

STUN GUNS AND SPECIAL EQUIPMENT FOR POLICE



OBERON-ALPHA
Moscow, Russia



ABOUT OBERON-ALPHA

OBERON-ALPHA is a Russian developer and manufacturer of non-lethal stun guns for professional use by police and for self-defense by civilians. We are based in Moscow, Russia, where all our products are developed and produced.

Company OBERON-ALPHA was founded in 1993. We have the experience and production capacity to carry out a full cycle of "development-production-sale" of our products. Our stun guns can be effectively used by citizens for self-defense and by law enforcement, security company, cash collection services for professional purposes: stun gun ZEUS, stun gun PHANTOM, stun gun KONVOY, stun gun HYBRID.

Our developments are unique and patented as inventions and utility models. We have necessary certificates which confirm that the weapons meet the legislation requirements and their use will be legal and effective.

POLICE EQUIPMENT

We develop and manufacture stun guns and police equipment:

- Smart stun guns for police: stun gun ZEUS (models ZEUS L, ZEUS M, ZEUS S), stun gun KONVOY.

- Multi-shot smart stun gun HYBRID: two-shot stun gun that can be used to transfer electric discharge at two aims at one, can be used for contact electroshock influence and has a replaceable magazine for two cartridges, removable high-current lithium battery, identification system and a patented system that prevents unintentional shooting.

- Remote cartridges for electroshock influence: remote cartridge with the shot distance of up to 5 meters, remote cartridge+ with the shot distance up to 10 meters, flashbang cartridges.

- Weapon module that can be used with weapons that are equipped with Picatinny mounting rail. Module can be used with the stun gun ZEUS (models ZEUS L, ZEUS M).

- Police shield "STENA" for riot control. The shield consists of modules with different functionality.

- Other weapons produced on contract terms: development, manufacture according to the technical requirements.

ADVANTAGES

Our advantages:

Design. Products manufactured by our company are designed by our highly qualified engineers using 3D modeling software.

Production. Products developed by OBERON-ALPHA are manufactured under the control of developers at our own production facilities. This allows to react quickly to clients' demands to create and bring to the market new, effective and high-quality production.

Certificates. Products are certified for compliance with the current legislation.

Guarantees. Products have a guarantee, the company provides a warranty/post warranty service.



**DEVELOPMENT AND MANUFACTURE
IN RUSSIA**



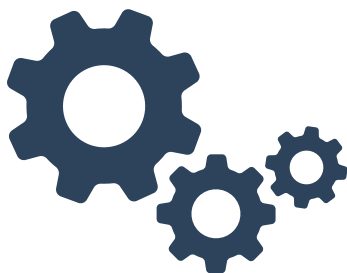
**PATENT-PROTECTED
DEVELOPMENTS**

POLICE

**STUN GUNS AND EQUIPMENT
FOR POLICE**



SUPPLY IN EAEU COUNTRIES



CUSTOM WEAPON DEVELOPMENT



**WARRANTY AND
POST-WARRANTY SERVICE**



ZEUS II

remote-contact
stun gun

“ZEUS II”

PURPOSE

Stun gun “ZEUS” (ZEUS II) is a powerful remote-contact electric weapon, made for contact (electro-shock) or remote (electroshock or psychophysical) professional use by policemen, employees of security services, collectors, etc, in accordance with job instructions. Stun gun “ZEUS” is a stun gun for control of offender’s actions that allows normalizing the situation in the shortest time possible.

MODELS

ZEUS II is produced in three models:

1. ZEUS-L. Model with identification system (length 405mm).
2. ZEUS-M. Model with identification system (length 355mm).
3. ZEUS-S. Model without identification system (length 305mm).



SPECIFICS OF BIOLOGICAL INFLUENCE



Electrical parameters of the stun gun ZEUS are safe for an influenced object when applied according to user’s manual, do not lead to lethal effect or irreversible pathological changes in the influenced object’s body.

NEURO-MUSCULAR INCAPACITATION. ZEUS II influences an object with the impulses of high frequency that cause neuromuscular incapacitation. ZEUS II transformer system is executed from the high-precision materials and forms an effective contour with the influenced area. The contour transfers the defeat energy from the device to the

object as special impulses that block the nervous system. Neuromuscular incapacitation is effective against the aggressors with high pain tolerance level (drug abusers, persons under the stress, prepared and trained opponents who can withstand the influence with pain or can put up a fight despite the pain).

PURPOSE

Remote cartridge is made for remote electroshock influence on an object.

Remote cartridge can be used with remote-contact stun guns according to their User's manual. Cartridges are fired by high-voltage discharge between stun gun's electrodes. Cartridge is safe for life and health on an influenced object, when used according to instructions.



TECHNICAL CHARACTERISTICS

-Dimensions, mm	67,5 x 51 x 22,7
-Weight, kg	0,06
-Maximum distance of electroshock discharge transportation, m	5
-Durability, years	5
-Probe needle material	Steel with covering (gold)
-Climate conditions resistance: operates in the temperature range from -15C to +50 C and relative humidity up to 98% at the temperature +25C	

SPECIFICS OF CONSTRUCTION

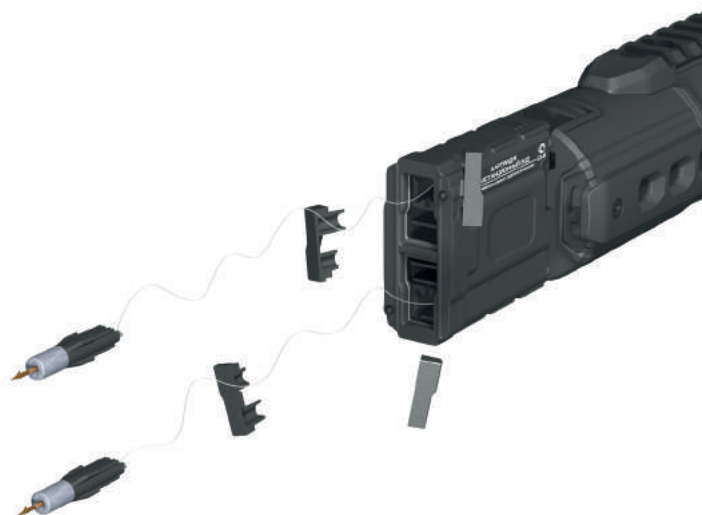
Remote cartridge is made in shock-resistant case and includes:

- bayonet mount, fixation element that allows setting it on stun guns, made as spring-supported pin. Construction of bayonet mount of flexible geometry allows setting the cartridge in the slot with rotational or translational motion;
- contact bases that come in high voltage contact with the stun gun's electrodes for cartridge initiation;
- its own group of electrodes, that allow stunning an offender if the wires are ripped after the cartridge, installed on the stun gun, is initiated;
- stopper plugs that close booster channels and the wire, laid in individual sections;
- aiming line (for some ESD models);

Two probes are located in the boosting channels; center of gravity is moved forward to provide a stable fixation on the target for needles with hitches.

The probes are placed in the individual speeding up channels, have plastic feathering and a bracket for the connection of the probe with a wire.

The wire is laid in the individual sections.



“ZEUS II”

