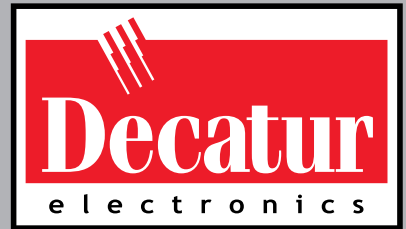


Technical Specifications

SI-3L Surface Velocity Radar™
Special Application Radar



www.DecaturElectronics.com
Phone: 800.428.4315

General Specifications	
Type	Special Application Radar
Accuracy	100% accurate with a resolution of ± 0.10 unit of measure. (± 0.10 mph), (± 0.10 km/h), (± 0.10 feet-per-second) (± 0.10 meters-per-second)
Ambient Operating Temperature	-22° F to +158° F (-30° C to +70° C)
Available Frequencies	K-Band
Communications	RS232 via 6-pin waterproof connector. Parameters can be changed via serial port
Controls	Adjustable through software.
Cosine - Horizontal	0 - 45° (Default = 0)
Cosine - Vertical	0 - 45° (Default = 0)
Data Format (Default)	SS.SSS S = Speed, cr = Carriage Return (Note: Various other protocols can be selected)
Data Hold Time	100 to 9999 ms (Default is 1000 ms)
Data Rate	1200, 2400, 9600, 19200, 38400, 57600 & 115200 baud rates. (Default is 9600 baud)
Directionality	Choose between "all", "approach and recede", "approach" or "recede"
Features	DSP, 32 bit processing. Software easily upgradable.
Finish	Gray
Frame	ABS Polycarbonate Blend
Maximum Humidity	100% (Note: Unit is weather proof, not water proof)
Ports	16 selectable communication ports. (Default is Com 1)

General Specifications - continued	
Power	+12VDC nominal
Sensitivity	Adjustable (increments 1-100)
Speed Measurements	mph, km/h, feet-per-second (fps), & meters-per-second (m/s) (Default is feet-per-second)
Speed Range	0.1 - 65 fps (0.1 - 20 m/s) 0.1- 45 mph (0.1 - 70 km/h)
Standard Warranty	One-year parts & labor
Target Acquisition Time	< 1 second

Mechanical	
Height	6.125" (15.5575 cm)
Width	6.5" (16.51 cm)
Depth	1.5" (3.81 cm)
Weight	1.75 lbs (0.793 kg)

Electrical	
Power Requirements	+10.8 VDC to +24 VDC
Low Voltage Shutdown	+10.8 VDC
Maximum Current Draw	175 milliamperes
Nominal Current Draw	150 milliamperes @ 12 VDC
Surge Current Requirements	250 milliamperes

Microwave	
Type	K-band
FCC Identifier	HTRSI-3L
Frequency	24.075 GHz ~ 24.175 GHz
Beam Width	6.5° x 5.5° at the -3dB point
Polarization	Linear
Power Density	114.3 dBuV/m at 3 metres
Power Output (EIRP)	+20 dBm
Horizontal Sidelobe Suppression	15 dB typical
Vertical Sidelobe Suppression	15 dB typical