FORTEZA®
RUSSIA

TECHNICAL PERIMETER SECURITY SOLUTIONS

CATALOGUE

PERIMETER PROTECTION SENSORS

QUICKLY DEPLOYABLE TECHNICAL PERIMETER SECURITY SOLUTIONS

SECURITY LIGHTING

CONTROL PANELS

ALARM MONITORING AND CONTROL SYSTEM

ADDITIONAL EQUIPMENT

№ 17-11

ABOUT COMPANY

FORTEZA is a group of companies working on the security market since 2000. We produce equipment for the security systems, make design, mounting and start and adjusting works.

FORTEZA® RUSSIA **IS THE COMPANY TRADE MARK**

We produce the following equipment:

- perimeter protection sensors (microwave, vibration, dual technology);
- mobile quickly deployable systems;
- LED searchlights for the security lighting;
- control panels;
- power supply units and junction boxes.

The clients of our company include: the Ministry of the Internal Affairs of Russia, oil and gas enterprises (Lukoil, Gazprom, etc), Federal State Reserve Agency, Federal Penitentiary Service, solar parks in Bulgaria, Spain, Portugal, Czech, manufacturing facilities in China and Saudi Arabia, power plants in Romania, Australia, Iran, Baltic States and many other big Russian and foreign industrial sites, airports, farms, construction sites, mines, stocks, ports, prisons.

OOO Okhrannaya technika headquarters is located in the city of Penza (650 km from Moscow). More than 80 employees work at the factory. We have 3 research laboratories working on design and development of new products. As a result we have got some patents on circuit technology and digital signal processing.

Reliable and user friendly FORTEZA equipment is easy to integrate and install. Long life time is also one of FORTEZA distinctive features. Every product unit is 100% tested before sale.

We work with distributors all over the world: in Brazil, Germany, Italy, Spain, Poland, England, UAE, Morocco, Australia, Iran, India and other countries. Stock reserve assures minimal shipment delay.

We are looking for partners all over the world for mutually beneficial cooperation based on partnership relations, business activity and intent to tap new markets.

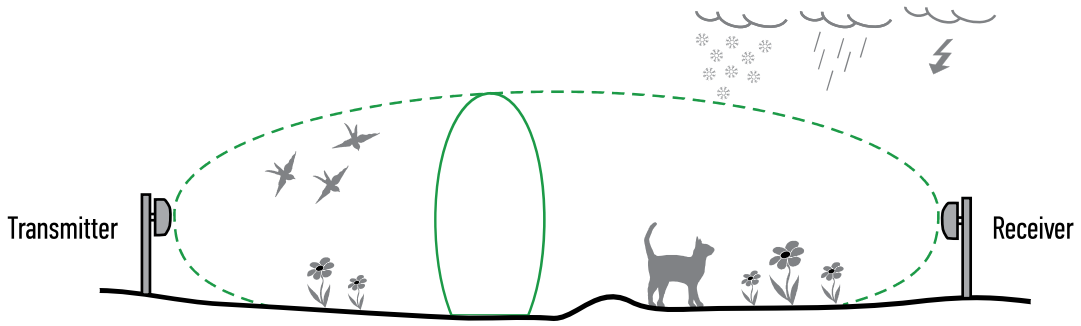
IT IS EASY AND PROFITABLE TO DO BUSINESS WITH US

OOO OKHRANNAYA TECHNIKA IS YOUR RELIABLE PARTNER

MICROWAVE BISTATIC SENSORS

The sensors are intended for the protection of direct perimeter sectors. The sites include industrial facilities, airports, sites of force structure, power plants, private premises, etc.

The principle of operation is based on generation of an invisible volumetric detection zone between the transmitter and the receiver. When the intruder is crossing the detection zone, the receiver registers its alteration and generates the alarm.



Features of Microwave Bistatic Sensors

Taking into account many years of operation of the sensors we can mark their high detection probability and good interference immunity. The sensors are easy to mount and adjust and do not require significant expenses on seasonal maintaining.

The sensors are immune to the influence of rain, snow, fog, lightning, icing, solar radiation, electromagnetic field up to 500 kV, vegetation, small birds and animals.

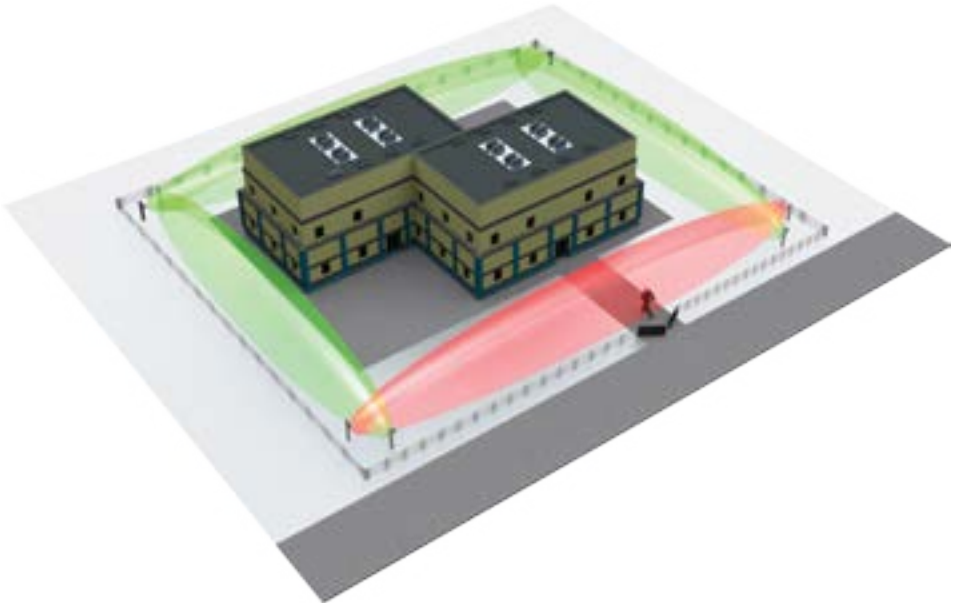
The wide choice of models differing in range, frequency and operational temperature allows to select the optimal variant for the perimeter protection in different climatic conditions.

