



ASK THE EXPERT

Emerson's Next-Generation Transmitters Deliver State-of-the-Art Technology to Legacy Systems



BRETT SIBEL
*Product Manager,
Emerson*

Developing new products for any industry can be challenging. The job gets even tougher for industries requiring precise measurement, flawless performance, and extended service time under all conditions. Emerson has developed a new transmitter for metered applications that meets all the above criteria.

Brett Sibel, product manager for Emerson, addresses frequently asked questions regarding their newest offering, the Micro Motion 4700 Coriolis Config I/O Transmitter.

What makes the Micro Motion 4700 Transmitter such an exciting product?

The Micro Motion 4700 is a new, great mid-tier offering for our transmitter portfolio moving forward and is a great option for manufacturers looking to upgrade their legacy systems.

The biggest benefit for customers with this latest innovation is the updated electronics. The 4700 is capacitive touch, which means operators interested in upgrading to the Micro Motion 4700 will be able to do it easily with a retrofit adapter.

The Micro Motion 4700 meets lead-free initiatives occurring industry-wide, along with its advanced diagnostics capabilities such as Smart Meter Verification and time-stamped PDF verification reports, among

others. It is also Emerson's first Coriolis transmitter featuring Bluetooth® connectivity, which is huge from a safety standpoint and allows for wireless configuration, avoiding the need for a hot work permit.



Micro Motion™ 4700 Remote Mount Transmitter

Sponsored by



Speaking of Bluetooth connectivity, what is the range for the end user?

The range for Bluetooth connectivity is about 50 feet or 15 meters. This allows users to access device information from a safe location, especially if installed out of reach or in a congested or hazardous area. Each transmitter has its own unique identifier and password that are used to connect to that product specifically. What's also nice is that we have an AMS Device Configurator application that works with Coriolis transmitters and all other Emerson products enabled with Bluetooth connectivity.

Can you talk a little more about Emerson's new retrofit adapter?

It is an integrally mounted adapter solution for connecting our new electronic transmitters with legacy sensors. It is an exciting innovation since it avoids the need to take the sensor out of the process line to use our new transmitter. Customers don't have to buy a whole new sensor; they can use their existing sensor body, which saves them a ton of money and time while allowing them to take advantage of all the advanced diagnostic features of the new Micro Motion 4700.



Micro Motion™ 4700 Integrally Mounted to G-Series Coriolis Meter

What type of diagnostics does the Micro Motion 4700 offer?

The Micro Motion 4700 will tell you the health and status of the meter to let you know that it is functioning and working properly. It also has Smart Meter Verification in two versions, basic and professional. The basic version is free, comes with all the transmitters, automatically verifies measurement performance, and detects corrosion and erosion damage within non-critical processes. The professional version includes non-uniform coating detection and a time-stamped PDF verification report, which is recognized by many third parties to extend proof-test and calibration intervals.

It also provides extra diagnostic options and access to a printed report for the health diagnostic of the meter. The report gives you a holistic status of what is functioning well in the meter. Also, a real-time clock provides a time stamp of when that report is generated so the user can look back and see precisely what the status was at that time.



Micro Motion™ 4700 Transmitter with Bluetooth® Wireless Technology

Sponsored by



What industries would benefit most from this product?

Any industry can benefit from this product. For the chemical industry, along with oil and gas or petrochemical industries, the 4700 has a C1D1 (Zone 1) housing and approvals for hazardous environments. It is approved by all the major testing agencies. Companies working in hazardous conditions can rest assured this is a safe product regardless of the process conditions.

It's also great for the food and beverage industry and life sciences. So, for those who want a mid-tier transmitter, this will be an awesome solution because it will have three channels that the value-tier transmitters don't have.

What type of channel options does the Micro Motion 4700 have?

The transmitter has three channels, so it complements our other products, such as our Micro Motion 5700 Coriolis Transmitter, which has five channels, and our Micro Motion 1600 Coriolis Transmitter, which has two. It also has a frequency output, discrete output, and 4-20mA

output on Channel A. Channel B has all those same outputs and discrete input, and Channel C has an RS485 Modbus channel. These are all licensable options. You can have as many as three or as little as one.

What other innovations may be coming down the road?

Emerson is also thrilled to announce the launch of the new Micro Motion G-Series Coriolis Flow and Density Meter. This new innovation is the most compact dual-tube Coriolis mass flow meter on the market and is very lightweight. So, for customers who want a smaller, reliable Coriolis flow meter that fits installations even where available space is limited at an accessible price point, this will be a perfect solution. As with all of our flow meters, customers can select the size and configuration unique to their process conditions. Similar to the 4700, the G-Series Coriolis Flow Meter is ideal for many industries but is especially well-suited for chemical and other industrial applications because of its ability to function flawlessly under adverse conditions.

For more information, please visit www.emerson.com/en-us/catalog/micro-motion-sku-4700-flow-transmitter.

[Learn More >](#)

Sponsored by

