Next Level Flow Intelligence

Micro Motion® 5700 Transmitter
The Coriolis flow and density transmitter for superior process measurement

EMERSON.

A flow expert packed with value

You face more than your share of obstacles when it comes to managing uptime, throughput, and optimizing your operations - and challenges like a retiring workforce and tighter regulations add to the complexity. To meet your goals, you need measurements you can count on, simple and easy products to work with and expert support for help when you need it.

Unnecessary maintenance trips are a thing of the past.
Instrumentation that can be accessed remotely ensures that your process is running smoothly and saves your technicians a trip to the field, regardless of your plant's location.

Information is powerful.
Data from your plant can be overwhelming and costly to manually analyze. The onboard standard data historian coupled with a real time clock automatically stores process data and can be used to identify potential process upsets allowing you to focus more on the big picture.

Increase your process safety.
Field devices are often in difficult to reach locations that require climbing ladders, scaffolding, and additional equipment to physically connect to the device. The cable that is connected to the device can introduce a tripping hazard. Additionally, time spent in hazardous areas should be minimized and opening the terminal compartment adds unnecessary risk. With a wireless configuration solution, field personnel can increase their safety by accessing device information from a safe location without the need for more equipment and spending less time in the hazardous area.

Our engineers design and develop innovative solutions, and in harnessing the insight and awareness gained through data capture, we're able to positively influence operational goals and generate efficiencies.

Creating and recreating performance standards for over 45 years.

The Micro Motion 5700 transmitter delivers the best in measurement technology and offers unparalleled support — ensuring total measurement confidence, valuable process insight and greater operational efficiency. The 5700 provides the scalability, compatibility and performance that your application demands. (Shown here: 5700 Transmitter with Configurable Inputs and Outputs with Wi-Fi Display)

MICRO MOTION™

Up-to-date process information is not only valuable, but necessary. Micro Motion 5700 transmitters offer you a window into your process so you can ensure your process is running smoothly.

Different housing options provide optimal flexibility

5700 transmitters can be offered in aluminum and stainless steel housing and can be used as an integral or remote mount to most Micro Motion Coriolis sensor options.

Enjoy peace of mind.

We are the pioneers of Coriolis technology, and solving tough engineering problems is our expertise. With over 45 years of measurement expertise and the largest installed base in the world, you can consider us a trusted advisor for your measurement needs.

Reduce cost, increase uptime.

5700 transmitters offer real-time indication of multi-phase flow events that allow for greater process control. High accuracy flow and density measurement from Micro Motion Coriolis meters reduce or eliminates waste in your process, while the on board standard data historian automatically records process upsets and deviations minimizing the troubleshooting process.

Improve troubleshooting and optimize your process.

Detailed data historian files deliver key time-stamped information about your process from configuration changes and alerts to process events and statistics. ProcessViz software allows you to graphically analyze the historical data files in order to make process improvement decisions.

Be prepared for the unexpected.

As operators plan, manage, and execute their operational goals, they're not looking for products that meet today's challenges, they are looking for solutions for tomorrow's challenges. Solutions that offer longevity and can evolve alongside their business. The 5700 transmitter has been engineered as a solution for the long term, listening to our customers and growing with them. Built with the measurement accuracy known best with Coriolis flow meters, operators maintain confidence in their operations.

What's your challenge?

Instrumentation that can be accessed remotely ensures that your process is running smoothly and saves your technicians a trip to the field, regardless of your plant's location.

What's your opportunity?

Increase your process safety.
Field devices are often in difficult to reach locations that require climbing ladders, scaffolding, and additional equipment to physically connect to the device. Additionally, time spent in hazardous areas should be minimized and opening the terminal compartment adds unnecessary risk. With a wireless configuration solution (Wi-Fi display), field personnel can increase their safety by accessing device information from a safe location with the need for less equipment and less time in the hazardous area.

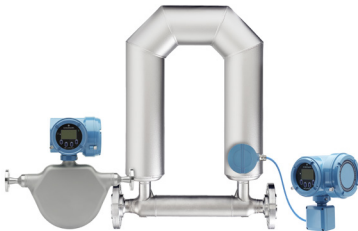# Local display and material of construction options for heightened versatility

The 5700 offers a standard local operator interface, blind display, or a Wi-Fi display (Config I/O version only).