PURPOSE

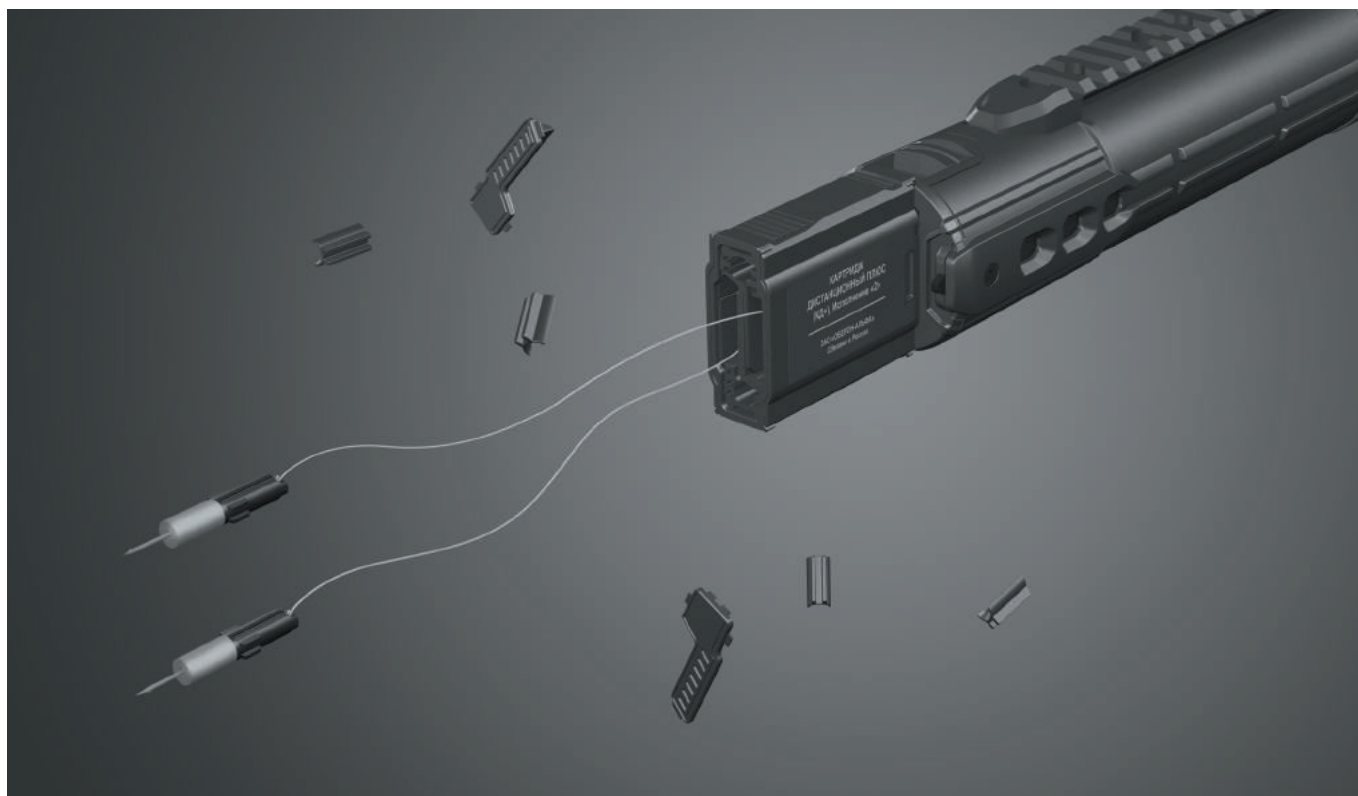
Remote cartridge plus is made for remote electroshock influence on an object at a distance up to 10 meters.

Remote cartridge can be used with remote-contact stun guns according to their User's manual. Cartridges are fired by high-voltage discharge between ESD's electrodes. Cartridge is safe for life and health on an influenced object, when used according to instructions.



TECHNICAL CHARACTERISTICS

-Dimensions, mm	66,4 x 46 x 20
-Weight, kg	0,06
-Maximum distance of electroshock discharge transportation, m	5 and following the aim for distance up to 10
-Durability, years	5
-Probe needle material	Steel
-Climate conditions resistance: operates in the temperature range from –15C to +50 C and relative humidity up to 98% at the temperature +25C	



PURPOSE

Weapon module MO-18 is used to extend functionality and efficiency of civilian and service weapons, equipped with Picatinny mounting rail.

Module is equipped with special replaceable cartridges. Available types of cartridges: flashbang, aerosol and marker.

Module MO-18 is developed by “OBERON-ALPHA” - leading Russian producer of stun guns and police special equipment.



TECHNICAL CHARACTERISTICS

- Dimensions, mm	65,5 x 40,6 x 38
- Weight, kg	0,15
- Battery (replacable)	4xLR44
- Operates in the temperature range from –15C to +50C and relative humidity up to 98% at +25C	
- Indication of battery condition	yes
- Indication of operational readiness of the cartridges	yes
- Open sight	yes
- Jack for the external activation button	yes

SPECIFICS OF USE

The module has two removable cartridges:

Flashbang cartridge is intended for psycho-physical influence (stunning, blinding, disorienting) on an offender.

Aerosol cartridge is intended for spraying a target with aerosol containing irritating agent.

Marker cartridge contains hard-to-remove paint and is intended for marking offenders during public events in order to detain them later.



Cartridges are initiated by pressing the button on the module or by pressing external activation button. Module has a jack for the external activation button, which increases operational comfort.

PACKAGE SET

Module MO-18 – 1 pc;
Flashbang cartridge – 2 pcs;
Battery LR-44 – 4 pcs;
User's manual (with guarantee card and passport) – 1 pc;
Package – 1 pc.

“ZEUS II”

PURPOSE

Flashbang cartridge is made for psychophysical influence (stunning, blinding) on an object, followed, if necessary, with electroshock influence.

Flashbang cartridge can be used with remote-contact stun guns according to their User's manual. Cartridges are initiated by high-voltage discharge between stun gun's electrodes. Cartridge is safe for life and health on an influenced object, when used according to instructions.



TECHNICAL CHARACTERISTICS

-Dimensions, mm	47 x 28 x 45
-Weight, kg	0,04
-Distance between the electrodes	40,0
-Resistance to influence: operates in range of temperatures from -20 °C to +50 °C and relative humidity up to 98% at the temperature +25 °C	



SPECIFICS OF CONSTRUCTION

Flashbang cartridge is made in shock-resistant case and includes:

- bayonet mount, fixation element that allows setting it on stun guns, made as spring-supported pin. Construction of bayonet mount of flexible geometry allows setting the cartridge in the slot with rotational or translational motion;
- contact bases that come in high voltage contact with the stun gun's electrodes for cartridge initiation;
- its own group of electrodes that allow influencing the offender with high-voltage current after the cartridge is initiated;
- membrane protected by the flange;
- flange that fixes and pressurizes the membrane and allows directing the sound wave at an object, lowering the level of sound and light pressure on stun gun operator.

Stun gun ZEUS is made in shock-resistant case, its base for all elements is a pipe made from fibreglass.



HANDLE

Accumulator battery and LED-flashlight are located in the rear side of the handle and are fixed with a nut. The nut is wider than the handle, which makes it more comfortable to hold the device.

GUARD

Located in the front side of the handle. The guard has: safety fuse, laser switch, laser aiming module, LED indication, ergonomic silicone electroshock discharger activation button, identifier slot (for models ZEUS-L, ZEUS-M), identifier latch (for models ZEUS-L, ZEUS-M), antenna (inner reader-receiver) for registering master-card/identifier (for models ZEUS-L, ZEUS-M), pin slot (for model ZEUS-S), pin latch (for model ZEUS-S).

HIGH-VOLTAGE ZONE

Includes:

- *Cartridge lock to install Signal cartridges, Remote cartridges, and another means of remote influence with bayonet locks (magazines of remote electric defeat, cartridges of remote electric defeat)

- *Control electrodes that are located in the inner cavity of the high-voltage zone and provide a blank discharge after the initiation of remote influence means.

- *Working electrodes are intended for contact electrical influence on the suspect with electroshock discharger.

- *Anti-grab electrodes are intended for a safe application of ZEUS II by an operator. Anti-grab electrodes are under voltage during the operation of electroshock discharger and hit an offender with electric discharge of high voltage if the attempt of snatching the stun gun from the operator.

- *Initiation electrodes are intended for initiation of remote influence means and the following transfer of the high-voltage electric impulses to the aim.

“ZEUS II”

PARAMETER	ZEUS L/ ZEUS M/ ZEUS S
- Outcome voltage on the working electrodes, kV *	90-150/ 90-150/ 90-150
- Power of influence, W*	3-30 /3-30/ 3-30
- Operational in temperature range from -15 °C to +50 °C and relative humidity up to 98% at +25 °C	
- Multiple impacts, vibration resistance GOST 30631 for a group M34, stiffness degree 11a	
- Weight, kg	0,72/ 0,65/ 0,58
- Dimensions Length-x-Height-x-Width, mm	405x64x53 / 355x64x53/ 305x64x53
- Distance between the working electrodes, mm	38/ 38/ 38
- Recommended duration of a single influence on an object, sec	3/ 3/ 3
- Recommended duration of a pause between single influences, sec	10/ 10/ 10
- Checking mode: cyclic. Discharge – not more than 1 sec. Pause – not less than 5 sec	
- Maximum allowed decrease of influence power, not more than, %	25/ 25/ 25
- Cycles of operation for a fully charged battery, not less than	80/ 80/ 80
- Supply element: removable rechargeable LiPOL accumulator battery 11.1V, 600 mAh	
- Cycles of battery charging, not less than	500/ 500/ 500
- Durability, years	3/ 3/ 3
- Identification system	Yes/ Yes/ No
- Flashlight ZS-L-9	Yes/ Yes/ Yes
- Operation resource of ZS-L-9 flashlight for a fully charged battery, not less than, hours	6/ 6/ 6
- Operation length of Picatinny mounting rail, mm	130/ 80/ -
- Laser aiming module	Yes/ Yes/ Yes
- Energy consumption in mode “Safety switch is off, electroshock discharger isn’t on, flashlight and laser are off”, not more than, mA	25/ 25/ 5

