

ZAO «OBERON-ALPHA»

DEVELOPMENT AND
PRODUCTION
OF POLICE EQUIPMENT



OBERON-ALPHA

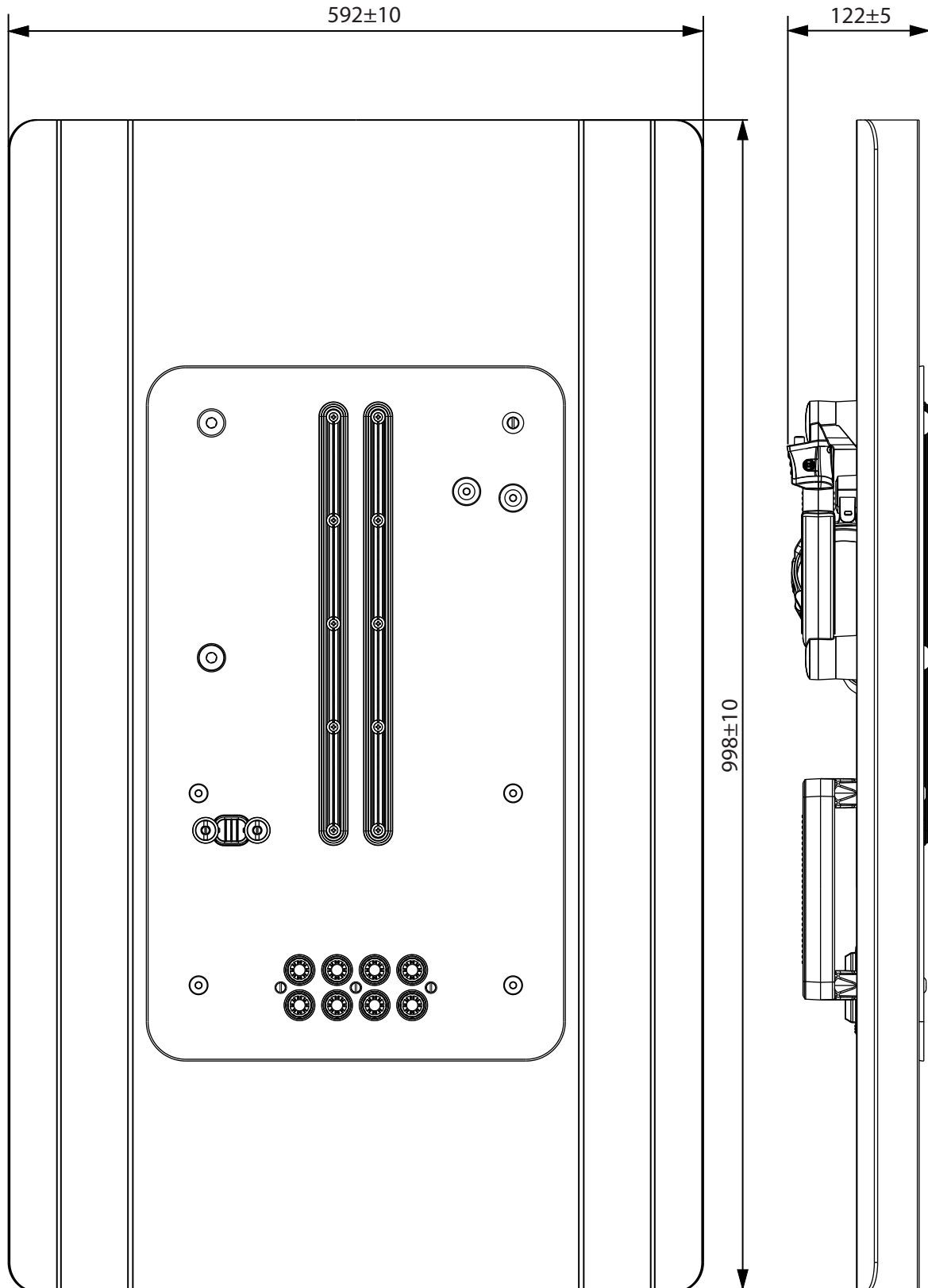


ELECTROSHOCK SHIELD
«STENA»

2022
Moscow, Russia

ELECTROSHOCK SHIELD «STENA»

TECHNICAL DRAWING



PURPOSE

Electroshock shield «STENA» ALSHP.010415.024 TU is designed for:

- protection of law enforcement officers during mass riots from blows with sticks, metal rods and thrown objects (stones, bricks, bottles, etc.);
- pushing back, controlling the behavior of the crowd and neutralizing aggressively acting offenders during mass riots, etc.;
- preventive psychological impact on an offender or a group of offenders;
- centralized management and control of the use of special equipment.

