF_PRESS_UNITS	Differential Pressure Units: 0 - inH2O@60°F 1 - inH2O@68°F 2 - kPa 3 - mbar 4 - kg/cm ² 5 - psi 6 - bar	ENUM16	0 → 6	inH2O@60°F (0)	Differential Pressure Selection (26)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
PRESS_UNITS	Pressure Units: 0 - psi 1 - kPa 2 - MPa 3 - bar 4 - kg/cm ²	ENUM16	0 → 4	psi (0)	Pressure (78)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
TEMP_UNITS	Temperature Units: 0 - °F 1 - °C 2 - K	ENUM16	0 → 2	°F (0)	Temperature (3)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENS_UNITS	Density Units: 0 - lb/ft ³ 1 - kg/m ³ 2 - g/cc	ENUM16	0 → 2	lb/ft ³ (0)	Density (4)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
VOL_HV_UNITS	Volume Based Heating Value Units: 0 - Btu/ft ³ 1 - MJ/m ³	ENUM16	0 → 1	Btu/ft ³ (0)	Volume Heating Value (5)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_HV_UNITS	Mass Based Heating Value Units:	ENUM16	0 → 1	Btu/lb (0)	Mass Heating Value (225)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - Btu/lb 1 - MJ/kg					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
DYN_VISC_UNITS	Viscosity Units: 0 - cP 1 - lb/ft-s	ENUM16	0 → 1	lb/ft-s (1)	Dynamic Viscosity (6)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
H2O_CONTENT_UNITS	Water Content Units: 0 - lb/MMSCF 1 - kg/(k)m ³	ENUM16	0 → 1	lb/MMSCF (0)	Water Content (21)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIN_LONG_UNITS	Linear Long Units: 0 - ft 1 - m	ENUM16	0 → 1	ft (0)	Linear (Long) (8)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIN_SHRT_UNITS	Linear Short Units: 0 - in 1 - mm	ENUM16	0 → 1	in (0)	Linear (Short) (7)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
VOL_TOT_UNITS	Volume Units for Totals: 0 - ft ³ 1 - m ³ 2 - MCF 3 - (k)m ³ 4 - MMCF 5 - BCF	ENUM16	0 → 5	MCF (2)	Volume Total (9)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_TOT_UNITS	Mass Units for Totals: 0 - lb 1 - kg 2 - Mlb 3 - tonne	ENUM16	0 → 4	Mlb (2)	Mass Total (10)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ENERGY_TOT_UNIT S	Energy Units for Totals: 0 - Btu 1 - MMBtu 2 - J 3 - MJ 4 - GJ 5 - Dth	ENUM16	0 → 5	MMBtu (1)	Energy Total (11)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
VOL_RATE_UNITS	Volume Units for Rates: 0 - ft ³ /s 1 - ft ³ /min 2 - ft ³ /h 3 - ft ³ /d 4 - MCF/s 5 - MCF/min 6 - MCF/h 7 - MCF/d 8 - m ³ /s 9 - m ³ /min 10 - m ³ /h 11 - m ³ /d 12 - (k)m ³ /s 13 - (k)m ³ /min 14 - (k)m ³ /h 15 - (k)m ³ /d 16 - MMCF/s 17 - MMCF/min 18 - MMCF/h 19 - MMCF/d 20 - BCF/s 21 - BCF/min 22 - BCF/h 23 - BCF/d	ENUM16	0 → 23	MCF/d (7)	Volume Rate (12)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MASS_RATE_UNITS	Mass Units for Rates: 0 - lb/s 1 - lb/min 2 - lb/h 3 - lb/d 4 - Mlb/s 5 - Mlb/min 6 - Mlb/h 7 - Mlb/d 8 - kg/s 9 - kg/min 10 - kg/h 11 - kg/d 12 - tonne/s 13 - tonne/min 14 - tonne/h 15 - tonne/d	ENUM16	0 → 15	Mlb/d (7)	Mass Rate (13)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_RATE_UNITS	Energy Units for Rates: 0 - Btu/s 1 - Btu/min 2 - Btu/h 3 - Btu/d 4 - MMBtu/s 5 - MMBtu/min 6 - MMBtu/h 7 - MMBtu/d 8 - J/s 9 - J/min 10 - J/h 11 - J/d 12 - MJ/s 13 - MJ/min 14 - MJ/h 15 - MJ/d 16 - GJ/s 17 - GJ/min 18 - GJ/h	ENUM16	0 → 23	MMBtu/d (7)	Energy Rate (14)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	19 - GJ/d 20 - Dth/s 21 - Dth/min 22 - Dth/h 23 - Dth/d							
VOL_KF_UNITS	Volumetric K-factor Units: 0 - pulses/ft ³ 1 - pulses/m ³	ENUM16	0 → 1	pulses/ft ³ (0)	Volumetric K-Factor (27)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_KF_UNITS	Mass K-factor Units: 0 - pulses/lb 1 - pulses/kg	ENUM16	0 → 1	pulses/lb (0)	Mass K-Factor (28)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
UVOL_RATE	Uncorrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SVOL_RATE	Corrected Volume Flow Rate	DOUBLE		0	MCF/d (12.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MASS_RATE	Mass Flow Rate	DOUBLE		0	Mlb/d (13.7)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ENERGY_RATE	Energy Flow Rate	DOUBLE		0	MMBtu/d (14.7)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
UVOL_RAW_TOT	Uncorrected Volume Total	DOUBLE		0	MCF (9.2)	R/W: Admin; Engineer; Meas. Tech R/O:	01.00.03.03	Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SVOL_RAW_TOT	Corrected Volume Total	DOUBLE		0	MCF (9.2)	Operator; Auditor R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
MASS_RAW_TOT	Mass Total	DOUBLE		0	Mlb (10.2)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
ENERGY_RAW_TOT	Energy Total	DOUBLE		0	MMBtu (11.1)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