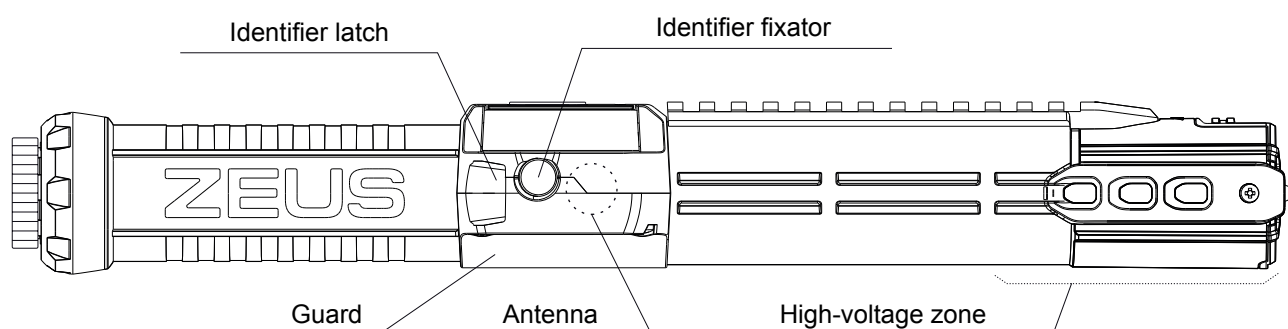
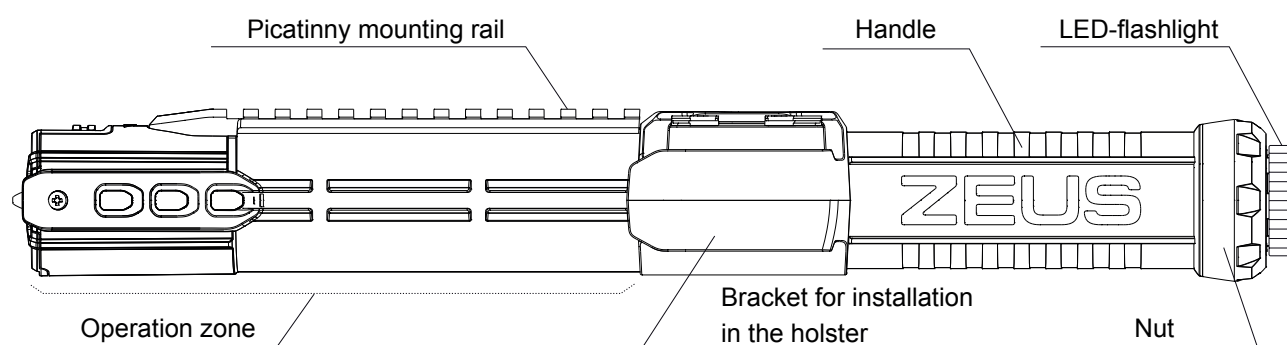
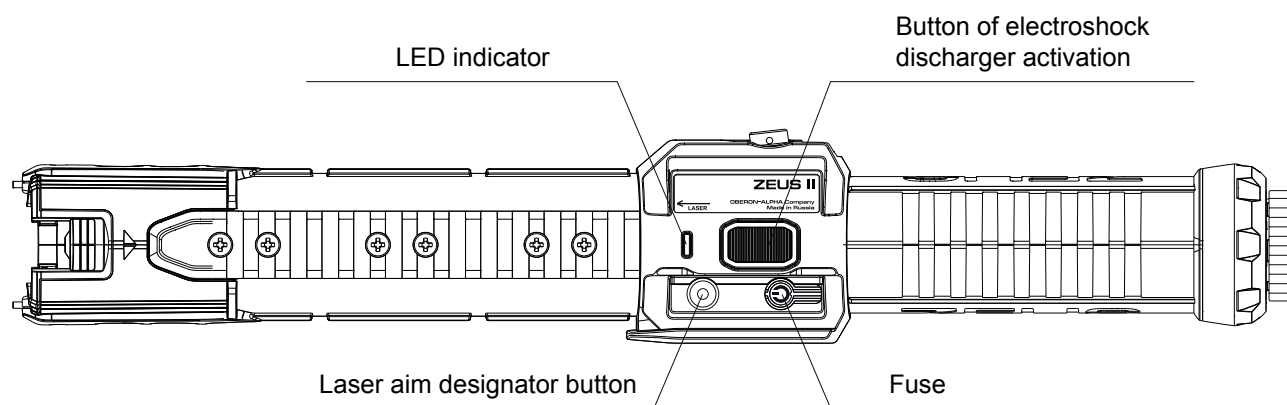
*according to contract terms

ZEUS II. INNOVATION

ZEUS II INNOVATION. Identification system. Stun gun ZEUS II is a XXI century weapon. It uses Identification System that forbids unauthorized application of the weapon. ZEUS II is the only stun gun that is equipped with this technology. Identification system excludes the possibility of unauthorized application of electric discharge and cartridge initiation.

ZEUS II INNOVATION. Picatinny mounting rail. Picatinny rail is used on various firearms and provides a standard mounting for attachments, such as aiming modules and tactical flashlights. Picatinny rail on ZEUS II allows broadening the functionality during the professional exploitation.





“ZEUS II”

STANDART DELIVERY SET (for models ZEUS-L, ZEUS-M)

- ZEUS II – 1pc.
- Holster– 1pc.
- Identifier with a wrist strap– 1pc.
- Master-card – 1pc.
- Accumulator battery LIPOL (rechargeable) – 1pc.
- LED flashlight ZS-L-9 – 1pc.
- Charging device ZS-11.1-600 – 1pc.
- Operation manual (with a guarantee card and passport) – 1pc.
- Package – 1pc.



STANDART DELIVERY SET (for model ZEUS-S)

- ZEUS II – 1pc.
- Holster – 1pc.
- Pin with a wrist strap – 1pc.
- Accumulator battery LIPOL (rechargeable) – 1pc.
- LED flashlight ZS-L-9 – 1pc.
- Charging device ZS-11.1-600 – 1pc.
- Owner`s manual (with a guarantee card and passport) – 1pc.
- Package – 1pc.



ADDITIONAL DELIVERY SET

1. Cover “umbrella”;
2. Car charger ZS-11.1-600-12-24V;
3. Remote cartridge, Remote cartridge plus;
4. Flashbang cartridge;
5. Weapon module (autonomous module for 2 flashbang, aerosol or marker cartridges);
6. Glass breaker.

