

LevelPro® — ProScan® 3

Radar Level Sensor (80GHz)

ICON™ Corrosion-Free
PROCESS CONTROLS Instrumentation Equipment™



 Bluetooth®

LevelPro®

The Future of Non-Contact Level Measurement is Radar Technology!

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ICON™ PROCESS CONTROLS Corrosion-Free Instrumentation Equipment™

 **Bluetooth®**

Corrosion Resistant CPVC Body

Polycarbonate Cover

 **SimpliConnect™**
Cable Grip Connectors

2" NPT Connection

PP Transducer

LevelPro®

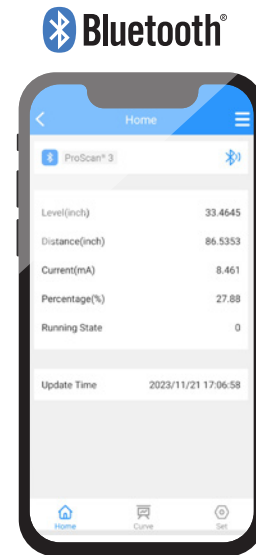
Features

- ✓ Bluetooth Connectivity (30m | 100') 
- ✓ Excellent Reliability and Accuracy
- ✓ Not Affected by Vapor or Outgassing
- ✓ RS-485 Communication | 4–20mA
- ✓ Measurement Under Vacuum | High Pressure
- ✓ Unaffected by Temperature Fluctuations
- ✓ NEMA 4X | Suitable for Outdoors

The Future of Non-Contact Level Measurement is Radar Technology!

The **ProScan® 3** 80 GHz high frequency technology permits a significantly more precise transmission signal focus. This makes it easier to distinguish between actual level signals and interference signals, making the measurement more reliable coupled with a higher degree of accuracy.

The new **ProScan® 3** series of compact instruments are ideally suited for more complex level applications.



Monitor Your ProScan® 3 with the Free App

Available on the  **App Store**

ANDROID APP ON  **Google play**



Scan the above QR codes to download the app



M12 Wiring (For SS Model)

Pin	Wire Color	Description
Pin 1	Brown	+VDC +mA
Pin 2	White	RS485A
Pin 3	Blue	-VDC -mA
Pin 4	Black	RS485B



