

CVD-108 Security Sensor



Purpose

CVD-108 security sensor is intended to provide reliable protection in outdoor environments and detects a human intruder passing the detection zone near fences, masts, gates or entryways.

Composition:

- transmitter – 1 pc.;
- receiver – 1 pc..

Incorporated in sealed plastic housing (with unique protection against the formation of condensation water) with mounting bracket for adjustment to round masts (Ø from 40 mm) by metal rings or to flat surfaces by screws. The mounting bracket ensures adjustable position of the sensor and can rotate it by $\pm 20^\circ$ in any direction.

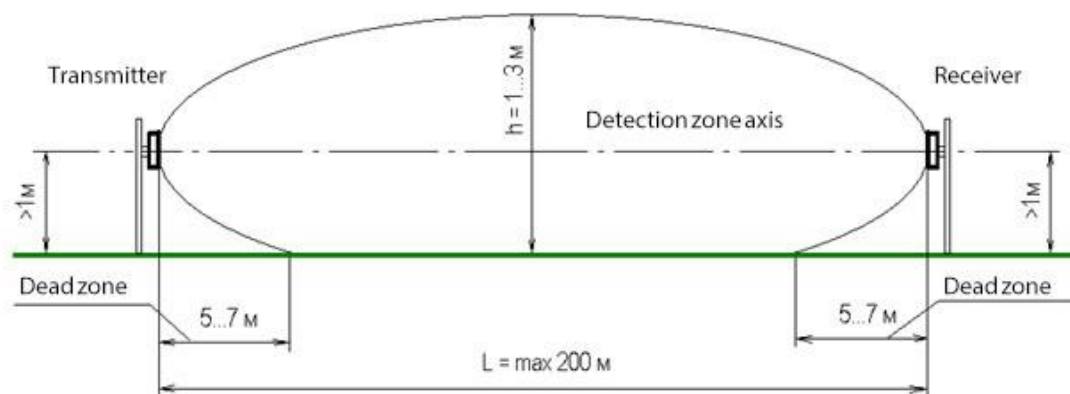
Transmitting and receiving units are installed and connected on the opposite sides of the protected area. Unique synchronization technology does not require preliminary manual settings and automatically tunes receiver to operate with certain transmitter and guarantees no impact of neighboring sensors on each other.

Microwave CVD-108 sensor generates an electromagnetic field between transmitter and receiver, creating an invisible detection zone. When an intruder enters the detection zone, changes to the field are registered and an alarm occurs.

Unique signal processing technologies generate detection zone without affection of detection probability:

- 1) Alongside walls for access control;
- 2) Along the upper part of the fencing;
- 3) Along ground surface on open areas.

Detection zone has spheroid ellipsoid form with an axis corresponding with imaginary straight line connecting transmitter and receiver. Detection area is created over 5 to 200 meters. Detection width depends of the distance between transmitter and receiver and does not exceed 4 meters.



Application

CVD-108 security sensor is applied in integrated security system or as an independent intruder detector and ideal for installation very close to fencing with small exclusion zone, near traffic roads or railways.

Technical specification

Parameter	Value
Operating frequency, GHz	10
Detection range, m	5...200
Max detection width, m	4
Max detection height, m	1,5
Target velocity, m/sec	from 0,1 to 10
Min probability of detection	0,98
Operation time after switch on, sec	30
Return to operating mode, sec	10
Min alert time, sec	3
Data out	Relay
Direct current voltage, V	10,2-36
Max consumed current at 12 V power, MA	50
Min false alarm run period, h	1200
Operating time	24/7
Ingress protection	IP66
Operating temperatures, °C	-40 ... +50
Overall dimensions of transmitter and receiver, mm	210x210x100
Wight, kg	2

CVD-108 Security Sensor connection:

Pin allocation for receiver:

Wire color	Purpose
Orange	+Upower
White-orange	-Upower
Green	Our relay pins: Closed – operating mode, open - alarm
White-green	

Pin allocation for stransmitter:

Wire color	Purpose
Orange (brown)	+Upower
White-orange (brown)	-Upower

