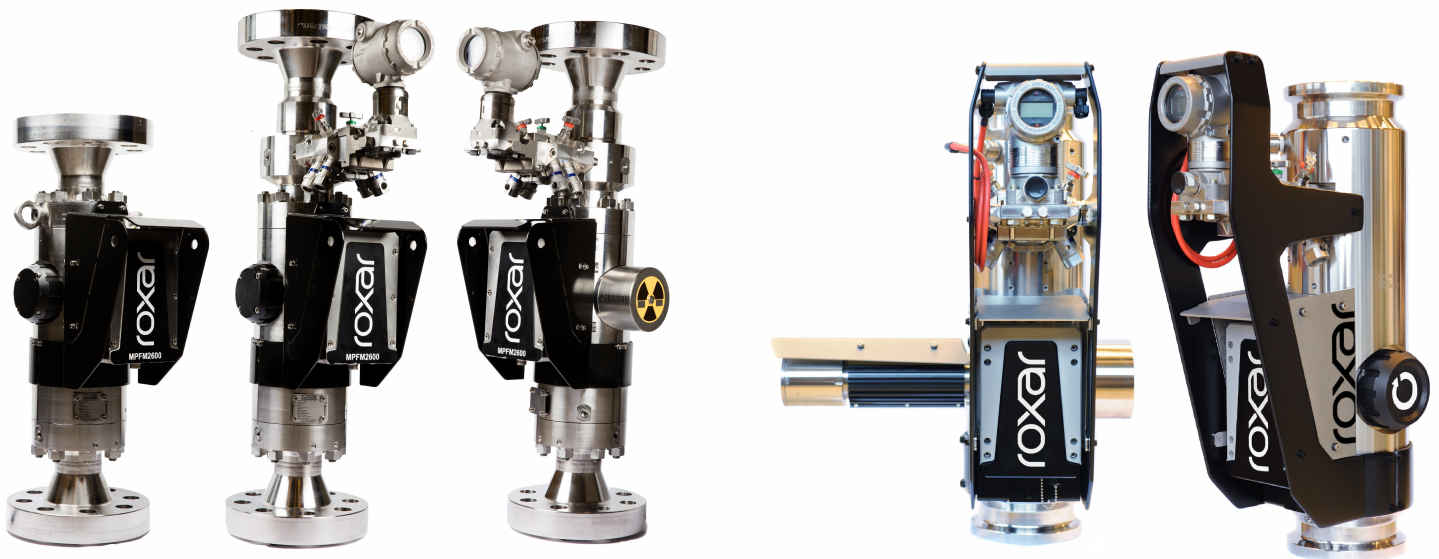


# Roxar™ 2600 MPFM

## Multiphase Flow Meter with Rapid Adaptive Measurement™



As oil and gas operators worldwide adjust their production methodologies and target more challenging reservoirs, the multiphase flow metering technology must be robust and reliable in ever more demanding conditions.

The Roxar 2600 MPFM key features:

- Real time, three-phase measurement without the need for separation
- Modular design and selectable advanced software features to fit your application needs
- Flexible and adaptable configuration options throughout the lifetime of your field
- Intuitive and user-friendly operator interface tool for calibration and configuration
- The Roxar Rapid Adaptive Measurement embedded software supporting automation and trustworthy measurement in dynamic multiphase flow
- Robust full-range non-gamma meter version available, for operators who prefer to avoid the use of a radioactive source
- Fully compatible with Emerson Connected Services, giving operators continuous access to Emerson expertise and support
- The Roxar Multiphase Salinity System (RMSS) available as an additional module, providing live salinity content information when operating in water-dominant flow

# Roxar 2600 Multiphase Flow Meter model options and specifications

Emerson offers a modular approach to the Roxar 2600 Multiphase Flow Meter. This makes it possible for operators to select only the modules suitable for their application and measurement needs, fully confident changes can be made in field if application needs change over time.

Model description	M	MV	MVG
Key raw data measurements:	Base model – impedance measurement	M model plus dP over venturi measurement	MV model plus gamma density measurement
Application description:	Single well applications Direct well head monitoring and trending of oil, water and gas fractions and rates	Single or multi-well applications Flow rates for oil, water and gas over a wide range of applications	Single or multi-well applications Flow rates for oil, water and gas over a full range of applications
Operating range:	<ul style="list-style-type: none"> <li>■ 0 - 85% gas volume fraction (GVF)</li> <li>■ 0 - 100% water liquid ratio (WLR)</li> <li>■ Flow velocity 5 - 25 m/s</li> </ul>	<ul style="list-style-type: none"> <li>■ 0 - 100% GVF</li> <li>■ 0 - 100% WLR</li> <li>■ Flow velocity 2 - 40 m/s</li> </ul>	<ul style="list-style-type: none"> <li>■ 0 - 100% GVF</li> <li>■ 0 - 100% WLR</li> <li>■ Flow velocity 1 - 40 m/s</li> </ul>