1



2



3



4





HYBRID

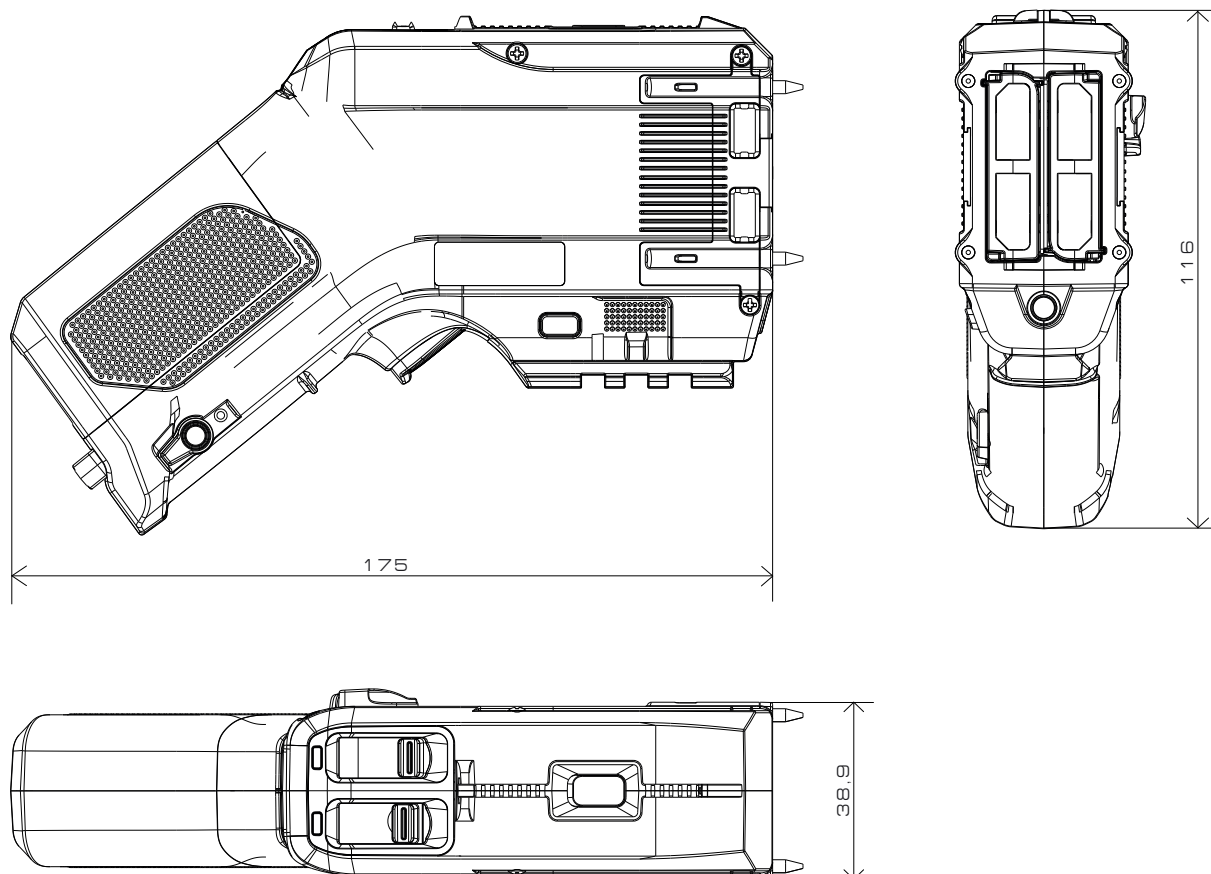
multi-shot
stun gun

“HYBRID”

TECHNICAL CHARACTERISTICS

-Outcome voltage on the working electrodes, kV	90-150*
-Power of influence, W	3-30*
-Operational in temperature range from -15 °C to +50 °C and relative humidity up to 98% at +25 °C	
-Weight, kg	0,38
-Dimensions Length-x-Height-x-Width, mm	175 x 116 x 38,9
-Distance between the working electrodes, mm	40
-Laser target designator	yes
-Cycles of operation for a fully charged battery, not less than	250
-Supply element: removable rechargeable LiPOL accumulator battery 11.1V, 600 mAh	
-Cycles of battery charging, not less than	500
-Blockage key	yes
-Picatinny mounting rail	yes

*depends on the contract terms



COMPLETE SET

Stun gun HYBRID - 1 pc;
 Remote cassettes in a magazine – 2 pcs;
 Battery – 1 pc;
 Charging device – 1 pc;
 Blockage key with wrist strap – 1 pc;
 Belt holster – 1 pc;
 User`s manual (with guarantee card and passport) – 1 pc.

PURPOSE

Stun gun HYBRID is a powerful double-charged handheld weapon, intended for contact, distant and psychological influence on an offender.

Developed by ZAO "OBERON-ALPHA" – leading Russian producer of stun guns.



The United Nations' Convention "Basic Principles on the Use of Force and Firearms" and "Code of Conduct for Law Enforcement Officials" recommend the policemen, when detaining offenders, to use non-violent methods, physical force and special means before applying firearms.



Stun gun HYBRID is made for use by special services, police and security companies. Power of influence of police weapons is up to 30 W (specified in the contract)

CONSTRUCTION SPECIFICS



ELECTROSHOCK FUNCTIONS:

-Stun gun HYBRID has two remote influence cassettes installed in a magazine with a function of fast deployment. Shot distance is up to 6 meters. One or two objects can be influenced simultaneously and differentially.

-HYBRID can be applied contact or blank discharge can be displayed without deploying the cassettes or when the cassettes have already been deployed.

-HYBRID has 4 side blank discharge zones that affect the offender psychologically.

SAFETY:

-The special cassette safety system SHOT LOCK protects the cassettes from being deployed when HYBRID is applied contact or when the blank discharge is displayed.

-HYBRID has a blockage key that turns off stun gun's functions if the weapon is snatched by offender.

CONSTRUCTION ELEMENTS:

Stun gun HYBRID is made in impact-resistant case, it has removable lithium-polymer battery. Gun flash-lights and additional laser target designator can be installed on Picatinny mounting rail. HYBRID holster allows carrying the device with installed devices.

“HYBRID”

SPECIFICS OF BIOLOGICAL INFLUENCE

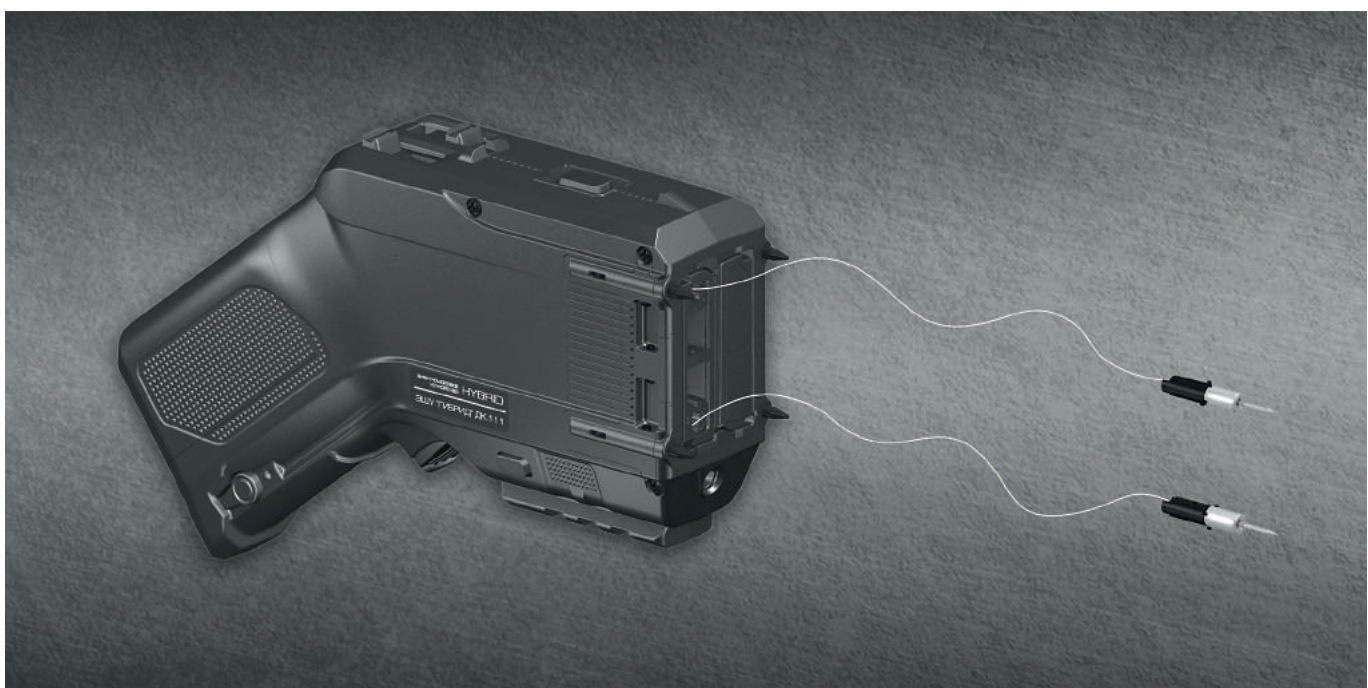
Basis of HYBRID effective influence is neuromuscular incapacitation effect. Neuromuscular incapacitation is effective for offenders with a high pain threshold (those who use drugs, under severe stress, prepared or trained opponents who may not feel pain of the impact or are capable of resisting detention (or self-defense) despite physical pain). Electric influence of HYBRID allows controlling opponent's actions which prevents the him from consciously breaking the contact or showing resistance.

Efficiency of contact impact is increased due to two pairs of fighting electrodes with independent impact.

Benefits of HYBRID remote influence:

- Increases safety of the stun gun operator – lack of physical contact with the offender doesn't allow the offender to use force or cold weapons.
- Allows using remote electroshock functions against two objects simultaneously without replacing the magazine.
- Allows using the stun gun contact with earlier initiated cartridges without removing them.
- Allows transferring electroshock discharge repeatedly on an object through earlier initiated cartridge.

High convenience and safety of operation. The plastic holster is provided for carrying HYBRID on a belt.