We use traditional dry relay contacts as well as RS-485 and USB interfaces to control the sensors and to transmit the alarm signal. Like this we make it easy to combine our sensors with many modern integrated security systems and popular control panel.

We use up-to-date effective algorithms for digital signal processing. Many years of manufacture and operation of our sensors allowed us to analyze the reliability of the equipment and correct the algorithms. As a result we achieved the maximal interference immunity and reliability of the signal processing.

We do not stop. We develop new functional which will increase the reliability and comfort of work.

FOR NOW THESE ARE THE MOST POPULAR SENSORS FOR PERIMETER PROTECTION



FORTEZA-500, FORTEZA-300
FORTEZA-200, FORTEZA-100, FORTEZA-50

Operation on 24,15 GHz allows to:
- use sensor in many countries all over the world without getting approval for frequency use;
- minimize the influence of different types of interference;
- provide narrow detection zone and make it possible to use the sensors on different sites.

Configuration of sensors using special software (under Windows) via USB allows to set the optimal operation mode, also remotely from the guard room via RS-485 interface.

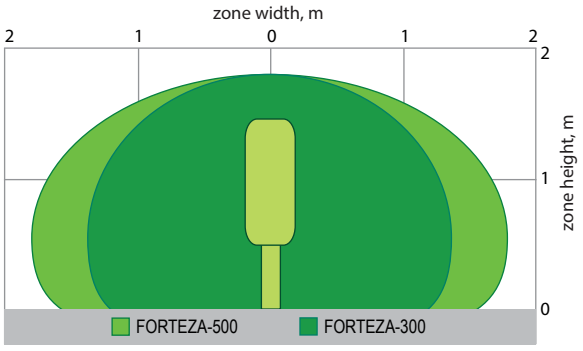
The model with wireless configuration via Bluetooth on Android is available at the order.

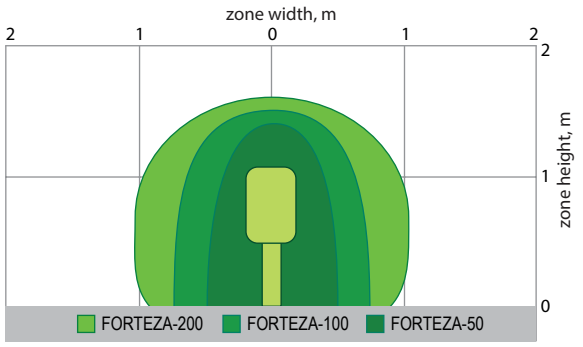
The wide aperture of the parabolic antenna of the sensors FORTEZA-500 and FORTEZA-300 allows to eliminate «dead zones» near Tx and Rx and to assure reliable performance under snow cover up to 0,9 m, grass up to 0,4 m and to provide high interference immunity for birds flying near antennas. As a result we minimize maintenance works on the protected site.

Improved design and signal processing algorithms used provide the reliable detection of the intruder and high interference immunity.

4 frequency letters eliminate the influence of adjacent sensors. Like this it is possible to put several sensors near each other.

Specifications	FORTEZA-500	FORTEZA-300	FORTEZA-200	FORTEZA-100	FORTEZA-50
Operational frequency	24,15 GHz				
Range	10 ÷ 500 m	10 ÷ 300 m	10 ÷ 200 m	10 ÷ 100 m	5 ÷ 50 m
Width of the detection zone	0,5 ÷ 3,5 m	0,5 ÷ 2,7 m	0,5 ÷ 2,1 m	0,5 ÷ 1,5 m	0,5 ÷ 1 m
Height of the detection zone	up to 1,8 m	up to 1,8 m	up to 1,6 m	up to 1,5 m	up to 1,4 m
Supply voltage	9...30 V				
Current consumption	0,045 A				
Detection probability	not less than 0,98				
Operational temperature	minus 50...+70 °C				
Housing protection level	IP-55				
Alarm output	relay contacts				
Interfaces	RS-485, USB, Bluetooth (upon request)				
Dimensions	605x150x172 mm		211x138x105 mm		141x123x76 mm
Weight	5,4 kg		2,4 kg		1 kg





Dimensions of the detection zones of the sensors FORTEZA

FMW-300, FMW-200, FMW-100, FMW-50

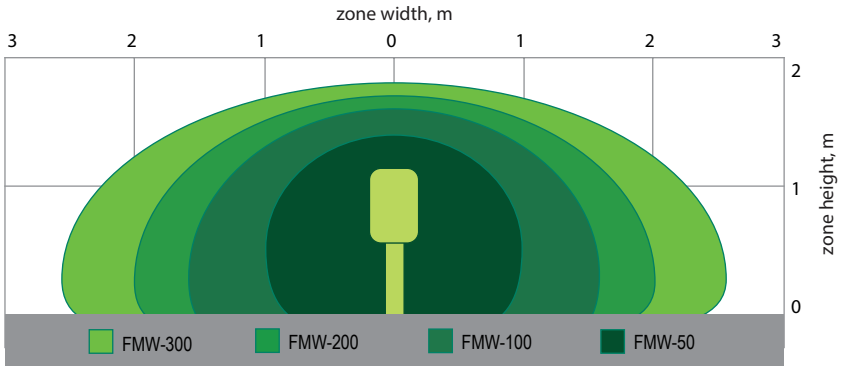
Available and effective sensor for the protection of different sites with maximum number of positive testimonials.

Operation on 10,525 GHz allows to increase the width of the detection zone. Like this we make it difficult for the intruder to cross it.

The easiest configuration using control units on-board of the Rx does not require high qualification of staff. Multimeter and screw driver are enough for configuration.

The sensor is successfully used on outdoor perimeter sectors free from buildings and big vegetation. The sensor assures reliable protection of the site under control.

