STALKER® Radar Stationary Speed Sensor

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°C 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 3.3Vpp 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 barrier mixer diodes
POWER OUTPUT:	10 mW mininum 15 mW nominal 25 mW maximum
POWER DENSITY:	1 mW/cm^2 maximum at 5 cm from lens

CONTROL and 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 Cutoff 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)