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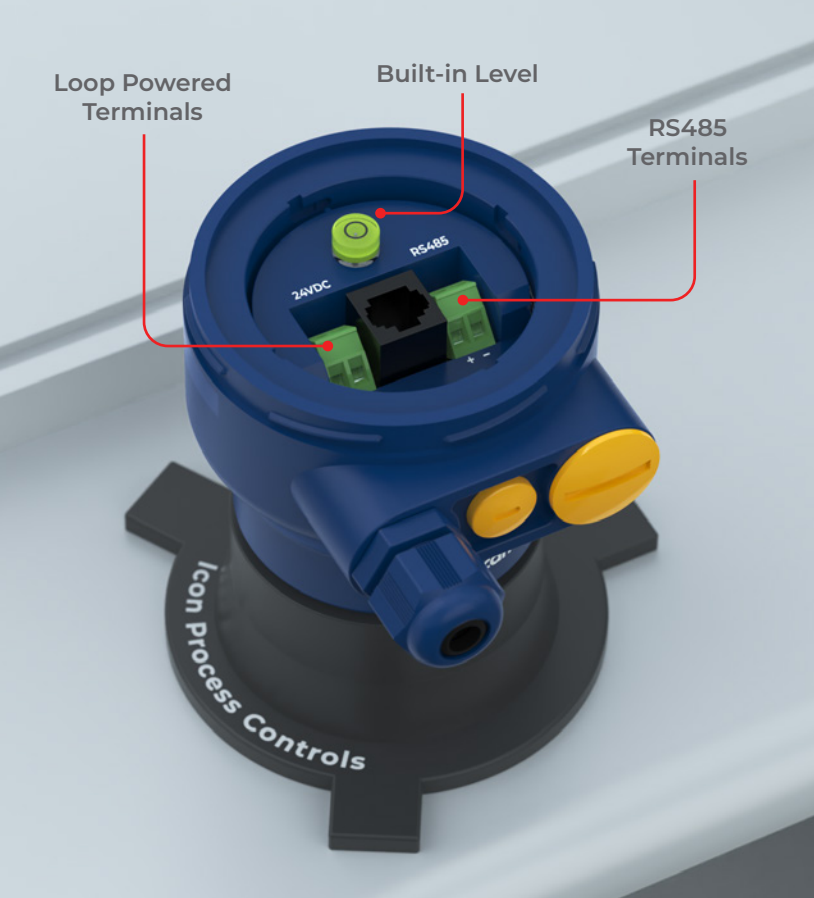
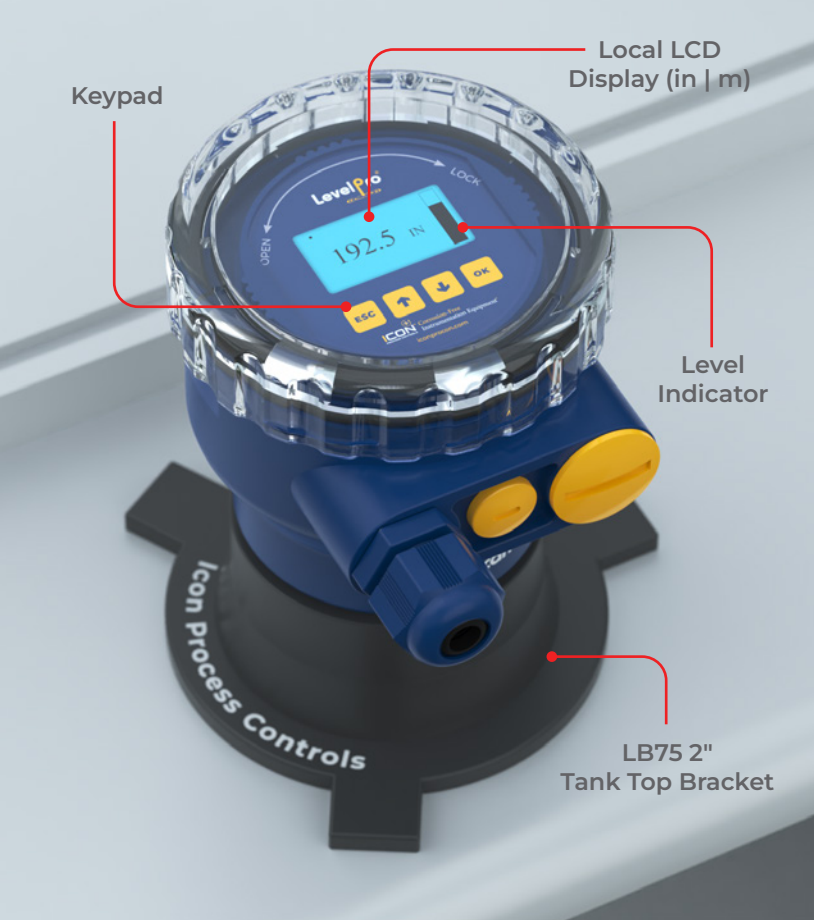
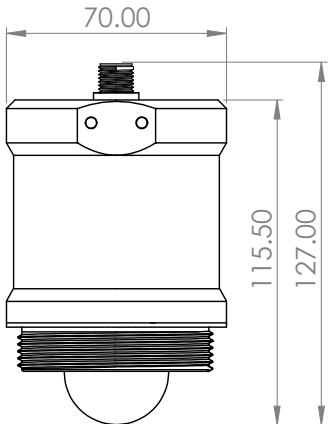
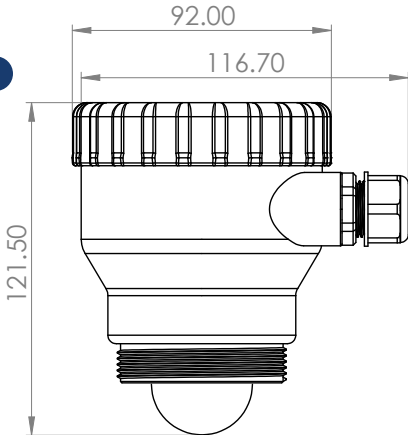
Specifications