Specifications	FMW-300	FMW-200	FMW-100	FMW-50
Operational frequency	10,525 GHz			
Range	10 ÷ 300 m	10 ÷ 200 m	10 ÷ 100 m	5 ÷ 50 m
Width of the detection zone	0,75 ÷ 5 m	0,75 ÷ 4 m	0,75 ÷ 3 m	0,75 ÷ 2 m
Height of the detection zone	up to 1,8 m	up to 1,7 m	up to 1,6 m	up to 1,4 m
Supply voltage	9...30 V			
Current consumption	0,035 A			
Detection probability	not less than 0,98			
Operational temperature	minus 40...+80°C			
Housing protection level	IP-55			
Alarm output	relay contacts			
Dimensions	213x213x70 mm		211x135x75 mm	
Weight	2,4 kg		2 kg	



Dimensions of the detection zones of the sensors FMW

FORTEZA-FONAR

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. 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
Operational frequency	9,375 GHz
Range	10 ÷ 75 m
Width of the detection zone	0,5 ÷ 2 m
Height of the detection zone	up to 1,7 m
Number of frequency letters	4
Supply voltage	220 V
Current consumption	0,15 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
Weight	10 kg

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.

Specifications	FORTEZA-FONAR-COMBI
Operational frequency	9,375 GHz
Range	10 ÷ 75 m
Width of the detection zone	0,15 m
Number of frequency letters	4
Supply voltage	220 V
Current consumption	0,15 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
Weight	10 kg

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

- Microwave channel
- Infrared channel

MICROWAVE MONOSTATIC SENSORS

The sensors are intended for the protection of separate perimeter sectors where it is difficult or impossible to use Bistatic sensors, for example: blind streets, marshlands, ravines, communication passages over the fence, stock areas, tunnels, overpasses, viaducts, etc.

The principle of operation: the sensor has one electronic unit containing the transceiver. The sensor transmitter radiates the linear frequency modulated signal. The sensor receiver registers the level of the signal received. In case there are moving objects in the detection zone the receiver registers the alteration of the signal received and generates the alarm. The sensor works on the Doppler effect.

Special software allows to make it easy to start-up the sensor and assures the correct configuration of the sensor parameters.

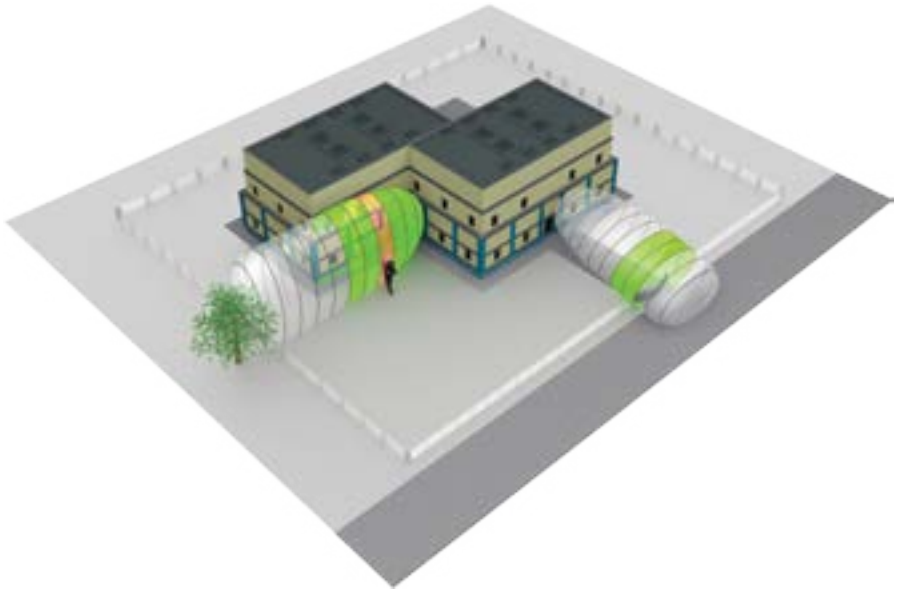
The configuration is made:
- using the laptop (Windows) via USB interface in field;
- using the tablet or smartphone (Android) via Bluetooth wireless interface or USB;
- remotely from the guard room via RS-485 interface.

Division into 12 sub zones allows to configure the sensitivity separately in every sub zone. Antenna gain and thresholds levels are set separately in every sub zone. Like this we adapt the sensor to the given interference situation on the site.

One or several sub zones can be disconnected. Disconnecting the sub zones we can provide «secured» passages on the protected site for free moving of people through the checkpoint and free moving of transport through the gates. In order to increase the interference immunity we recommend to disconnect the sub zones where detection is not required.

Equalization of sensitivity throughout the length of the detection zone allows to clearly identify its limits and increase the interference immunity to people and transport moving outside the detection zone.

There are two models differing in operational frequency: 9,375 GHz and 24,15 GHz.



FM-30, FM-60 (volume, curtain, fan)
FM-30(24) (volume, curtain), FM-60(24), FM-84(24)

It is the latest development of the factory. Thanks to the patented algorithm of signal processing the sensors are leaders in interference immunity and functionality among monostatic sensors.

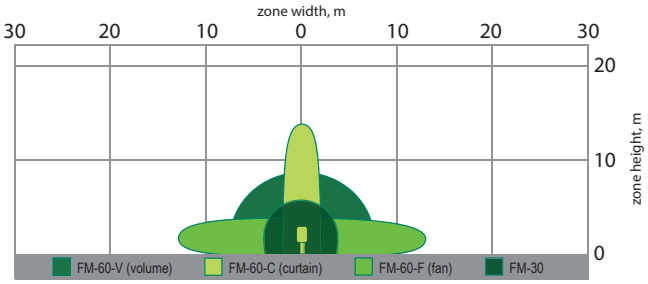
The principle of operation of the sensor is based on the method of linear frequency modulation. The sensors FM have more clear limits of the detection zone if compared with usual doppler sensors.

The sensors FM have 5 frequency letters. Like this we avoid mutual interference from adjacent sensors. Like this we can use sensors near each other, for example, in hangars, warehouses, etc.

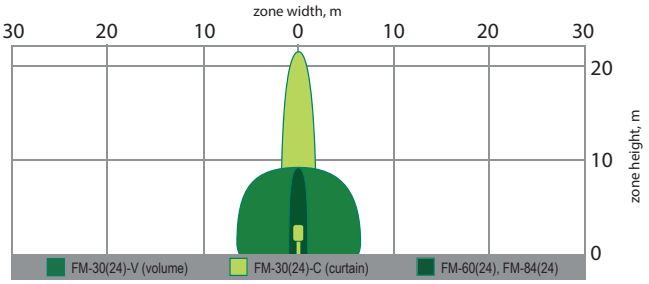
The model with configuration via Bluetooth wireless interface for Android is available at the order.

