

Features:

- **FMCW type RADAR**
- **Advanced echo processing includes “auto false-echo suppression”**
- **Unaffected by vapors, temperature or pressure fluctuations**
- **Built-in Self-Calibration**
- **High Frequency, 24 GHz electromagnetic wave**
- **Narrow Beam Angle allows for flexible mounting options, 4.5°**
- **Up to 50 m measurement range**
- **Only Two Tank Penetrations for Full Height, IHH, IGP and Temperature**
- **Maintenance can be done under closed tank conditions**
- **Wide operating temperature range**
- **Approved by major classification societies**

Description:

The Metribeam™ tank radar is used to gauge petroleum products and chemicals with temperatures up to 200°C (392°F).

The Metribeam's high Signal-to-Noise ratio combined with the 24 GHz high frequency electromagnetic wave makes it one of the most accurate and reliable tank gauges in the Marine Market.



The Metribeam has a measuring range of 0.35 to 50 m (1.15 to 164 ft) making it suitable for everything from small Barges to Chemical Carriers to ULCC's.

Whether you are gauging Crude, Refined Products, Chemicals or Asphalt the Metribeam tank radar is the right solution to your gauging requirements.

Technical specifications

Mode of operation

Measuring principle	FMCW radar level measurement
Frequency	24 to 25 GHz
Measuring range	0.35 to 50 m (1.15 to 164 ft)

Output

Communication	PROFIBUS PA
PROFIBUS PA protocol	Layer 1 and 2, Class A, Profile 3.0

Performance (Reference conditions)

Accuracy	±5 mm
Repeatability	±1 mm (0.04")
Beam Angle	4.5° from vertical

Rated operating conditions

• Ambient temperature for enclosure	-40 to +65°C (-40 to +149°F)
• Location	Indoor/outdoor

Medium conditions

Dielectric constant	$\epsilon_r > 1.4$
Process temperature range	-40 to +200°C (-40 to +392°F)
Tank Pressure	Up to 40 bar, (600 psig) (process connection dependent)

Design

Weight (approximate)	12.2 kg (26.8 lbs)
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Materials

• Housing	Die-cast aluminum, painted
• Enclosure	Stainless Steel (316L)
• Ingress protection	IP67/Type 4X/NEMA 4X, Type 6/NEMA 6

Power supply

24 VDC +25/-20%, 6W

Certificates and approvals

• Safety	CSAUS/C, CE, FM
• Shipping	Lloyd's Register of Shipping ABS
• Radio	Europe (R&TTE, CETECOM), Industry Canada, FCC
• Hazardous areas	ATEX II 1/2 G EEx dem [ia] IIC T6 ATEX II 1/2 G EEx dem IIC T6 CSA/FM Class I, Div. 1, Groups B, C, D; Class II, Div. 1, Groups E, F, G; Class III T6

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