EchoPod® DL14

Multi-Function Ultrasonic Liquid Level Transmitter

FLOWLINE™ LEVEL BEST

Application

The general purpose ultrasonic transmitter provides continuous level measurement up to 49.2” (1.25m) with a 4-20 mA signal output and four relays, and is configured via our free WebCal® software. Each relay is fully configurable for automatic fill, empty or alarm functions, and the embedded level controller may lower cost by replacing external control hardware. This non-contact liquid level sensor is well suited for corrosive, sticky or waste liquids, and is selected for chemical feed, IBC or drum, skid or machine and cooling tower applications.

SCIENCE GATE Your Automation Partner
SCIGATE AUTOMATION (S) PTE LTD
No.1 Bukit Batok Street 22 #01-01 Singapore 659592
Tel: (65) 6561 0488 Fax: (65) 6562 0588
Email: sales@scigate.com.sg Web: www.scigate.com.sg
Business Hours: Monday - Friday 8.30am - 6.15pm

Features

- Level measurement, switch and control functions up to 49.2” (1.25m)
- Configuration is fast and easy via WebCal software and USB adapter
- Narrow 2” beam width and short 2” dead band optimized for small tanks
- Four (4) programmable relays rated @ 1A / 60VA for switch, pump or valve control and fail-safety
  - 1 pump or valve with 3 alarms
  - 2 pumps lead-lag with 2 alarms
  - 2 pumps duplexing with 2 alarms
  - 4 independent switch point alarms
- PVDF transducer and 6P polycarbonate enclosure for corrosive liquids
- Automatic temperature compensation for accurate measurement

Success

EchoPod is featured in what FOX News calls, “The greenest house in the world”. Florida’s Green House spotlights residential conservation technologies for EPA, university, engineer and architect study. As the nations water resources decline, reclamation is core to the solution. The average US citizen consumes 88 gallons of water per day. About 65% of indoor use occurs in the bathroom and 1/3 of that flushes down the toilet. The Green House reclamation system collects and filters grey water from sinks, showers, baths, laundry and the yard for reuse in toilets and irrigation. The system includes a 120 gallon underground water cistern. EchoPod measures the level, and opens the fill valve to replenish the system with tap water, if necessary.

Compatible Products

LI25-1

DATALOOP™

Level Indicator

LI55

DATAVIEW™

Level Controller

LI40

PODVIEW™

Level Indicator

EchoPod® DL14

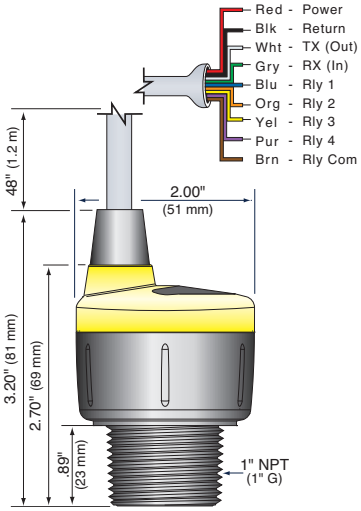
Multi-Function Ultrasonic Liquid Level Transmitter

FLOWLINE™ LEVEL BEST

Specifications

Range:	49.2” (1.25m)
Accuracy:	0.125” (3mm)
Resolution:	0.019” (0.5mm)
Dead band:	2” (5cm)
Beam width:	2” (5cm)
Configuration:	WebCal® PC Windows® USB 2.0
Memory:	Non-volatile
Supply voltage:	24 VDC (loop)
Consumption:	0.5W
Loop resist.:	400Ω max
Signal output:	4-20 mA, two-wire
Signal invert:	4-20 mA or 20-4 mA
Signal fail-safe:	4 mA, 20 mA, 21 mA, 22 mA or hold last
Contact type:	(4) SPST relays, 1A
Contact fail-safe:	Power loss: Hold last Power on: Open, close or hold last
Hysteresis:	Selectable
Process temp.:	F: 20° to 140° C: -7° to 60°
Temp. comp.:	Automatic
Ambient temp.:	F: -31° to 140° C: -35° to 60°
Pressure:	MWP = 30 PSI (2 bar)
Enclosure rating:	Type 6P, encapsulated, corrosion resistant & submersible
Encl. material:	Polycarbonate
Strain relief mat.:	Santoprene
Trans. material:	PVDF
Cable jacket mat.:	Polyurethane
Cable type:	9-conductor, shielded
Cable length:	48” (1.2m)
Process mount:	1” NPT (1” G)
Mount gasket:	Viton®
Classification:	General purpose
Compliance:	CE, RoHS
Approvals:	cFMus

Dimensions



Configuration

LI99-1001

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. Download your free copy of WebCal in English or Chinese.

Fittings

For optimum performance, install the level sensor using the below recommended or direct equivalent fittings.

	P/N	DESCRIPTION
	LM52-1400	2” NPT x 1” NPT, PVC, schedule 40
	LM52-1800	2” NPT x 1” NPT, PVC, schedule 80
	LM52-1410	2” socket x 1” NPT, PVC, schedule 40
	LM52-1810	2” socket x 1” NPT, PVC, schedule 80
	LM52-1850	1” ANSI x 1” NPT, CPVC, schedule 80
	LM50-1001-1	1” NPT side mount bracket, PP

Ordering

DL14 - ☐ ☐

PROCESS MOUNT (1)

- **0** NPT (US)
- **1** G (Metric)

FOB USB ADAPTER (2)

- **0** Without Fob
- **1** With Fob

NOTES

1) Install the level sensor using Flowline installation fittings or equivalents.
2) 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. Fobs are universal and can be used to configure any WebCal compatible product. WebCal is a free download from our website.