ESD "PHANTOM"

remote-contact
stun gun

TECHNICAL CHARACTERISTICS

- Maximal voltage of blank discharge, kV	90-150*
- Power of influence, W	20*
- Operating climatic conditions: operational in the temperature range –15C - +50 C and relative humidity up to 98% at the temperature +25 C;	
- Weight, kg	0,21
- Dimensions, mm	136x60x30
- Work cycles with completely charged battery, not less	80
- Supply element: removable rechargeable LiPOL battery	7.4/600
- Quantity of charging cycles of the battery (if tested every three months), not less than	500
- Check cycles (1s.) with completely charged battery, not less than	240

*depends on the contract terms

PURPOSE

PHANTOM is a modern stun gun meant to be used by policemen, special units and services in countries that legally allow application of an electroshock weapons. PHANTOM is used to affect offenders with series of high-voltage discharge, as well as for psychological influence on an aggressive person.

Use of PHANTOM allows policemen:

- To eliminate the usage of physical strength during arrest of the suspect and to avoid injuring the suspect;
- To avoid attracting attention during detention;
- To avoid violating the principles of humane treatment of the suspects.

TYPES OF APPLICATION

Contact application. Bring the working electrodes to an attacker's body and push the button of high-voltage discharge.

Remote electroshock application. Mount the tactical nozzle-adapter NP-11 on PHANTOM in advance and attach remote cartridge (KD or KD+). After the cartridge is initiated PHANTOM can be used on the same object without removing the cartridge or adapter. PHANTOM can be carried and applied contact with a mounted NP-11 adapter.

Remote psychophysical application on one or several objects. Mount the tactical nozzle-adapter NP-11 on PHANTOM in advance and attach flashbang cartridge (KSSH). After the cartridge is initiated PHANTOM can be used on an object without removing the cartridge or adapter. PHANTOM can be carried and applied contact with a mounted NP-11 adapter.



SPECIFICS OF USE

Effectiveness of contact application of the stun gun is determined by:

- Use of psychological intimidation on the enemy with a sight and a sound of discharge. Loud noise of high voltage discharge causes the aggressor to instinctively fear the possible contact application. Blank discharge can be used on street dogs, or opponents of equal strength. If the opponent has an obvious advantage in strength, it is not recommended to demonstrate the weapon.
- Stun gun is most effective in conditions, where other self-defense means are not efficient or dangerous for the user: in windy weather, in closed spaces such as cars, elevators, etc.
- It is allowed to be in physical contact with the object, on which the device is being used. Only the part of the influenced object between the electrodes is exposed to high voltage.
- Apply stun gun PHANTOM to particular zones for better effect. The most vulnerable areas are neck, groin, solar plexus, chest and upper thighs.
- Apply the device unexpectedly. Unexpected use of self-defense weapons does not allow the offender to prepare for the impact psychologically and take preventive actions.
- One of the fundamental rules of effective use is to follow the movement of a target during the application: it is necessary to press the electrodes tightly to the body of the aggressor.

Effectiveness of the electroshock device is directly related to the distance from the working electrodes to the affected area. Maximum efficiency can be achieved if the electrodes touch the body of the attacker or are in close proximity (2-3mm) from the affected area.

SPECIFICS OF INFLUENCE

Neuromuscular Incapacitation (NMI). During contact or remote application stun gun PHANTOM influences an object with the impulses of high frequency that cause neuromuscular incapacitation. PHANTOM transformer system is executed from the high-precision materials and forms an effective contour with the influenced area. The contour adjusts to the physiological features of the object and to the physical and chemical changes in the defeat zone during the application. The contour transfers the defeat energy from the device to the object as special impulses that block the nervous system.

Neuromuscular incapacitation is effective against the aggressors with high pain tolerance level (drug abusers, persons under the stress, prepared and trained opponents who can withstand the influence with pain or can put up a fight despite the pain). Electric influence of PHANTOM allows to control the opponent's actions which prevents the opponent from consciously breaking the contact or showing resistance during the application.



STUN GUN

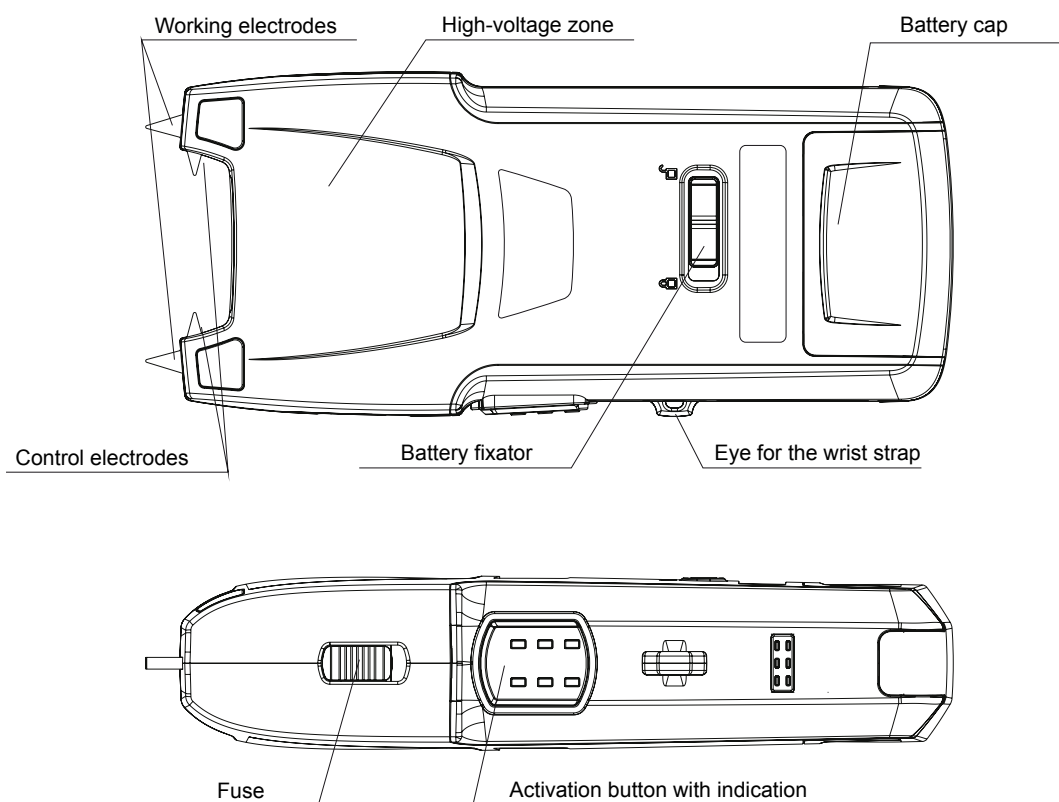
"PHANTOM"

TECHNICAL DESCRIPTION

CONSTRUCTION

PHANTOM is designed in a shock-resistant case and has a safety fuse to prevent accidental triggering, control electrodes for producing blank discharge. It is possible to carry the device on the wrist strap.

PHANTOM has a removable lithium polymer battery. The battery can be fixed in the case without using the battery cover temporarily with the battery lock is provided (in the position of the lock "closed" the battery is fixed inside the case). The lock is used for easy installation of the battery cover.



COMPLETE SET

- Stun gun PHANTOM - 1 pc;
- Battery (LiPOL 7,4V, 600mAh) - 1 pc;
- Charging device «PHANTOM A1»- 1 pc;
- Wrist strap - 1 pc;
- Operation manual - 1 pc.

Additional equipment:

- Nozzle-adapter NP-11 for attachment of remote cartridges;
- Flashbang cartridge;
- Remote cartridge;
- Belt holster (material: nylon).



MULTI-FUNCTIONAL
ELECTROSHOCK SHIELD
“STENA”

TECHNICAL CHARACTERISTICS

- Dimensions of the shield, mm	1000x600
- Protected area, dm ²	60
- Weight, not more than, kg	4,8
- Power of influence of electroshock discharger (ESD), W	10
- Voltage of blank discharge ESD, kV	130
- Distance between electrodes, mm	40
- Operational in the range of temperatures from -15 °C to +50 °C and relative humidity up to 98% at the temperature +25 °C	
- Time of autonomous operation, months	3
- Non-stop operation of the flashlight from fully charged battery, hours	3
- ESD operation mode	manual/automatic/mob.barrier
- Modes of cartridges initiation	1x1 / 1x2 / 1x4
- Floodlight operation mode	100% power/stroboscope/50% power
- Protection class	02 according to 50744-95
- Supply element: rechargeable LiPOL accumulator battery	11,1V/5Ah
- Video camera*	yes
- Telemetry system*	yes
- Magazine capacity, flashbang cartridges, pcs	8

*configuration depends on contract terms



PURPOSE

Shockproof electroshock shield "STENA" is designed for:

- protection of law enforcement officers during mass riots;
- control of the crowd and neutralizing aggressive protesters during mass events, demonstrations, etc.;
- psychological and physical influence on offenders;
- centralized control of police units and the use of force.