Specifications	FM-30	FM-60-V (volume)	FM-60-C (curtain)	FM-60-F (fan)
Operational frequency	9,375 GHz			
Range	30 m	60 m	60 m	60 m
Width of the detection zone	8 m	15 m	4 m	25 m
Height of the detection zone (in free space)	8 m	15 m	25 m	4 m
Number of letters	5			
Supply voltage	10...30 V			
Current consumption	0,04 A at 24 V			
Detection probability	not less than 0,98			
Operational temperature	minus 50...+80 °C			
Housing protection level	IP-55			
Alarm output	relay contacts			
Interfaces	RS-485, USB and Bluetooth (upon request)			
Dimensions	141x123x67 mm	210x135x75 mm		
Weight	0,4 kg	0,5 kg		

Specifications	FM-30(24)-V (volume)	FM-30(24)-C (curtain)	FM-60(24)	FM-84(24)
Operational frequency	24,15 GHz			
Range	30 m	30 m	60 m	84 m
Width of the detection zone	12 m	2 m	1 m	1 m
Height of the detection zone (in free space)	8 m	40 m	8 m	8 m
Number of letters	5			
Supply voltage	10...30 V			
Current consumption	0,06 A at 24 V			
Detection probability	not less than 0,98			
Operational temperature	minus 40...+80 °C			
Housing protection level	IP-55			
Alarm output	relay contacts			
Interfaces	RS-485, USB and Bluetooth (upon request)			
Dimensions	141x123x67 mm		210x135x75 mm	
Weight	0,4 kg		0,5 kg	



Dimensions of the detection zone of the sensors operating on 9,375 GHz, installation at 1 m



Dimensions of the detection zone of the sensors operating on 24,15 GHz, installation at 1 m

DUAL TECHNOLOGY SENSORS (IR+MW)

The sensors are used for the protection of long perimeter sectors with high requirements for the mean time for false alarm, i.e. high immunity for industry, natural and common interference. There are two modifications of Dual Technology sensors, Bistatic – MIR-B and Monostatic – MIR-M.

The principle of operation: we achieved the high interference immunity of the sensor thanks to the combination of two different physical principles of operation – bistatic (monostatic) microwave (MW) and active (passive) infrared (IR), i.e. two ways of intrusion detection.

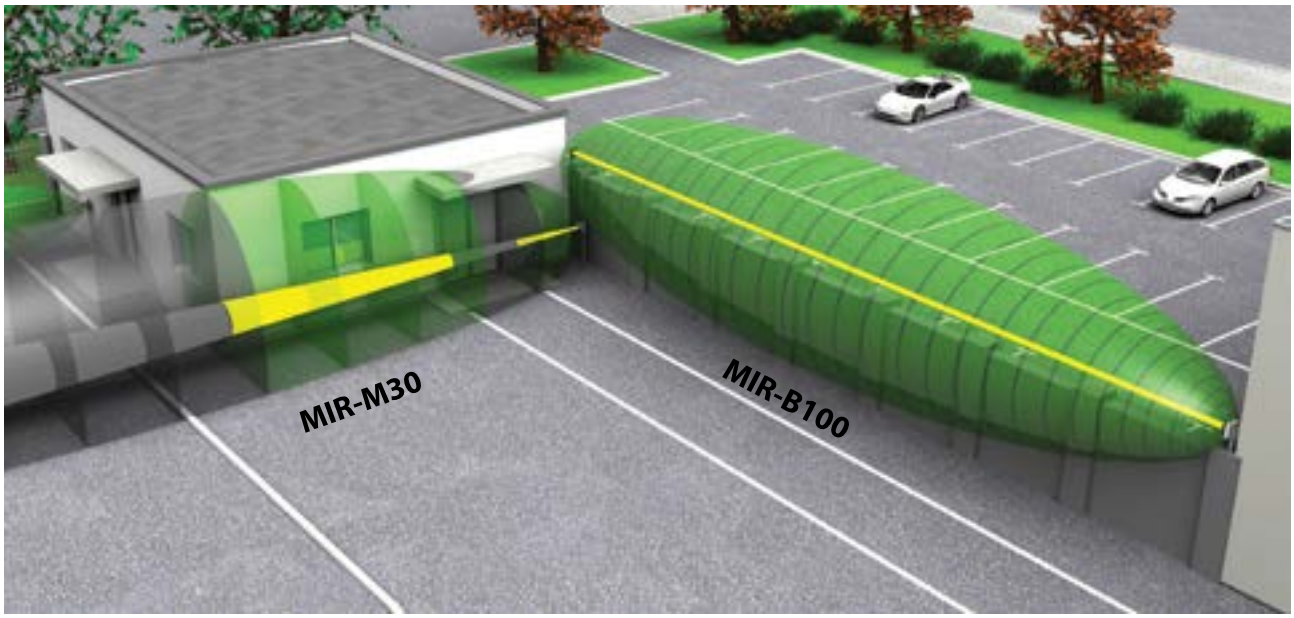
Different interferences influence differently on the processing channels. For example, the litter raised by the wind can activate the IR channel and the MW channel will stay inactive. That is why combination of these two physical principles and alarm initialization at the activation of both channels allowed to increase significantly the interference immunity.

There is no complete analogues of our sensors in architecture, design and integrated functionality.

The sensors are used to protect big and small industrial factories, military bases, transport structure, etc.

As the alarm is generated only at the activation of both channels, the resultant detection zone in case of bistatic dual technology sensors has small dimensions – the dimensions of the IR beam. Like this we can use the sensors for the protection of perimeter sectors requiring extra narrow detection zone.

The high survivability of the sensor is assured thanks to the performance of the sensor in case of failure or false alarming of one of the detection channels.



Protection of the perimeter using the Dual Technology Bistatic sensor MIR-B100 and Dual Technology Monostatic sensor MIR-M30

- microwave channel
- infrared channel
- sub zones disconnected

MIR-B100, MIR-B50

The principle of operation is based on the operation of two channels working on two different physical principles of detection: bistatic microwave and bistatic infrared.

The sensors performance is the most effective on direct perimeter sectors requiring extra narrow detection zone, for example, if the sensors are installed by the top of the fence, in corridors, in areas near side-walks and roads, etc.

