

RANGER® R5

Wide-Area Surveillance for Desert Environments

APPLICATIONS

**DETECT PERSONNEL
AND VEHICLES**

**CRITICAL FACILITIES
PROTECTION**

SECURE BORDERS

**MONITOR PORTS, AIRPORTS,
AND MILITARY BASES**



The Ranger® R5 is a ground-based radar, designed to withstand the rigors of a desert environment. Providing 24/7 security to ranges of up to 5,000 meters, the Ranger R5 scans a full 360° every second, effectively monitoring up to 78 square kilometers (30 square miles). Multiple units can be installed with overlapping coverage areas to protect larger areas such as borders. Network with Teledyne FLIR EO/IR imagers to initiate slew-to-cue capability.

Operating in the Ka-band, this radar is compact and highly portable. Easily network other Teledyne FLIR radars and EO/IR images for slew-to-cue capabilities. Ideal for desert environments, border security, force protection, and critical infrastructure protection, R5D provides fast and accurate detection of up to 128 threats simultaneously.

FEATURES

MULTIPLE SECURITY APPLICATIONS

Whether securing airports, seaports, borders, critical infrastructure, or for force protection, Teledyne FLIR radars provide an ideal wide-area surveillance solution.

LOW FALSE ALARM RATE

Accuracy, ease of operation, and the lowest false alarm rate in the industry, separates Ranger radars from the competition.

INTEGRATED PROTECTION

Network multiple Teledyne FLIR radars and EO/IR imagers with Teledyne FLIR command and control to form a single powerful, integrated surveillance system.

FAST, ACCURATE THREAT DETECTION

R5 quickly detects up to 128 threats simultaneously while accurately displaying each target's location.

RELIABLE OPERATION & EASY INTEGRATION

High availability rate saves on costs for spare systems or repairs, and it requires only one cable and four bolts for integration.

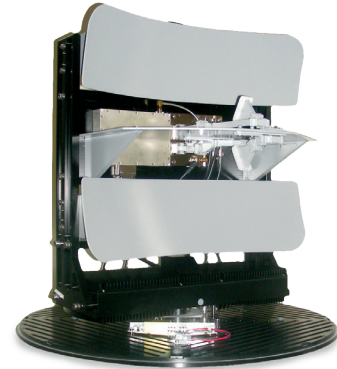
SPECIFICATIONS

R5	
Target Types	Moving, Less than 0.1 m/s min Vehicles and personnel
Target Velocity	0.1 to 50 m/s
Frequency	Ka Band
Resolution	0.7 m range, 1° azimuth
Scan Rate	One revolution per second (60 rpm)
Elevation Control	Up: 3°; Down: 5° (fixed settings)
Input Power	20 to 30 VDC, 24 nominal
Radiated Power	Safe for human exposure
Communications	Ethernet, wireless, fiber
XML	Yes
False Alarm Rates	< 1 per 24 hours
Mask Zone(s)	Two selectable angular blanking zones Unlimited polygon detection zones
Network	8 per server; total unlimited
Dimensions	21.3 in h x 22.5 in diameter
Weight	37 lbs (17 kg)
Operating Range	10 - 5000 m
Detection Range*	10 - 3000 m, personnel walking 10 - 3000 m, personnel running 10 - 500 m, personnel crawling (low crawl) 10 - 1000 m, personnel crawling (hands & knees) 10 - 500 m, personnel swimming 10 - 5000 m, vehicles and watercrafts
Coverage Area	78 km ² (30 mi ²)

*Clear air, low clutter

ENVIRONMENTAL

Temperature	-30° to +60°C (operating) -40° to +70°C (storage)
Humidity	50% +/- 5 to 95% +/- 4, non-condensing (60°C max)
Altitude	Up to 15,000 ft (operating and storage)
Wind	Up to 120 km/hr
Weather	Sealing Weather resistant (rain, snow, dust, sand, salt spray)
Power Consumption	45 watts
Environmental Ratings	IP65, NEMA 4
Data Bandwidth	Maximum: 1 Mbits without PPI Maximum: 7 Mbits with PPI
Protocol	ICD 0100



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