# EchoWave® LG10-11

Guided Wave Liquid Level Transmitter



# **Application**

Offered in 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 with foam, vapor, condensation, temperature or pressure. Select the rod or cable probe for use with clean, dirty, coating or crystallizing liquids in above grade metal or below grade tanks of any material. Select the coaxial probe for use with clean, non-coating or crystallizing liquids in above or below grade tanks of any material. Standard probe lengths may be user cut in the field. Typical applications include small bulk storage, day tank, skid or machine, IBC or drum, process tank, cooling tower and waste sumps.











### **Features**

- Offered in standard or custom probe lengths up to 18' (5.5m)
- Configuration is easy via WebCal software and USB adapter
- Rugged 316L stainless steel probe and process mount
- 4" (10cm) dead band enables utilization of the entire tank
- Disturbance scan maps and rejects false echo signal returns
- Rugged NEMA 4 aluminum enclosure with 316L process mount
- Self diagnostics with five selectable fail-safe signal outputs
- Automatic temperature compensation for accurate measurement

### Success

Sintering is the process of compacting and forming a solid mass of material by extreme heat and pressure without melting it to the point of liquification. Its commonly used in the manufacturing



of metals, ceramics and other materials process where process temperatures can exceed 400 degrees. Here, a LG10-0 is installed in a metal manufacturing plant waste sump using a PVC stand pipe to eliminate turbulence. The guided wave sensor is unaffected by the high temperature, condensation and foam.



LG10-0

LG11-2

# EchoWave® LG10-11

Guided Wave Liquid Level Transmitter



## **Specifications**

Range: Rod & coaxial: 9.8' (3m)

Cable: 18' (5.5m)

Accuracy: ± 3mm

**Dead band:** Top: 4" (10cm)

Bottom: 2" (5cm)

Repeatability: < 2mm
Resolution: < 2mm
Configuration: WebCal® PC

Windows® USB® 2.0

Supply voltage: 10-30 VDC

Max. consumption: < 50mA @ 24 VDC Signal output: 4-20mA, 3-wire

Signal fail-safe: 4mA, 20mA, 21mA, 22mA or

hold last

Dielectric: > 1.8

**Enclosure rating:** 

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 PSI

(-1 to 17 bar)

NEMA 4

Encl. material: Aluminum

Feed through mat.: 316L SS & PEEK

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

Probe material: Bod & coaxial: 316L SS

Rod & coaxial: 316L SS

Cable: 316 SS

Process mount: 3/4" NPT (3/4" G)

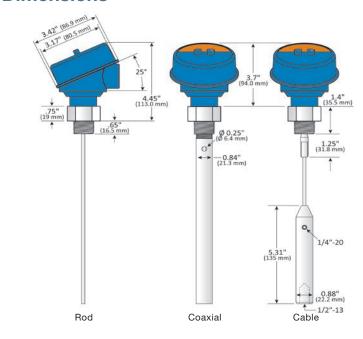
Classification: General purpose

Certification: cCSAus, NRTL

Compliance: CE. CRN. RoHS

XXX Standard or custom probe length

#### **Dimensions**



## Configuration



The level sensor is configurable via our free WebCal PC software and Fob USB adapter. The sensors are offered with and without Fobs. Fobs are universal and can be used to configure any WebCal compatible product. WebCal is a free download from our website.

#### LG<sub>1</sub> 0 3 - 0**Ordering** RANGE (1) -O 9.8' (3m) 18' (5.5m) PROBE TYPE (2) (3) 0 Rod 1 Coaxial 2 Cable **PROCESS MOUNT** NPT (US) G (Metric) **FOB USB ADAPTER** No Fob 0 With Fob PROBE LENGTH (4)

#### NOTES

- The max. range for the rod (LG10) and coaxial (LG10) probe is 3m; and the cable probe (LG11) is 5.5m.
- 2) Rod and cable probes may be installed in above grade metal and reinforced concrete tanks or below grade tanks of any material. Coaxial probes may be installed in tanks of any material, above or below grade.
- 3) Probes are available in the following configurations:

Rod: LG10-\_ 0 \_ 3 - 0 \_ - XXX Coaxial: LG10-\_ \_ 3 - 0 \_ - XXX Cable: LG11-\_ 0 \_ 3 - 0 \_ - XXX

4) Probes are offered in standard or custom lengths. Standard lengths for the rod and coaxial probes are 036", 072" and 118"; and the cable probe is 216". Custom lengths may be specified in 1/2" (1.3cm) increments down to 24" (.6m) on the rod and coaxial probes; and to 48" (1.2m) on the cable probe. A cut charge of \$100 net will be added to the next highest standard probe length on custom probe length orders. Standard probe lengths may also be user cut in the field which is addressed in the manual.