

Man Portable Kit



Man Portable deployment of the R6SS

FLIR RANGER™

R6SS

Man Portable Electronic
Scanning, Long-Range
Ground surveillance radar

The Ranger® R6SS is a man portable, ground-surveillance radar specifically designed to detect and track personnel and vehicles within a 10 kilometer range. With its small size and lightweight, the Ranger R6SS has class leading target detection and acquisition performance in a man portable form factor.

APPLICATIONS

- Force Protection
- Border Security
- Vehicle Dismount
- Artillery and Mortar Fire Correction
- UAS Detection

KEY FEATURES

- High Performance Ground Surveillance System
- Man Portable
- Built-in North Finding Capability
- Automatic Target Tracker
- Automatic Target Classification
- Low False Alarm Rate
- MIL - STD - 810G Qualified
- Built in GPS

Specifications

Parameters	R6SS	R6SS-Armour
Instrumented range	15,000 m	
Radar targets	Person, UAS, boat, vehicles	
Detection Range	Person 6 km Light Vehicle 10 km Large Vehicle 15 km	Mini UAS 1.8 km Person 2.5 km Light Vehicle 5.5 km
Minimum Detection Range	10 m	
Scan sector	± 45° (fixed) - 360° with P/T	
Vertical coverage	≥ 4°	≥ 40°
Number of simultaneously displayed tracks	Up to 512	
Electronic scan rate	2 Hz	
Minimum Detection Velocity (MDV)	< 0.1 m/s	
Accuracy		
Range Accuracy	± 2 m	
Angular Accuracy (azimuth)	< 0.2 degree	
Power		
Power consumption	85 W nominal	
Operating voltage	20 - 48 VDC	
Overview		
Size (in)	14.7" x 14.4" x 4.3" (37 x 36 x 11 cm)	
Weight	≤ 22 lbs (10 kg)	
Operating frequency	X-Band	
Connectivity	Ethernet	
Environmental	MIL-STD-461F, IP67 MIL-STD-810G, FCC/CE	
Other Features		
Built-in GPS	Yes	
Built-in compass	Yes	
Tripod		
Construction type	Black Carbon Fiber, 3-Stage	
Foot type	Spike	
Payload Interface	No-tool quick connect	
Weight	6.8 lbs (3.1 kg)	
Max height (working)	73.6" (187 cm)	
Min height (working)	8.7" (22 cm)	
Pan/Tilt (Optional)		
	Pan & Tilt	Pan Only
Size	7.1" x 9.4" x 13.4" (18 x 24 x 34 cm) (WxDxH)	7.1" x 11.8" (18 x 30 cm) (Dia x H)
Pan Range	360° continuous	
Tilt Range	± 30°	- 10° to + 20° (manual with custom bracket)
Weight	19.8 lbs (9 kg)	11 lbs (5 kg)
Batteries		
Battery type	BB-2590/U	
Ruggedized Tablet		
Processor and display	5th Generation Intel® Core™ i5 vPro™ Processor, Daylight-Readable 10.1" Display with Gloved Multi Touch + Digitizer	
Standard Accessories		
Radar Carry Bag, Accessory Carry Bag, Interconnect Cable, Operator's Manual and Documentation		



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