

GEOLUX RSS-2-300 S RADAR DETECTOR

LONG RANGE INTRUSION DETECTION • PORTABLE VERSION AVAILABLE

PRODUCT FEATURES

- Detection of moving objects up to 800m (800m for vehicles, 400m for humans)
- Compact, low-power design
- Wide input voltage range, suitable for solar applications
- Supports variety of communication interfaces (RS-232, RS-485, CAN, 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
- Detailed statistics for monitored objects
- Configurable incoming, outgoing or all object detection with statistics accumulation for selected directions
- 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-2-300S is a Doppler radar detector operating in K-band, enhanced with advanced phyTrack object detection and tracking algorithm. Designed for long range intrusion detection applications, RSS-2-300S radar sensor reports a list of all currently detected moving objects distanced up to 800m. Refresh rate can be set up to 20 times per second. Detected objects are reported over serial or CAN interface. RSS-2-300S 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.

Field-proven Geolux RSS-2-300S radar sensor is certified according to both European and American standards, which makes it an ideal solution for our partners that operate globally.

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-2-300S to detect objects even through bushes and other similar obstacles.

PRODUCT SPECIFICATION

GENERAL

Radar Type	K-band 24.125GHz/24.200GHz Doppler radar, 27 dBm EIRP
Beam Angle	12° Elevation, 30° Azimuth
Detection Distance	Pedestrian: 400 m Vehicle: 800 m
Speed Range	2 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
CAN Interface	Up to 1Mbps CAN2.0
Alarm Outputs	2 x open collector, max 50V 200mA
Expansion Port	1 x general purpose 16-pin for custom expansion modules

ELECTRICAL

Power Input	9 to 22 VDC
Power Consumption	< 1,35W (typical 1,0W)
Maximal Current	< 250 mA
Temperature Range	-40°C to +85°C (without heating or coolers)