MIR sensors operate on 24,15 GHz.

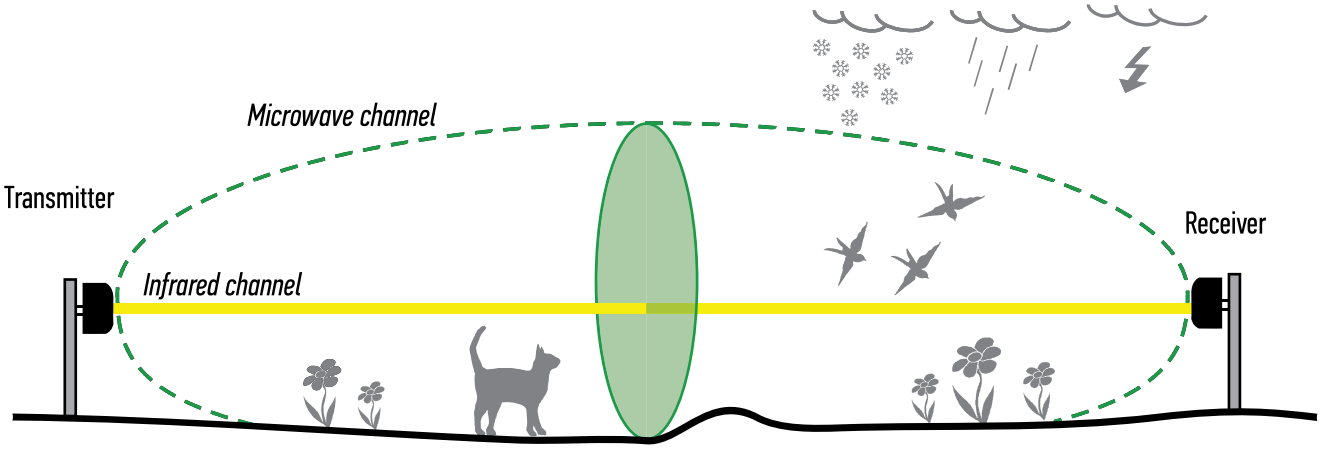
The essential advantage of the sensors is the high interference immunity.

The sensors have USB and RS-485 interfaces for work with special software. The software makes it easy to start up the sensors and assures correct configuration of parameters.

In spite of apparent difficulty of the sensors, they are easy to operate. They do not require special knowledge of staff and are not expensive.

Specifications	MIR-B100	MIR-B50
Operational frequency	24,15 GHz	
Range	10 ÷ 100 m	10 ÷ 50 m
Diameter of IR channel detection zone*	up to 0,2 m	up to 0,1 m
Diameter of MW channel detection zone	0,5 ÷ 1,5 m	0,5 ÷ 1 m
Number of letters	4	
Supply voltage	9...30 V	
Current consumption	0,06 A	
Detection probability	not less than 0,98	
Operational temperature	minus 40...+75°C	
Housing protection level	IP-55	
Alarm output	relay contacts	
Interfaces	RS-485, USB and Bluetooth (upon request)	
Dimensions	211x138x105 mm	211x138x70 mm
Weight	1,2 kg	1 kg

*Diameter of the sensor detection zone coincides with the IR channel detection zone



Parameters of the detection zone

- Microwave channel
- Infrared channel

MIR-M30

The principle of operation is based on the operation of two channels working on two different physical principles of detection: monostatic microwave and monostatic infrared.

We use the sensor FM-30 for microwave channel of MIR sensors. That is why all the advantages and features of FM are appropriate to MIR sensors, especially:

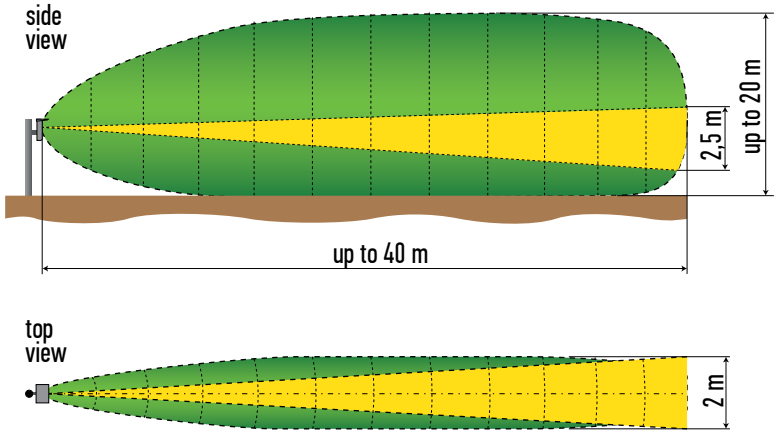
- using of special software via USB or RS-485 interfaces allows to configure correctly the sensor in-field as well as remotely from the guard room.

- the sensors detection zone is divided into sub zones, every sub zone can be configured separately, any sub zone can be disconnected to make secured passages for people or transport through gates.

- the sensors have 5 frequency letters allowing to install and operate them near each other.

Specifications	MIR-M30
Operational frequency	24,15 GHz
Range	up to 40 m
Width of the detection zone	up to 2 m
Number of sub zones	12
Number of letters	5
Supply voltage	10...30 V
Current consumption	0,04 A
Detection probability	not less than 0,98
Operational temperature	minus 40...+65°C
Housing protection level	IP-55
Alarm output	relay contacts
Interfaces (MW channel)	RS-485, USB and Bluetooth (upon request)
Dimensions	210x135x95 mm
Weight	1 kg

The sensors MIR-M30 have beam-shaped detection zone, that is why we recommend to use them for the protection of «frontiers».



- Microwave channel - Infrared channel

Detection zone of the sensor MIR-M30

VIBRO-M, VIBRO-MG

Vibration sensors VIBRO are intended for detection of destruction of physical fences.

The sensor is used:
VIBRO-M – for the protection of window, door or gate grids;

VIBRO-MG – for the protection of sewers, storm drains and other fences temporary flooded.

Features

If the surface of detection allows, it is possible in some cases to use the sensor to protect two grids welded by the metal rod, Like this we decrease expenses.

Vandal-proof housing makes it impossible to dismount the sensor without opening the cover. Under the cover there is the tamper.

