

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.



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.

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 ($\pm 0.02\%$ 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

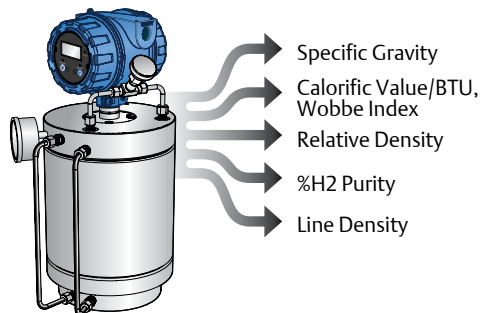
Robust & Flexible Measurement

- Real-world performance that is unaffected by process or compositional changes
- Application-specific measurement and output configurations to ensure simple set-up and commissioning

PRODUCT HIGHLIGHTS

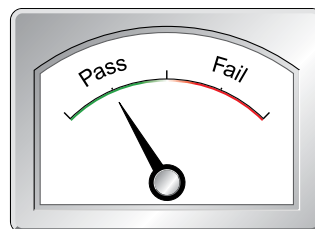
Application-Specific Configurations

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



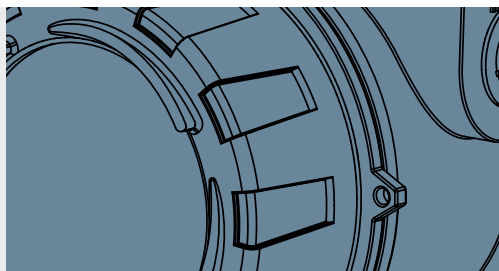
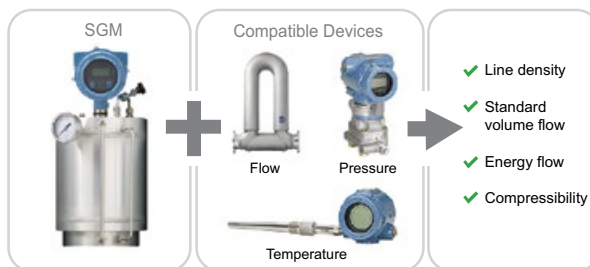
Unrivalled Density Performance

A choice of installation options for replacement solutions give you the performance you need



Interconnectivity

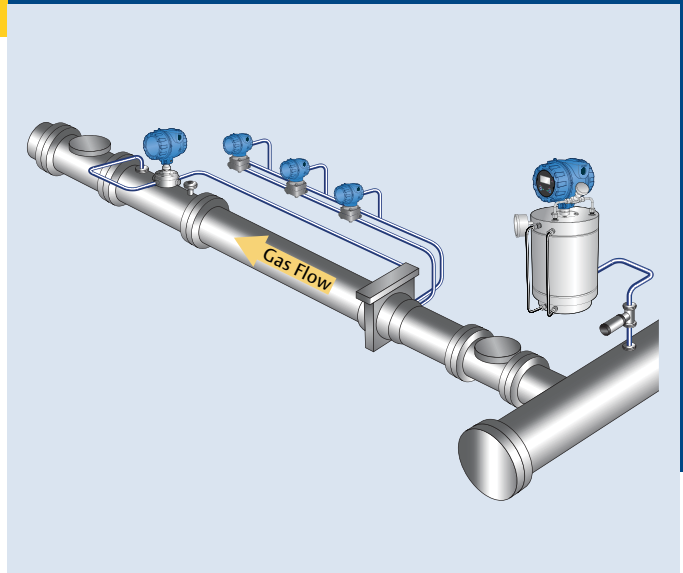
Integral HART I/O allows direct input of external temperature, pressure and flow measurements for enhanced outputs