UVOL_TOT_OBJ	Uncorrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_7 2 - Total_17		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SVOL_TOT_OBJ	Corrected Volume Total Object	ObjectRef	Total	Instance: 1 - Total_8 2 - Total_18		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MASS_TOT_OBJ	Mass Total Object	ObjectRef	Total	Instance: 1 - Total_9 2 - Total_19		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ENERGY_TOT_OBJ	Energy Total Object	ObjectRef	Total	Instance: 1 - Total_10 2 - Total_20		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FLW_ALM_OBJ	Flow Alarm Object	ObjectRef		Instance: 1 - Alarm_11 2 - Alarm_13		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
BUYER	Custody Transfer Buyer	UC40				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SELLER	Custody Transfer Seller/Producer	UC40				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
STN_ID1	Station Identifier 1	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
STN_ID2	Station Identifier 2	UC20				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LIQ_PROD_OBJ	Liquid Product Object	ObjectRef		Instance: "Liq Prod_X" (where X is instance number between 1 and 36)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OIL_METHOD	Oil Flow Calculation Method 0 - API Ch 12.2 1 - API Ch 20.1	ENUM16	001	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
WATER_OPT	API Ch 20.1 Water Option 0 – Use Oil Correction Factor for Water 1 – Use Separate Correction Factor for Water	ENUM16	0-1	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSB_SEL	Selected Base Density	DOUBLE		0	°API (294-8)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
GVOL_RATE	Gross Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
SVOL_O_RATE	Net Standard Volume Flow Rate	DOUBLE		0	bbl/d (298-35)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
SVOL_W_RATE	Net Water Flow Rate	DOUBLE		0	bbl/d (299-35)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
GVOL_RAW_TOT	Gross Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
SVOL_O_RAW_TOT	Net Standard Volume Total	DOUBLE		0	bbl (296-8)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
SVOL_W_RAW_TOT	Net Water Volume Total	ObjectRef		0	bbl (297-8)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
GVOL_TOT_OBJ	Gross Volume Total Object	ObjectRef		Varies by instance		R/O: Admin; Engineer;	2.4.0.XXX	Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		
SVOL_O_TOT_OBJ	Net Standard Volume Total Object	ObjectRef		Varies by instance		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.4.0.XXX	Legal
SVOL_W_TOT_OBJ	New Water Volume Total Object	ObjectRef		Varies by instance		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor		Legal
DENS_OPT	Density Option 0 - Station Base Density from Product 1 - Meter Observed Density 2 - Station Header Density	ENUM16	0-2	1	Density Option (320)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor		<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSH_OBJ	Header Density Object	ObjectRef	Liq Dens	Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DENSH_INUSE	In Use Header Density	DOUBLE		0	°API (294-8)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	Legal
TH_INUSE	In Use Header Temperature	DOUBLE		0	°F (3-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	Legal
PH_INUSE	In Use Header Pressure	DOUBLE		0	psi(g) (29-0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	Legal
ROUND_OPT	Rounding Option 0 - No Rounding 1 - Rounding Per API 12.2	ENUM16	0-1	Rounding Per API 12.2 (1)	Rounding Option (280)	R/W: Admin; Engineer; Meas. Tech	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Station								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						R/O: Operator; Auditor		
SF_OPT	Shrinkage Factor Option 0 – Apply to Gross Standard Volume 1 - Apply to Net Standard Volume	ENUM16	0□1	Apply to Gross Standard Volume (0)	Shrinkage Factor Option (354)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FLWTM_UNITS	Flow Time Units 0 – s 1 - min	ENUM16	0□1	s (0)	Flow Time Units (359)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.8.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FAULT_CONFIG	Fault Health Configuration 0 -Normal 1 – Fault 2 – Primary Inputs – Fault 3 – Primary Inputs – Alarm 4 – Primary Inputs – Override 5 – Calculation Alarm 6 – Flow Rate Alarm 7 – Config Checksum Fault 8 – System Fault	BIN16		Fault, Calculation Alarms, Flow Rate Alarms, Config Checksum Fault, System Fault	Fault Health Configuration (360)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changers ▪ Legal