Equipping shockproof shields with electroshock device will increase the efficiency of controlling the crowd; will allow to suppress aggression at demonstrations in time.

Shield "STENA" can be used as a part of mobile and stationary protective barriers and other electroshock devices.

Telemetric system in electroshock shield "STENA" allows to control the use of weapons, to store and receive data of the event log and statistics online, to adjust parameters or block the weapons, as well as to redistribute forces during police operations, to call for reinforcements, to have data for the legal justification of the use of weapons.

FUNCTIONALITY

- Patented module design (patent RU2652496 "Electroshock module and shield for suppression of riots, that uses this module") allows to use optimal configuration of special means.
- Control of use of special means and parameter adjustment can be done remotely with mobile app or on monitoring website.
- Can be integrated in the satellite navigation and monitoring system (NMS) to improve the accuracy of evaluation of the situation and management decisions, to improve the efficiency of the interaction between law enforcement agencies, to strengthen control over the use of special means.

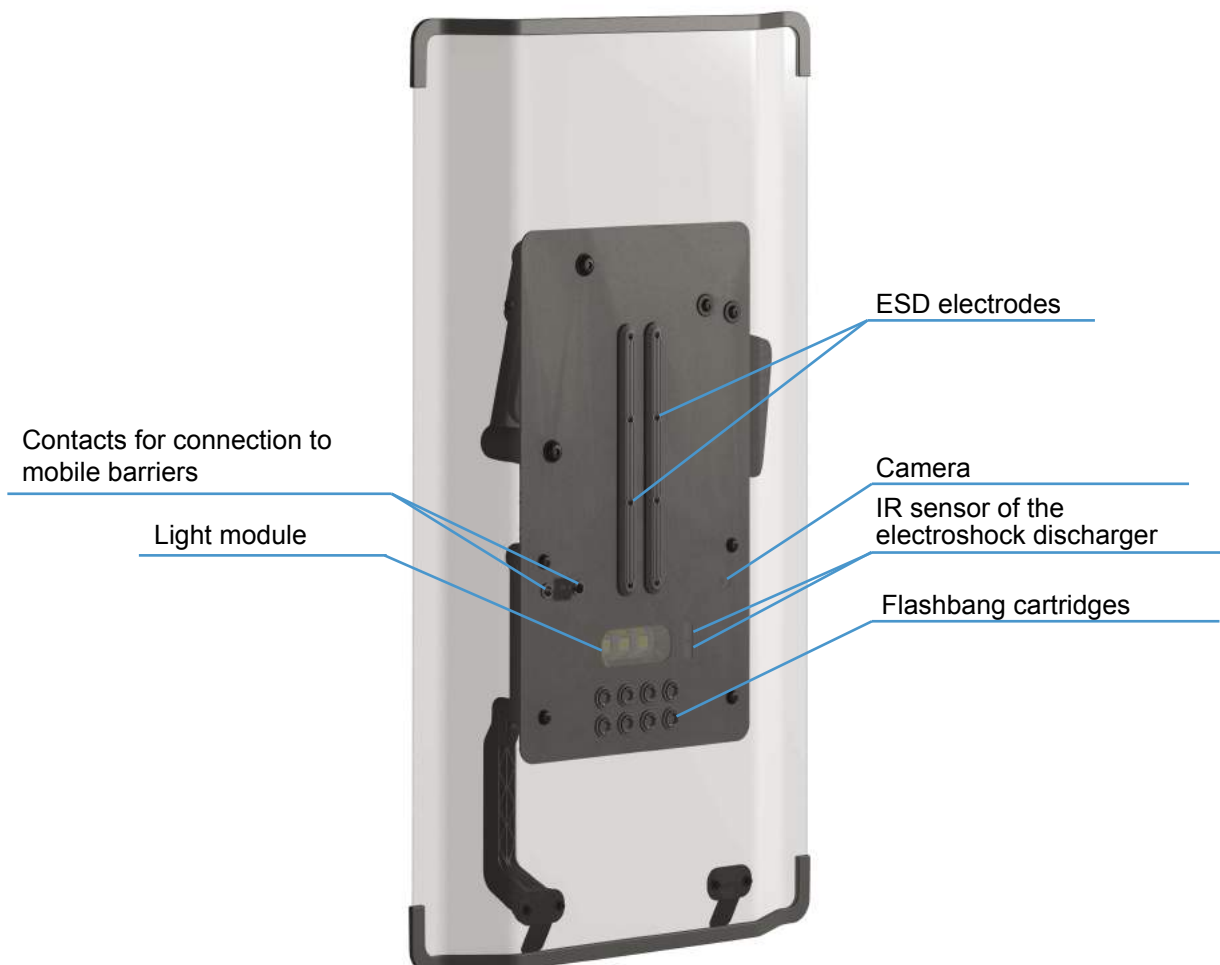
CONSTRUCTION SPECIFICS

- Shockproof transparent polymer shield provides optimal visibility, confidence and effectively protects against melee weapons, improvised street weapons (sticks, rods, stones,...), protects law enforcement officers from traumatic weapons. The cushioning pad protects user's shoulders and forearms from the pressure of the crowd during riots.
- Special means are activated by the hand holding the shield.
- The shield has brackets for battle formations and is equipped with a lower handle.
- Module design allows to replace the spent magazines of flashbang cartridges and discharged batteries to recharge them.
- Electronic key lock eliminates the possibility of unauthorized use of the shield.
- Module design allows the customer to select appropriate configuration and functionality of the shield.

CONNECTION TO MOBILE BARRIERS

The system can be used for connection to stationary and mobile barriers in order to ensure physical protection of important, administrative, economic and other objects.

CONFIGURATION OF THE EXTERNAL SIDE OF THE SHIELD



TELEMETRY SYSTEM "OBERON.MONITORING"

The shield "STENA" has the Control System (CS), which controls its operation. All history of operation and application of the System is recorded in the event log: CS receives information from data sensors, as well as records its own actions. Obtained data is continuously stored in non-volatile memory.

CS is equipped with a real-time clock that is synchronized with the clock of an external device when a communication channel is established.

Information is transferred to external devices via communication module.

External device is:

- **PC with installed software** that commutates with CS of the shield through the wire.
- **Mobile device** that commutates with CS of the shield through mobile application.
- **Automated workplace in the monitoring center** that commutates with CS of the shield through web-interface and mobile application. Collected data is processed on a remote server or in the monitoring center, and access to the data is organized through a web-interface or through special software.

All objective information is visualized and statistically processed with reference to a single map resource.



SHIELD "STENA"

FOR POLICE

INTEGRATED MODULES

ELECTROSHOCK MODULE

The module operates in manual (switching on from the button) and automatic mode (automatic switching on when an object approaches the electrodes). It can also be connected to mobile high-voltage barriers.

The electrodes are arranged in two vertical rows. The absence of electrodes at the perimeter of the shield excludes unintentional defeat of the law enforcement officer during operation.

FLASHBANG MODULE

For remote psycho-physical influence on the target (stunning, blinding, disorienting the influenced person) the shield is equipped with a replaceable magazin with 8 flashbang cartridges. After all cartridges have been used, the magazin can be quickly replaced. The magazin is fixed with clamps and removed by lifting the rotary handle.

Flashbang cartridges are initiated by pressing a button on the handle.

Type of initiation can be set on control panel: 1, 2 or 4 cartridges at a time.



LIGHT MODULE

The shield is equipped with powerful LED lights. The bright light has a blinding effect on offenders.

Operation mode is set with the selector on the control panel.

Operation modes:

- Floodlight 100% power (equivalent of 400W halogen lamp), narrow beam;
- Stroboscope;
- Floodlight 50% power.



IDENTIFICATION MODULE

The shield has the function of identification of the operator. To do this, the operator inserts an electronic key-identifier into the slot, which can be firmly fixed in the slot or fixed with the possibility of extraction, with a rotary lock. Control unit regularly sends the signal to the receiver of identifier. If control unit receives a response signal from the identifier, the system allows switching on electroshock discharger, flashbang cartridges, etc. The belt of identifier is put on the operator's hand, and if the offender captures the shield, the identifier is removed from the socket, the control unit does not receive a response signal and blocks operation of the shield.

Identifiers are registered in the memory of control unit with the master card, which is unique for each shield, with "OBERON.Monitoring" service through PC or mobile application.

VIDEO RECORDING MODULE

Video recording module is designed to save video information about the circumstances of the device application to provide evidence about its legality. The device has a non-volatile memory designed to store the recorded information. Video camera is turned on using the button on the control panel. Indicator of camera operation is on the control panel.

The module transfers data in online or offline mode to the navigation and monitoring system.

