



## MAN-PORTABLE MID-RANGE GROUND SURVEILLANCE RADAR

# FLIR Ranger® R8SS

The man-portable FLIR Ranger® R8SS electronically-scanned, mid-range radars detect and track personnel and vehicles up to 15 kilometer ranges. Light and small, the Ranger R8SS and provides best-in-class target detection and acquisition performance in a form factor that fits in a backpack or is easily mounted to a vehicle or permanent structure as part of an integrated solution. The low false alarm rate and extremely reliable operation builds operator trust and yields high operational availability.

The R8SS has a low minimum detection target velocity that allows detection of slow-moving threats such as walkers or crawlers. It uses a +/-45° scan sector to monitor a perimeter. Adding a pan and tilt provides a full 360° coverage every second. The R8SS provides fast and accurate detection of up to 512 threats simultaneously, allowing large areas to be continuously monitored in real time.

### FEATURES

#### COMPLETE PERIMETER SECURITY

Extremely fast scanning at 4 times a second per panel, nothing is missed. The Ranger Panel Radars can scan a full 360° every second with a pan tilt mount, quickly detecting any ground threat from any direction.

#### HIGH-PERFORMANCE GROUND SURVEILLANCE

Built-in GPS and North finding capability, automatic target tracker and classification, and low false alarm rate deliver best-in-class performance.

#### BUILT FOR RUGGED ENVIRONMENTS

Panel Radars are MIL-STD-810G qualified and IP67 certified.

#### FAST, ACCURATE THREAT DETECTION

Panel Radars quickly detects up to 512 threats simultaneously while accurately displaying each target's location.

#### MAN-PORTABLE AND EASY TO INTEGRATE

R8SS can be transported in a backpack of a dismounted soldier and draws only 135W, giving it extreme deployment flexibility. With four mounting bolts and a single cable, the radar is easy to install in fixed installations.

### APPLICATIONS

FORCE PROTECTION

BORDER SECURITY

VEHICLE DISMOUNT

ARTILLERY AND MORTAR FIRE CORRECTION

UAS DETECTION

## SPECIFICATIONS

Parameters	R8SS
Instrumented range	15,000 m
<b>Detection Range</b>	
Person	8 km
Light Vehicle	12 km
Large Vehicle	18 km
MicroUAS	N/A
MiniUAS	N/A
Small UAS	N/A
Minimum Detection Range	10m
Scan sector	± 45° (fixed) - 360° with P/T
Vertical coverage	≥ 4°
Number of simultaneously displayed tracks	Up to 512
Electronic scan rate	2 Hz or 4 Hz
Minimum Detection Velocity (MDV)	< 0.1 m/s
<b>Accuracy</b>	
Range Accuracy	± 3 m
Angular Accuracy (azimuth)	< 0.2 degree
Angular accuracy (elevation)	N/A
<b>Power</b>	
Power consumption	135 W nominal
Operating voltage	20 - 48 VDC
<b>Overview</b>	
Size (in)	14.7" x 14.4" x 4.3" (37 x 36 x 11 cm)
Weight	≤ 23.1 lbs (10.5 kg)
Operating frequency	X-Band
Connectivity	Ethernet
Environmental	MIL-STD-461F, IP67, MIL-STD-810G, FCC/CE
<b>Other Features</b>	
Built-in GPS	Yes
Built-in compass	Yes



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Specsheet LTR



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