



**Achieve Absolute Measurement
Confidence**

Smart Meter Verification

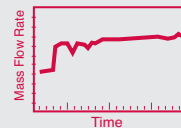
Easily verify flow meter performance – in line and on demand.



Maintaining measurement accuracy and meter integrity is a challenge

You have a lot to manage when it comes to verifying the performance of your instruments and optimizing regulatory compliance. Smart Meter Verification is the only tool to deliver absolute confidence in measurement integrity and performance to help address and resolve these common challenges:

“With over 1000 instruments in operation, we need a single diagnostic that will verify Coriolis meter performance.”
– Instrumentation Engineer



“The average cost of calibration is \$1,000 to \$5,000.”
– Metrology Manager



“The average out-of-service time to recalibrate a meter is 1 to 6 weeks.”
– Instrumentation Engineer



“\$160,000 in staffing is required to complete calibrations for 26 new flow points across six plants.”
– A Major US Utility Provider



“We are required by regulation to prove our Coriolis meters once a month, even when performance hasn’t changed in 12 years.”
– A Major Upstream Oil and Gas Producer





“Instead of being uncertain about the state of your meter, what if you could monitor measurement accuracy and meter integrity without stopping your process?”

- Guy Fulkerth, Instrument Specialist / Maintenance Team Leader, Keyera Energy

Achieve confidence in your measurement and insight into your process



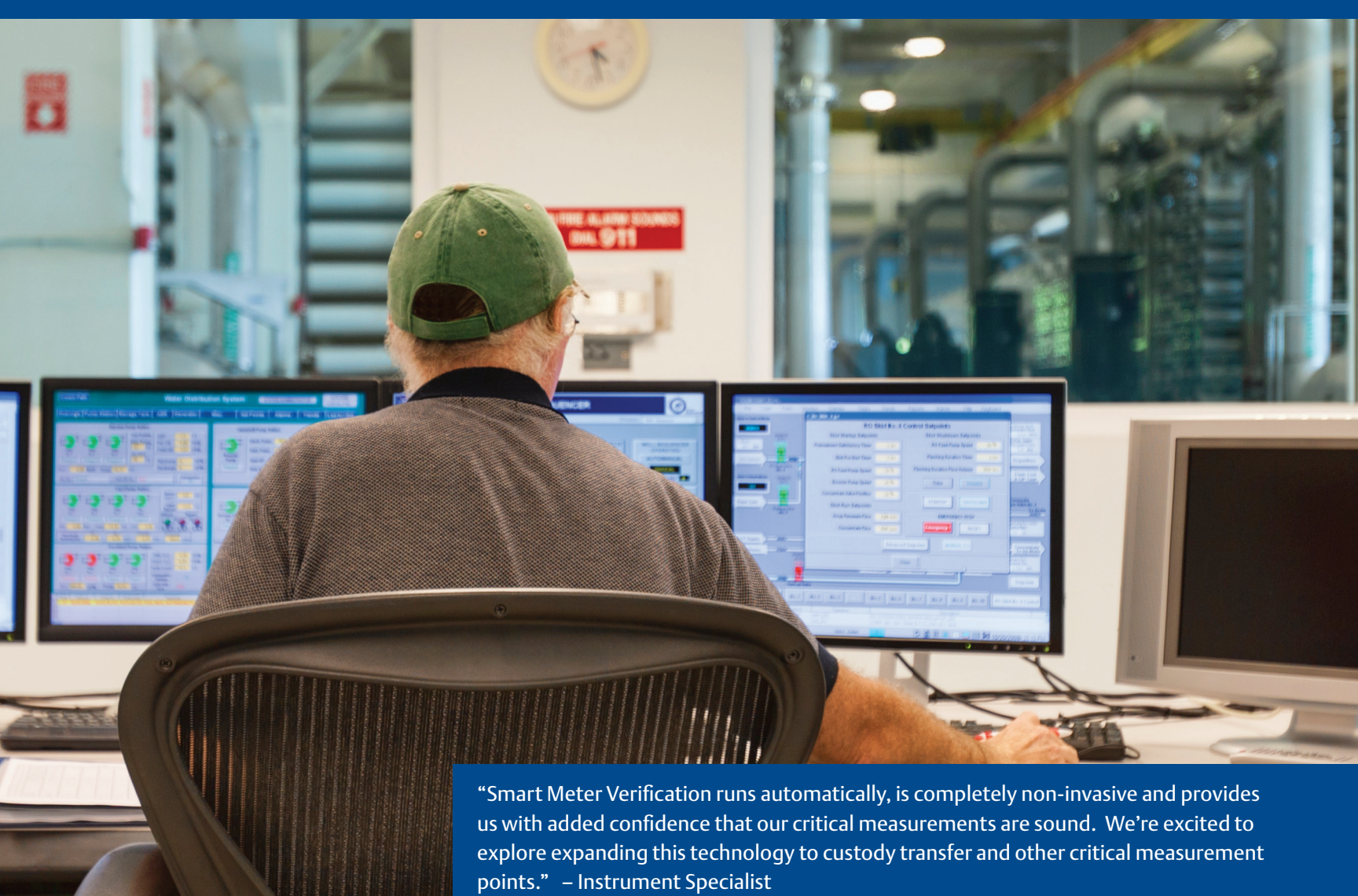
Smart Meter Verification transforms diagnostic data into actionable information to ensure greater operational safety, quality, efficiency and certainty.

