



LC-100 Tank Level Indicator

Engineered specifically for the Offshore & Marine markets, LevelCom TLI's have a proven record of success in 20 years of use in harsh environments.

The LC-100 microprocessor pulsed bubbler is one of the most accurate, reliable level indicators on the market. The LC-100 has features not found on any other TLI and works in most all marine level applications.

- Ballast
 V
 - Vessel Draft

Service Tanks

- Fuel
- Water
- Lube



LEVELCOM 100





- Pulsed bubbler technology allows the LC-100 to automatically monitor level, zero the sensor, run
 a purge cycle and perform self diagnostics on both pneumatic and electronic components of the
 system.
- The LC-100's valved manifold controls the flow of air and allows the LC-100 to accurately monitor liquid levels with a minimal air usage.
- Programmable Specific Gravity allows the machine to measure liquids of varying densities.
- Tank tables allow users to establish 10 vertical levels points to define the shape of irregular shaped tanks providing very accurate readings
- Automated operating cycles
- Alarm and Control Relays
- Network communication options are; Analog Output (4 to 20mA), Modbus, Profibus, Ethernet and Dual Communication mode Analog with Modbus.

LevelCom's "Advanced Bubbler Technology"

- Easy Installation and Setup
- Monitors without electronics (sensors) or electricity in liquid
- Displays Depth, Weight or Volume English or Metric
- Eliminates replacement costs due to failed sensors
- Panel Mount options

Installation requires connection to air supply, power and bubbler tube. All controls are above the tank eliminating the need for costly tank cleaning and Marine chemist certification making maintenance and service quicker, safer and more economical.

Only the bubbler tube and supply air come in contact with the liquid, making this system ideal for applications involving hazardous, corrosive, liquids and slurries.

For hazardous area installation, the LC-100 controls can be located up to 600 feet away from the tank. The pneumatic tubing isolates the hazardous from the safe area.

In normal mode the LC-100 automatically zeros its sensor to atmosphere every 30 minutes. The bubbler tube is purged at regular intervals to keep the line clear. Self-diagnostics check the system for both pneumatic and electronic faults. If a problem is found, the LC-100 will display the appropriate error message or activate an alarm to alert the operator.

All values and alarm set points are displayed in either English or Metric units of measure, (depth, volume or weight) on the digital display.

Communication options are; Analog Output (4-20 mA), Modbus, Profibus and Ethernet.

Dual Communication, Analog with Modbus is an option for fiber optic networks, BCS and VMS systems.



Marine Applications

- Ballast Control
- Rig or Vessel Draft Indication
- Fuel Oil-DFM, HFO, JP2, JP5
- Liquid Cargo
- Wastewater (gray & black)
- Lube Oil
- Bunker Oil
- Drill Water
- Dry Docks



Levelcom HMI Screen

OPTIONS							
Depth Range — Ft.	0-32	0-62	0-92	0-180			
Meters	9.45	18.9	27.43	54.86			
Communication RS 232 / 422 / 485	Modbus	Profibus	Modbus TCP/IP	Dual Communication			
Alarm & Control Relay	4 programmab rs ("rated "Pilot	4 programmable internal set points, Control 1 & 2, On / Off; $2-SPDT$ Form C relays ("rated "Pilot Duty")					
Analog Output	4 to 20 mA	4 to 20 mA					
Automatic Specific Gr	avity Requires 2nd b	Requires 2nd bubbler tube installation					
Differential Pressure	Requires 2nd b	Requires 2nd bubbler tube installation					
Alarm Horn	Integral piezoe	Integral piezoelectric alarm horn					
Digital Communication	For Use with L	For Use with LC101 for Secondary Remote Readout					
Panel / Cabinet Fabric	ation Made to custor	Made to customer specifications, complete with tubing, regulator and wiring					

SPECIFICATIONS

Approvals	ABS Type Approval , UL Listed, ISO 9001 Certified Manufacturer					
Power	120VAC / 100mA / Fuse – 2A; 24 VDC / 500mA / Fuse – 2A					
Supply Air	Regulated pressure varies with input sensor range (see below). Filtered to 40 microns					
Temperature	Operating range: -20° F to +140° F (-28.88° C to +60° C)					
Enclosure	UL listed NEMA 3R - Powder coated aluminum alloy with 304 stainless steel fasteners					
Fittings	Brass or 316 Series Stainless Steel					
Dimensions	14.5" (37cm) H x 5.5" (14cm) W x 3.8" (9.6cm) D					
Alarm Set Points	Four (4) programmable internal set points (Relay option required for remote alarm activation)					
Control Set Points	Four (4) programmable set points (Control 1 & 2 On/Off) (Relay option required)					
Security	User defined 1 - 9 character password protection					
Tank Sensing Range (H ₂ O)	0 - 31 ft. (9.45m)	0 - 62 ft. (18.9m)	0 - 90 ft. (27.43m)	0 - 180 ft. (54.86m)		
Accuracy (Full Scale)	+/-0.2% FS (+/-0.75")	+/-0.2% FS (+/-1.5")	+/-0.2% FS (+/-2.2")	+/-0.1% FS (+/-2.2")		
Resolution (Full Scale)	0.1" (2.54mm)	0.2" (5.08mm)	0.3" (7.62mm)	0.1" (7.62mm)		
Supply Air Pressure	20 - 35 psi	30 - 50 psi	45 - 60 psi	85 - 100 psi		

One Levelcom LC-100 replaces all of these components:

• Pressure Transducer & Cable

• Intrinsic Barrier/ Signal Conditioner

Signal Amplifier

• Panel Meter / Display

DIMENSIONS



TMS is the leader in developing and refining pulsed bubbler technology over the past 18 years. LevelCom products have earned a reputation for being a very accurate, dependable monitoring system with a long trouble free service life.

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