Equipping shockproof shields with an electroshock device will increase the effectiveness of pushing back and controlling crowd behavior, will allow for timely suppression of aggression at mass events. The shield provides shockproof protection for a law enforcement officer in case of illegal actions of an offender. The use of an electroshock discharger, flashbang cartridges and a powerful LED flashlight increases the safety of the police personnel.

Electroshock shield «STENA» can be used as an integral part of mobile security barriers, objects and other devices for transferring electroshock influence on a live target.



INTEGRATED MODULES

The shield has a modular structure, its functionality can be adjusted in accordance with customer requirements.

Standard integrated modules:

- Electroshock module;
- Flashbang module;
- Light module.

Additionally, the following modules can be integrate:

- Telemetry module;
- Video registration module.

«ELECTROSHOCK» MODULE

The module operates in manual (switching on with a button) and automatic mode (operation in discharge-pause mode for 30 seconds) and can be connected to mobile high-voltage barriers.

The combat electrodes are arranged in two vertical rows. The absence of electrodes at the perimeter of the shield excludes the unintentional electroshock influence on the fellow police officers.

«FLASHBANG» MODULE

To provide a warning effect on the offender or a group of offenders, the shield is equipped with a replaceable magazine with 8 flashbang signal cartridges (PSSH) ALSP.040922.056 TU. After using all the cartridges, the magazine can be quickly replaced.

PSSS Initiation Modes:

- initiation of 1 PSSH cartridge, indicated on the control panel as "1x1";
- initiation of 2 PSSH cartridges, indicated on the control panel as "1x2".



The selection of the initiation mode of the PSSH cartridges is done using a selector on the control panel of the shield. Initiation of the PSSH cartridges is carried out by pressing the button on the handle.

«LIGHT» MODULE

The shield is equipped with powerful LED lights. The bright light has a blinding effect on offenders. Operating mode is set using the selector on the control panel.

Operating modes:

- 100% power spotlight;
- 50% power spotlight;
- Strobe light.

INTEGRATED MODULES

The system can be equipped with the following modules according to customer's demand: Telemetry, Video recording.

«VIDEO RECORDING» MODULE

A video recording device designed to store video information about the use of the shield to create an evidence base on the legality of its deployment. The device has a non-volatile memory unit designed to store recorded information.