Expensive proving and calibration cycles can now be extended to save thousands by eliminating labor, outsourced calibration services and production interruptions with a standard traceable calibration verification.

Measurement performance is confirmed, under current flowing conditions, to be within factory accuracy specifications.

These actionable instrument and process diagnostics can be accessed across your existing operational infrastructure by integrating with digital hosts like AMS with SMART Wireless.

There is no longer a need to interrupt your process in order to achieve confidence in your instruments, measurements and process.



“Smart Meter Verification runs automatically, is completely non-invasive and provides us with added confidence that our critical measurements are sound. We’re excited to explore expanding this technology to custody transfer and other critical measurement points.” – Instrument Specialist

Reduce costs

“I know that sending my meter to be calibrated at a lab won’t make it any better, so Smart Meter Verification gives me the confidence to save money and only calibrate my meter when it’s needed.”

- Joel Singleton, Process Control I&E Engineer
Evonik Industries

Increase uptime

“Process monitoring via wireless saves \$5000 for every installation point. For our multiple meters, Green House Gas meter verifications save us \$18,000 per year without process downtime.”

- Kien Vo, Manufacture Technology Principle Engineer
Dupont Fayetteville

Eliminate uncertainty

“Smart Meter Verification now tells me if the meter is measuring within factory uncertainty specifications – under the current flowing conditions, not just in the lab.”

- Metrology Manager,
Major Global Chemical Company

Improve quality and safety

“Smart Meter Verification improves safety by eliminating human factors and loss of the SIS measurement function during proof testing. When proof testing means taking the meter out of service and bringing to a calibration facility, in-line verification is the answer.”

- Kees Kaysjer, Global SIS Instrument Lead
Dow Chemical Company

Delivering insight for better measurement and better process management



Smart Meter Verification overview

Smart Meter Verification enables you to check your flow meter's health without taking your meter out of line. It's diagnostics continuously monitor meter health to empower users to take action and avoid safety and measurement issues as a result of corrosion, erosion, over-pressurization, build-up and other sources of potential instrument damage.

Smart Meter Verification performs a traceable calibration verification with a patented tube integrity diagnostic, as Coriolis meter calibration factors are directly related to the mechanical stiffness of the flow tubes. This method provides early detection of instrument damage, before it creates a safety risk or accuracy shift. This traceable calibration verification, as well as a verification of all electrical components, is now included as a standard feature.

[Emerson.com/SmartMeterVerification](https://www.emerson.com/SmartMeterVerification)



Benefits of Smart Meter Verification

- Troubleshoot any process and isolate/confirm meter performance with rapid and actionable verification feedback
- Proactively monitor the condition of meters with regular verification, trending and forecasting the need for calibration
- Assure stability of operation with ongoing measurement verification, including verifying meter after process events or upsets
- Accessible directly at the meter, through digital connectivity or via the Smart Wireless THUM Adapter, for flexibility of use

Easily monitor meter performance without interrupting your process

Agency recognition



Traceable calibration verification results on the Smart Meter Verification report are recognized to extend proof-test and recalibration intervals by agencies including the EPA, FDA, API, Exida, GOST-R, and more.

Non-uniform coating detection



Enhance maintenance and Clean-In-Place (CIP) programs to avoid proving failures, measurement inaccuracies and quality challenges.

Intuitive Interface



Quickly generate agency-recognized reports and confidence in your Coriolis measurement through ProLink, Ethernet webpages and AMS.