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5.2.54 System Parameters

Description: The System object provides the parameters for configuring and viewing information on the system as a whole.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-55: System Parameters

System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		System		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
PROD_TYPE	Product Type: 0 - FB1100 1 - FB1200 2 - FB2100 3 - FB2200	ENUM16		FB1100 (0)	Product Type (93)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
PROD_DESC	Product Description	UC40		Explosion Proof Flow Computer		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
SITE_NAME	Site Name	UC40				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
DEV_TEST_DATE	Device Test Date	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DEV_SER_NUM	Device Serial Number	UC30				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
CONN_TEST_DATE	Connectivity Board Test Date	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
CONN_SER_NUM	Connectivity Board Serial Number	UC30				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
PKG_VER	Package Version	UC20		1.0.0.0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MAX_STN	Max Number Stations	UINT32	0 → 2	1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MAX_STRM	Max Number Streams	UINT32	0 → 2	1		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MAX_PID	Max Number PID	UINT32	0 → 3	0		R/O: Admin; Engineer;	01.00.03.03	

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		
NUM_ALM	Number Alarm Records	UINT32	1000 → 2500	1000		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
NUM_EVT	Number Event Records	UINT32	1000 → 2500	1000		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
NUM_WM_EVT	Number W&M Events	UINT32	1000 → 2500	1000		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MPU_LOAD	MPU Loading	FLOAT	0 → 100	0	%(18.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
SYS_INTEG	System Integrity: 0 - Normal 1 - Alarm 2 - Fault	BIN32		Normal	Composite System Integrity (33)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
RESTART_TM	Restart Time	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
BATT_TYPE	Battery Type: 0 - None 1 - Lithium 2 - Lead Acid 3 - Not Applicable	ENUM16		None (0)	Battery Type (72)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MFG_ID	Manufacturer ID	UC20		Emerson		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MODEL_SPEC_1	Model Specification 1	UC40				R/O:	01.00.03.03	

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
MODEL_SPEC_2	Model Specification 2	UC40				Admin; Engineer; Meas. Tech; Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MODEL_SPEC_3	Model Specification 3	UC40				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
CPU_TEMP	CPU Temperature	FLOAT		0	°F (3.0)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	
EVT_CONF_TYPE	Event Log Configuration Type: 0 - Combined Event Log 1 - Separate Legal and Non-Legal Event Logs 2 - Separate Verifiable & Exportable Logs 3 - BSAP Combined Event Alarm Log	ENUM16	0 → 3	Combined Event Log (0)	Event Log Config Type (246)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Verified ▪ Legal
DB_RECOVERY_OPTION	Database Recovery Option: 0 - Restore to Database Defaults 1 - Restore from Flash Config File	ENUM16	0 → 1	Restore to Database Defaults (0)	Database Recovery Option (256)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CURRENT_CPU_FREQ	Current CPU Frequency: 0 - Low Frequency 1 - Medium Frequency 2 - High Frequency	ENUM16	0 → 2	Low Frequency (0)	CPU Frequency Level (261)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.01.00.25	
FLASH_CONFIG_CREATED	Flash Config Created Time	Time				R/O:	01.01.00.25	Log Changes

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech; Operator; Auditor		
NUM_SYSTEM_RESTARTS	Number of Restarts Performed By System	UINT16		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.01.00.25	
RADIO_POWER_ENABLE	Radio Power Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.01.00.25	
ACTIVE_DNP3_MAP	Active DNP3 Map 0 - Default 1 - User Defined	ENUM16	0→1	Default (0)	Active DNP3 Map (265)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.1.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
HOME_SCREEN	Home Screen	UC40				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.4.0.XXX	Log Changes
VERIFICATION_STATUS	System Verification Status 0 - System Unverified 1 - System Verified	ENUM16	0→1	System Unverified (0)	System Verification Status (350)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
VERIFICATION_TIME	Verification Time	TIME				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	
LEGAL_EVT_LOCK_STAT	Legal Event Lock Status 0 - Unlocked 1 - Locked	ENUM16	0→1	Unlocked (0)	Legal Event Lock Status (355)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.5.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LEGAL_EVT_LOCK_TIME	Legal Event Lock Time	TIME				R/O: Admin; Engineer;	2.5.0.XXX	

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		
EVT_LAST_EXPORT_TIME	Legal Event Last Export Time	TIME				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.6.0.XXX	Log Changes
MBUS_MAP_USE_CSV	Modbus Mapping using CSV Files	ENUM16	0->1	Database Objects(0)	CSV Option(367)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
MBUS_MAP_STATUS	Modbus Mapping file status	BIN32				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	
MBUS_MAP_CSV_BUSY	Reload Modbus Map	ENUM16	0->1	Ready(0)	Reloading Maps(369)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
CHECK_INTERVAL	Checksum Interval	UINT16	1- >1440			R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
SYSTEM_FIRMWARE	Firmware Checksum State	ENUM16	0->3	Disabled (0)	Integrity Status (370)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	
VERIFY_OPT	Verification Checksum	ENUM16	0->1	Disabled (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.9.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
FIRMWARE_CHECK	Firmware Checksum	UINT32		Hex	Hexadecimal Data (373)	R/O: Admin; Engineer;	2.9.0.XXX	

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CONFIG_CHECK	Configuration Checksum	UINT32		Hex	Hexadecimal Data (373)	Meas. Tech; Operator; Auditor R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	Legal
CONFIG_CHECK_CO UNT	Config Change Count	UINT32				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	Legal
CONFIG_CHECK_C MP	Saved Config Checksum	UINT32		Hex	Hexadecimal Data (373)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	Legal
CONFIG_CHECK_ST ATE	Config Checksum State	ENUM16	0->4	Disabled (0)	Integrity Status(372)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.9.0.XXX	Legal
EFM_ARCH_USE_CS V	EFM Archive Mapping using CSV	ENUM16	0->1	Database Objects(0)	CSV Option(367)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.11.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
EFM_ARCH_STATUS	EFM Archive Mapping file status	BIN32				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.11.0.XXX	
EFM_ARCH_CSV_BU SY	Reload EFM Archive Map	ENUM16	0->1	Ready(0)	Reloading Maps (369)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.11.0.XXX	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
DATA_MAP_ENABLE	Data Model Mapping	ENUM16	0->1	0	Enable/Disable Selection (30)	R/W: Admin; Engineer; R/O:	2.12.0.XXX	Log Changes

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System								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Meas. Tech; Operator; Auditor		
DATA_MAP_STATUS	Data Model file status	BIN32		0	Csv Parse Status (368)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	2.12.0.XXX	
DATA_MAP_BUSY	Reload Data Model Map	EUNM16	0->1	0	Reloading Maps (369)	R/W: Admin; Engineer; R/O: Meas. Tech; Operator; Auditor	2.12.0.XXX	Log Changes
ROC_LONG_CREDENTIALIALS	ROC Long Credentials	ENUM16	0->1	0	ROC Long Credentials (383)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.12.0.XXX	Log Changes
DNP3_MAP_BUSY	Reload DNP3 Data Map	ENUM16	0 -> 1	0	Reloading Maps (369)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	2.15.0.XXX	Log Changes

5.2.55 System Power Parameters

Description: The System Power object provides the parameters for monitoring the health of the batteries and configuring loop power.

