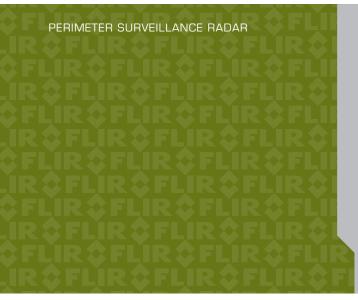
# Ranger<sup>®</sup> R5





#### **APPLICATIONS**

DETECT PERSONNEL AND VEHICLES
SECURE BORDERS

MONITOR PORTS, AIRPORTS, AND MILITARY BASES

CRITICAL FACILITIES PROTECTION

### **BENEFITS**

Continuous 360° wide area surveillance

Early warning of intruders

Continuous tracking of intruders

Low false alarm rate

Slew-to-cue camera integration

Annunciator integrations

Simple to integrate and operate

Cost effective

Compact design

#### **OVERVIEW**

The Ranger® R5 perimeter surveillance radar provides accurate, high resolution detection of vehicles and personnel. This ground-based radar is designed to meet the rigors of a desert environment, providing 24/7 security to ranges of up to 5000m.

The Ranger R5 perimeter surveillance radar scans a full 360 degrees 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. As part of the FLIR integrated product suite, multiple units may be networked with any or all of the full range of FLIR radars and imagers to conform to terrain profiles and secure areas inside and outside a perimeter. Using the radars' advantage in detecting intruders, pan-tilt-zoom (PTZ) cameras can focus on their strength – identifying and assessing threats – for a more efficient and cost effective solution.

The accuracy, simple integration and easy operation of FLIR radars, separate them from the competition. Whether to secure airports, sea ports, borders and critical infrastructure, or for force protection, the FLIR suite of radars is today's answer for detecting and tracking intruders as part of any wide area surveillance solution.





## Ranger<sup>®</sup> R5

#### **SPECIFICATIONS**

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

One revolution per second (60 rpm) Scan Rate

Azimuth Beamwidth 1° (2-way) 3.5° (2-way) Elevation Beamwidth

**Elevation Control** Up: 3°; Down: 5° (fixed settings) 20 to 30 VDC, 24 nominal Input Power Safe for human exposure Radiated Power 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

78 km<sup>2</sup> (30 mi<sup>2</sup>) Coverage Area

\*Clear air, low clutter

#### **ENVIRONMENTAL**

Temperature -30° to +60°C (operating)

 $-40^{\circ}$  to  $+70^{\circ}$ C (storage)

Humidity 50% +/- 5 to 95% +/- 4, non-condensing (60°C max)

Up to 15,000 ft (operating and storage) Altitude

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



