Density, Concentration and Net Flow Measurement
World-leading technology for all density applications
Exceptional Density, Concentration and Net Flow Measurement – only from Micro Motion®

Emerson’s Micro Motion precision density measurement devices are designed to tackle the most demanding process and fiscal applications. With accuracy to ±0.0001 g/cc for applications ranging from process monitoring to custody transfer, Micro Motion meters provide the highest quality density measurement possible.

Measurement Benefits

Increase production efficiency and quality
- Exceptional measurement accuracy ensures on-spec product with reduced rework and less material waste
- Whether full stream, slip stream or tank mounted, robust reliable measurement ensures increased production yields and accurate material allocation

Reduce costs
- Direct mass flow and density measurement removes the need for conventional temperature, pressure and flow computer instrumentation
- Reduced maintenance requirements via straight through density measurement in custody transfer applications where volumetric flow technologies are used.
- Dramatically reduce verification effort and expense by replacing master meter verifications with in-situ meter verification technology
- Superior meter stability, along with accredited gas and liquid calibrations that are insensitive to product changes, reduce operational and maintenance costs

Increase compliance and assurance
- Accredited, traceable gas and liquid calibrations provide unbeatable measurement confidence
- Optimized feed stock and fuel measurements ensures the highest possible quality control, energy efficiency while minimizing process emissions
- Using TÜV-certified measurement technology certified to IEC 61508 increases compliance and reduces device and documentation costs

Inherent Advantages of Micro Motion Meters
- Widest range of density, concentration and net flow measurement solutions
- Rugged, robust meters with no moving parts
- Industry leading flow and density accuracies that optimize plant efficiency
- Installation flexibility for tank, pipeline insertion, full-stream and slip-stream configurations
- Widest range of product measurement capability available - from fuel gas to corrosive acids and bases
Whether you need highly accurate fiscal density measurement, flow and temperature measurement, or on-line, real-time measurement of concentration and net flow, you want the best devices with the best performance. No matter what you need, look no further than Emerson’s Micro Motion.

- World-leading accuracy from gas and liquid density devices (±0.0001 g/cc) and Coriolis multivariable meters, for both mass flow (±0.05%) and density (±0.0002 g/cc) measurement.
- Exceptional, true density measurement that identifies whether any density change is due to entrained gas and thereby minimizes the impact on custody transfer applications.
- Insensitive to vibration, flow, temperature and pressure variations to perform well in the most demanding process and fiscal applications ensuring maximum uptime.
- Internationally accepted, on-site accredited density laboratory for guaranteed performance.

### Designed for Reliability and Unbeatable Quality

Emerson’s Micro Motion meters are part of the PlantWeb® architecture and are the world’s leading flow and density measurement technology for a wide range of fluid types -

- Alcohol
- Black liquor
- °Brix, Plato, Baume
- Brine
- Calcium carbonate
- Caustic
- Cement density
- Concentration
- Dairy separators
- Hydrogen peroxide
- Lime mud
- Net oil production and well testing
- Pounds sand added
- Refined products
- Resins
- Starch solids
- Starches
- Titanium Dioxide

### Summary Specifications Overview

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<th>Coriolis Multi-Variable Meters</th>
<th>Density &amp; Concentration Meters</th>
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<td>Fiscal Density Measurement</td>
<td>ELITE® F / H-Series</td>
<td>7835, 7845, 7847, 7826/28, 7812, 3098</td>
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<td>Liquid Density &amp; % Concentration</td>
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<td>Mass Flow, Density &amp; Concentration</td>
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<tr>
<td>Liquid Density &amp; % Concentration</td>
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<td>Sensor Type</td>
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<td>Single Straight Tube</td>
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<td>Single Straight Cylinder</td>
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<td>Special Calibration Option</td>
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<td>Measurement Accuracy</td>
<td>±0.2 kg/m³ ±0.0002 g/cc</td>
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<td>±0.1 kg/m³ ±0.0001 g/cc</td>
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<td>±0.1% reading</td>
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<td>Ti / Monel</td>
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- **Recommended**
- **Possible**
Micro Motion, a division of Emerson Process Management, is known globally in over 85 countries for its quality and reliability. As part of the Emerson PlantWeb® digital plant architecture, Micro Motion enables increased plant availability, decreased costs and enhanced safety. With over 600,000 meters installed around the world, Micro Motion delivers application expertise, service and technical support not available elsewhere.

Benefit from the wide range of Micro Motion solutions available
• In-line meter verification of electronics and sensor – without the need for tools or down-time
• Exceptional measurement and operating performance in entrained gas conditions
• World-leading dedicated density measurement devices
• Solutions for high and extreme temperature applications
• Best-in-class compact and drainable Coriolis
• TÜV Safety-certified Coriolis for SIL-2 and SIL-3 applications

For a complete list of contact information and websites, please visit: www.emersonprocess.com/home/contacts/global