Number of Instances: 1 instance may exist.

Storage Location: Saved to internal configuration memory.

Table 5-56: System Power Parameters

System Power								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		System Power		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20		System Power		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
BATT_TYPE	Battery Type: 0 - None 1 - Lithium	ENUM16		None (0)	Battery Type (72)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

System Power								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	2 - Lead Acid 3 - Not Applicable							
BATT_STATUS	Status of the Battery: 0 - Battery Not in Use 1 - Lead Acid Fault 2 - Lead Acid Charging 3 - Lead Acid Standby 4 - Lithium Battery on Reserve C Cell 5 - Lithium Battery Error 6 - Lithium Battery on Main D Cell	ENUM16		Battery Not in Use (0)	Battery Status (152)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BATT_VAL	Voltage of the Battery	FLOAT	>= 0	0	V (16.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BATT_ALM	Battery Alarm	ObjectRef		Alarm_32		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BATT_RUNTIME	Days the Battery has been In Use	UINT16		0	d (17.3)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
EXT_VOLT_VAL	Voltage from External Source	FLOAT		0	V (16.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
EXT_VOLT_ALM	External Voltage Alarm	ObjectRef		Alarm_33		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
BATT_CHNG	Indicate Battery has been Changed:	ENUM16	0 → 2	No Change (0)	Battery Change (154)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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System Power								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - No Change 1 - Battery Replaced 2 - SRAM Battery Replaced					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
OPER_TRIP_POINT	Operating Trip Point: 0 - 6 Volts 1 - 12 Volts 2 - 24 Volts	ENUM16	0 → 2	6 Volts (0)	Operational Trip Point 1X00 (155)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal ▪ Verified
SRAM_BATT_STATUS	Status of the SRAM Battery: 0 - Battery Normal 1 - Battery Failure or Removal	ENUM16		Battery Normal (0)	SRAM Battery Status (153)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SRAM_BATT_RUNTIME	Days the SRAM Battery has been In Use	UINT16		0	d (17.3)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BATT_CHNG_TIME	Date the Battery was Changed	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
BATT_CELL_CHNG_TIME	Date the Battery Switched Cells	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SRAM_BATT_CHNG_TIME	SRAM Battery Change Time	Time				R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Legal
LOOP_POWER	Enable/Disable Loop Power: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

5.2.56 Total Parameters

Description: The Total object provides the parameters for viewing periodic and cumulative totals, and configuring cumulative rollover values.

Number of Instances: 70 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-56: Total Parameters

Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: Total_X (where X is the instance)		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC20		Instance: 1 - DP Mtr 1 Uncorr Vol 2 - DP Mtr 1 Corr Vol 3 - DP Mtr 1 Mass 4 - DP Mtr 1 Energy		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				5 - DP Mtr 1 Flow Time				
				6 - DP Mtr 1 IV				
				7 - Stn 1 Uncorr Vol				
				8 - Stn 1 Corr Vol				
				9 - Stn 1 Mass				
				10 - Stn 1 Energy				
				11 - Lin Mtr 1 Uncorr Vol				
				12 - Lin Mtr 1 Corr Vol				
				13 - Lin Mtr 1 Mass				
				14 - Lin Mtr 1 Energy				
				15 - Lin Mtr 1 Flow Time				
				16 - Lin Mtr 1 Pulses				
				17 - Stn 2 Uncorr Vol				
				18 - Stn 2 Corr Vol				
				19 - Stn 2 Mass				
				20 - Stn 2 Energy				
				21 - DP Mtr 2 Uncorr Vol				
				22 - DP Mtr 2 Corr Vol				
				23 - DP Mtr 2 Mass				
				24 - DP Mtr 2 Energy				
				25 - DP Mtr 2 Flow Time				
				26 - DP Mtr 2 IV				

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				27 - Lin Mtr 2 Uncorr Vol				
				28 - Lin Mtr 2 Corr Vol				
				29 - Lin Mtr 2 Mass				
				30 - Lin Mtr 2 Energy				
				31 - Lin Mtr 2 Flow Time				
				32 - Lin Mtr 2 Pulses				
RAW_PARAM	Input to Totalize	ParamRef		Instance: 1 - DP Mtr_1. UVOL_RAW_ TOT 2 - DP Mtr_1. SVOL_RAW_ TOT 3 - DP Mtr_1. MASS_RAW_ TOT 4 - DP Mtr_1. ENERGY_RAW_ TOT 5 - DP Mtr_1. FLWTM_RAW_ TOT 6 - DP Mtr_1. IV_RAW_TOT 7 - Station_1. UVOL_RAW_ TOT 8 - Station_1. SVOL_RAW_ TOT		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				9 - Station_1. MASS_RAW_ TOT				
				10 - Station_1. ENERGY_RA W_TOT				
				11 - Linear Mtr_1. UVOL_RAW_ TOT				
				12 - Linear Mtr_1. SVOL_RAW_ TOT				
				13 - Linear Mtr_1. MASS_RAW_ TOT				
				14 - Linear Mtr_1. ENERGY_RA W_TOT				
				15 - Linear Mtr_1. FLWTM_RAW_ TOT				
				16 - Linear Mtr_1. PULSE_RAW_ TOT				
				17 - Station_2. UVOL_RAW_ TOT				
				18 - Station_2. SVOL_RAW_ TOT				
				19 - Station_2. MASS_RAW_ TOT				
				20 - Station_2. ENERGY_RA W_TOT				

