

Guided Wave Radar Level Transmitter



LVRD10 Series



- ✓ **Fail-Safe Diagnostics with Selectable Signal Fail-Safe Output**
- ✓ **Recognition, Storage and Rejection of False Echo Signals**
- ✓ **NEMA 4 (IP66) Aluminum Enclosure**
- ✓ **316L SS Antenna and Mount**
- ✓ **Simple Configuration Via Free Software**
- ✓ **Guided Wave Radar is Unaffected By Vapor or Condensation**
- ✓ **10 cm (4") Dead Band Enables Utilization of the Entire Tank**

The LVRD10 Series of general purpose guided wave radar level transmitters provide continuous level measurement with a 4 to 20 mA signal output. Offered in three probe (rod, coaxial or cable) configurations, three standard lengths 0.9, 1.8 or 3 meter (3, 6, or 9.8 ft). Units can be cut to specific lengths in the field. and coaxial and 5.5 m (18.0') for the cable design. The sensor is configured using the easy, yet powerful software (free download at Omega).

The contact liquid level sensor is intended for low corrosive chemical, waste, oil or water storage applications in above grade metal or reinforced concrete tanks or below grade tanks of any material. Select the sensor for easy application conditions with light agitation, condensation or vapor, and installation in a tank adapter or flange fitting.



All models shown smaller than actual size.

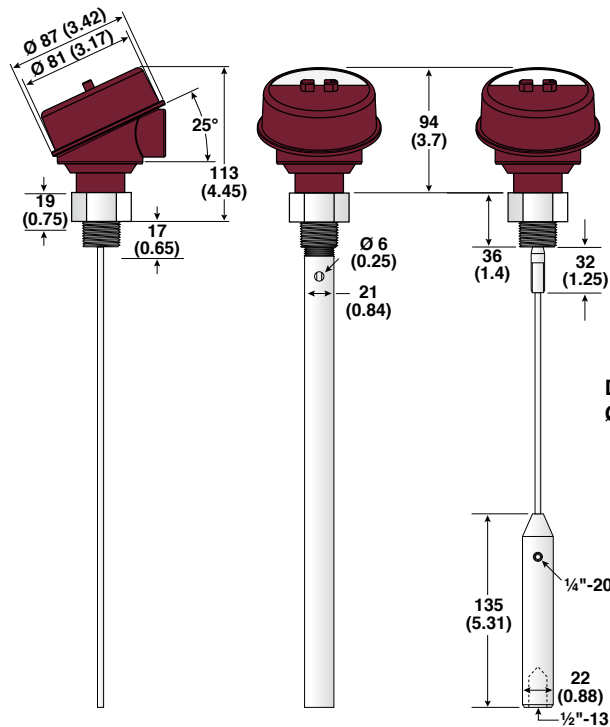
Specifications

Housing
Range: Rod/coaxial; 0.9, 1.8 or 3 m (3, 6, or 9.8')
Cable: 5.5 m (18')
Dead Band: 10 cm (4")
Accuracy: ±3 mm (0.118")
Repeatability: < 2 mm (0.08")
Resolution: < 1 mm (0.04")
Dielectric Constant: > 2
Configuration: PC Windows® USB 2.0
Supply Voltage: 10 to 30 Vdc
Signal Output: 4 to 20 mA, 3-wire, 22 mA maximum
Consumption: < 50 mA at 24 Vdc

Signal Fail Safe: 4 to 20 mA, 21 mA or hold last value
Process Temperature: -40 to 150°C (-40 to 302°F)
Pressure: -1 to 17 bar (-14.5 to 250 psi)
Enclosure: Aluminum with single conduit
Enclosure Rating: NEMA 4 (IP66)
Conduit Entrance: ½ NPT
Antenna Material: 316L SS
Feed Through Material: 316L SS and peek
Process Mount: ¾ NPT or ¾ G
Classification: General purpose
Compliance: CE, RoHS

Probe Mounting	Rod	Cable	Coaxial
Tall and Narrow Risers	•	•	+
Difficult Riser Geometries	•	•	+
Close to Internal Objects/Obstructions or Tank Wall	•	•	+
Probe Might Move or Touch Internal Objects/Obstructions or Tank Wall	•	•	+
Liquid Spray May Touch Probe Above the Liquid Surface	•	•	+
Non-Stationary Interference Targets, e.g. Agitator Blades	•	•	+
Measurement Readings at the Very Top or Bottom of the Tank	•	•	+
Non-Metallic Tanks	•	•	+
Bypass Chambers and Stilling Wells	+	-	•
Limited Headroom for Installation	•	+	•
Tall Tanks	•	+	•
Side Mount Bracket	•	•	+

Media Characteristics	Rod	Cable	Coaxial
Measuring Low Reflectivity Liquids (i.e. Low Dielectric Constant)	•	•	+
Viscous, Crystallizing, Adhesive, Coating, or Sticky Liquids	+	+	-
Fibrous Liquids, Sludge, Slurry, Pulp	+	+	-
Liquids Containing Solid Particles	+	+	-
Cleanability of Probe is Important	+	+	-



+	= Recommended
•	= Possible, maybe with configuration and/or mounting adjustments
-	= Not recommended

Dimensions mm (inch)
Ø = diameter

To Order					
Model No.	Description	Probe Style	Mounting	Range	Weight kg (lb)
LVRD11	Guided wave radar level transmitter	Single rod	¾ NPT	3 m (9.8')	6.8 (15)
LVRD11-3FT	Guided wave radar level transmitter	Single rod	¾ NPT	0.9 m (3')	4.8 (10.5)
LVRD11-6FT	Guided wave radar level transmitter	Single rod	¾ NPT	1.8 m (6')	5.8 (12.7)
LVRD12	Guided wave radar level transmitter	Coaxial	¾ NPT	3 m (9.8')	9.1 (20)
LVRD12-3FT	Guided wave radar level transmitter	Coaxial	¾ NPT	0.9 m (3')	6.3 (14)
LVRD12-6FT	Guided wave radar level transmitter	Coaxial	¾ NPT	1.8 m (6')	7.7 (17)
LVRD13	Guided wave radar level transmitter	Cable/weight	¾ NPT	5.5 m (18')	6.8 (15)

Comes complete with free software download and operator's manual.
To order basic models add suffix "-B" to model number for no additional cost.