The 5700 offers a stainless steel housing for remote installations while providing reliability for offshore and corrosive environments.

Micro Motion Coriolis sensors will suit any application

ELITE Series Sensors
- Unmatched flow and density measurement for liquids, gases and multiphase flow
- Delivers accurate, repeatable flow measurement in the most challenging environments and applications

F-series Sensors
- Perfect for all industries or applications
- Highly reliable and robust measurement for process control applications
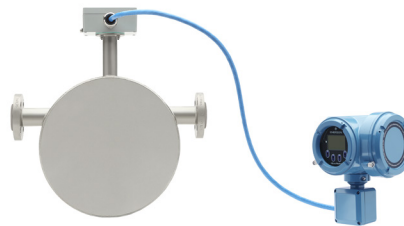- Resolves your toughest productivity challenges

H-series Sensors
- Hygienic line of Coriolis flow sensors
- Ideal for hygienic process-control applications
- Accurate, fit-and-forget, cleanable design

High Pressure Series Sensors
- Ideal for high pressure process applications, such as Hydrogen dispensing or Chemical Injection
- Small footprint is ideal for offshore platforms

TA-series Sensors
- Tantalum-lined Coriolis meter suitable for corrosive environments
- All-wetted material constructed to handle acids and bases
- Batching, distribution, allocation, and intra-plant measurement applications

T-series Sensors
- Micro Motion straight tube Coriolis sensor design optimal for cleanable environments
- Self-draining with a plug-resistant flow path

For more information, visit http://www.emerson.com/MicroMotion5700

Superior Process Insight for Optimizing Your Performance: Today and in the Future

How It Works

The Micro Motion 5700 transmitter delivers best in measurement technology by providing repeatable, reliable and accurate measurements. Have a window into your process with measurement history and real-time indication of process upsets. The 5700 transmitter with Smart Meter Verification takes your flow measurement to the next level. The all-encompassing diagnostic package ensures your flow meter's health instilling confidence that the meter is working properly.

Repeatable, Reliable, Accurate Measurements

- Faster processing speed delivers the best response even in the most challenging applications such as meter proving, filling & dosing, and batching
- Smart Meter Verification provides you with the confidence you need in your meter performance
- Zero verification confirms the calibration and indicates when it's time to re-zero the meter

Productivity Through Simplified Solutions

- Designed to minimize the time and expertise needed to install and operate the flow meter
- Configurable I/O version offers up to five fully configurable channels that can be easily upgraded with changing needs
- Intrinsically safe outputs version offers up to 4 configurable intrinsically safe channels
- Ethernet version offers dual Ethernet ports plus configurable channel for expansive connectivity
- FOUNDATION Fieldbus and PROFIBUS-PA versions offer the digital protocol plus additional inputs and outputs
- Offline configuration and auditing through new file shuttling capability
- Wi-Fi display option with Config I/O version provides point-to-point wireless communication in order to configure andcharacterize the meter, download historical files, and run Smart Meter Verification for troubleshooting purposes
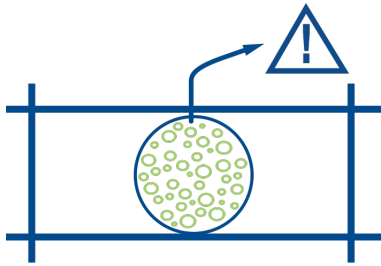
A window into your process

Smart Meter Verification

In-process verification of flow meter health by analyzing the components related to measurement performance. Smart Meter Verification™ provides predictive maintenance and measurement confidence that the meter is working properly. Smart Meter Verification transforms diagnostic data into actionable information to ensure greater operational safety, quality, efficiency and certainty.