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
				21 - DP Mtr_2. UVOL_RAW_ TOT				
				22 - DP Mtr_2. SVOL_RAW_ TOT				
				23 - DP Mtr_2. MASS_RAW_ TOT				
				24 - DP Mtr_2. ENERGY_RA W_TOT				
				25 - DP Mtr_2. FLWTM_RAW _TOT				
				26 - DP Mtr_2. IV_RAW_TOT				
				27 - Linear Mtr_2. UVOL_RAW_ TOT				
				28 - Linear Mtr_2. SVOL_RAW_ TOT				
				29 - Linear Mtr_2. MASS_RAW_ TOT				
				30 - Linear Mtr_2. ENERGY_RA W_TOT				
				31 - Linear Mtr_2. FLWTM_RAW _TOT				
				32 - Linear Mtr_2. PULSE_RAW_ TOT				
CURRENT	Current Accumulated Total	DOUBLE		0	Instance:	R/O: Admin; Engineer;	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					1 - MCF (9.2)	Meas. Tech; Operator; Auditor		
					2 - MCF (9.2)			
					3 - MIb (10.2)			
					4 - J (11.2)			
					5 - s (359.0)			
					6 - RESERVED			
					7 - MCF (9.2)			
					8 - MCF (9.2)			
					9 - MIb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			
					12 - MCF (9.2)			
					13 - MIb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - MIb (10.2)			
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - MIb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - MIb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
ROLLOVER	Rollover Value	DOUBLE	>= 0	1.00E+12		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ROLLOVER_COUNT	Non-resettable Rollover Count	UINT32		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SNAPSHOT	Value of Input at Last Period End	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - MIb (10.2) 4 - J (11.2) 5 - h (17.2) 6 -RESERVED 7 - MCF (9.2) 8 - MCF (9.2) 9 - MIb (10.2) 10 - J (11.2) 11 - MCF (9.2) 12 - MCF (9.2) 13 - MIb (10.2) 14 - J (11.2) 15 - h (17.2) 16 -RESERVED 17 - MCF (9.2) 18 - MCF (9.2) 19 - MIb (10.2) 20 - J (11.2) 21 - MCF (9.2) 22 - MCF (9.2) 23 - MIb (10.2) 24 - J (11.2) 25 - h (17.2) 26 -RESERVED 27 - MCF (9.2) 28 - MCF (9.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					29 - MIb (10.2) 30 - J (11.2) 31 - h (17.2) 32 - RESERVED			
SNAP_TIME	Timestamp of Last Period End	Time				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CUR_PER	Current Hour Total	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - MIb (10.2) 4 - J (11.2) 5 - s (359.0) 6 - RESERVED 7 - MCF (9.2) 8 - MCF (9.2) 9 - MIb (10.2) 10 - J (11.2) 11 - MCF (9.2) 12 - MCF (9.2) 13 - MIb (10.2) 14 - J (11.2) 15 - s (359.0) 16 - RESERVED 17 - MCF (9.2) 18 - MCF (9.2) 19 - MIb (10.2) 20 - J (11.2) 21 - MCF (9.2) 22 - MCF (9.2) 23 - MIb (10.2) 24 - J (11.2) 25 - h (17.2) 26 - RESERVED 27 - MCF (9.2) 28 - MCF (9.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					29 - MIb (10.2) 30 - J (11.2) 31 - h (17.2) 32 - RESERVED			
PREV_PER	Previous Hour Total	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - MIb (10.2) 4 - J (11.2) 5 - s (359.0) 6 - RESERVED 7 - MCF (9.2) 8 - MCF (9.2) 9 - MIb (10.2) 10 - J (11.2) 11 - MCF (9.2) 12 - MCF (9.2) 13 - MIb (10.2) 14 - J (11.2) 15 - s (359.0) 16 - RESERVED 17 - MCF (9.2) 18 - MCF (9.2) 19 - MIb (10.2) 20 - J (11.2) 21 - MCF (9.2) 22 - MCF (9.2) 23 - MIb (10.2) 24 - J (11.2) 25 - s (359.0) 26 - RESERVED 27 - MCF (9.2) 28 - MCF (9.2) 29 - MIb (10.2) 30 - J (11.2) 31 - s (359.0) 32 - RESERVED	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CUR_DAY	Current Day Total	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - Mlb (10.2) 4 - J (11.2) 5 - s (359.0) 6 -RESERVED 7 - MCF (9.2) 8 - MCF (9.2) 9 - Mlb (10.2) 10 - J (11.2) 11 - MCF (9.2) 12 - MCF (9.2) 13 - Mlb (10.2) 14 - J (11.2) 15 - s (359.0) 16 -RESERVED 17 - MCF (9.2) 18 - MCF (9.2) 19 - Mlb (10.2) 20 - J (11.2) 21 - MCF (9.2) 22 - MCF (9.2) 23 - Mlb (10.2) 24 - J (11.2) 25 - s (359.0) 26 -RESERVED 27 - MCF (9.2) 28 - MCF (9.2) 29 - Mlb (10.2) 30 - J (11.2) 31 - s (359.0) 32 - RESERVED	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PREV_DAY	Previous Day Total	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - Mlb (10.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					4 - J (11.2)			
					5 - s (359.0)			
					6 - RESERVED			
					7 - MCF (9.2)			
					8 - MCF (9.2)			
					9 - MIb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			
					12 - MCF (9.2)			
					13 - MIb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - MIb (10.2)			
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - MIb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - MIb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			
CUR_WK	Current Week Value	DOUBLE		0	Instance: 1 - MCF (9.2) 2 - MCF (9.2) 3 - MIb (10.2) 4 - J (11.2) 5 - s (359.0) 6 - RESERVED 7 - MCF (9.2)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					8 - MCF (9.2)			
					9 - MIb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			
					12 - MCF (9.2)			
					13 - MIb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - MIb (10.2)			
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - MIb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - MIb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			
PREV_WK	Previous Week Value	DOUBLE		0	Instance:	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
					1 - MCF (9.2)			
					2 - MCF (9.2)			
					3 - MIb (10.2)			
					4 - J (11.2)			
					5 - s (359.0)			
					6 - RESERVED			
					7 - MCF (9.2)			
					8 - MCF (9.2)			
					9 - MIb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					12 - MCF (9.2)			
					13 - MIb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - MIb (10.2)			
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - MIb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - MIb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			
CUR_MNTH	Current Month Total	DOUBLE		0	Instance:	R/O:	01.00.03.03	Legal
					1 - MCF (9.2)	Admin; Engineer;		
					2 - MCF (9.2)	Meas. Tech;		
					3 - MIb (10.2)	Operator; Auditor		
					4 - J (11.2)			
					5 - s (359.0)			
					6 - RESERVED			
					7 - MCF (9.2)			
					8 - MCF (9.2)			
					9 - MIb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			
					12 - MCF (9.2)			
					13 - MIb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - Mlb (10.2)			
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - Mlb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - Mlb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			
PREV_MNTH	Previous Month Total	DOUBLE		0	Instance:	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
					1 - MCF (9.2)			
					2 - MCF (9.2)			
					3 - Mlb (10.2)			
					4 - J (11.2)			
					5 - s (359.0)			
					6 - RESERVED			
					7 - MCF (9.2)			
					8 - MCF (9.2)			
					9 - Mlb (10.2)			
					10 - J (11.2)			
					11 - MCF (9.2)			
					12 - MCF (9.2)			
					13 - Mlb (10.2)			
					14 - J (11.2)			
					15 - s (359.0)			
					16 - RESERVED			
					17 - MCF (9.2)			
					18 - MCF (9.2)			
					19 - Mlb (10.2)			

