



Greyline
LIT25

Level indicating transmitter with non-contacting ultrasonic sensor for tank inventory, level monitoring, and control.

Non-Contacting Sensor

The LIT25's ultrasonic, echo-ranging sensor mounts at the top of the tank to continuously monitor level.

A built-in temperature sensor is included to automatically compensate for changes in speed of sound due to temperature. Level and temperature signals share a single coaxial cable that can be run up to 152.4 m (500 ft) to the electronics enclosure. The standard sensor is rated for tank sizes up to 9.7 m (32 ft) high, and is made with PVC and Teflon (an optional all-Teflon model is also available). The sensor and cable are rated intrinsically safe (with optional intrinsic safety barrier) for installation in hazardous rated tanks.

Low-Cost, Non-Contacting Level Transmitter

Transmits

The LIT25 Level Indicating Transmitter features a 4-20mA output rated up to 1000 ohms. This output is isolated and ready for direct connection to your PLC or controller.



THE RIGHT METER FOR

- Chemical Storage Tanks
- Reservoirs
- Lagoons
- Sumps

Displays

Mount the watertight display enclosure at a convenient location where the large, 4-digit LCD display is visible to operators. Use the built-in keypad for calibration without climbing the tank.

Controls

Use the LIT25 signal relay output to control pumps and alarms. Calibrate for level, echo loss, or temperature alarm.

Easy Calibration Without Climbing Tanks

Calibration is quick and easy, using the 2-button keypad built into the unit to directly enter the measurement span and relay set-points in centimeters or inches. There are no calibration targets or level simulations required, the values are stored in the unit through power interruptions, requiring no battery.

Designed for Operator Convenience

Mount the LIT25 enclosure at a convenient location for operators. The large LIT25 digital display indicates that it is calibrated in percent, centimeters, or inches, and in **Range** or **Level** mode. Relay status is also displayed and the **Echo** symbol flashes to indicate that echos are being received normally.

Special LIT25 features like **Output Simulation** allow operators to test calibration, loop wiring, and relay set-points directly from the LIT25 keypad. Simplify calibration or tank measurement with the LIT25's **Range** display – instantly display distance in centimeters or inches from the sensor to the target or liquid surface.

Use the LIT25 keypad to increase or decrease **Damping** and control the instrument's response to turbulence, wave action, or agitators. Increase damping to completely reject agitator blades or other moving obstructions even when they travel through the sensor sound path.



Level or Temperature Control

Calibrate the versatile LIT25 relay for your choice of level alarm, pump control, temperature alarm, or echo loss alarm. Relay **On** and **Off** set-points are independently adjustable through the LIT25 calibration keypad. You can even control the LIT25's response to an echo loss condition – Hold the last reading, output 20mA, or output 4mA.

Display, Transmit, & Control Level for Chemical Tank Inventory, Sumps, Pump Stations, or Lagoons

Simple, Reliable, & Accurate

- Non-contacting, temperature compensated, ultrasonic sensor
- Remote display enclosure for keypad-calibration without climbing the tank
- 4-20mA output is isolated, ready for connection to PLC's or process computers
- Level and temperature signals share a single cable up to 152.4 m (500 ft) length
- Optional Intrinsically Safe sensor and cable
- Optional pressure sensors
- Signal relay is programmable for **On / Off** pump control, level, temperature, or echo-loss alarm
- 115 V AC, 230 V AC, or 24 V DC power input

