EchoPulse® LR20

Pulse Radar Liquid Level Transmitter



Application

The general purpose 26 GHz. pulse radar transmitter provides continuous level measurement up to 65.6' (20m) with a 4-20 mA signal output, and is configured via its integral push button display module. The non-contact liquid level sensor is intended for chemical storage or process applications in above or below grade tanks of any material. Select this sensor for challenging process conditions with corrosive media, light surface foam or agitation, higher temperature or pressure, condensation or vapor, and installation in a flange fitting. Typical applications include bulk storage and process tanks.









Features

- 316L antenna with PTFE inner shield for corrosive media
- Simple configuration via integral push button display module
- 26 GHz. pulse radar is unaffected by vapor or condensation
- 12" (30cm) dead band enables utilization of the entire tank
- LCD displays level in feet or meters with percent of span bar
- Optional display mode indicates the echo signal return curve
- Auto-temperature compensation for accurate measurement
- Fail-safe diagnostics with selectable signal fail-safe outputs
- Recognition, storage and rejection of false echo signal returns
- Rugged IP67 aluminum enclosure with polycarbonate window



LR20-0310-30 Shown

Success

Hydrochloric acid is an inorganic acid that's widely used in industrial and commercial applications. Both highly corrosive and vaporous, it's difficult to measure. Here, a LR20 is flange mounted on a 18' HCL storage tank at a steel fabrication company. Its 26 GHz. pulse radar measurement is unaffected by the extreme vapor, and the antenna's PTFE inner shield, provides reliable corrosion resistance.





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Specifications

Range: 12" to 65.6' (30cm to 20m)

Frequency: 26 GHz.

Accuracy: ± 3mm

Dead band: 12" (30cm)

Beam angle: - 30: 12°

- 40: 8°

Configuration: Push button

Memory: Non-volatile

Display type: LCD, dot matrix

Display units: Feet and meters

Display bar: Percent of span

Display graph: Echo signal curve

Supply voltage: 16-26 VDC

Supply voltage: 16-26 VDC **Max. consumption:** 22.5 mA

Signal output: 4-20 mA, two-wire
Signal invert: 4-20 mA, 20-4 mA
Signal fail-safe: 3.9 mA, 20.5 mA, 22 mA

Process temp.: F: -40° to 302°

C: -40° to 150°

Temp. comp.: Automatic
Storage temp.: F: -40° to 176°

C: -40° to 80°

Pressure: -14.5 to 72 psi (-1 to 5 bar)

Enclosure rating: IP67

Encl. material: Aluminum w/silicone gasket

Encl. window mat.: Polycarbonate

Conduit entrance: (1) 1/2" NPT connector

(1) M20 x 1.5 plug

Antenna material: 316L w/PTFE inner shield

Process mount: - 30: 3" flange (ANSI)

- 40: 4" flange (ANSI)

Classification: General purpose

Certification: cTUVus

FCC

Compliance: CE, CRN, RoHS

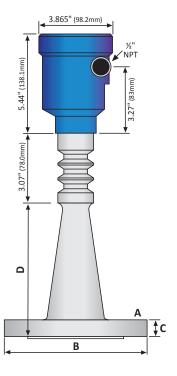
Dimensions

ANTENNA/FLANGE

P/N	-30	-40
Α	3" ANSI	4" ANSI
В	7.5" (190.5mm)	9.0" (228.6mm)
С	0.88" (22.3mm)	0.88" (22.3mm)
D	6.5" (165mm)	8.0" (203mm)



Echo Signal Return Curve Shown



Compatible Products



DATALOOP™

Level Indicator



LI55

DATAVIEWTM

Level Controller

Ordering

FLANGE SIZE (1) 3 3" ANSI

4 4" ANSI



NOTES

 If you want help in selecting a sensor for your application, please go to our website and submit a Level Questionnaire. An engineer will review your requirements and suggest a product solution via email.