TELEMETRY MODULE

Shield "STENA" is equipped with a telemetry system and a GPS/GLONASS communication module that allow:

- to integrate the shield into the navigation and monitoring system for control from the monitoring center;
- to receive and store online operation log data, statistical data, etc.;
- to transfer stored data to an external information device;
- to control modules remotely, to adjust parameters and block system resources;
- to monitor the application of ESD, monitor the intensity of application.



SHIELD "STENA"

FOR POLICE

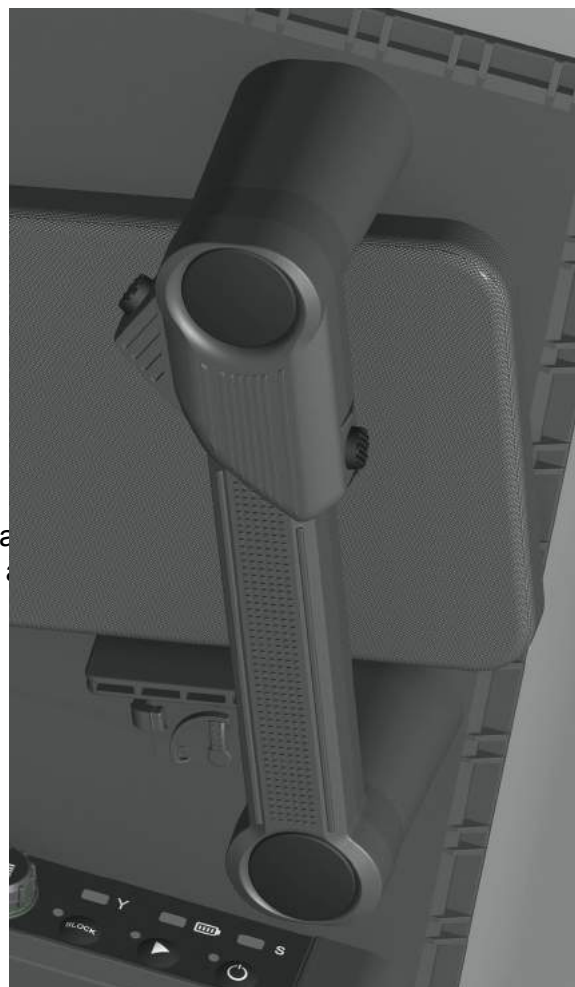
CONTROL AND INDICATION

CONTROL

On the control panel are located:

- * illuminated rotary switches of:
 - ESD operation modes;
 - Flashbang module;
 - Light module.
- activation buttons of:
 - the system;
 - camera;
 - block of the control panel.
- indicators of:
 - operation mode of the communication module;
 - charge level of the battery;
 - system status.

There are buttons of electroshock discharger activation and flashbang cartridges initiation on the handle. Buttons are pressed with the hand holding the shield.





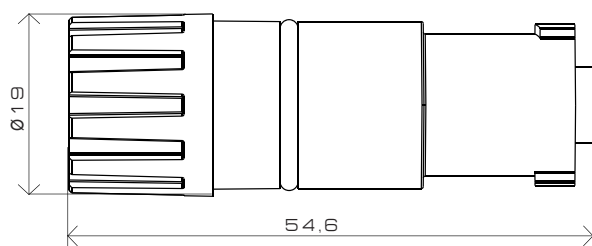
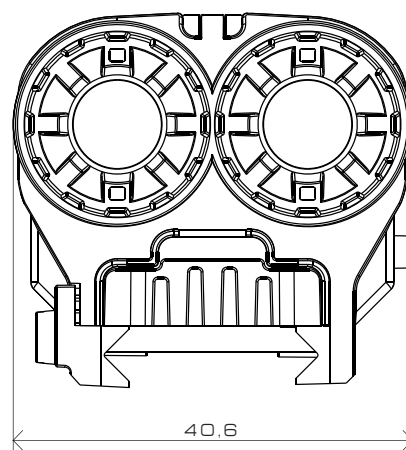
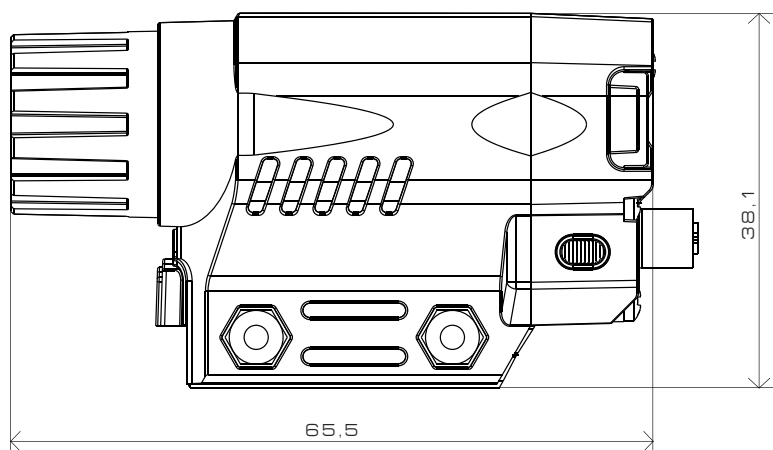
WEAPON MODULE MO-18

for civilian and
service weapons

MODULE "MO-18"

TECHNICAL CHARACTERISTICS

- Dimensions, mm	65,5x40,6x38,1
- Weight, kg	0,15
- Battery (replacable)	4xLR44
- Operates in the temperature range from -15C to +50C and relative humidity up to 98% at +25C	
- Indication of battery condition	yes
- Indication of operational readiness of the cartridges	yes
- Open sight	yes
- Jack for the external activation button	yes



PACKAGE SET

- Module MO-18 – 1 pc;
- Flashbang cartridge – 2 pcs;
- Battery LR-44 – 4 pcs;
- User's manual (with guarantee card and passport) – 1 pc;
- Package – 1 pc.

PURPOSE



Weapon module MO-18 is used to extend functionality and efficiency of civilian and service weapons, equipped with Picatinny mounting rail.

Module is equipped with special replaceable cartridges. Available types of cartridges: flash-bang, aerosol and marker.

Module MO-18 is developed by ZAO "OBERON-ALPHA" - leading Russian producer of electroshock devices and police special means.

CONSTRUCTION SPECIFICS

Module contains:

- safety fuse;
- open sight;
- indication of battery condition;
- power supply (4 batteries LR44);
- external activation button (additional set).

Module is water-resistant and can be used in all weather conditions.



MODULE "MO-18"

APPLICATION SPECIFICS

The module has two removable cartridges:

Flashbang cartridge is intended for psycho-physical influence (stunning, blinding, disorienting) on an offender.

Aerosol cartridge is intended for spraying a target with aerosol containing irritating agent.

Marker cartridge contains hard-to-remove paint and is intended for marking offenders during public events in order to detain them later.

Cartridges are initiated by pressing the button on the module or by pressing external activation button. Module has a jack for the external activation button, which increases operational comfort.



ADVANTAGES OF WEAPON MODULE

- Versatility. Module can be mounted on Picatinny mounting rail on any type of weapon;
- Increases operator`s safety. Absence of physical contact with an offender doesn`t allow him to use force or melee weapons.
- Allows applying the necessary means depending on the situation and degree of danger;
- Safety fuse increases the safety of operation;
- Indication of battery condition and indication of operational readiness of the cartridges increase the ease of use;
- External activation button allows placing the button in the convenient place and increasing manoeuvrability of the weapon;
- Cartridges have a universal bayonet lock;
- Open sight increases accuracy of shooting with aerosol and marker cartridges.

Module MO-18 is safe for influenced object`s life and health.



PURPOSE

Signal colour smoke cartridges (SCSC) are designed to equip special security systems, alarm and warning systems in order to improve their efficiency, as well as for systems to indicate the location of objects.

SCSC are activated by igniting the pyrotechnic composition when an electric current is supplied to the connector. As a result of flameless smoke formation, a cloud of colored smoke is formed from the chemical components of the cartridge (the color is indicated on the SCSC label), which contains partially intact chemical components of the compositions, as well as their combustion products: nitrogen, nitrogen dioxide (traces), carbon monoxide, carbon dioxide, sulfur dioxide and water.

