TELEDYNE | FLIR Defense

RANGER® R3

High-Resolution Perimeter Intrusion Detection

APPLICATIONS

- SECURE BORDERS
- MONITOR PORTS
- GUARD INDUSTRIAL FACILITIES
- FORCE PROTECTION
- DEFEND PUBLIC INFRASTRUCTURE



The Ranger® R3 is a high-resolution radar that accurately detects personnel and vehicles at a range of up to 2,800 meters in virtually any climate, weather, or lighting condition to provide 24/7 security. Able to scan 360° every second to monitor more than 24 square kilometers (9.6 square miles), it can be integrated in an overlapping array with a variety of other radar and EO/IR units to conform to terrain profiles and protect larger areas such as borders.

Operating in the Ka-band, this radar is compact and highly portable. In addition to border surveillance, R3 is ideal for force protection and securing airports, seaports, and critical infrastructure. R3 provides fast and accurate detection of up to 128 threats simultaneously. For a more efficient, cost-effective solution, integrate R3 with pan-tilt-zoom (PTZ) cameras to identify and assess threats.

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.

NETWORKED PROTECTION

Integrate R3 with Ranger R1 and R2 radars as well as DefendIR cameras to secure areas inside and outside perimeters.

FAST, ACCURATE THREAT DETECTION

R3 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.

For more information contact:
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SPECIFICATIONS

Ranger R3	
Target Types	Moving vehicles and personnel
Operating Range	5 m – 2800 m
Resolution	0.3 m (range) x 1° (azimuth)
Detection Range	5 m – > 500 m, Crawler 5 m – 1900 m, Personnel 5 m – 2500 m, Vehicles
Range Accuracy	2m typical
Target Speed	0.1 m/s or greater
Target Travel Direction	No limitations
Coverage Area	24 km^2 (9.6 mi^2)
Frequency	Ka-Band
Scan Rate	1 revolution per second
Elevation Control	Up: 2.5°; down 10° (fixed settings)
False Alarm Rate	1 per 24 hours
Input Power	20 – 32 VDC
Outputs	Ethernet; Intruder location (latitude/longitude, range/bearing, intruder course/velocity, signal quality)
XML	Yes
RF Transmission Masks	2 configurable “no transmit” sectors 1° resolution
Size	14.4” height x 18.25” diameter (364 x 461mm)
Weight	29 lbs (13.1 Kg)
Temperature	-30°C to +65°C
Weather Sealing	IP66 rating
Humidity	up to 95%, non-condensing (60°C max)



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Revised on 03/25/26
Ranger R3_Datasheet-A4 26-0324