KEY APPLICATIONS

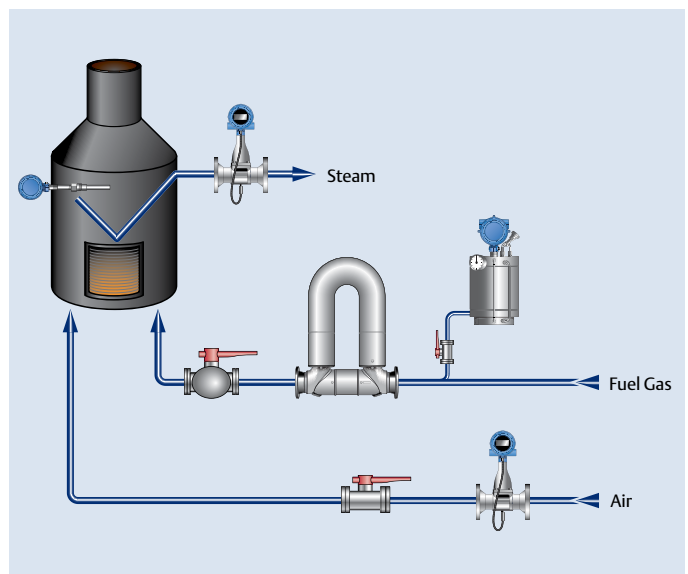
Oil & Gas Pipeline & Terminals

- **Natural Gas Fiscal and Custody Transfer**
Minimize exposure and gain/loss uncertainty
- **Gas Blending and Allocation**
Optimize control with fast-response measurement



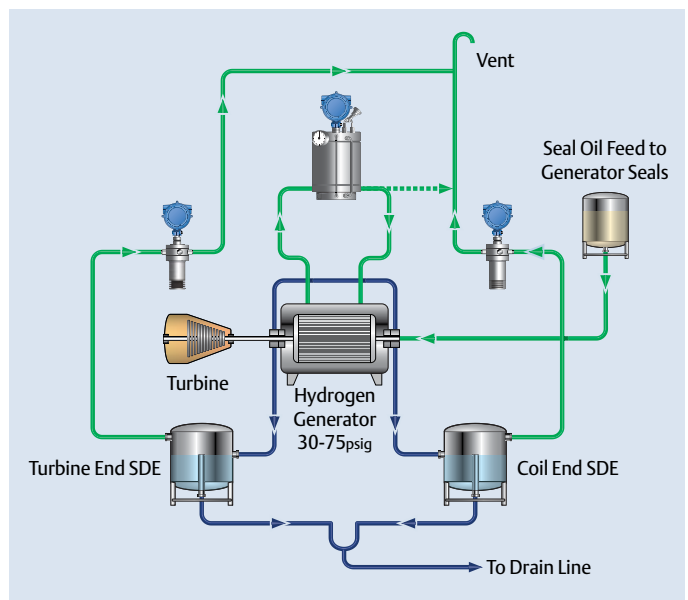
Refining & Petrochemical Fuel Gas Measurement

- **Optimized Combustion Control**
Efficient stable steam production and reduced flame-out risks
- **Minimize Emissions and Maintenance**
Fast-response combustion management reduces CO₂ and NO_x 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





YOUR SOLUTION FOR THE
MOST DEMANDING PROCESS
APPLICATIONS



MICRO MOTION™

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' ($\pm 0.15 \pm 0.002 \times T$)°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)



Compact Density Meter
Peak Performance
Precision Density Meter



Fork Density Meter
Direct Insertion
Density Meter



Gas Density Meter
Fiscal Gas
Density Meter



Specific Gravity Meter
Gas Specific Gravity
/BTU Meter



Fork Viscosity Meter
Multi-Variable
Viscosity Meter



Heavy Fuel Viscosity Meter
Multi-Variable Marine & Power
HFO Viscosity Meter

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

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Emerson Automation Solutions Americas
7070 Winchester Circle
Boulder, Colorado USA 80301
T: +1 800 522 6277
T: +1 (303) 527 5200
F: +1 (303) 530 8459

Mexico T: 52 55 5809 5300
Argentina T: 54 11 4837 7000
Brazil T: 55 15 3413 8000
Venezuela T: 58 26 1300 8100
Chile T: 56 2 2928 4800

Emerson Automation Solutions Europe/Middle East
Central & Eastern Europe T: +41 41 7686 111
Dubai T: +971 4 811 8100
Abu Dhabi T: +971 2 697 2000
France T: 0800 917 901
Germany T: +49 (0) 2173 3348 0
Italy T: 8008 77334
The Netherlands T: +31(0) 70 413 6666
Belgium T: +32 2 716 77 11
Spain T: +34 913 586 000
U.K. T: 0870 240 1978
Russia/CIS T: +7 495 981 9811

Emerson Automation Solutions Asia Pacific
Australia T: (61) 3 9721 0200
China T: (86) 21 2892 9000
India T: (91) 22 6662 0566
Japan T: (81) 3 5769 6803
South Korea T: (82) 2 3438 4600
Singapore T: (65) 6363 7766

