

VIARADAR STATIONARY SENSOR PRO I

General Specifications:

Type	Stationary Doppler Radar Speed Sensor
Operating Frequency	34.7 GHz (Ka-Band)
Stability	+/-100 MHz
Communication Interface	RS-232 or RS-485 available as separate models
Power Requirements	Voltage: 9-16 VDC for SN ST6560 and below 9-24 VDC for SN ST6561 and above Current: (at 12 VDC nominal) Transmitter on: 370 mA Transmitter off: 100 mA
Environmental	Operating: -30° to +70°C, 90% relative humidity Non-operating: -40°C to +85°C
Mechanical	Weight: 1.15 lb. (0.52 kg) Diameter: 2.6 in. (6.7 cm) Length: 4.7 in. (11.8 cm) Case Material: Aluminum Die Cast
Accuracy	+/- 0.3% - Speeds are rounded down to the nearest unit or tenths of a unit depending on the unit resolution setting
Audio Output	A 3.3 Vpp pulse-width modulated (PWM) audio output signal is provided - must be filtered and amplified for best audio quality.
Auto Self-Test	Performed every 10 minutes while transmitting
Speed Range	Stationary low speed threshold configurable: 1 MPH to 200 MPH (1.6 to 321 KM/H) 12 MPH to 200 MPH (19 to 321 KM/H)

Microwave Specifications:

Antenna	Conical horn
Polarization	Circular
3DB Beamwidth	12° +/- 1°
RF Source	Gunn-Effect diode
Receiver Type	Two Direct-Conversion Homodyne receivers using four low-noise Schottky battier mixer diodes
Power Output	10 mW minimum 15 mW nominal 25 mW maximum
Power Density	1 mW/cm ² maximum at 5 cm from lens

Control & Configuration Settings:

Basic Configuration	Transmitter Control, Zone, Unit of Measure, Unit Resolution, Faster Target Tracking, AUX Pin Configuration
Serial Port Configuration	Baud Rate, Output Format, Leading Zero Character, Format D Direction Character, Enable (RS-232 only), Zeros After Target (RS-232 only), Message Period, Format D Update on Change Only (RS-232 only), Format D Zero Report (RS-232 only), Polled Modes D0-D4 (RS-232 only)
Target Recognition	Opposite Lane/Stationary Sensitivity, Fine Sensitivity Adjust, Sensitivity Hysteresis, Low Sensitivity Target Strength Sensitivity, Target Acquisition Quality, Target Loss Quality
Target Filtering	Stationary Low Cut-off, Spurious Speed Filter, Max AGC Gain, Min AGC Gain, Current AGC Gain
Speed Presentation	Cosine 1 Angle, Cosine 2 Angle, Holdover Delay
Locking Targets	Lock Option, Faster Locking Enable, Strongest Lock, Fast Lock
Speed Alarm	Alarm Speed Threshold
Audio	Doppler Audio Volume, Aud 0 Enable, Variable Doppler Loudness, Squelch, Beep Volume
TX Power Save	TX On Time, TX Off Time, Keep TX On with Target, Max TX On Time
Testing	Fork Enable, Auto Test Period, Auto Test Mode, Enhanced Test
System	Get Product ID, Get Product Type, Get Software Version, Speed Sensor Address (RS-485 only)