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Total								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
					20 - J (11.2)			
					21 - MCF (9.2)			
					22 - MCF (9.2)			
					23 - Mlb (10.2)			
					24 - J (11.2)			
					25 - s (359.0)			
					26 - RESERVED			
					27 - MCF (9.2)			
					28 - MCF (9.2)			
					29 - Mlb (10.2)			
					30 - J (11.2)			
					31 - s (359.0)			
					32 - RESERVED			

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5.2.57 User Acct Parameters

Description: The User Acct object provides the parameters for...

Number of Instances: 38 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-57: User Acct Parameters

User Acct								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		User Acct		N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
ID	User Identifier	UC30				N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PASSWORD	Password	ByteArray 32				N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PIN	PIN Code	ByteArray 32				N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
LOCAL_PREF	Localization Preferences	ObjectRef	Local	Local_1		N/A:	01.00.03.03	Legal

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User Acct								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech; Operator; Auditor		
ROLE	Role	ObjectRef	Role	Role_1		N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PIN_ENB	PIN Enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SALT	SALT	ByteArray 32				N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
ACCT_TYPE	Account Type: 0 - User 1 - Internal	ENUM16	0 → 1	Internal (1)	Account Type (81)	N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
PROTOCOL	Protocol: 0 - None 1 - DNP3 2 - Modbus 3 - ROC 4 - BSAP	ENUM16	0 → 4	None (0)	Protocol (240)	N/A: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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5.2.58 User Data Parameters

Description: The User Data object provides the parameters for configuring the global data storage area.

Number of Instances: 8 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-58: User Data Parameters