Easy design and reliable sensors are well protected from climatic effects.

VIBRO-MG keeps its specifications under water jets or during temporary flood.

Specifications	VIBRO-M	VIBRO-MG
Protected surface	4 m^2	
Supply voltage	6...30 V	
Current consumption	0,002 A	
Detection probability	not less than 0,98	
Operational temperature	minus 45...+65 °C	
Housing protection level	IP-65	IP-67
Alarm output	relay contacts	
Dimensions	90x58x65 mm	
Weight	0,25 kg	

VIBRO-M

VIBRO-MG

LED-75/60, LED-40/10

The searchlights are intended for the security lighting of perimeter sites and grounds of different objects. Like all up-to-date LED light sources it assures significant energy saving and high reliability.

No stroboscopic effect and collinear optics exclude flare lighting of CCTV cameras and allow to use searchlights for lighting the zones monitored by cameras.

It is possible to use different operation modes, for example, full lighting mode, stand-by mode, switched off.

Continuous light flux in all the range of power supply is resistant to low input voltage drops and have no on delay while supplying voltage.

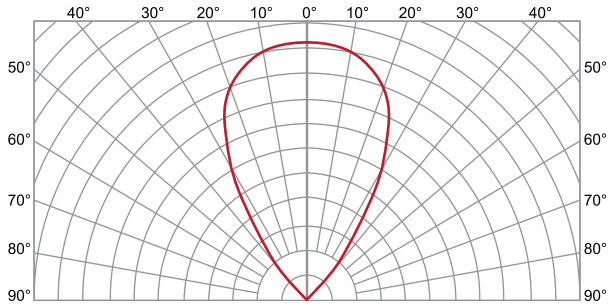
High reliability, LEDs lifetime up to 100 000 hours.

Remote control via RS-485 interface allows to fade the power of light flux directly from the guard room creating its own level of lighting on the protected sector.

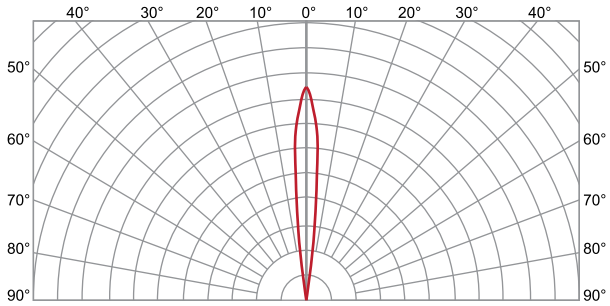
Specifications	LED-75/60	LED-40/10
Colour of lighting	white (4700 ÷ 7000 K)	
Light flux	3700 lm	3000 lm
Angle of lighting	60°	10°
Supply voltage	170...260 V	
Watt consumption	40 W	
Alarm input	relay contact	
Operational temperature	minus 40...+50 °C	
Housing protection level	IP-65	
Interfaces	RS-485	
Dimensions	308x217x67 mm	
Weight	3 kg	

Dust-water-proof aluminum housing.

Low current consumption at important level of lighting.



Light flux. LED-75/60



Light flux. LED-40/10

	10 m	20 m	30 m	40 m	50 m
LED-75/60	55 lx	14 lx	7 lx	4 lx	-
LED-40/10	300 lx	70 lx	30 lx	16 lx	11 lx

Level of lighting at specific distance from the searchlight

MOSKIT, MOSKIT-KIT, MOSKIT-CARTRIDGE

Principle of operation of the breakage sensor is based on the integrity control of closed perimeter line generated by a double micro wire.

A very thin and imperceptible wire is stretched from the sensor' case and fastened along to the perimeter site or the object surface, transport, doors or windows. If an intruder enters the perimeter or steals an object, he breaks the wire. Close the micro wire end by sealing it with a match or lighter flame to generate a closed perimeter line.

After the switching ON the sensor goes to the stand-by mode to control the micro wire integrity. The sensor triggers at the breakage of a double micro wire. Triggering is accompanied with an intermittent sound alarm.

Specifications	MOSKIT
Micro wire reserve	not less than 1000 m
Supply voltage	ALKALINE battery, dimension 23A (N), 12 V
Current consumption in stand-by mode	0,045 mA
Time of continuous operation	1...1,5 months
Operational temperature	minus 40...+65 °C
Alarm output	alarm sound
Dimensions	Ø55x90 mm
Weight	0,25 kg

The micro wire has a small diameter and a masking color. That's why it is barely visible for an intruder and doesn't provoke any efforts for a human during its breakage.

In case of battery discharge less than allowed the sensor MOSKIT generates a continuous sound signal requiring replacing the battery.

The sensor MOSKIT is supplied from a built-in battery.

Small dimensions and weight.

Rapidness at the generation and the reconstruction of the protected site.

Rapidness at the cartridge replacement with the micro wire MOSKIT-CARTRIDGE and the battery.

MOSKIT-KIT is intended for the sensor transportation on a waist belt in the compact bag and has two spare cartridges.

MOSKIT-KIT includes:

- compact bag with the fixations on a waist belt - 1 pc.
- sensor MOSKIT - 1 pc.
- spare cartridges in the protective pocket - 2 pc.

FORTEZA-1000, FORTEZA-1000L

Quickly deployable intrusion detection system FORTEZA-1000 is intended for temporary reliable protection of sites, small perimeters, perimeter sectors.

The system can be used for the protection of VIP aircrafts, critical cargo, precious machines, night parkings, military and medical camps, building facilities as well as for Border Service to detect the movement of criminal groups.

Features

The system is compact, independent, small weight. It can be transported to the temporary protection site by one man. The essential feature is mobility. The system can be quickly deployed on the site. It assures reliable performance in different climatic conditions. The system is practically invisible on site.

The system does not require adjustment and thresholds setting. It can operate on unprepared site. It can be used practically on any landscape.

The system is immune to vibrations from industrial plants, railway and cars.

The system is powered from accumulators incorporated.

No dead zones.

The system makes periodic self diagnostics of performance. Like this we get actual information on its state.

Alarm signals from every sector are transmitted via the radio channel to the mobile panel. The general signal from the mobile panel can be transmitted to the stationary security system.

No mutual interference of adjacent systems.

