



Application

The COLM (COntec Level Measurement) 9400 Guided Wave Radar is a breakthrough in cost-effective, highly accurate and high-resolution level measurement for heavy-duty applications.

The Model 9400 level sensor is used to monitor liquids such as fuels, chemicals, water, coolants, lubricants. The 9400 can be optionally configured to measure both the fuel as well as the level of different materials, such as water/fuel interfaces. The instrument emits a series of electromagnetic pulses across the sensor probe. Liquid/air interfaces and dissimilar liquid interfaces cause a change in the sensor probe and produce a reflection of the pulse. The transit time of the reflected pulses is measured, and the liquid and interface levels are calculated.



Specifications

Liquid Types:	Liquids compatible with the construction materials, typically fuels, oils and water.
	<ul style="list-style-type: none"> • Active Sensing Range 35mm to 1000mm from flange • Connector Configurable depending on output requirement

Electrical Specifications

Supply Voltage:	9-36 Vdc or 5Vdc regulated
Supply Current:	35mA average
Superimposed AC:	over DC ISO 16750-2
Supply Voltage:	Drop ISO 16750-2 Section 4.6
EMC/EMI:	UN ECE R10 revision 5

Output Specifications

Output Protocol	
Analog:	- Voltage, PWM; Digital - LIN, CAN; Optional programmable alarm output
Accuracy:	±2.0% of span max (including nonlinearity, hysteresis, temperature effects).
Resolution:	1mm

Construction

Housing:	Die Cast Low Copper Aluminum
Sensor Tube:	Extruded Low Copper Aluminum
Wetted Materials:	Low Copper Aluminum, Buna Nitrile (or Viton), FR-4
Mounting Configuration:	Configurable including 4-bolt, 5-bolt SAE and 6-bolt

Environmental Ratings

Housing Size:	45mm (Height) x 67mm (diameter)
Operating Temperature Range:	-40°C to +85°C
Water and Dust Sealing:	IP69K
Maximum Tank Pressure:	15 PSI
Shock:	ISO 16750-3
Vibration:	BS EN 60068-2-64: 1993 IEC 60068-2- Up to 500mm
Drop:	ISO 16750-3
Surface Resistance:	ISO 16750-3
Chemical Resistance:	ISO 16750-5
Corrosion Resistance:	VDA 621-415, DIN EN ISO 16270-2, DIN EN ISO 9227
Corrosive Gas Resistance:	DIN 50018



COLM 9400 GWR Sensor

