

FMR532 Series Radar Tank Gauges

Continuous and non-contact precision level measurement with an accuracy rate of ± 0.5 mm.

Varec®



Highlights

- Cost-effective intrinsically safe — 4-wire cable for HART and 24 VDC i.s. power.
- Easy on-site operation using built-in display.
- Easy commissioning and diagnostics using Windows® based software.
- Inventory control version with available (± 3 mm) accuracy.
- National approvals (NMI, PTB) for custody transfer.

FMR532 RTG with Planar Antenna

It is essential to evaluate the right antenna type for the RTG application.

The FMR532 RTG with planar antenna is specifically suited for stilling well applications with ranges up to 38 m (124 ft). The emitted circular mode radar pattern is a must for high accuracy applications on stilling wells. This special mode allows the software to compensate for variations of the inside diameter of the stilling well and layering of adhering product. The diameter of the antenna itself fits in 6" (DN150) stilling wells directly. Cone adapters allow installation on larger diameter stilling wells. A good match between well and adapter is essential. The Varec planar antenna with pulsed radar technology allows direct installation even on tapered stilling wells – a unique feature.

Product Options

Approvals & Certifications

- FM, CSA
- Contact Varec for ATEX or IECEx approved devices

Antenna

- Various DN Sizes and Material Types

Process Connections

- DN, RF & UNI-flange

Output Options

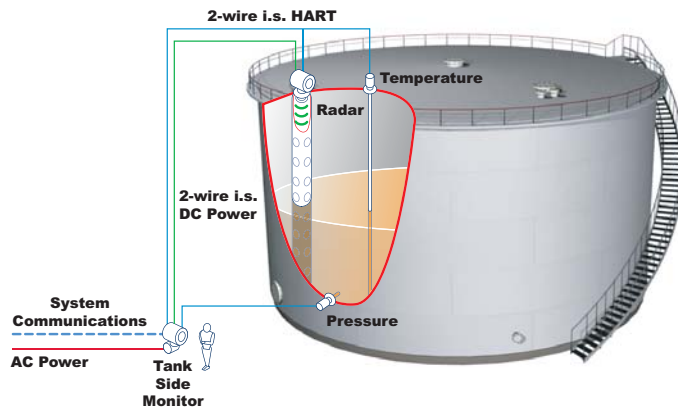
- HART

Gland Entry

- Metric, NPT

Accuracy

- High Accuracy, ± 0.5 mm (2 sigma value), NMI/PTB Approval
Inventory Control Accuracy, ± 3 mm



Example Tank Gauging System

Technical Specifications

This product conforms to all applicable industry standards and approvals, such as climate class, electromagnetic (EMC), vibration, and radio frequency (RF). See product installation manual.

These specifications apply to the FMR532 RTG under reference operating conditions with no major interference reflections inside the signal beam.

Weight	6.5 kg (14.4 lbs) + weight of flange
Power consumption	Max. 330 mW at 16 V, max. 500 mW at 24 V, max. 600 mW at 30 V.
Current consumption	Max. 21 mA (50 mA inrush current).
Enclosure	IP 65, NEMA 4X (IP20, NEMA 1 with open housing and removed liquid crystal display) Housing T12: separate terminal compartment for increased safety respectively explosion proof. Material: aluminium, seawater repellent, chromate, powder coated Sight window: glass
Antenna	IP 68 (NEMA 6P)
Conduit entries	M20x1.5; Pg 13.5 (gland included); ¾ NPT; G ¾ internal thread
Ambient temperature	-40 °F and +185 °F -40 °C and +85 °C)
Approvals CE approval RF approvals - R&TTE, FCC Marine certificate - GL (Germanisch Lloyd), ABS, NK Factory Mutual - IS Class I,II,III, Div 1 Groups A-G T* Class 1, Zone 0, AEx ia IIC T* DIP Class II,III, Div 1 Groups E,F,G T* NI Class I, Div 2 Groups A-D T* XP-IS Class 1, Div. 1 Groups A-D T* XP Class 1, Zone 0, IIC T* Antenna Class 1, Zone 0, AEx ia IIC T* CSA - ExnC IIC Class 1 Zone 2, Exd [ia] IIC Zone 1/0, Ex ia IIC Class 1 Zone 0	

Note:

Please complete an Application Data Sheet for this equipment to facilitate proper selection of options for your unique application.

Please contact your Varec Sales Representative for more information.

