

Geolux RSS-4 Ground Surveillance Radar

RADAR SENSOR FOR INTRUSION DETECTION AND PERIMETER CONTROL

HIGHLIGHTS

- Detects humans up to 150 meters
- Detects vehicles up to 1000 meters
- Simultaneous tracking of up 32 objects
- Distance, relative angle and relative speed reported for each detected object
- Range precision $\pm 1\text{m}$
- Speed precision $\pm 1\text{km/h}$
- Angle precision $\pm 1^\circ$
- Easy pole, wall or enclosure mounting
- Supports wide variety of communication interfaces
 - (Ethernet, RS232, RS485, CAN)
- PoE or 9VDC to 27VDC power supply
- IP66-rated enclosure (for outdoor applications and harsh environments)
- Operation in license free K-band
- Configurable areas of interest and exclusion areas

DETAILED SPECIFICATIONS

GENERAL

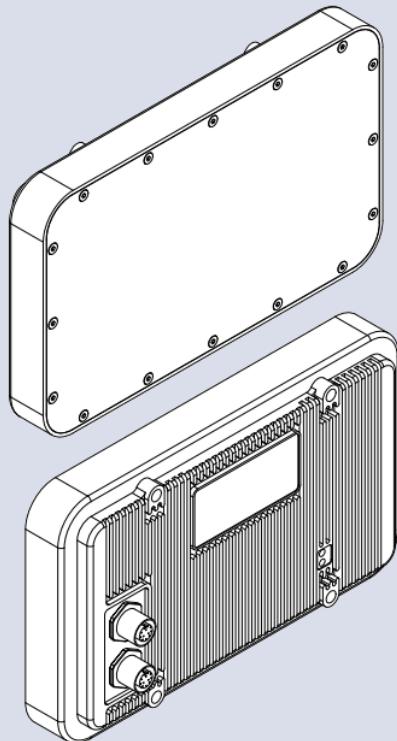
Radar Type	K-band 24.05 to 24.245 GHz
Beam Angle	FMCW modulation, 20 dBm EIRP
Detection Distance	90° Azimuth, 22° Elevation
	150m humans ($0,75 \text{ m}^2$ RCS)
	500m vehicles (10 m^2 RCS)
Speed Range	0,5 km/h to 336 km/h
Tracker	5 Hz refresh rate, up to 32 targets

INTERFACE

Ethernet Interface	1 Gb/s
Serial Interface	1x serial RS-232 full-duplex
	1x serial RS-485 half-duplex
Serial Baud Rate	9600 bps to 115200 bps
Speed Range	1x M12 8pin IP68 connector
	1x M12 12pin IP68 connector

ELECTRICAL & MECHANICAL

Power Input	PoE or 9 to 27 VDC
Power Consumption	< 10 W
Maximal Current	< 1,25 A
Temperature Range	-20°C to +70°C
Dimensions	210 x 130 x 30 mm



Geolux is a company based in the European Union that develops and manufactures radar sensors for use in traffic, security and hydrology applications.