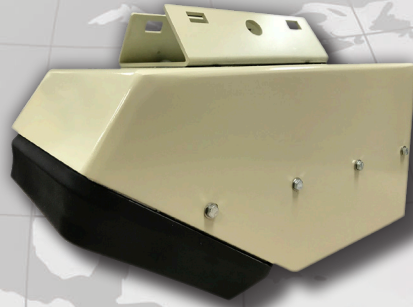


Technical Specifications

SVR Dual Surface Velocity Radar™
Special Application Radar



www.DecaturElectronics.com
Phone: 800.428.4315

SI-3L 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 - 60° (Default = 0)
Cosine - Vertical	Preset at 40°
Data Format (Default)	SS.SSS <cr> 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	Black
Housing	ABS Polycarbonate Blend
Maximum Humidity	100% (Note: Unit is weather proof, not water proof)

SI-3L General Specifications - Continued	
Ports	16 selectable communication ports. (Default is Com 1)
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

SI-3L Electrical Specifications	
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

SI-3L Microwave Specifications	
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



Technical Specifications

SVR Dual Surface Velocity Radar™
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Distance Sensor Microwave Specifications	
Type	Distance Sensor
Detection Distance	.005 to 35 meters
Duty Cycle	10% to 100% (adjustable)
Frequency	61 GHz
Beam Width	8° Horizontal & Vertical
Accuracy	+/- 2mm
Power Transmit	EIRP 10 dBm
Power Output (EIRP)	+20 dBm
Horizontal Sidelobe Suppression	15 dB
Vertical Sidelobe Suppression	15 dB

SVR Dual Mechanical Specifications	
Height	16.5" cm
Width	17.8 cm
Length	33 cm
Weight	7 lbs (3.2 kg)
Frame	1/8" (3.2 mm) thick welded aluminum frame
Finish	Gray Powder Coat

SVR Dual Electrical Specifications	
Power Requirements	+10.8 VDC to +24 VDC
Low Voltage Shutdown	+10.8 VDC
Power Consumption	
Power consumption is dependent on what power duty cycle the level sensor is set at. As an example: If the duty cycle is set for 10% (lowest possible setting) then the average current draw is 175 mA, 50% duty cycle would be 275 mA, 100% duty cycle is 400 mA. (12VDC input)	