Two versions to address your verification needs

| | Basic | Professional | |
|---|---|---|-------------------------------|
| Sensors | CMF, CMFS, F, H, R, and T | | |
| Transmitters | Direct Connect, 1500, 1700, 2400, 2500, 2700, 4200, 5700 (Enhanced Core Processors Only) | Direct Connect, 1500, 1700, 2400, 2500, 2700, 4200, 5700 (Enhanced Core Processors Only) | 5700 |
| Access | <i>Included</i> | <i>Licensed</i> | <i>90-Day Trial, Licensed</i> |
| Calibration verification | ● | ● | ● |
| Electronics verification | ● | ● | ● |
| Automation | ● | ● | ● |
| Compliance Report | | ● * | ● * |
| Previous 20 verifications stored | | ● | ● |
| Non-uniform coating detection | | | ● |
| Installation verification | | | ● |
| Multiphase diagnostic | | | ● ** |
| Flow range diagnostic | | | ● ** |

* Access, Save and Export with ProLink III Basic and Professional, Ethernet webpage, and AMS SMV SNAP-ON

** Access 24-hour visual historian for these diagnostics in ProLink III Professional

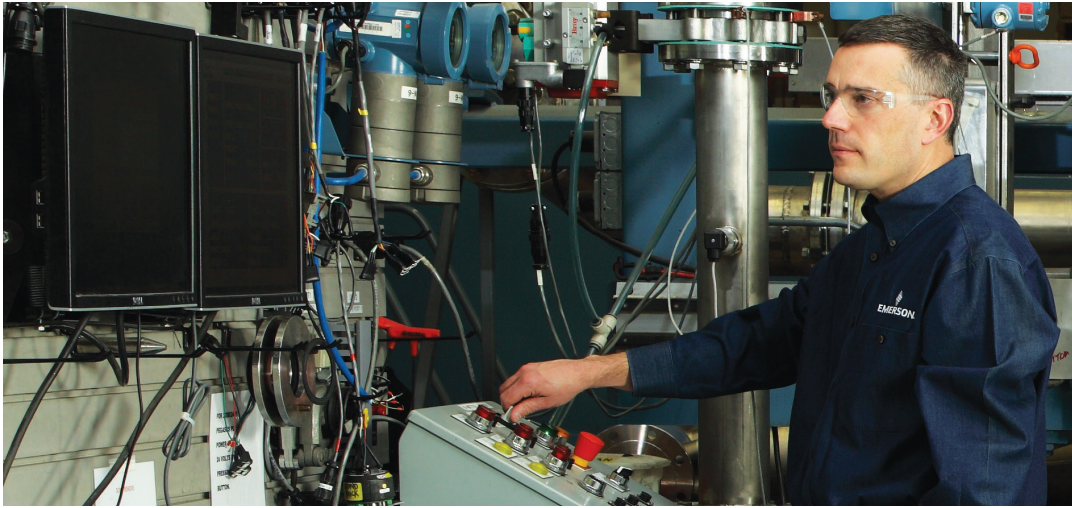
Basic

- Calibration and electronics verification **now included with all Enhanced Core Processors**
- Follow actionable NE107 alert recommendations to resolve operational challenges quickly
- Verify measurement is within factory specification under current flowing conditions

Professional

- Optimize instrumentation and process compliance
- Generate reports recognized by regulatory agencies (e.g. EPA, FDA, API, SIS) to extend recalibration, proving and proof-test intervals
- Detect non-uniform coating to protectively clean equipment before it leads to quality, safety or proving challenges
- Improve measurement performance by diagnosing process upsets or an improper installation

Delivering insight for better measurement and better process management



MICRO MOTION™

Smart Meter Verification is an easy-to-use, automatic diagnostic tool that monitors the flow meter's performance and integrity – without interrupting your process or your measurement

Emerson Automation Solutions

Worldwide Headquarters
7070 Winchester Circle
Boulder, Colorado USA 80301
T: +1 800-522-6277
T: +1 303-527-5200
F: +1 303-530-8459
Mexico: 52 55 5809 5473
Argentina: 54 11 4733 5400
Brazil: 55 15 3413 8888
Chile: 56 22 4310 7432

Emerson Automation Solutions

Central Europe: +41 41 7686 111
Eastern Europe: +41 41 7686 111
Dubai: +971 4 811 8100
Abu Dhabi: +971 2 697 2000
Austria: +43 2236 607-0
France: 0800 917 901
Germany: +49 (0) 2173 3348 0
Italy: 8008 77334
The Netherlands: +31 318 495 555
Belgium: +32 2 716 77 11
Spain: 900 901 986
U.K.: 0870 240 1978
Russian/CIS: +7 495 995 9559

Emerson Automation Solutions

Australia: (61) 3 9721 0200
China: (86) 21 2892 9000
India: (91) 22 6662 0566
Japan: (81) 3 5769 6803
South Korea: (82) 31 8034 0000
Singapore: (65) 6 363 7766



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR-Automation

©2020 Micro Motion, Inc. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Micro Motion, ELITE, ProLink, MVD and MVD Direct Connect marks are marks of one of the Emerson Automation Solutions family of companies. All other marks are property of their respective owners.

MC-00949 Rev J | Printed in USA | 02-20



EMERSON™

CONSIDER IT SOLVED™