Measuring Performance	
Maximum Range	34 ft (std), 68 ft (special order)
Minimum Range (Blind Area)	50mm (2in)
Resolution	1mm
Azimuth Beam Width (3 dB)	3°
Elevation Beam Width (3 dB)	3°

Operating Conditions	
Operating Frequency Band	76 – 81 GHz
Power Supply	18 – 36VDC
Average Operating Current	20mA
Effective Isotropic Radiated Power	13 dBm
Communication Interface	RS485
Analog Output	4-20mA Loop Powered
Enclosure Protection	NEMA 4X IP67
Ambient Temperature	-4°F ~ 158°F -20°C ~ 70°C

Materials		
Housing Material	CPVC+PC	316SS
Transducer	PP	

Dimensions (mm)

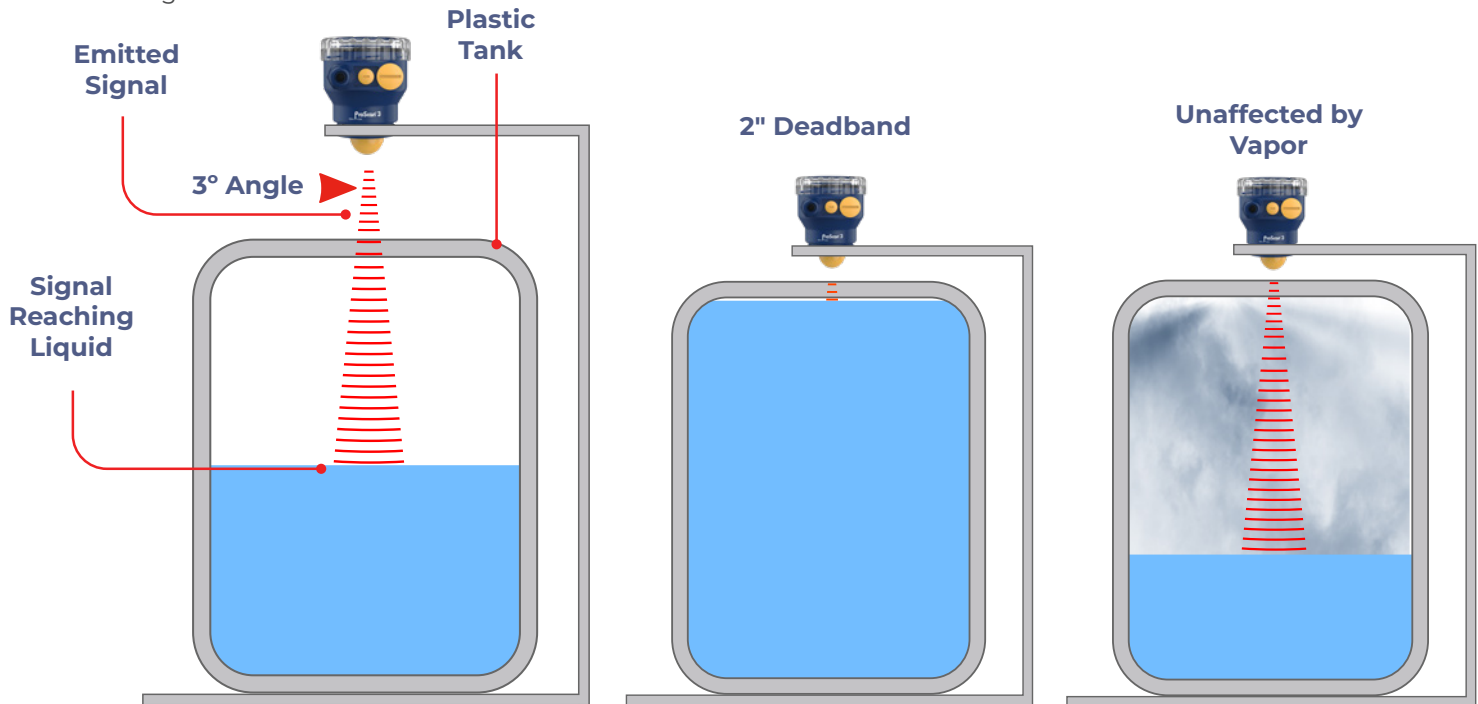


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Operating Principle

The **ProScan® 3** (80GHz) radar is a transmitter for continuous level measurements using fast sweep Frequency Modulated Continuous Wave (FMCW) technology. The transducer of radar continuously emits signal sweeps with a constant frequency towards the liquid surface. The reflected signal is then captured by the transducer. The time to send and receive is known as the time of flight.



Advantages of Measuring Top of Tank

High Purity Liquids

In high purity applications, measuring through the vessel eliminates any concerns the sensor or process connection could contaminate the material inside.

Highly Corrosive Material

Often, highly corrosive materials are stored in plastic vessels. If the tank does not have to be opened there is less risk of material leaking or off-gassing from the vessel. Additionally, the level sensor does not have to be constructed of exotic materials in order to function in a hostile measuring environment.