User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - User Data_1 2 - User Data_2 3 - User Data_3 4 - User Data_4 5 - User Data_5 6 - User Data_6 7 - User Data_7 8 - User Data_8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status	BIN32				R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
DESC	Description	UC40		Instance: 1 - User Data_1 2 - User Data_2 3 - User Data_3 4 - User Data_4 5 - User Data_5 6 - User Data_6 7 - User Data_7 8 - User Data_8		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
FLOAT_1	Floating Point 1	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_2	Floating Point 2	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_3	Floating Point 3	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_4	Floating Point 4	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_5	Floating Point 5	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_6	Floating Point 6	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_7	Floating Point 7	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_8	Floating Point 8	FLOAT		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
FLOAT_9	Floating Point 9	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_10	Floating Point 10	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_11	Floating Point 11	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_12	Floating Point 12	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_13	Floating Point 13	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_14	Floating Point 14	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_15	Floating Point 15	FLOAT		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
FLOAT_16	Floating Point 16	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_17	Floating Point 17	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_18	Floating Point 18	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_19	Floating Point 19	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
FLOAT_20	Floating Point 20	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_1	Double Floating Point 1	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_2	Double Floating Point 2	DOUBLE		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
DOUBLE_3	Double Floating Point 3	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_4	DoubleFloating Point 4	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_5	Double Floating Point 5	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_6	Double Floating Point 6	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_7	Double Floating Point 7	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_8	Double Floating Point 8	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
DOUBLE_9	Double Floating Point 9	DOUBLE		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
DOUBLE_10	Double Floating Point 10	DOUBLE		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_1	Long Integer 1	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_2	Long Integer 2	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_3	Long Integer 3	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_4	Long Integer 4	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_5	Long Integer 5	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_6	Long Integer 6	UINT32		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
LONG_7	Long Integer 7	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_8	Long Integer 8	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_9	Long Integer 9	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
LONG_10	Long Integer 10	UINT32		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_1	Short Integer 1	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_2	Short Integer 2	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_3	Short Integer 3	UINT16		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SHORT_4	Short Integer 4	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_5	Short Integer 5	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_6	Short Integer 6	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_7	Short Integer 7	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_8	Short Integer 8	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_9	Short Integer 9	UINT16		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
SHORT_10	Short Integer 10	UINT16		0		R/W:	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
BYTE_1	Byte Integer 1	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_2	Byte Integer 2	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_3	Byte Integer 3	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_4	Byte Integer 4	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_5	Byte Integer 5	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_6	Byte Integer 6	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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User Data								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
BYTE_7	Byte Integer 7	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_8	Byte Integer 8	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_9	Byte Integer 9	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
BYTE_10	Byte Integer 10	UINT8		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
EVENT_LOG_OPT	Event Logging: 0 - Disable 1 - Enable	ENUM16	0 → 1	Enable (1)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes

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5.2.59 4088 Parameters

Description: The 4088 object provides the parameters for configuring 4088B multivariable transmitters.

Number of Instances: 2 instances may exist.

Storage Location: Saved to internal configuration memory.

Table 5-59: 4088 Parameters

4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
OBJ_NAME	Tag	UC20		Instance: 1 - 4088B_1-1 2 - 4088B_1-2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
OBJ_AREA	Area Assignment	UINT8	0 → 5	0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	Log Changes
OBJ_STATUS	Status: 0 - Normal 1 - In Alarm 2 - Failure 3 - Override 4 - Inactive	BIN32		Normal	Object Status (80)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	
MOD_LOC	Module Location	UINT8		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
CHANNEL	Channel	UINT8		2		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
DESC	Description	UC20		Instance: 1 - 4088B_1-1 2 - 4088B_1-2		R/W:	01.00.03.03	<ul style="list-style-type: none"> Log Changes Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
SENSOR_OBJ	Transmitter Sensor	ObjectRef	Sensor	Instance: 1 - Sensor_1-2 2 - Sensor_1-3		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
4088_ADDR	4088B Modbus Address	UINT8	1 → 240	Instance: 1 - 1 2 - 2		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LCD_BMASK	LCD Bit masks: 0 - None 1 - Differential Pressure 2 - Absolute Pressure 3 - Temperature 4 - Baud Rate 5 - Gage Pressure 6 - Sensor Temperature 7 - Reserved 8 - Slave Address 9 - Host Parameter 1 10 - Host Parameter 2 11 - Host Parameter 3 12 - Host Parameter 4 13 - Host Parameter 5 14 - Host Parameter 6 15 - Reserved 16 - Reserved 17 - Host Variable 1 18 - Host Variable 2 19 - Host Variable 3	BIN32		None	LCD Bit masks (196)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
LCD_SCROLL_TM	LCD Scroll Time	UINT8	1 → 10	3	s (17.0)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
4088_TAG	4088B Tag	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
4088_DESC	4088B Description	UC20		???????????????? ???		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
4088_MSG	4088B Message	UC40		???????????????? ???		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_TXT1	User Defined Text 1	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_VAL1	User Defined Value 1	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_UNIT1	User Defined Unit 1	UC10		??????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_TXT2	User Defined Text 2	UC10		??????????		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
USR_DEF_VAL2	User Defined Value 2	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_UNIT2	User Defined Unit 2	UC10		??????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_TXT3	User Defined Text 3	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_VAL3	User Defined Value 3	ParamRef		Undefined		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_UNIT3	User Defined Unit 3	UC10		??????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_LABEL1	User Defined Label 1	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PRM1	User Defined Parameter 1	FLOAT		0		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
USR_DEF_PUNT1	User Defined Unit of Parameter 1	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_LABEL2	User Defined Label 2	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PRM2	User Defined Parameter 2	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PUNT2	User Defined Unit of Parameter 2	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_LABEL3	User Defined Label 3	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PRM3	User Defined Parameter 3	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PUNT3	User Defined Unit of Parameter 3	UC10		??????????		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
USR_DEF_LABEL4	User Defined Label 4	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PRM4	User Defined Parameter 4	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PUNT4	User Defined Unit of Parameter 4	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_LABEL5	User Defined Label 5	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PRM5	User Defined Parameter 5	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PUNT5	User Defined Unit of Parameter 5	UC10		??????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_LABEL6	User Defined Label 6	UC10		??????????		R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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4088								
Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
						Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
USR_DEF_PRM6	User Defined Parameter 6	FLOAT		0		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
USR_DEF_PUNT6	User Defined Unit of Parameter 6	UC10		?????????		R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
STAT_OPTN	Transmitter Status Option: 0 - None 1 - DP Sensor Present 2 - AP Sensor Present 3 - GP Sensor Present 4 - PT Sensor Present 5 - LCD Available	BIN8		None	Transmitter Status Option (197)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
MODBUS_REV	Transmitter Modbus Version	UINT8		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
FIRM_VER	Firmware Version	UINT8		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
SCAN_ENABLE	Transmitter Scanning enable: 0 - Disable 1 - Enable	ENUM16	0 → 1	Disable (0)	Enable/Disable Selection (30)	R/W: Admin; Engineer; Meas. Tech R/O: Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal
ON_DEMAND_CMD	User commands:	ENUM16	0 → 5	No Command (0)	User Commands (198)	R/W:	01.00.03.03	<ul style="list-style-type: none"> ▪ Log Changes ▪ Legal