«TELEMETRY» MODULE

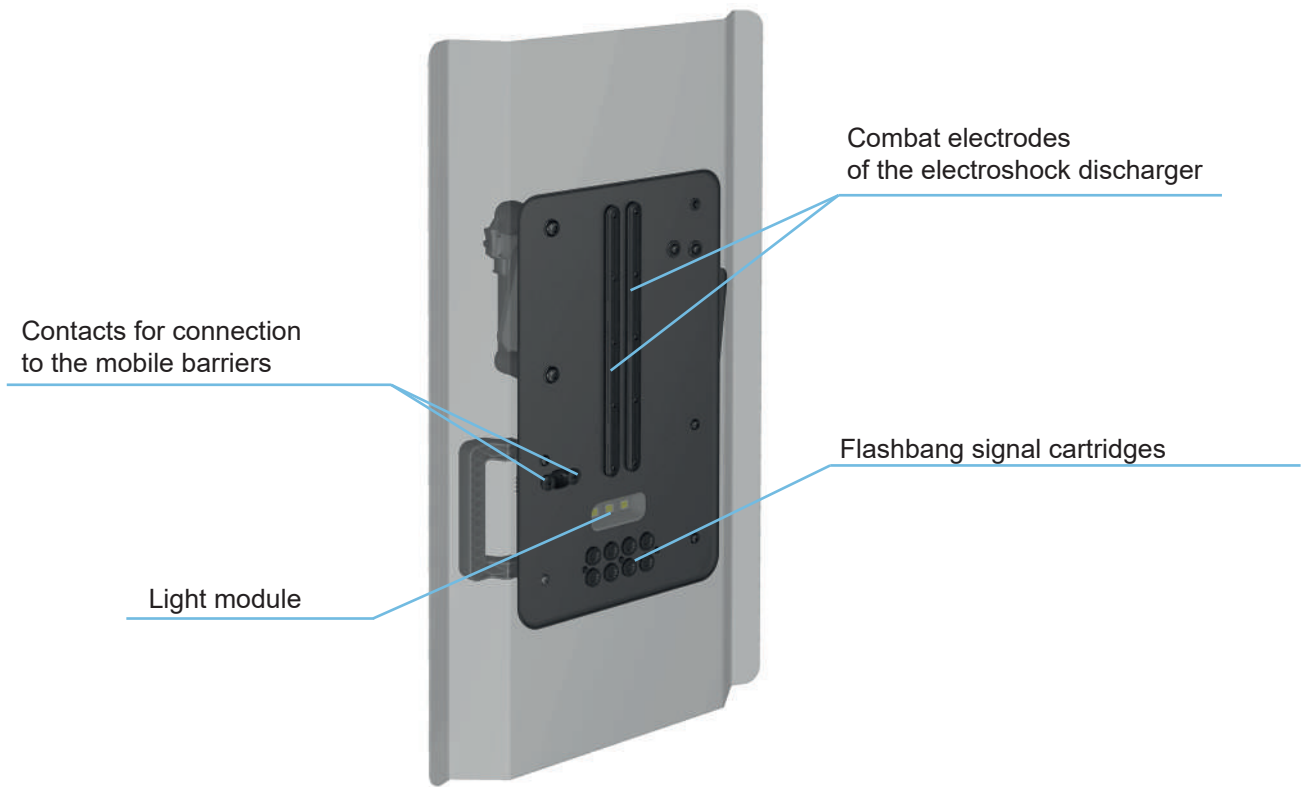
The shield can be additionally equipped with a telemetry system and a GPS/GLONASS communication module, which allow to:

- integrate the shield into the navigation and monitoring system;
- receive and store operation log data, statistical data, etc.;
- transfer the stored data to an external information device;
- remotely manage modules, configure and adjust parameters, block system resources from the monitoring center;
- monitor the use of an electric shock arrester, monitor the intensity of application.
- when conducting special operations, redistribute forces and means, call for reinforcements, have data for the legal justification of the use of weapons.



ELECTROSHOCK SHIELD «STENA»

Configuration of the front side



Control elements



On the control panel there are:

- rotary selectors with indicators to choose the operation modes of:
 - electroshock module;
 - flashbang module;
 - light module.
- power buttons:
 - system (fuse with battery level indicator);
 - light module (with indicator);
 - mobile barrier mode (with indicator).

The buttons for switching on the electroshock discharger and initiating flashbang signal cartridges are located on the handle. The buttons are pushed with the hand holding the shield.

ELECTROSHOCK SHIELD «STENA»

ELECTROSHOCK FUNCTIONS OF THE SHIELD

Electric current is transmitted to the object through narrow metal plates located vertically in the upper half of the shield. The distance between the plates corresponds to GOST R 50940-96 and is 40 mm.

The electroshock discharger can operate in manual start mode, in automatic mode or in "Fence" (barrier) mode.



When the control button on the handle is pressed in the manual mode, a visible steady electric discharge runs between the control electrodes of the shield. When the control button is released, the discharge stops.

The automatic activation of the electroshock discharger is indicated by "AUTO" on the control panel. Pressing the discharge button on the handle in this mode starts a cycle of continuous operation of the electroshock discharger in the Discharge-Pause mode (1sec - 1sec) for 30 seconds.

The "Fence" mode can be effectively used as a psychological influence on aggressive offenders. In this mode, a high-voltage discharge will appear between the control electrodes of the electroshock discharger. High voltage will also be on the combat electrodes at this time, and when the object approaches the combat electrodes, the discharge will affect him too.

Electroshock discharger in the "Fence" mode works continuously in the Discharge-Pause mode. In this case, the duration of the discharge can be changed using the button on the control panel.

