

CVD-102 Security Sensor



Product

CVD-102 security sensor – stand-alone wireless passive infra-red detector with independent power supply. CVD-102 detects changes in infrared range caused by intruders moving through the detection pattern.

Rugged metal construction of CVD-102 allows its application in wide range of environmental conditions. The sensor case can be positioned at $\pm 90^\circ$ angle vertically and 360° horizontally to the bracket.

CVD-102 detects intrusion by sensing the infrared radiation contrast between an object moving through the detection pattern and the background environment.

CVD-102 power supply is provided by non-chargeable lithium cell with 2 years lifetime in a busy operating environment.

Application

Sensitivity level can be adjusted to eliminate nuisance alarms. CVD-102 is a part of “RadioFence” system.

Technical specification

Parameter	Value
Intruder detection distance, not more, m	50
Detection zone width/height within 50 m, m	3/2
Intruder speed range, m/s	From 0.1 to 5
Detection rate	0.95
Alarm transmission frequency, MHz	433 ±0,2% (from 200 to 900)
Transmitter power, not more, mW	10
Transmission distance with antenna, m* - Directed, Max - Rod quarter-wave, max - Rod quarter-wave, guaranteed	Up to 8000 Up to 2700 Up to 1000
Activation time after switch-on, not more, sec	60
Time of standby mode recovery after alarm detection, not more, sec	10
Alarm duration, not less, sec	5
White light resistance, not less, lux	10000
Direct current voltage, V	3.6
Input current, not more, mA: - Standby mode - Message transmission (pulsed)	0.045 45
Ingress protection	IP65
Operating temperatures, °C	- 40 to +50
Operating mode	Continuous
Autonomous operation time	Up to 2 years and depends on application environment
Overall dimensions without antenna	165x95x90
Weight	0.7

Connection

Sensor back panel with connection socket
Pins assignment

№	Purpose
1	LED jumper
2	LED jumper
4	Alarm out
5	General
8	Power in +3.3 V
9	Power out +3.3 V
10	General
11	False Immunity jumper
12	False Immunity jumper
14	Control out – A
15	Control out – B
16	RS-485-A
17	RS-485-B

Contacts 3, 6, 7, 13, 18, 19 – are not used