

STALKER® Radar Speedometer Speed Sensor

GENERAL SPECIFICATIONS

TYPE:	Moving 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.
AUTO SELF-TEST:	Performed every 10 minutes while transmitting
GROUND SPEED RANGE:	Low ground speed acquisition threshold configurable: Standard acquisition of <1 to 90 MPH (<1.6 to 144 KPH), when Ground Speed Lo Cutoff = Low Optional acquisition of 20 to 90 MPH (32 to 144 KPH), when Ground Speed Lo Cutoff = High Ground speed, once acquired, will track to 199 MPH (320 KPH)

CONTROL and CONFIGURATION SETTINGS

BASIC CONFIGURATION:	Transmitter Control Unit of Measure Unit Resolution
SERIAL PORT CONFIGURATION:	Baud Rate Output Format Leading Zero Character Message Period
TARGET RECOGNITION:	Ground Speed Sensitivity Patrol Speed Blank
TARGET FILTERING:	Patrol Speed Low Cutoff Max AGC Gain Min AGC Gain Current AGC Gain
TESTING:	Fork Enable Test
SYSTEM:	Get Product ID

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 minimum 15 mW nominal 25 mW maximum
POWER DENSITY:	1 mW/cm ² maximum at 5 cm from lens