REVOLUTIONIZE YOUR GAS DENSITY AND PURITY MEASUREMENT TECHNOLOGY

Micro Motion Gas Density Meter
INTRODUCING EMERSON’S MICRO MOTION® GAS DENSITY METER

Density Measurement with Reliability and Confidence

The combination of our industry-leading technology, wide breadth of products, unparalleled application expertise and customer support allows us to deliver unbeatable performance and value, time and time again.

Our Gas Density Meter (GDM) delivers fast-response online gas density and purity measurements. Designed for fiscal metering, this rugged and reliable meter raises the standard for online density measurement of gases such as fuel gas, syngas, hydrogen and natural gas mixtures. The meter enhances your custody transfer, purity and blending measurement confidence by leveraging best-in-class performance and leading accredited calibration facilities.

The Micro Motion Gas Density Meter Delivers:

Superior Measurement Capabilities

- An innovative sensor unaffected by process or compositional changes that provides the best, real-world measurement performance
- The tightest density resolution and accuracy available (±0.1% reading over 1-400 kg/m³ range)

A World-Class Leading Electronics Platform

- Local display and user interface allows for simplified device management, minimizing maintenance requirements
- Simple integration into DCS, PLC, and flow computers (Frequency/Time Period, Analog 4-20mA, HART®, Modbus RS485 and WirelessHART™)
- Revolutionary device diagnostics and verification methods

Accredited Density Measurement

- State-of-the-art IEC/ISO17025 accredited, traceable density calibrations
- Compliant to national and international standards
**Application-Specific Configurations**
Automatic, application-specific measurement and output configurations ensure simple set-up and commissioning.

**Meter Diagnostics**
Built-in diagnostics for real-time monitoring and automated meter verification systems.

**Unrivalled Density Performance**
A choice of installation options for replacement and upgrade solutions give you the performance you need.

**Interconnectivity**
Integral HART I/O allows direct input of external temperature, pressure and flow measurements for enhanced outputs.
**Oil & Gas Pipeline & Terminals**

- **Natural Gas Fiscal and Custody Transfer**
  Minimize exposure and gain/loss uncertainty

- **Measurement Standards**
  Adheres to national & international standards (AGA3, ISO5167)

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**Refining & Petrochem Fuel Gas & Hydrogen Measurement**

- **Enhanced Refining Efficiencies**
  Hydrogen purity indication for improved cracking yields and catalyst protection

- **Combustion Control**
  Fuel gas density input to air/fuel ratio control enables stable steam production

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**Power Generation**

- **Turbine Generator Cooling**
  Hydrogen purity indication improves cooling efficiency and minimizes windage losses

- **Operation and Maintenance Expense**
  Reduced fuel costs through efficient peak shaving and combustion fuel management
For over 30 years, Emerson’s Micro Motion has been a technology leader delivering the most precise flow, density and concentration measurement devices for fiscal applications, process control and process monitoring. Our passion for solving flow and density measurement challenges is proven through the highly accurate and unbeatable performance of our devices.
### Gas Density Meter Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Measuring Range</td>
<td>1-400 kg/m³ (0.001-0.4 g/cc)</td>
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<tr>
<td>Density Accuracy</td>
<td>±0.1% of reading</td>
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<tr>
<td>Density Repeatability</td>
<td>±0.02% of reading</td>
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<tr>
<td>Temperature Accuracy</td>
<td>BS1904, DIN 43760 Class ‘A’ (±0.15 ± 0.002 X T)°C</td>
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<tr>
<td>Accreditation &amp; Standards</td>
<td>ISO17025, NAMUR, NACE (pressure retaining parts), AGA3, ISO5167</td>
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<tr>
<td>Safety Approvals</td>
<td>ATEX, CSA, IECEx (Intrinsically-safe)</td>
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<tr>
<td>Display</td>
<td>Two-line, LCD screen, Optical switch configuration</td>
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<tr>
<td>Outputs</td>
<td>Standard : Time Period, 4-20mA, HART, Modbus RS-485</td>
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<tr>
<td></td>
<td>Optional : WirelessHART™</td>
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<tr>
<td>Protection Class</td>
<td>Ingress Protection : IP66/67, NEMA4</td>
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<tr>
<td></td>
<td>EMC compliant with EN61326</td>
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<tr>
<td>Dimensions</td>
<td>376 mm (h) x 125 mm (w) x 163 mm (d)</td>
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<tr>
<td>Weight (Typical)</td>
<td>5 kg (11 lbs)</td>
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For more information, please visit: www.Emerson.com/density