

## FLIR ELARA™ R-290

FCC-Compliant Commercial Ground Security Radar

The FLIR Elara R-290 is a compact ground radar used to detect and provide early warning of intruders as part of a larger video surveillance system. Radars can track targets in all weather and lighting conditions and dynamically map them in real time for position intelligence. The Elara R-290 features a 90-degree field of view and up to 400-meter range for vehicle tracking and 200-meter range for human tracking, providing wide-area protection and situational awareness beyond the fence line. With simultaneous tracking of up to 32 targets and geolocation capability, the Elara R-290 can activate alarms and guide PTZ cameras for visual verification to maximize security coverage and increase the amount of time available to react to a threat.

PHYSICAL SECURITY
PERIMETER PROTECTION
OUTDOOR INTRUSION DETECTION
GEOLOCATION CAPABILITY
VMS COMPATIBILITY
CYBERSECURITY HARDENED



## DETECT AND RESPOND TO INTRUSIONS FASTER

Receive advanced warning of human and vehicle intrusions beyond the fence line

- Scan field of view up to 10 times per second for fast target detection and smooth target tracking
- Detect humans at distances up to 200 m (656 ft) and vehicles up to 400 m (1312 ft)
- Long range and wide field of view enable a faster intrusion response than stand-alone camera systems

## **EXPAND SITUATIONAL AWARENESS**

 $Continuously\ track\ and\ precisely\ locate\ up\ to\ 32\ targets\ simultaneously,\ and\ quickly\ intercept\ threats\ in\ any\ environmental\ or\ weather\ condition$ 

- Track targets in rain, snow, fog, light, and dark, while ignoring shadows and light reflections that trigger false alerts on visual-only systems
- Interact with radar tracks on the map to override automatic PTZ prioritizations and focus on certain high-interest targets\*
- Video stream birds-eye map with overlaid masking zones, alarm areas, targets, and associated target range



 $Radar\ target\ tracking\ information\ is\ integrated\ with\ video\ management\ systems\ (VMS)\ for\ precise\ accuracy\ and\ full\ control$ 

- Link multiple radars for large field-of-view requirements, and connect to a PTZ camera for seamless target tracking
- Combine multiple radars with overlapping coverage and no interference between units
- Compatible with FLIR Triton PT-Series HD, FLIR Elara DX Series, and FLIR Saros DM Series Thermal Security Cameras; and Quasar 4K IR PTZ Visible Security Cameras
- Compatible with FLIR United VMS and other third-party VMS using standard ONVIF S Conformant protocols





<sup>\*</sup>Requires UVMS and the FLIR Detections System Module





## **ELARA R-290 RADAR (FCC VERSION)**

Performance	
Field of View [H×V]	90°×20°
Frequency Range	24.075-24.175 GHz ISM Band
RF Transmit Power	14 dBm (0.025 W)
Human Detection Range	200 m (656 ft)
Vehicle Detection Range	400 m (1312 ft)
Target Detection Speed	0.2 m/sec
Radar Targets	32
Range Resolution	1.5 m
Range Accuracy	<1 m
Angular Accuracy	0.6°
Refresh Rate	10 Hz
Coverage Area	Human Detection: 7.6 acres (30,000 m²)
Target Information	GPS coordinates, velocity, RCS, range, azimuth angle/direction, heading, course/track, target ID
Supported Protocols	AXML, ONVIF, FLIR Nexus SDK, FLIR Nexus CGI
Pan Range	±43°
Tilt Range	30°/-60°
Interface	
Connector Types	RJ45 Ethernet, Power Terminal Block
Connectivity	10/100 Ethernet
Mechanical	
Weight	2.4 kg / 5.3 lb
Height	161 mm / 6.34 in
Width	161 mm / 6.34 in
Depth	195 mm / 7.68 in
Box Contents	Radar, back box, back box cover, back box side cover, wall mount plate, RJ45 cover, screwdriver, hex wrench, 10-pin I/O connector
Optional Accessories	421-0067-00: Pole Mount Kit 421-0066-00: Corner Mount Kit 421-0083-00: 180° Dual Radar Wall Mount Kit 4210755: PoE+ Power Supply
Environmental	
Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Non-operating Temp	-50°C to 85°C (-58°F to 185°F)
IP Rating	IP66
Power	
Input Voltage	12V DC, 24V AC, and POE+
Power Consumption	7.5 W

For more information visit: www.flir.com/R-290

