



## 8-inch Smart Tank Level Measurement

The EM540 Radar is an 8-inch smart radar level solution specifically designed for tanker level measurements involving chemicals, bitumen, etc. It may also be used for other simple tanker and inland river applications.

The EM540 Radar employs advanced smart sensor technology, including microprocessors performing signal processing. In addition to transmitting tank level, pressure and temperature data to the central monitoring system, this radar solution provides self-diagnostics, self-monitoring and remote configuration. It can be installed either on a still pipe or free space (depending on the radar type).

The use of intrinsically safe, two-way digital signal transmission between the radar gauge and the central monitoring system enables easy integration of the EM540 into any type of control system. The unit is compliant with certification rules and regulations issued by international classification societies.

# EM540 Radar - Technical Specifications

## Technical Data

<b>Accuracy:</b>	- Instrument: +/- 3 mm - Operating : +/-5 mm
<b>Resolution:</b>	1mm
<b>Range:</b>	0.6 to 42 m
<b>Maximum pressure:</b>	1 bar
<b>Operating temperature:</b>	- 40°C to + 70°C
<b>Product temperature*:</b>	- 40°C to +250°C
<b>Storage temperature:</b>	- 40°C to + 85°C
<b>Antenna aperture angle:</b>	13°(FMCW 10GHz)
<b>Protocol:</b>	EMS
<b>Protection class:</b>	IP66/67
<b>Intrinsic safety approval:</b>	IECEX, ATEX. II 1 (1) G Ex ia [ja Ga] IIB or IIC T4 Ga IP66/67

\* with special mounting features

## Special Mounting Features

Automatic radar self-test during power up

**Material:** Housing stainless steel 316 L

Antenna FEP protection.

3 PT100 temperature inputs

3 Analog inputs

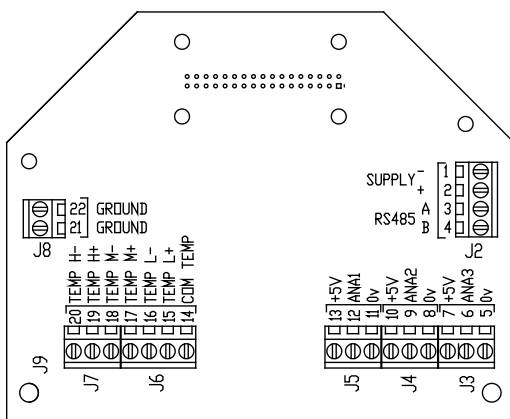
Automatic antenna fouling detection

## Technical Documentation

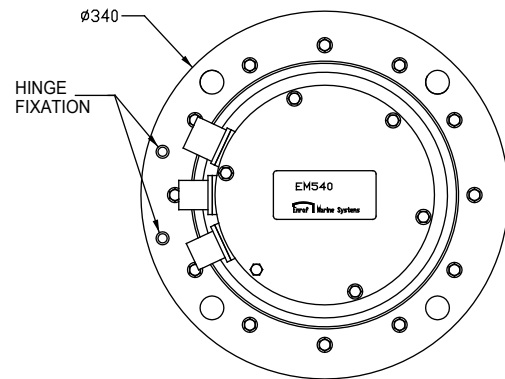
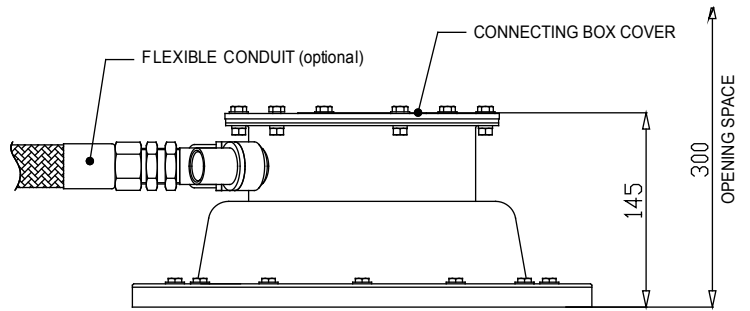
**Installation manual:** MI5016

**Technical manual:** MT5016

## Electrical Connection

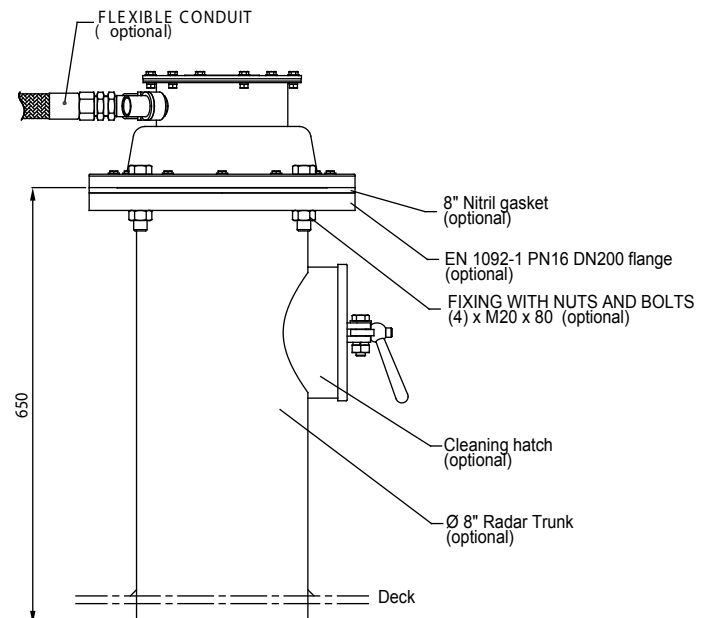


## Mechanical Fittings & Dimensions



WEIGHT: 13 Kg

## Mechanical Connection



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