## Mechanical specification

Category	Specification description
Installation	Vertical with upwards flow
Meter sizes	ID 1 ½ in (35 mm) to ID 8 in (173 mm)
Design pressure	Up to 5,000 psi (345 bar)
Design temperature	-4 °F (-20 °C) to 266 °F (130 °C) Lower minimum temperatures can be accommodated, assessed on a case by case basis.
Meter body wetted parts material options	Duplex UNS S31803 Stainless steel UNS S31600 Super duplex UNS S32760 Inconel 625 UNS N06625 PEEK natural
Flange connection	ANSI flanges or hubs with clamp connectors
Density measurement (when applicable)	Compact gamma system Source: Cs-137, 2, 5 or 8.3 mCi Half-life 30.1 years

## Communication and electrical specification

Category	Specification description
Power supply	18 - 30 VDC 100 - 240 VAC Power consumption: 22 W
Communications interface	RS-232 RS-485 Ethernet
Communications protocol	Modbus RTU Modbus TCP HTTP
Flow computer mounting	Painted aluminum Ex d housing for hazardous area SS 316L Ex d housing for hazardous area SS 316L IP 66 housing for safe area Rack mountable arrangement for safe area

## Standards and certifications

Category	Standard or certification description
Hazardous area certification	ATEX IECEX CSA C/US TR CU 012 (EAC)
Design code	ASME B16.5 & ASME B31.3
Material specification compliance	ASME B31.3
Sour service wetted parts	NACE MR 0175 ISO 15156

## Measurement uncertainty specification

### MVG meter version

	GVF range					Repeatability
	< 25%	25-90%	90-95%	95-98%	>98%	
Gas rate (%rel)	7.0%	5.0%	5.0%	5.0%	5.0%	¼ of %
Liquid rate (%rel)	3.0%	3.5%	5.0%	8.0%	10% <sup>(1)</sup>	¼ of %
Water-liquid ratio (%abs)	2.0%	2.5%	3.5%	4.0%	10% <sup>(1)</sup>	¼ of %
1. Uncertainties given at a 95% confidence interval. 2. Requires correct PVT and water conductivity input. 3. Applicable for operating pressures above 73 psi (5 bar).						

(1) As the liquid fraction approaches zero, the uncertainties increase beyond this figure and a case-by-case calculation can be conducted.

### MV meter version

	GVF range					Repeatability
	< 25%	25-90%	90-95%	95-98%	>98%	
Gas rate (%rel)	8.0%	6.0%	5.0%	5.0%	5.0%	¼ of %
Liquid rate (%rel)	3.5%	4.0%	5.0%	10%	12% <sup>(1)</sup>	¼ of %
Water-liquid ratio (%abs)	2.5%	3.0%	4.5%	5.0%	10% <sup>(1)</sup>	¼ of %
1. Uncertainties given at 95% confidence interval. 2. Requires correct PVT and water conductivity input. 3. Applicable for operating pressures above 73 psi (5 bar).						

(1) As the liquid fraction approaches zero, the uncertainties increase beyond this figure and a case-by-case calculation can be conducted.

### M meter version

M-version uncertainties are 10% relative on gas and liquid rates and 5% absolute on WLR.

## Software features

The Roxar 2600 Multiphase Flow Meter comes with the Rapid Adaptive Measurement core software as standard. Several value-add features are available to optimize for application requirements.

	Features	Functionality
Standard	Core	One mode
		Adaptive density measurement
		Parallel computation
		Basic alarms and diagnostics
		Embedded PVT
Advanced	Advanced PVT	Multistage flashing
		Gas lift integration
	Detect and correct	In-situ flow verification
		In-situ calculation verification
		In-situ sensor verification
		Layer compensation
	Non-gamma	Non-gamma one mode
	Connect	Performance monitoring

## Roxar 2600 MPFM MVG



Meter Sizes: ID 1½ in (38 mm) to 4 in (102 mm)  
Flange Connection: ANSI flanges  
Design Pressure: 3750 psi (258 bar)



Meter Sizes: ID 2 in (51 mm) to 8 in (203 mm)  
Flange Connection: Hubs with clamp connectors  
Design Pressure: 5000 psi (345 bar)

## Roxar 2600 MPFM MV



Meter Sizes: ID 1½ in (35 mm) to 4 in (87 mm)  
Flange Connection: ANSI flanges  
Design Pressure: 3750 psi (258 bar)



Meter Sizes: ID 2 in (50 mm) to 8 in (173 mm)  
Flange Connection: Hubs with clamp connectors  
Design Pressure: 5000 psi (345 bar)

## Roxar 2600 MPFM M



Meter Sizes: ID 2 in (50 mm) and 3 in (67 mm)  
Flange Connection: ANSI flanges  
Design Pressure: 3750 psi (258 bar)





For more information: [Emerson.com](https://www.emerson.com)

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