Technical Specifications

GENERAL SPECIFICATIONS

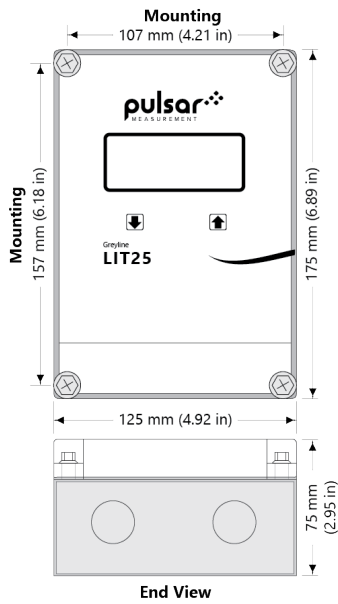
Programming:	Built-in 2-button keypad with menu selection. Calibration parameters are permanent when stored (even through a power interruption)
Electronics Enclosure:	NEMA4X (IP66) polycarbonate with clear, shatterproof cover
Accuracy:	±0.25% of Range or 2 mm (0.08 in), whichever is greater
Display:	Large (19 mm (0.8 in) high) 4 digit LCD
Power Input:	100-130 V AC 50/60 Hz, 5 W maximum
Analog Output:	Isolated 4-20mA, 1 kΩ load maximum
Signal Relays:	Qty 1, rated 120/240 V AC or 24 V DC, 1 ampere, programmable for level alarm, echo loss alarm, pump control, or temperature alarm
Temperature Compensation:	Temperature probe inside level sensor for high accuracy in changing temperatures
Operating Temp. (Electronics):	-25 °C to +60 °C (-13 °F to +140 °F)
Approximate Shipping Weight:	2.7 kg (6 lb)

TRANSDUCER SPECIFICATIONS

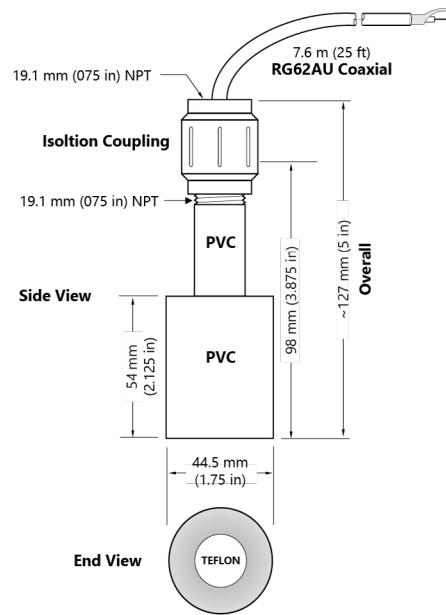
Maximum Range:	9.7 m (32 ft)
Deadband (Blanking):	Programmable, Minimum 305 mm (12 in)
Beam Angle:	8° Locate 0.3 m (12 in) from tank sidewall for every 3 m (10 ft) depth
Operating Frequency:	42 KHz
Exposed Materials:	PVC and Teflon
Operating Temperature:	-40 °C to 65 °C (-40 °F to 150 °F)
Operating Pressure:	1.4 bar (20 psi) maximum
Sensor Cable:	RG62AU coaxial, 7.6 m (25 ft) standard length (See Options)

POPULAR OPTIONS

Sensors:	All Teflon construction / flange mount / 15.2 m (50 ft) range
Hazardous Locations:	Intrinsically safe Sensors CSA rated Class I, II, III, Div. I, II, Groups C, D, E, F, G
Sensor Cable:	15.2 m (50 ft) RG62AU coaxial continuous from Sensor, or splice up to 152.4 m (500 ft)
Sensor Cable Junction Box:	Watertight NEMA4 steel with connection terminal strip
Power Input:	200-250 V AC 50/60 Hz, 12 V DC or 24 V DC
Enclosure Panel Mount:	Flange assembly mounts standard enclosure



Greyline LIT25 electronics enclosure dimensions



PZ32T sensor

Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia allow us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

www.pulsarmeasurement.com



INFO@PULSARMEASUREMENT.COM

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Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX
Registered No.: 3345604 England & Wales*

United States
11451 Belcher Road South
Largo, FL 33773
+1 888-473-9546

Canada
16456 Sixsmith Drive
Long Sault, Ont. K0C 1P0
+1 855-300-9151

United Kingdom
Cardinal Building, Enigma
Commercial Centre
Sandy's Road, Malvern WR14 1JJ
+44 (0) 1684 891371