

# Technical Specifications

Genesis II Select™  
Police Traffic Radar  
Revision Date 3-29-12



SONCELL NORTH AMERICA  
A PUBLIC SAFETY COMPANY



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Decatur Electronics  
3433 East Wood Street  
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General Specifications	
Type	Dash-mounted, single or dual antenna, moving/stationary Doppler radar
Accuracy	100% accurate with a display resolution of ± 1 unit of measure (± 1 mph, ± 1 km/h)
Ambient Operating Temperature	-22° F to +158° F (-30° C to +70° C)
Available Frequencies	K-Band, Ka-Band
Communications	RS232, DB-9 serial connector
Controls	All functions controlled through the hand remote
Display	Hi Intensity LEDs with 4 windows for displaying target speeds, modes, locked speeds, and patrol speeds
Features	DSP, 32 bit processing with true Doppler audio. Internal and user initiated self-tests.
Finish	Black, scratch resistant powder coat paint
Frame	Durable extruded aluminum frame
Maximum Humidity	90% relative humidity @ +98.6° F (+37° C)
Power	12 VDC nominal
Speed Range - Stationary	12 mph - 210 mph (19 km/h - 337 km/h)
Speed Range - Moving	10 mph - 210 mph 16 km/h - 337 km/h) Depending upon mode. Refer to Speed Range details
Standard Warranty	Two-year parts & labor
Water Resistance	Meets International robustness standard IEC 529:1989 and European Community Standard EN60529 Classification IP44
Weight	1.3 lbs (0.590 kg) Display & Computer

Display - Mechanical	
Display	Detachable display with optional cable and bracket
Dimensions	1.45" (H) x 5.25" (W) x 1.1" (D) (3.68 cm x 13.33 cm x 2.79 cm)
Weight	5.90 oz (0.41kg)

Computer - Mechanical	
Dimensions	1.45" (H) x 5.25" (W) x 3" (D) (3.68 cm x 13.33 cm x 7.63 cm)
Weight	14.5 oz (0.41 kg)

Computer - Electrical	
Power Requirements	+10.8 VDC to +16.5 VDC (+13.6 nominal)
Low Voltage Shutdown	+10.8 VDC with visual indicator
Minimum Current Draw	0.60 Amperes (Antenna off)
Maximum Current Draw	1.3 Amperes (All segments lit)
Fusing	Internal, resetable and external 2A (in lighter plug)

Computer - Speed Ranges	
Stationary Mode	12 mph - 210 mph (19 km/h - 337 km/h)
Stationary Mode Low Speed Option	2 mph - 210 mph (4 km/h - 337 km/h)
Moving Mode Opposite Direction - Patrol	5 - 100 mph (with no targets) (8 km/h - 161 km/h)
Moving Mode Opposite Direction - Target	10 mph - closure 210 mph (16 km/h - closure 337 km/h)
Moving Mode Same Direction - Patrol	20 mph - 100 mph (32 km/h - 160 km/h)
Moving Mode Same Direction - Target (Slower or Faster)	From the user's selected minimum speed separation up to 75% of the patrol speed



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Hand Remote - Mechanical	
Features	Speaker, 11 button keypad, extruded aluminum housing.
Dimensions	5" (H) x 2.10" (W) x 1.2" (D) 12.70 cm x 5.33 cm x 3.04 cm
Weight	9.10 oz (0.26 kg)

K-Band Antenna	
IACP Type	IV
FCC Identifier	724
Frequency	24.150 GHz nominal
Beam Width	12° nominal
Polarization	Circular
Power Density	$\leq 1 \text{ mW/cm}^2$
Power Output	7 mW nominal
Dimensions	4.15" (L) x 3" (W) (10.54 cm x 7.62 cm)
Weight	13.25 oz (0.37 kg)

K-Band Directional Antenna	
IACP Type	IV
FCC Identifier	HTRCR-1KD
Frequency	24.150 GHz nominal
Beam Width	12° nominal
Polarization	Linear
Power Density	$\leq 1 \text{ mW/cm}^2$
Power Output	7 mW nominal
Dimensions	4.15" (L) x 3" (W) (10.54 cm x 7.62 cm)
Weight	13.25 oz (0.37 kg)

Ka-Band Antenna	
IACP Type	VI
FCC Identifier	HTRKA2
Frequency	35.500 GHz nominal
Beam Width	12° nominal
Polarization	Circular
Power Density	$\leq 2 \text{ mW/cm}^2$
Power Output	10 mW nominal
Dimensions	3.85" (L) x 2.10" (W) (9.77 cm x 5.33 cm)
Weight	7.25 oz (0.20 kg)

Tuning Forks	
MPH K-band	35.2 & 65.6 mph K-band tuning fork with case (S900-25)
MPH Ka-band	35.2 & 50.6 mph K-band tuning forks with case (S900-22)
KM/H K-band	55.2 & 105.6 km/h tuning forks with case (S900-26)
KM/H Ka-band	60.2 & 90.6 km/h tuning forks with case (S900-27)