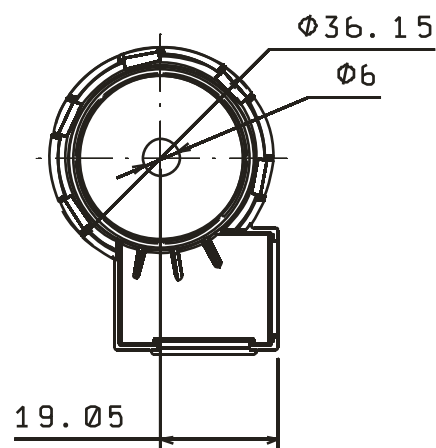
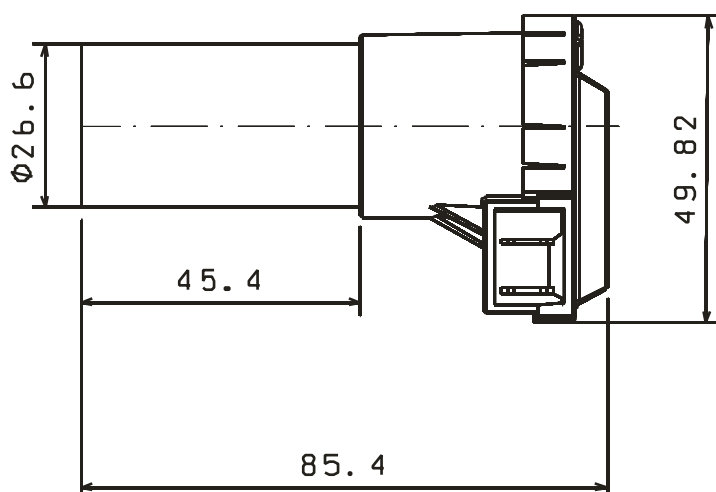
Exposure to the smoke at a distance of 50-100 centimeters from the epicenter of the aerosol cloud formed from the Signal color smoke cartridge may be accompanied by transient phenomena of irritation of the eye membranes (eyelid spasm, lacrimation, redness, feeling of a foreign body in the eyes).

Exposure to the smoke at a distance of more than 100 centimeters from the epicenter of the aerosol cloud does not have a harmful effect on the human body, has a short-term irritating effect on the upper respiratory tract and does not cause long-term negative consequences.

Signal colour smoke cartridges can be installed in steel or plastic brackets.

TECHNICAL CHARACTERISTICS

- Time of smoke formation, sec from	10 to 30
- Current for cartridge initiation, not less than, A	0,4
- Electric resistance of initiation circuit, Ohm	2,5-4,5
- Smoke colour (marked on the label)	white, red
- Weight, kg	0,09
- Dimensions (cartridge with a plastic cap), mm	49,8x85,4x28
- Operational in the range of temperatures from -30 °C to +50 °C and relative humidity up to 98% at the temperature +25 °C	



“KRAPIVA”

PURPOSE

- Physical protection of important and potentially dangerous industrial, administrative and other stationary objects.
- Protection of temporarily built objects, including military objects.
- Protection of mobile objects.

Operation of non-lethal protective electroshock device "KRAPIVA" is based on the technology of high-voltage modulated electric impulses and its effective and safe influence on an offender.

Combined with other engineering and technical security means, "KRAPIVA" forms an independent engineering-technical complex that prevents unauthorised trespassing and physical influence on the object.

Operation of "KRAPIVA" is based on the safe influence on an object with electrical pulses up to 45 kV. The object get stunned after approaching a high-voltage electrode at a distance of about 10-15 mm. The object receives a very tangible and unpleasant, but safe electric impulse.

Electric impulses easily penetrate thick clothes (gloves, leather jackets, etc.).

System “KRAPIVA” has one jack for plugging in conductive elements. It is easy to install the system on the high-voltage fence. Any conductive elements can be connected to the system sequentially or parallel, with the total length of 200 m. The electrodes act as proximity sensors. The system transmits a signal on a remote security station, when the electrodes are approached (at the distance up to 15 mm) and simultaneously stuns the offender. The influence is both safe and effective.

If the high-voltage circuit is broken or if there is no high voltage in the circuit, the according signals are sent to the station as well.



TECHNICAL CHARACTERISTICS

- Dimensions, not more than, mm	260 x 170 x 80
- Weight of the system, kg	1,5 ± 0,1
- Power supply, V	220V 50 Hz/ 12 V
- Voltage of the discharged, generated by the system, kV	from 20 to 45
- Power of influence for 1 kOhm,	from 1 to 2
- Operational in the range of temperatures from -15 °C to +50 °C and relative humidity up to 98% at the temperature +25 °C	

ELEMENTS OF THE SYSTEM

Electroshock system for perimeter protection "KRAPIVA" includes:

1. Electrified fence

Electrified barrier is an engineering barrier with function of non-lethal electroshock influence, which includes:

- Engineering barriers of any type (mesh, concrete, brick), including the existing barrier of the object.
- A set of specialized isolators allowing compact installation of electrified elements.
- A system of permanent stretched electrified wire.
- Electrified elements in the form of rows of cold-rolled galvanized wire.

2. System "KRAPIVA".

Installed in a case. Electrified electrode and working electrode are connected to the metal sections of the fence. The wires are connected to the case. The working electrode can be earthed by earthing the metal sections of the fence. The use of an earthed working electrode and the metal sections of the fence will allow to simplify the connection of the barriers of big length.

3. Case for the system.

The case is made from sheet steel and has dimensions of 600x1000x250 mm.



Model of the system "KRAPIVA" installed in the testing ground

"FAUST-TERMINAL"

ATM PROTECTION

APPLICATION SPECIFICS

PURPOSE

Faust-Terminal is a specialised system that prevents the theft of money from ATMs and the theft of ATMs themselves.

The system resists the following theft attempts:

- thermal and mechanical cutting
- breaking open
- attempt to open an ATM with a skeleton key
- blowing the ATM up
- theft (unsanctioned transportation attempt).

The system uses the following devices to resist the crime:

* Siren with a noise level of 120 dB. At a distance of 1 meter the noise level is higher than the pain threshold.

* White smoke cartridge. White smoke fills the space (up to 60 m) around the ATM. The smoke is safe for people and doesn't leave marks on the surfaces after dissipation. It can be noticed from big distances and attracts attention to the crime. Smoke won't let the criminal continue the theft, will force him to leave the crime scene.



Additional options:

- Sending the signal about the theft attempt to the security service;
- Individual settings of the time parameters;
- Manual start of the defense algorithm;
- Special paint can be used to mark the cash during the attempted theft;
- The algorithm can be stopped using a proxy card;
- The size of the unit can be changed to fit different ATM types.

CONSTRUCTION SPECIFICS

The case is made from steel, which protects the system from damage. A battery is installed inside the case, which provides autonomous operation of the system if the main power supply gets disconnected or turned off. The system is equipped with a tilt and hit sensor.

ADVANTAGES OF FAUST-TERMINAL

The system has the following features and advantages:

- Easy installation. The system is installed inside the ATM. The main unit can be installed in all common ATM types directly on the case or on a bracket. Ease of installation is also provided by the prior installation of the main elements of the system in its case. Convenience and speed of connections of external elements is provided by the detachable connectors and prepared wires of fixed length. Time of installation of the system in the ATM is no more than 15 minutes.
- Security mode is activated and deactivated by using coded keys – RFID-cards. The user can save and delete cards from the system with a master card.
- The system has tilt sensors that detect an angle of more than 30° and a sensor for detection of the opening or breaking doors, sensor for detection of separation from the floor (optional). The system is protected from false positives, including attacks on the ATM body.
- Powerful 120 dB siren, installed in the main unit.
- It is possible to install additional sirens.
- The system FAUST-TERMINAL uses additional means for crime resistance - smoke cartridges. Smoke fills in the room with an ATM, makes it harder to navigate the room, makes it impossible to take active actions with an ATM, significantly complicates the transportation of an ATM. Included in delivery – 2 cartridges.
- Power supply 220V, insensitivity to significant voltage drops.
- Built-in battery to ensure Autonomous operation, battery life in the protection mode-at least 1 day (possibly up to 7-10 days, depending on the required functions). Operating time in "alarm" mode is not less than 4 hours.
- Minimum occupied space inside the ATM.
- The system can send signals to the remote control station, or send SMS messages if a GPS module is installed.
- Constructed and produced in Russia. If necessary, quick changes and additions to the design can be made.
- Warranty period -12 months.



TECHNICAL CHARACTERISTICS

- Operating time in the security mode from the built-in battery, at least, h	48
- Operating time in alarm mode from the built-in battery, at least, h	3
- Supply voltage of the main unit,	220V or 12V
- Operating temperatures range	(-40°C) – (+85°C)
- Overall dimensions of the main unit, (possible options of size for different types of ATMs), mm	338x110x46
- Sound pressure level of the siren, dB	118
- Smoke generation time, no more, sec.	15
- Smoke volume, not less than, m3	60
- Durability, years	5

