

**FORTEZA-FONAR**  
**FORTEZA-LAMP**



The sensors are intended for the protection of administrative buildings, park territories, villas and other objects with high requirements for the territory appearance or secrecy of the alarm system.

The principle of operation is similar to all Bistatic sensors – generation of an invisible volumetric detection zone between the transmitter and the receiver located in the housing of FORTEZA-FONAR or FORTEZA-LAMP. When the intruder is crossing the detection zone, the receiver registers its alteration and generates the alarm.

**Features of the sensors**

The sensors function as the alarm devices and decorative lamp. The lights can be switched on or off automatically or manually.

The housing of one sensor can contain one or two receivers (or transmitters). Like this we decrease the number of devices on the territory and mounting works.

Several frequency letters of the sensors allow for the sensors to operate near each other.

Specifications	FORTEZA-FONAR	FORTEZA-LAMP-W	FORTEZA-LAMP-G
Operational frequency		9,375 GHz	
Range	10 ÷ 75 m	3 ÷ 30 m	3 ÷ 40 m
Width of the detection zone	0,5 ÷ 2 m	0,5 ÷ 2 m	0,5 ÷ 4 m
Height of the detection zone	1,1 ÷ 1,7 m	0,5 ÷ 2 m	1,4 ÷ 1,6 m
Number of frequency letters	4	2	2
Supply voltage	220 V		16...32 V
Current consumption	0,15 A		0,5 A
Detection probability		not less than 0,98	
Operational temperature		minus 40...+65 °C	
Housing protection level		IP-43	
Alarm output		relay contacts	
Dimensions	1450x Ø 160 mm	400x200x300 mm	1050x200x200 mm
Weight	10 kg	4 kg	5 kg

At the order FORTEZA-FONAR or FORTEZA-LAMP are available with:

- radio channel alarm transmission;
- monostatic microwave sensor with linear-frequency modulation.



Protection of the villa perimeter using masked sensors FORTEZA-FONAR

## FORTEZA-FONAR-COMBI

The sensor is intended for the protection of critical objects with high requirements for interference immunity, territory appearance and the secrecy of alarm system.

The principle of operation is similar to all Bistatic sensors – generation of an invisible volumetric detection zone between the transmitter and the receiver. But the detection zone combines microwave and infrared detection channels. When the intruder is crossing the detection zone, the receiver generates the alarm following AND logic (activation of both detection channels) increasing significantly the interference immunity.

### Features of the Sensors

The sensors have all the advantages and distinctive features of the sensor FORTEZA-FONAR and the combination of the two physical detection principles allows to decrease significantly the number of false alarms because of weather interference factors, influence of electromagnetic and radio interference and be immune to small animals and birds.

The sensors have very narrow detection zone allowing to use it on difficult sectors.



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Protection of the perimeter using Dual Technology Bistatic sensor FORTEZA-FONAR-COMBI

- - Microwave channel
- - Infrared channel