The system can contain from 4 up to 20 sectors at the customer's order. Like this we can decrease the expenses on security.

The system package contains all the necessary elements for operation, transportation, storage and maintenance.

Specifications	FORTEZA-1000	FORTEZA-1000L
Total length of the protected perimeter	up to 1000 m	
Operation frequency	2,45 GHz	
Number of sectors	up to 20	
Range of one sector	5 ÷ 50 m	
Width of the detection zone of one sector	up to 8 m	
Height of the detection zone of one sector	up to 2 m	
Detection probability	0,98	
Operation temperature of the linear part	minus 40...+50 °C	
Operation temperature of the radio channel receiver	minus 20...+50 °C	
Housing protection level, the linear part	IP-55	
Time of operation of accumulators at 20 °C, the linear part	7 days	27 days
Signal transmission range without retransmitter	1000 m on open area	
Signal transmission range with retransmitter	5000 m on open area	
Delivery package	Kit of sensors (up to 20 sectors), antenna to receive information from sensors, alarm panel to visualize the information, recharging devices, kit of bags, retransmitter (delivered at pre-order)	
System weight (4 sectors)	about 24 kg	about 20 kg

In maximum configuration the system provides the protected perimeter with the total length up to 1000 m. The total protected perimeter is divided into 20 sectors 50 m each. Every 50 m we install supports with linear receiver and transmitter units by turn. The linear transmitter unit contains two transmitters and the accumulator which can be quickly removed. The linear receiver unit contains two receivers, the accumulator which can be quickly removed and the radio channel transmitter transmitting the alarm signal to the remote radio channel receiver. The radio channel receiver can receive and indentify the signals from up to 20 transmitters. Like this we can select the sector activated.

FORTEZA-1000

Thanks to small weight it is easy to transport in particular manually.

It is possible to replace quickly the accumulators not removing the system.

The essential advantage is the system small weight.

FORTEZA-1000L

The system is powered from lithium battery. The time of operation without recharging is increased, no wire power supply. Autonomous operation of accumulators without recharging is not less than 27 days.

FCP-8

The control panel is intended for organization of centralized or autonomous protection of sites and informing of on-duty personnel on alarm by sound or light signals.
The principle of operation of the panel is based on the control of integrity of the two-wire signal line with the terminator connected – resistor. In case of intended breakage of the line (break or short circuit) the panel generates the alarm.

The panel has the nonvolatile memory of number of alarms and integrated sound and light alert.
The panel is easy to operate and maintain. It has anti vandal fixing model.
Additional equipment can be connected. Eight outputs «open collector».
If necessary additional sound and light alerts can be connected.

Specifications	FCP-8
Number of alarm circuits	8
Supply voltage	12...15 V
Current consumption	0,15 A
Number of outputs to central surveillance panel	1 (common)
Operational temperature	minus 40...+65 °C
Housing protection level	IP-20
Resistance of terminal resistors	1,5 kOhm
Dimensions	182x138x46 mm
Weight	0,3 kg

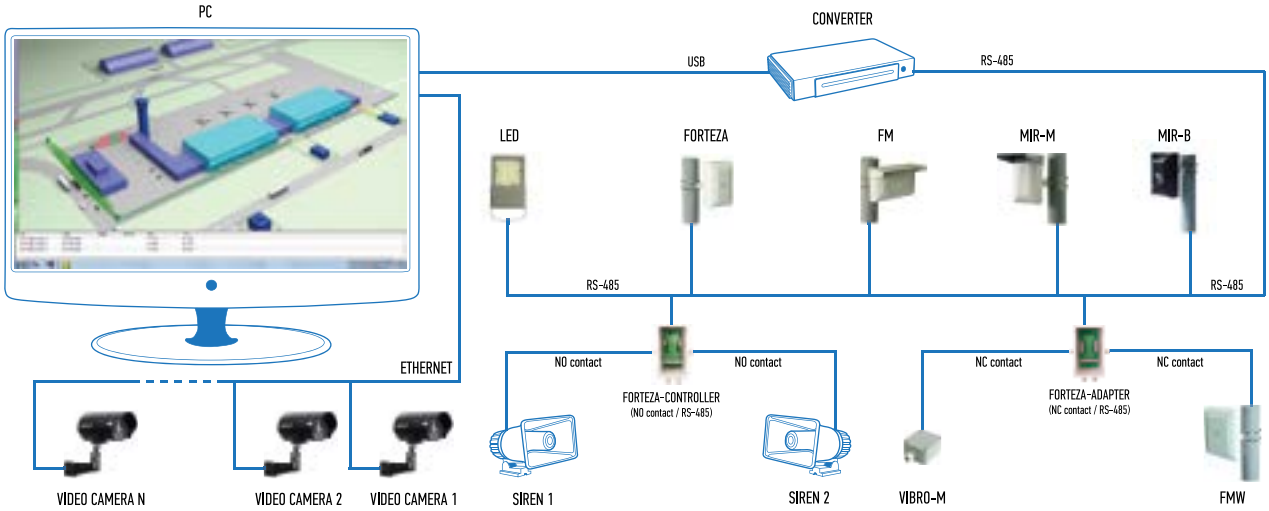
Axxon Intellect Enterprise Software

We offer special software - a multifunctional open program platform intended for making integrated security systems.

Security system on the basis of the software can integrate perimeter protection system and video surveillance.

Thanks to the software the security system of the site is the integrated information environment where we realized functions of processing and intellectual analysis of information, the system can flexibly react to different events.

Specifications	Axxon Intellect Enterprise Software
Length of interface line	1200 m
Number of lines	not limited
Number of devices in a line	32
Number of cameras connected	not limited
Rate of exchange	1200 bit/s



The sensors with NC relay contacts are connected to the software using FORTEZA-ADAPTER.

Actuators with NO relay contacts are connected to the software using FORTEZA-CONTROLLER.

PSU-U-15-0,15; PSU-U-24-0,7; PSU-R-15-0,15

Universal power supply units PSU are intended for power supply of security and fire alarm equipment or other power users with direct current constant voltage.

The power supply units are protected from:

- load current surpassing;
- short circuit in load circuit.

The power supply units PSU are intended for outdoor use thanks to dust- waterproof housing. It is possible to install the units in electric box, heated and non heated premises.

