



# 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



All models shown smaller than actual size.

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 up to 3 m (9.8') for the rod 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.

### Specifications

#### Housing

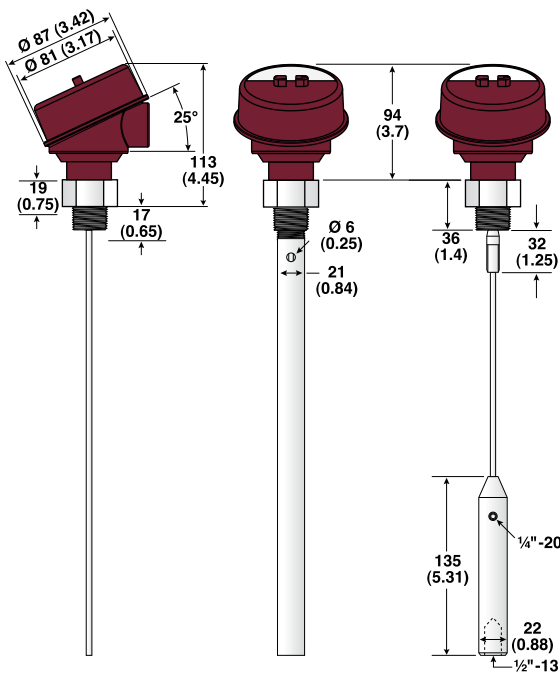
**Range:** Rod/coaxial; 3 m (9.8')  
**Cable:** 5.5 m (18')  
**Dead Band:** 10 cm (4")  
**Accuracy:** ±3 mm (0.118")  
**Repeatability:** < 2 mm (0.08")  
**Resolution:** < 1 mm (0.04")  
**Dielectric Constant:** > 2  
**Configuration:** PC Windows® USB 2.0  
**Supply Voltage:** 10 to 30 Vdc  
**Signal 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:** ¼ NPT or ¼ 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)
LVRD12	Guided wave radar level transmitter	Coaxial	¾ NPT	3 m (9.8')	9.1 (20)
LVRD13	Guided wave radar level transmitter	Cable/weight	¾ NPT	5.5 m (18')	6.8 (15)
LVRD11G	Guided wave radar level transmitter	Single rod	¾ G	3 m (9.8')	6.8 (15)
LVRD12G	Guided wave radar level transmitter	Coaxial	¾ G	3 m (9.8')	9.1 (20)
LVRD13G	Guided wave radar level transmitter	Cable/weight	¾ G	5.5 m (18')	6.8 (15)
LVRD11-3FT	Guided wave radar level transmitter	Single rod	¾ NPT	0.9 m (36")	2.7 (6)
LVRD11-6FT	Guided wave radar level transmitter	Single rod	¾ NPT	1.8 m (72")	2.7 (6)
LVRD12-3FT	Guided wave radar level transmitter	Coaxial	¾ NPT	0.9 m (36")	3.6 (8)
LVRD12-6FT	Guided wave radar level transmitter	Coaxial	¾ NPT	1.8 m (72")	5.4 (12)

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