REVOLUTIONIZE YOUR GAS SPECIFIC GRAVITY, PURITY AND ENERGY MEASUREMENT TECHNOLOGY

Micro Motion Specific Gravity Meter
INTRODUCING EMERSON’S MICRO MOTION® SPECIFIC GRAVITY METER

Specific Gravity and Purity Measurement with Performance 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.

The Micro Motion Specific Gravity Meter Delivers:

Superior Measurement Capabilities

• An innovative sensor that provides the best real-time measurement of specific gravity, molecular weight and relative density

• The tightest resolution and repeatability available (±0.02% reading)

• A rugged, fast-response device that needs minimal maintenance and recalibration

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

Robust & Flexible Measurement

• Real-world performance that is unaffected by process or compositional changes

• Application-specific measurement and output configurations to ensure simple set-up and commissioning

Our Specific Gravity Meter (SGM) delivers precision, fast-response measurements of specific gravity, molecular weight, gas purity, BTU/calorific value and Wobbe Index. This rugged and reliable meter raises the standard in online Specific Gravity measurement and enhances the custody transfer, gas purity and combustion control capabilities of diverse applications such as fuel gas, syngas, hydrogen and natural gas mixtures.
**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 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

- **Gas Blending and Allocation**
  Optimize control with fast-response measurement

Refining & Petrochemical Fuel Gas Measurement

- **Optimized Combustion Control**
  Efficient stable steam production and reduced flame-out risks

- **Minimize Emissions and Maintenance**
  Fast-response combustion management reduces CO₂ and NOₓ taxation and fuel costs

Hydrogen Purity Control

- **Turbine Generator Cooling**
  Efficient hydrogen-cooling and minimized windage loss through fast-response purity measurement

- **Enhance Refining Efficiencies**
  Hydrogen purity control for improved cracking yields and catalyst protection
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.
Specific Gravity Meter Specifications

**Measuring Range**  
0.1-3.0 typical

**Accuracy**  
±0.1% of reading (Specific Gravity, Molecular Weight, Relative Density)

**Repeatability**  
±0.02% of reading

**Temperature Accuracy**  
BS1904, DIN 43760 Class 'A' (±0.15 ± 0.002 X T)°C

**Response Time**  
Less than 5 seconds upon entry into device

**Safety Approvals**  
ATEX, CSA, IECEx (Intrinsically-safe)

**Display**  
Two-line, LCD screen, Optical switch configuration

**Outputs**  
Standard : Time Period, 4-20mA, HART, Modbus RS-485  
Optional : WirelessHART™

**Protection Class**  
Ingress Protection : IP66/67, NEMA4  
EMC compliant with EN61326

**Dimensions (no enclosure)**  
452 mm (h) x 201 mm (w) x 254 mm (d)

**Weight**  
20 kg (44 lbs)

For more information, please visit: www.MicroMotion.com/density