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	0 - No Command 1 - On Demand Connect 2 - On Demand Synchronize 3 - Transmitter Reset 4 - On Demand Write 5 - On Demand Read					Admin; Engineer; Meas. Tech R/O: Operator; Auditor		
DP_VAR_STATUS	DP Variable Status: 0 - Good - Not Limited 1 - Poor Accuracy-Low Limited 2 - Poor Accuracy-High Limited 3 - Poor Accuracy-No Limited 4 - Manual/Fixed - Constant 5 - Bad -Constant 6 - Unknown	ENUM16		Good - Not Limited (0)	Variable Status (202)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified
SP_VAR_STATUS	SP Variable Status: 0 - Good - Not Limited 1 - Poor Accuracy-Low Limited 2 - Poor Accuracy-High Limited 3 - Poor Accuracy-No Limited 4 - Manual/Fixed - Constant 5 - Bad -Constant 6 - Unknown	ENUM16		Good - Not Limited (0)	Variable Status (202)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified
PT_VAR_STATUS	PT Variable Status: 0 - Good - Not Limited 1 - Poor Accuracy-Low Limited 2 - Poor Accuracy-High	ENUM16		Good - Not Limited (0)	Variable Status (202)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
	Limited 3 - Poor Accuracy-No Limited 4 - Manual/Fixed - Constant 5 - Bad -Constant 6 - Unknown							
ST_VAR_STATUS	ST Variable Status: 0 - Good - Not Limited 1 - Poor Accuracy-Low Limited 2 - Poor Accuracy-High Limited 3 - Poor Accuracy-No Limited 4 - Manual/Fixed - Constant 5 - Bad -Constant 6 - Unknown	ENUM16		Good - Not Limited (0)	Variable Status (202)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified
4088_CAL_STAT	Calibration status of 4088B: 0 - No Measurement In Calibration 1 - DP Measurement In Calibration 2 - SP Measurement In Calibration 3 - PT Measurement In Calibration	BIN8		No Measurement In Calibration	Calibration status of 4088 (199)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
COMM_STATUS	Modbus Communication Health: 0 - Success 1 - Failure	ENUM16		Success (0)	Status (200)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified
ACTUAL_SCAN_TIME	Actual 4088B Scan Time	FLOAT		0	s (17.0)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified

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Name	Description of functionality and meaning of values	Data Type	Range	Default	Default Measurement Type (Table #)	Access (by Role)	Version	Other Attributes
CONFIG_CHANGE_COUNTER	Configuration Change Counter	UINT16		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	<ul style="list-style-type: none"> ▪ Legal ▪ Verified
INPUT_STATUS	Input Health Status: 0 - Normal 1 - Not Licensed 2 - Instance Inactive 3 - Comm Fail 4 - Write Protect Lock 5 - Config. Issue Due To Write Protect 6 - Config. Issue Due To Comm. Fail 7 - Config. Issue 8 - Transmitter Failed 9 - Synchronization In Progress 10 - Scan Disabled 11 - Config. Issue Due To Invalid Value 12 - Write On Demand Failed 13 - Scanning Baud Rate 14 - EMV in Mode A 15 - Reading Device 16 - Writing Device 17 - Baud Too Low	BIN32		Normal	4088 Input Status (201)	R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal
XMTR_SER_NUM	Transmitter Serial Number	UINT32		0		R/O: Admin; Engineer; Meas. Tech; Operator; Auditor	01.00.03.03	Legal

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North America and Latin America:

Emerson Automation Solutions
Energy and Transportation Solutions
6005 Rogerdale Road
Houston, TX 77072 U.S.A.
T +1 281 879 2699 | F +1 281 988 4445
[Emerson.com/SCADAforEnergy](https://www.emerson.com/SCADAforEnergy)

United Kingdom:

Emerson Process Management Limited
Fosse House, 6 Smith Way
Grove Park, Enderby
Leicester LE19 1SX UK
T +44 0 870 240 1978

Europe:

Emerson S.R.L
Regulatory Compliance Shared Services
Department
Company No. J12/88/2006
Emerson 4 Street
Parcul Industrial Tetarom 11
Romania
T +40 374 132 000

Middle East/Africa:

Emerson Automation Solutions
Energy and Transportation Solutions
Emerson FZE
P.O. Box 17033
Jebel Ali Free Zone – South 2
Dubai U.A.E.
T +971 4 8118100 | F +971 4 8865465

Asia-Pacific:

Emerson Automation Solutions
Energy and Transportation Solutions
1 Pandan Crescent
Singapore 128461
T +65 6777 8211 | F +65 6777 0947

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