All power supply units PSU can be mounted on a pole as well as on a wall.

Tamper button can be installed on any power supply unit at the order.

The power supply unit PSU-U-15-0,15 – static, on the base of AC/DC converter.

The power supply unit PSU-U-24-0,7 – classical model with mains transformer.

The power supply unit PSU-R-15-0,15 is a classic one with the network transformer providing the standby battery installation.

Specifications	PSU-U-15-0,15	PSU-U-24-0,7	PSU-R-15-0,15
Input voltage	85...264 V	187...242 V	
Imax, consumption from circuit 220V	0,02 A	0,15 A	0,04 A
Uout, nominal	14,7... 15,3 V	23... 25,6 V	14... 15,6 V
Imax load current	0,15 A	0,7 A	0,15 A
Amplitude of ripple Uout	0,5 V	0,05 V	0,05 V
Number of commutated (transit) circuits	-	5	-
Operational temperature	minus 40...+50 °C		
Housing protection level	IP-55		
Weight	0,5 kg	2 kg	1 kg
Number of cable glands PG-9 (for cable Ø4,5...8 mm)	2		
Number of cable glands PG-11 (for cable Ø6...10,5 mm)	-	2	4
Dimensions	210x80x35 mm	220x180x105 mm	191x152x100 mm

PSU-U-15-0,15

PSU-U-24-0,7

PSU-R-15-0,15

JB-84, JB-30, JB-15

JB junction boxes are intended for connection of commutation cable lines, signal circuits of security and fire alarm systems, power circuits and can be used outdoors. The boxes are used for designing and mounting of sites like the elements of security and fire alarm systems.

Junction boxes are intended for outdoor use thanks to metal or polycarbonate dust-waterproof housing.

The boxes have cable glands for cables used for mounting of cable lines.

The base of the box JB-84 contains holes for connection of wires and cords providing optimal and careful electrical cabling. Like this we provide free access to terminal blocks during start-up works additional circuits commutation.

Specifications	JB-84	JB-30	JB-15
Material of the housing	polystyrene	polycarbonate	
Number of commutation circuits	84	30	15
Number of cable glands PG-9 (for cable Ø4,5...8 mm)	-	2	3
Number of cable glands PG-11 (for cable Ø5...11mm)	-	2	-
Number of cable glands MG-20A (for corrugated tube Ø16mm)	6	-	-
Operational temperature	minus 50...+65 °C	minus 50...+80 °C	
Housing protection level	IP-55		
Dimensions	300x260x87 mm	190x218x100 mm	210x98x36 mm
Weight	1 kg	0,46 kg	0,25 kg

At the order:
- additional cable glands for another type of cables;
- tamper button;
- two variants of mounting on the pole Ø70...90 mm or on the wall.

JB-84

JB-30

JB-15

BRACKET-500, BRACKET-350, BRACKET-120

Brackets are intended for mounting the protection sensors produced by the company on building walls, perimeter fence of any type.

We produce three models of outboard metal brackets differing in carry-over – 500, 350 or 120 mm accordingly.

Brackets can be used for:

- mounting of sensor units on building walls for the protection of windows and doors as well as for multilevel protection of building walls from intrusion through windows or wall breach.
- mounting of sensor units on building wall or fence for detection of approaching to the protected site.
- mounting of sensor units along the top of the fence for detection of climbing over the fence.
- mounting of sensor units when it is not possible to install the pole.

BRACKET-500

BRACKET-350

BRACKET-120

BRACKET-500/350

BRACKET-120

FORTEZA-DEMO-STAND

FORTEZA-DEMO-STAND – is the special offer for our partners, intended for presentations for end clients, training of the company staff and testing on-site.

The stand allows to make presentations of different types of sensors for clients without special testing field and additional equipment. The stand can be installed in the show room, used for demonstrations during regional exhibition or for outdoor training and conference.

FORTEZA-DEMO-STAND contains Microwave Monostatic sensor FM-30(24)-C-BT, which can be configured using the wireless interface Bluetooth.

The software works on mobile devices under Android operation system and is available for downloading on PlayMarket free of charge.

The price for the equipment is as low as possible.

No special skills and efforts are required to begin operation of the stand. Just unpack the FORTEZA-DEMO-STAND and connect it to the 220 V AC mains.

Additionally to the FORTEZA-DEMO-STAND we provide FREE OF CHARGE catalogues of our products with your contact details and banners with description of equipment represented for designing the show room.

FORTEZA-DEMO-STAND is delivered assembled with working sensors configured for operation, connected to the power supply and the control panel.

Contents of FORTEZA-DEMO-STAND:

Designation	Quantity
Microwave bistatic sensor FORTEZA-50	1 kit
Microwave Monostatic sensor FM-30(24)-C-BT	1 kit
Dual Technology Bistatic sensor MIR-B50	1 kit
Dual Technology Monostatic sensor MIR-M30	1 kit
Control panel FCP-8	1 kit
Security Lighting LED-75/60	1 kit
Power Supply unit PSU-U-24-0,7	1 kit
Power Supply unit PSU-U-15-0,15	1 kit
Junction box JB-48	1 kit
Junction box JB-15	2 kit
Catalogue of products	50 pcs.
Advertising banners	2 pcs.
Wire mesh fence on supports (1x1,5 m)	1 kit

FORTEZA-DEMO-STAND contents can be changed at the customer's order.

FORTEZA-DEMO-STAND

Presentations on exhibitions

Integration with security systems

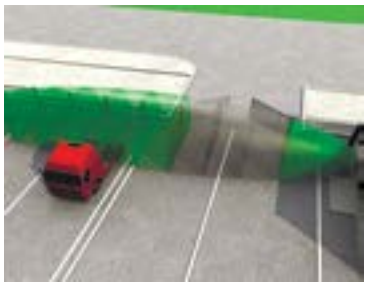
Demonstrations in offices

On-site presentations for customers

Training

№ 17-11








CONTACT INFORMATION

Manufacture (Trademark Forteza)
OOO OKHRANNAYA TECHNIKA

P.O. box 45, Zarechny, Penza region, 442960, Russia
Tel/fax: +7 (8412) 65-53-16 (multichannel), 65-53-15,
65-53-17, 65-52-86
info@forteza-eu.com
www.forteza-eu.com