

EchoWave® LG10/11

Guided Wave Radar Level Transmitter



Application

Offered with three probe types, the general purpose guided wave transmitter provides continuous level measurement up to 18' (5.5m) with a 4-20 mA signal output, and is configured via our free WebCal™ software. This liquid level sensor is applied in non-turbulent environments where foam, vapor, vacuum, condensation, high temperature or pressure may be present. Select the rod or cable probe for use with clean, dirty, coating or crystallizing liquids in above grade metal tanks or below grade tanks constructed from any material. Choose the coaxial probe for use with clean, non-coating or non-crystallizing liquids in above or below grade tanks of any material. Standard probe lengths may be user cut in the field. The sensor is intended for bulk storage, day tank, skid or machine, IBC or drum, process tank or waste sump applications.

Features

- Rugged 316L stainless steel probe and process mount
- Simple configuration via WebCal™ software
- Guided Wave Radar is unaffected by vapor, vacuum, foam, condensation, high temperature or pressure
- 4" (10cm) dead band enables utilization of the entire tank
- Fail-safe diagnostics with selectable signal outputs
- Disturbance scanning that maps the recognition, storage and rejection of false echo signal returns
- Rugged NEMA 4 aluminum enclosure



Success

Sintering is a process of compacting and forming a solid mass of material by extreme heat and / or pressure without melting it to the point of liquefaction. It is used in the manufacturing process of metals, ceramics and other materials. Ovens that have temperatures exceeding 400 degrees require a system to prevent overheating during manufacturing. Here, a LG10 is mounted on an 8' cooling tower sump at a metal manufacturing plant. The guided wave radar measurement is unaffected by the condensation, agitation, foam and the high temperature environment.



CRN



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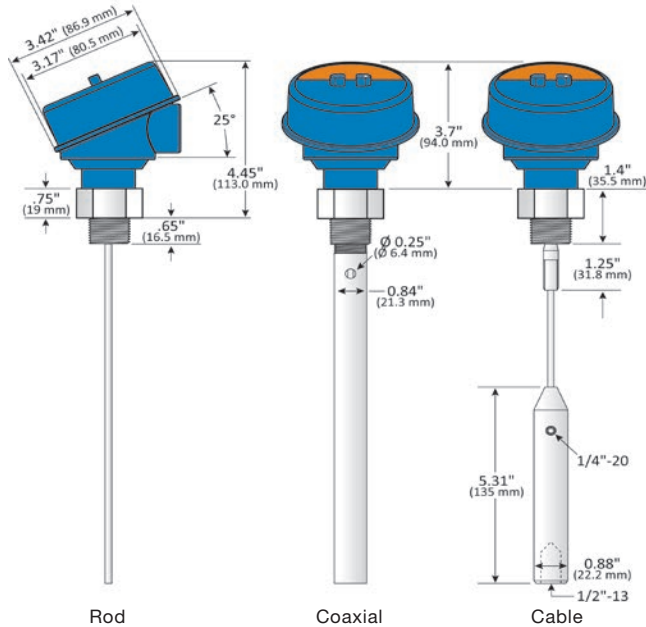
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Specifications

Range:	Rod / Coaxial: 9.8' (3.0m) Cable: 18.0' (5.5m)
Accuracy:	± 3mm
Dead band:	Top 4" (10cm) Bottom 2" (5cm)
Repeatability:	<2mm
Resolution:	<2mm
Configuration:	WebCal™ PC Software
Supply voltage:	10-30 VDC
Max. consumption:	<50mA at 24 VDC
Signal output:	4-20mA, 3-wire
Signal fail-safe:	4mA, 20mA, 21mA, 22mA or Hold Last Value
Dielectric:	>1.8
Process temp.:	F: -40° to 302° C: -40° to 150°
Ambient temp.:	F: -40° to 185° C: -40° to 85°
Pressure:	-14.5 to 250 psig (-1 to 17 bar)
Enclosure rating:	NEMA 4
Encl. material:	Aluminum
Feed through mat.:	316L SS and PEEK
Conduit entrance:	(1) 1/2" NPT connector
Probe material:	Rod / Coaxial: 316L SS Cable: 316 SS
Process mount:	3/4" NPT or 3/4" G
Classification:	General purpose
Certification:	CSA / NRTL (pending)
Compliance:	CE, CRN, RoHS

Dimensions



Fittings

REDUCER BUSHINGS (NPT)

LM51-1S00

1" x 3/4", 316 Stainless Steel

LM51-2S00

2" x 3/4", 316 Stainless Steel

LM51-1800

1" x 3/4", PVC, Sch 80



LM51-2S00



LM51-1800

Configuration

WEBCAL



LI99-1001

EchoWave is configurable via our free WebCal™ PC software and Fob USB adapter. The sensors are offered with and without Fobs. Download your free copy of WebCal™ at www.flowline.com

Ordering

LG1 - **3 - 0** (1)(4)

RANGE (2)

- 0 9.8' (3m)
- 1 18.0' (5.5m)

PROBE TYPE (3)

- 0 Rod Probe
- 1 Coaxial Probe
- 2 Cable Probe

PROBE MATERIAL

- 0 316L Stainless Steel
- 1 Galvanized Steel (Coaxial Probe Only)

PROCESS MOUNT

- 0 3/4" NPT
- 1 3/4" G Thread

FOB USB ADAPTER (5)

- 0 No Fob
- 1 With Fob

NOTES

- To select a radar sensor for distributor purchase, please go to www.flowline.com/LAQ and submit a level application questionnaire for review. You will receive a suggested part number and comments based on your requirements.
- Available only in the following configurations:
 - Rod:** LG10-00_3-0_
 - Coaxial:** LG10-1_3-0_
 - Cable:** LG11-20_3-0_
- Rod and Cable Probes must be installed in metal or reinforced concrete tanks. Coaxial Probes can be installed in tanks constructed from any material.
- Probes are shipped in standard lengths (Rod / Coaxial: 3m, Cable: 5.5m). To order a shorter probe, indicate the dimension after the part number, i.e. LG10-0003-01-XX.
- The Level sensor is configured via our WebCal software and one LI99-1001 Fob USB adapter. The level sensor is offered with and without a Fob. The Fob is universal and can be used to configure any WebCal compatible product. WebCal is a free download from our website, www.flowline.com.