# PROSCAN SERIES Radar Level Transmitter



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



#### **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.
- Distance = (Speed of Light x Time Delay) | 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	11/2" 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	

#### 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

Order from: **C A Briggs Company;** 622 Mary Street; Suite 101 - Warminster, PA 18974 Phone: 267-673-8117 - Fax: 267-673-8118; E-Mail: <u>Sales@cabriggs.com</u> - <u>www.cabriggs.com</u>



## **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®