

GEOLUX RSS-3-300 S RADAR DETECTOR

LONG RANGE • LIGHTWEIGHT • PRECISE TARGET LOCATION

PRODUCT FEATURES

- Detects both static and moving objects up to 800m (800m for vehicles, 400m for humans)
- Compact, low-power design
- Precise angle and distance measurement for each detected target
- Target size estimation
- Simultaneously tracks up to 24 targets
- Wide input voltage range, suitable for solar applications
- Supports variety of communication interfaces (RS-232, RS-485, Ethernet, Alarm open-drain outputs)
- IP66 enclosure suitable for outdoor applications and harsh environments
- Advanced phyTrack object tracking algorithm that guarantees extremely low number of false alarms
- Configurable zones of interest / ignored zones
- Customizable communication protocols
- PC application for radar setup, live monitoring and statistics analyzing
- Easy pole, wall or enclosure mounting, and suitable for mobile applications
- Optional OEM embedded module available
- Optional GPRS or ZigBee communication module
- Optional camera integration



INTRODUCTION

Geolux RSS-3-300S is a FMCW Doppler radar detector operating in K-band, enhanced with advanced phyTrack object detection and tracking algorithm. Designed for long range intrusion detection applications, RSS-3-300S radar sensor is able to detect, locate and track both static and moving targets distanced up to 800m. For each detected object, RSS-3-300S reports its speed, location, and gives object size estimate. Detected objects are reported over serial or Ethernet interface. RSS-3-300S sensor supports ASCII-S and GLX-NMEA serial interface data protocols, and support for more protocols can be added on customer request. Two configurable open-collector alarm outputs are also available for indication of the intrusion detection.

RSS-3-300S can report all detected objects, or only objects detected in predefined interest zones. Each interest zone can be assigned threat level, so the detected objects can be reported as "small threats", "medium threats", etc.

Advanced phyTrack object detection and tracking algorithm analyzes detected objects in real time, and extracts precise target statistics which greatly reduces false alarms and enables RSS-3-300S to detect objects even through bushes and other similar obstacles.

PRODUCT SPECIFICATION

GENERAL

Radar Type	K-band 24.125GHz/24.200GHz FMCW Doppler radar, 27 dBm EIRP
Beam Angle	12° Elevation, 30° Azimuth
Detection Distance	Pedestrian: 400 m Vehicle: 800 m
Speed Range	0 km/h to 336 km/h
IP Rating	IP66

INTERFACE

Serial Interface	1 x serial RS-485 half-duplex 1 x serial RS-232 (two wire interface)
Serial Baud Rate	1200 bps to 115200 bps
Serial Protocols	ASCII-S, GLX-NMEA
Ethernet Interface	10/100 Mbps
Alarm Outputs	2 x open collector, max 50V 200mA

ELECTRICAL

Power Input	9 to 22 VDC
Power Consumption	< 3,5W (typical 2,5W)
Maximal Current	< 750 mA
Temperature Range	-40°C to +85°C (without heating or coolers)