

Technical Specifications

SVR™
Surface Velocity Radar
Revision Date 3-12-09



www.DecaturRadar.com
 Phone: 800.428.4315
 Outside USA: 217.428.4315
 Fax: 217.428.5302

715 Bright Street
 Decatur, IL 62522

General	
Type	Hand held stationary Doppler radar
Accuracy	± 0.1 f/s (± 0.3 m/s)
Ambient Operating Temperature	-22°F to +158°F (-30°C to +70°C)
Angle Compensation	Vertical and Horizontal
Controls	Mode, Select, Power and Trigger
Display	LCD with backlight
Features	DSP, 32 bit processing
Finish	Black, scratch resistant powder coat paint on housing
Frame	Handle is a rugged ABS Polycarbonate Blend
Maximum Humidity	90% relative humidity @ +98.6° (+37°C)
Power	Two (2) Black & Decker® Versapak™ Nickel-Metal-Hydride (NiMH) batteries
Speed Measurements	Feet-per-second (f/s) or meters-per-second (m/s)
Speed Range	0.1 f/s to 43 f/s (0.3 m/s to 13 m/s)
Standard Warranty	2 years parts & labor
Water Resistance	Meets International Robustness Standard IEC 529:1989 and European Community Standard EN60529 Classification IP55

Mechanical	
Dimensions	7.6" (H) x 3.25" (W) x 7" (L) (19.304 cm x 8.255 cm x 17.78 cm)
Weight	2.0 lbs (0.907 kg)

Electrical - Power	
Power Requirements	Two (2) Black & Decker Versapak® 3.6 VDC NiMH "Gold" series batteries
Voltage Range	+6.2 VDC to +8.0 VDC
Low Voltage Shutdown	+6.2 VDC

Electrical - Power Consumption Parameters (All currents measured at 7.2 VDC with backlight on)	
Standby (antenna off)	.180 amperes
Antenna ON (no targets)	.370 amperes
Antenna ON (with targets)	.440 amperes
Antenna OFF (segment check "888")	.180 amperes
Antenna ON (segment check "888")	.370 amperes

Electrical - Power Consumption Parameters (All currents measured at 7.2 VDC with backlight off)	
Standby (antenna off)	.155 amperes
Antenna ON (no targets)	.345 amperes
Antenna ON (with targets)	.415 amperes
Antenna OFF (segment check "888")	.155 amperes
Antenna ON (segment check "888")	.345 amperes





Technical Specifications

SVR™
Surface Velocity Radar
Revision Date 3-12-09

Features	
Bi-Directional	Measures the speeds coming toward the gun or speeds going away from the gun
Angle Compensation	Compensates for the cosine error effect that occurs when the gun is not directly in line (parallel) to the target
Horizontal Angle Compensation	Adjustable from 0° to 45° in increments of 5° to compensate for cosine angle error
Vertical Angle Compensation	Tilt sensor automatically compensates for the vertical angle.

Microwave	
Type	K-Band
FCC Identifier	HTRCR-1K
Frequency	24.150 GHz nominal
Beam Width	12° nominal
Polarization	Circular
Power Density	$\leq 1 \text{ mW/cm}^2$
Power Output	7 mW nominal

