

# Technical Specifications

Railmaster™  
Special Application Radar



www.DecaturElectronics.com  
Phone: 800.428.4315

General	
Type	Stationary hand held Doppler radar
Accuracy	± 0.1 unit of measure (low speed) (± 1 unit of measure (high speed)
Ambient Operating Temperature	-22°F to +158°F (-30°C to +70°C)
Controls	Rubber keypad with Menu, Select, Power, Recall and Mode buttons. Trigger switch
Display	LCD with backlight
Display LCD	Displays the speed readings, menu options, and message icons. Display can be set to show speeds in 10ths or whole units.
Features	DSP, 32 bit processing. Capable of displaying speed in two ranges with the ability to recall the last measured speed.
Frame	Housing is a rugged ABS Polycarbonate Blend
Maximum Humidity	90% relative humidity @ +98.6°F (+37°C)
Dual Power	Six (6) AA NiMH batteries or detachable 12 VDC power cable with lighter plug
Speed Range	Low Speed = 1.0 to 75.0 MPH (2.0 - 122.0 KM/H)  High Speed = 10 to 210 MPH (20 to 337 KM/H)
Speed Units	Miles-per-hour (MPH) Kilometers-per-hour (KM/H)
Standard Warranty	2 years parts & labor
Water Resistance	Meets International Robustness Standard IEC 529:1989 and European Community Standard EN60529 Classification IP55

Mechanical	
Dimensions	10.25" (H) x 3" (W) x 7.25" (L) (26.31 cm x 7.62 cm x 18.43 cm)
Weight	2.1 lbs (0.952 kg)with batteries

Electrical - Power	
Battery Requirements	Six (6) AA Nickel-Metal-Hydride (NiMH) rechargeable batteries (User replaceable)
Battery Voltage Range	+6.1 VDC to +7.2 VDC
Battery Low Voltage Shutdown	+6.1 VDC
Detachable Power Cord	Plugs into the cigar lighter receptacle of the vehicle
Power Cord Voltage Range	+8.5 VDC to +16.5 VDC
Power Cord Low Voltage Shutdown	+ 8.5 VDC

Electrical - Power Consumption Parameters (All currents measured at 7.2 VDC with backlight on)	
Standby	0.105 amperes
Transmitting	0.170 amperes

Microwave	
FCC Identifier	HTRCR-1K
Frequency	24.150 GHz nominal (K-band)
Beam Width	12° nominal
Polarization	Linear (Horizontal)
Power Density	</= 1 mW/cm <sup>2</sup>
Power Output	7 mW nominal