

Marine Radar Level Gauge

The Rosemount® 5400M is a marine proved non-contact radar level gauge with high accuracy and reliable measurement of tank levels under a wide variety of conditions and different applications. The Rosemount® 5400M offers:

- Level/Ullage measurement in marine environment with best-in-class performance
- Suited for a broad range of applications; chemical tankers, product carriers etc.
- Innovative solutions and robust design
- Easy installation and good serviceability with possibilities to replace antenna head without opening the tank

Rosemount 5400M is a radar level gauge developed to be used in a wide range of marine vessels with the demand for a reliable and precise level measurement.

The bell-shaped Rosemount 5400M is suited to optimise the signal transmission and minimize the antenna dimensions making it easier to install and facilitate measurement reading and service. Data can be read from the optional integral display or remotely from external indicators.

The Rosemount 5400M is equipped with dual-compartment housing that separates cabling from the electronics for increased moisture resistance. The housing can easily be rotated and removed from the antenna assembly for service or replacement. Cooling fins on the underside of the sensor housing help conduct and dissipate excess heat resulting in a longer life span for the electronic components in the sensor.



The Rosemount 5400M supports widely adopted communication standards and can therefore easily be integrated into almost any host system.

The Rosemount 5400M can be installed anywhere offering configuration with HART® or analog 4-20mA as output. The system is setup using Rosemount Radar-Master software that supports HART.

The Rosemount® 5400M is intrinsically safe and meets the requirements of the major international marine classification societies.

Ultimately the Rosemount 5400M enables supervision of your process in real-time, increasing the availability and performance with the state-of-the-art radar level measurement.

Rosemount® 5400M

Technical Specification:

Product	Liquid level transmitter
Measurement Principle	Pulsed, free propagating radar 26GHz
Measuring Range	10 m
Flange	DIN DN 100/150 PN 16 or JIS 10K - 100/150 A
Antenna	4"
Beam Angle	Half power beam width: $\pm 4.5^\circ$ (HPBW) Inner beam area: $\pm 9^\circ$ (No interfering objects allowed without deflection plates) Outer beam area: $\pm 14^\circ$ (Some minor interfering objects allowed without deflection plates)
Reference Accuracy	± 3 mm
Resolution	1mm
Integral Display	The integral display can toggle between: Level, Ullage, Volume, Internal temperature
Ambient Temperature	-40°C to +80°C (LCD readable in: (-20°C to +70°C)
Humidity	0-100% Relative Humidity, non condensating
IP Rating	IP 67
Terminal Supply Voltage	16 -30 V
Interface	4-20mA current loop, HART
Material Housing, Flange and Antenna	Stainless steel
Weight	14 kg
Configuration Tool	HART Rosemount RadarMaster, Rosemount 375/475 Handheld Communicator (optional)
EU Directive Compliance	CE mark, 93/68/ECC
Marine Type Approval	LR, RS, ABS, GL, DNV, BV more approval available on request

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