Advanced Phase Measurement

Advanced Phase Measurement accurately measures liquid or gas flow in limited multiphase conditions, providing continuous real-time data at ±3% accuracy in up to 15% gas-void fraction of gas in liquid and 5% by mass of liquid in gas applications.
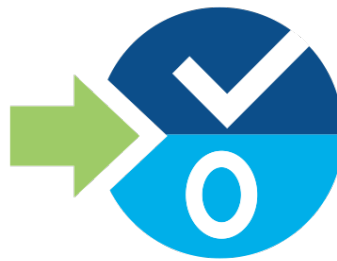
ProcessViz Software

Combined with the on board data historian standard on the 5700 transmitter, ProcessViz will help you visualize and analyze your process data to assist in process efficiency decisions saving time and money.

Electronics that are tailored to your process

Check the health of your meter and process over time with the onboard data historian and Smart Meter Verification diagnostic as standard.

Determine if your meter needs to be re- zeroed by checking the stability of your process with Zero Verification. If a new zero is required, a Zero Verification report can be accessed and printed using ProLink III version 4.7 or higher.

Discover how Plantweb enables effective digital transformation through a portfolio of technologies, software and services that drive performance improvements.

5700 transmitter: unchallengeable innovation with Wi-Fi connectivity

Micro Motion 5700 transmitters offer reliability for your process both inside and out. 5700 transmitters deliver top performing measurement technology and offer unparalleled support — ensuring total measurement confidence, valuable process insight and greater operational efficiency. Designed with safety in mind, the 5700 Wi-Fi display reduces risk by accessing the device via Wi-Fi point to point connection using ProLink III. Field technicians are looking to increase efficiency and safety. Using a wireless configuration allows the field technician to connect to the meter to perform configuration, running diagnostics, and downloading historical files without the need of a hot work permit or equipment to access the device if it was installed in a difficult to reach location minimizes the time spent in a hazardous location.

5700 Transmitter Specifications

Standard interface/display	Graphical backlit display with 4-button optical controls and flowmeter-status LED
	Supports English, German, French, Spanish, Portuguese, Russian, Chinese and Japanese
Power	Self switching AC/DC input, automatically recognizes supply voltage
Configurable I/O version	Up to 3 mA outputs
	Up to 3 Pulse outputs
	Up to 3 Discrete outputs
	Up to 2 Discrete inputs
	mA and Pulse inputs
	Modbus/RS-485
	SIL 2 single device and SIL 3 multiple devices capable certified per IEC 61508
Ethernet version	Dual Ethernet ports supporting EtherNet/IP, Modbus TCP, and PROFINET all in one device
	Additional channel configurable to mA output, Pulse output, Discrete Output, or Discrete Input
FOUNDATION Fieldbus	FOUNDATION™ Fieldbus channel
	mA output
	Pulse or discrete output
Intrinsically safe option	Up to 3 mA IS outputs
	Up to 2 Pulse IS outputs
	SIL 2 single device and SIL 3 multiple devices capable certified per IEC 61508
PROFIBUS-PA version	PROFIBUS PA channel
	IS mA output
	IS Pulse or discrete output
Operating temperature limit	-40 to +149 °F (−40 to +65 °C)
Communication protocols	Modbus/USB, HART/RS-485, Modbus/RS-485, HART/Bell 202, WirelessHART available via THUM adapter, FOUNDATION Fieldbus, and PROFIBUS-PA. EtherNet/IP/Ethernet, Modbus TCP/Ethernet, PROFINET/Ethernet
Advanced features	Smart Meter Verification, Concentration Measurement, API Referral, Batching, Advanced Phase Measurement (APM), and Piece Wise Linearization
WiFi Display option	WiFi display option available for a 5700 with configurable inputs and outputs only.

Mounting

	Coriolis Sensor	
	Integrally Mounted	Remotely Mounted
Field-mount Aluminum	Micro Motion ELITE (CMFS), F-series, H-series, R-series, or T-series Coriolis sensor	Any 4-wire or 9-wire Micro Motion ELITE®, F-series, H-series, R-series, or Tantalum-series Coriolis sensor
Field-mount Stainless Steel	Not Available	Any 4-wire or 9-wire Micro Motion ELITE®, F-series, H-series, R-series, or Tantalum-series Coriolis sensor

Flexibility for your toughest challenges

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