PreView Sentry Deutsch Kit



Includes: Heavy-duty FMCW 24GHz Sentry Radar, In-Cab LED Display Module, 9m / 30' Heavy-Duty Body Harness with Deutsch Connectors, 90° Sensor Mounting Bracket



Tech Specs

Measuring Performance

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Range	Prec-configured detection range - see parts table
Range Accuracy	0.3m
Azimuth Field of View	±75 degrees (10 dBsm target)
Elevation Field of View	±10 degrees (10 dBsm target)
Angle Accuracy	±2° @ ±10° FOV, ±5 @ ±30° FOV, ±10 @ ±75° FOV
Velocity Range	± 9 m/sec (± 20 mph)
Target Resolution	1.4 m for static targets, approaching 0.3 m for dynamic targets
Cycle Time	120 ms (A CAN bus target message is provided in every cycle.)
Water Tightness	IP 68 - IP 69K
Operating Temp	-40°C to +60°C
Salt Spray	ISO 9227
Housing	Plastic Aluminum
Lens	Hardened glass
Reflector	Free from reflector
Warranty	5 Years

Operating Conditions

Frequency	24.00 – 24.25 GHz
Power Supply	9 – 33 VDC, Reverse polarity and over-voltage protected
Current	<0.5 A
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +105°C
Shock	50G
Vibration	25 G, random, all three axis
Protection Rating	IP69K

Operating Modes

Detection Pattern	Fixed based on model number	
Target Detection Time	300 ms	
Power On to Active Time	300 ms	
Communications Interface		
J1939 CAN Bus	250 Kbits/sec, terminated with 120 ohm resistor	
LED Interface	Switch to ground, sink up to 1A, over current protected	
Physical Characteristics		
Sealing	IP69K	
Housing Material	Polycarbonate radome	
Dimensions	4.90° (w) x 4.06° (h) x 1.28° (d) (12.4 cm x 10.3 cm x 3.25 cm)	
Weight	7.5 lb (3.4 kg)	
Mounting	Four 0.22" (5.6 mm) diameter mounting holes	

Description

This PreView Sentry Deutsch Kit is a plug-and-play heavy-duty radar solution with a pre-configured sensor range. The kit comes with the FMCW 24GHz Sentry radar sensor, in-cab LED display module, 9m / 30' heavy-duty body harness with Deutsch connectors, and a 90° sensor mounting bracket. There are 6 PreView Sentry Kits to choose from, each with its own pre-configured range - see parts table below.

The PreView Sentry accurately identifies the location and velocity of up to 16 people or objects simultaneously and is designed to withstand the harsh environments encountered by heavy-duty equipment.

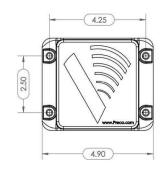
With built-in fail safe alerts that notify the operator of radar blockage or communication issues, operators and fleet managers can be sure that they are working with the most reliable object detection system available.

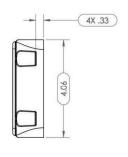
Features and Benefits

- · Frequency: 24Ghz
- · Pre-configured detection range see parts table
- · Current Draw: Less than 0.25A
- · Connects to reverse lights for power
- Operating Temp: -40 F/ +185 F (-40 C to +85 C)
- Sensor Dimensions: 4.9"H x 4.06"W x 1.28"D
- Display Dimensions: 1.0"H x 2.3"W x 2.0"D
- · Built to meet rugged J1455 Specs
- · Utilizes standard CAN communication protocols

Applications

Heavy-duty object detection





Parts / Models

Part No.	Description
ST85043	PreView Sentry Deutsch Kit with 4.5 x 3m Sensor
ST85062	PreView Sentry Deutsch Kit with 6 x 2m Sensor
ST85063	PreView Sentry Deutsch Kit with 6 x 3m Sensor
ST85064	PreView Sentry Deutsch Kit with 6 x 4.2m Sensor
ST85066	PreView Sentry Deutsch Kit with 6 x 6m Sensor
ST85084	PreView Sentry Deutsch Kit with 8 x 4m Sensor





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