

PROSCAN SERIES

Radar Level Transmitter

- **Excellent Chemical Resistance**
- **High Accuracy**
- **Suitable for Foam | Vapor**



FEATURES

- Plastic Design | Chemical Resistant
- Small Dead Band
- PTFE Antenna (Horn)
- Low Profile
- Simple Programming
- Suitable for Foam | Vapor
- Fail Safe Diagnostics
- Simple Configuration
- IP67 Housing
- Epoxy Coated Enclosure
- Loop Powered | 2 Wire

Measurement Principle

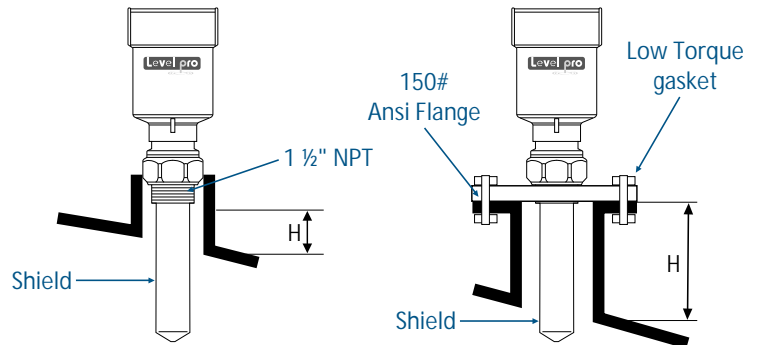
- The ProScan Series transmitter measures the liquid level inside the tank or sump by using an all plastic (PP or PTFE) antenna or horn that sends and receives low energy radar pulses. The sensor is mounted to the top of the tank and the pulsed signal is reflected off the liquid surface, the echo (returned signal) is then picked up or received by the transmitters antenna. The time it takes is compared to known laws of physics (speed of light), once this is done the distance can be determined, and very accurately measured.
- $\text{Distance} = (\text{Speed of Light} \times \text{Time Delay}) \div 2$
- The ProScan Series does not contact the process liquid and therefore is an excellent choice for applications that may be corrosive, coating, dirty, or crystallizing. The are temperature compensated over the entire range (-40-260°F) and can be used on to measure liquid under pressure or vacuum.
- The ProScan Series is both reliable and accurate; there is no requirement for re-calibration, and virtually zero maintenance as there are no moving parts.
- The ProScan Series utilizes a special microprocessor technology and mapping software that allows it to be used where other non-contact level sensing products fail or go lost i.e. Ultrasonics on Foam, Vapor, Condensate or Turbulence.

SPECIFICATIONS

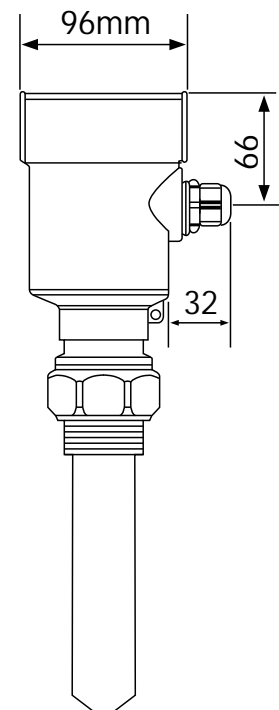
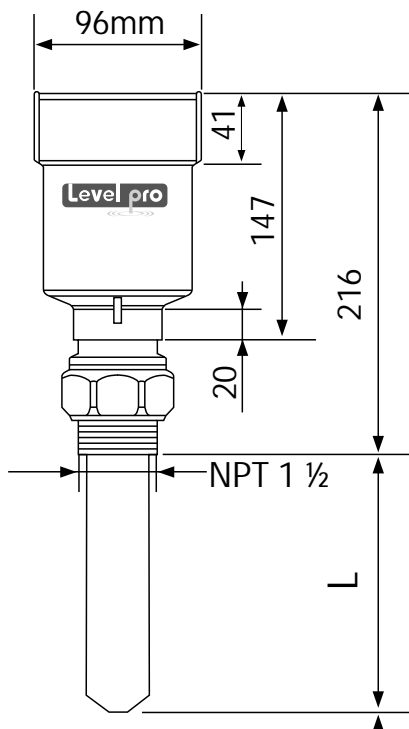
Working Frequency	6.8 GHZ
Range	0 - 36 m 0 - 118 ft
Repeatability	±3mm 0.11"
Resolution	1mm 0.04"
Sampling	55 Sec
Response Rate	1.1 Sec
Accuracy	> 0.1% 4mm 0.16"
Temperature	PTFE (-40 - 130°C) (-40 - 266°C)
Output Signal	4-20mA Hart
Display	4-Digits LCD
Power Supply	24VDC
Connection	1½" NPT 150 lb ANSI Flange
Communication	4-20mA RS485
Dimensions	96x 48 x 98 mm
Enclosure Rating	NEMA 4X IP67
Enclosure-Material	NORYL Epoxy Coated Aluminum

STANDARD INSTALLATION

- Ensure the radar antenna is not tilted towards the tank wall.
- The rod antenna (Tip) must be inside tank. (See Diagram)
- The vertical 90° placement of the sensor - beam must be perpendicular to liquid.
- No tools are required to install



DIMENSIONS OF INSTRUMENTS



ORDERING

Connection	Input	Output
NPT	PS8000	Teflon®
Flange	PS8500	Teflon®