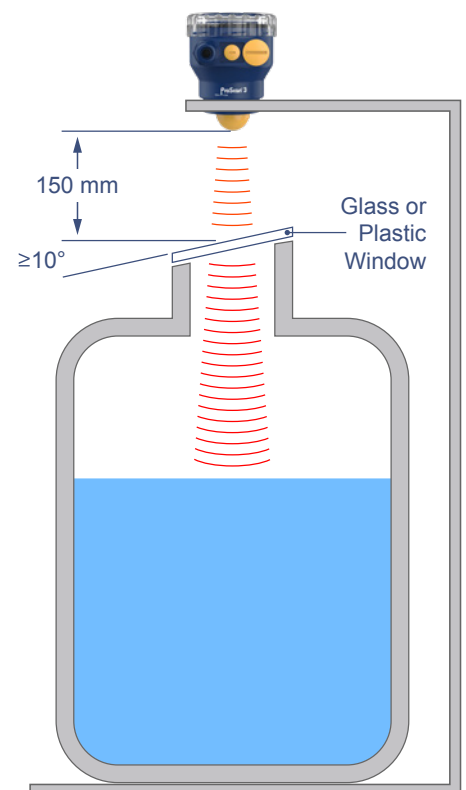
High-Temperature and High-Pressure Vessels

Measuring from the top of high-temperature or high-pressure vessels allows radar level sensors to be used even when internal vessel conditions exceed the temperature or pressure ratings of the radar transducer.

Mounting Considerations

Sight glasses should be tilted at least 10° so that any energy that doesn't pass through the glass is reflected away from the sensor.

The narrow beam (3°) of the 80GHz **ProScan® 3** allows mounting above a sight glass and above a tall nozzle. Make sure that there is a clear path for the reflected energy to travel away from the sensor.



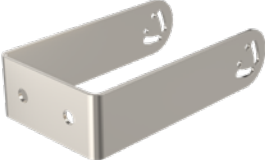
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Model Selection

ProScan® 3 — Radar Level Transmitter				
Connection	Part Number	Material	Display	Output
2" NPT	PS38000	CPVC	LCD	4-20mA RS485
2" NPT	PS38000S	316SS	Blind	4-20mA RS485
2" NPT	PS38000RT	CPVC	Blind	4-20mA
2" NPT	PS38000RT-R	CPVC	Blind	RS485
2" NPT	LB75 Tank Top Bracket	PVC	-	-
2" NPT	LB50 Wall Mount Bracket	GFPP	-	-
2" NPT	SBF Self Aligning Bulkhead	PVC	-	-
Clamp	LB80S SS Mounting Bracket	316SS	-	-

10m range is standard. Add "-20" suffix for 20m range

ProScan® 3 — Accessories		
Part Number	Description	Image
LB75	2" Tank Top Mounting Bracket	
LB50	2" Wall Mounting Bracket	
LB80S	SS Wall Mounting Bracket	
SBF-020	Self-Aligning Bulkhead	
BHF-20	Bulkhead Fitting	