In the "AUTO" and "Fence" modes, pressing the discharge power button on the upper handle turns the electroshock discharger on.

ELECTROSHOCK SHIELD «STENA»

CONSTRUCTION SPECIFICS

- Electroshock shield consists of a shock-resistant transparent polycarbonate protective panel, which provides optimal visibility, effectively protects against blows with cold weapons, improvised street weapons.

- The panel has a shield chassis with a seal protecting the space between the chassis and the shield panel from moisture and dust.

- A cushion is installed on the chassis, damping blows and ensuring safety from injuries - protecting the shoulders and forearms of fighters - under the onslaught of the crowd during riots. An adjustable belt is used to fix the shield on the police officer's arm.



- The product is held using the handle. The handle has a button for manual activation of the electroshock discharger and a button for initiating the PSSH cartridges.

- The control system is placed on the chassis, with a lower handle mounted on it, which allows additional force to be applied to the shield.

- The modular design allows to quickly replace spent cartridge magazines and discharged batteries for recharging them.

- Ease of operation: functionality of the the control panel is configured and controlled via switches and rotary selectors located on the system unit of the panel.

- The control system with handles structurally form a single unit that can be reinstalled on a new polycarbonate panel.

FLASHBANG MODULE

Flashbang signal cartridges (PSSH) have a warning effect on aggressive protesters. The cartridges are filled with a flashbang mixture, which, when initiated, creates a loud sound and a bright flash.

The magazine is equipped with 8 PSSH cartridges. The PSSH magazine is installed on the shield using a rotary locking handle. The magazine with the used flashbang signal cartridges can be quickly replaced with a new one if necessary.



ADDITIONAL FUNCTIONS

- 1) The electroshock shield «STENA» can be equipped with a GLONASS/GPS system for operational control of mobile police and riot squads. Data on the operation of the shields and the location of the fighters are transmitted to the information and analytical center. This increases the accuracy of the assessment of the operational situation, the effectiveness of managerial decision-making and control of their execution.
- 2) Built-in video surveillance system.
- 3) The possibility of integrating the shield into mobile barrier systems.
- 4) The possibility of installing thrust brackets for the construction of battle formations.

STANDARD SET

The standard set includes:

- Electroshock shield «STENA» ALSHP.010415.024 TU - 1 unit;
- Charger S-11.1-5000 - 1 pcs.;
- Rechargeable battery 11.1V / 5Ah - 1 pc.;
- Magazine for flashbang signal cartridges - 1 pc.;
- Flashbang signal cartridges ALSHP.040922.056 TU - 8pcs;
- Packaging (cardboard transport box);
- Operating manual (passport) - 1 pc.



ADDITIONAL PRODUCTS

Electroshock shield «STENA» can be additionally equipped with:

- Transport cover;
- Replaceable polycarbonate panel (replacement is carried out by an authorized service center);
- A set of wires for connecting the shield to mobile barriers;
- Additional rechargeable battery 11.1V / 5Ah;
- Additional flashbang unit;
- Flashbang signal cartridges.

ELECTROSHOCK SHIELD «STENA»

TECHNICAL CHARACTERISTICS

| | |
|--|--|
| Overall dimensions of the shield, cm | 59.2 x 99.8 x 12.2 |
| Weight, kg | 4,8 |
| The material of the protective panel of the shield | polycarbonate 3 mm |
| Battery | removable rechargeable LiPOL battery 11.1V / 5 Ah |
| Charger model | S-11.1-5000 |
| Retains protective properties in the temperature range from - 20 ° C to +50 ° C in an air atmosphere with increased humidity of 98% at a temperature of 25 ° C | |
| Service life, months | 36 |
| The possibility and operating conditions of the product after this period can be determined by a joint decision of the manufacturer and the customer. | |

Electroshock module

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|--|--------------------------------------|
| Output voltage on the combat electrodes, kV | 110-130 |
| Impact power, W | 7-10 |
| The distance between the combat electrodes, mm | 40 |
| Operating mode | manual/ automatic/ "Fence" |
| Operation of the electroshock discharger in automatic mode | 1 s. discharge/1 s. pause for 30s. |
| Operation of the electroshock discharger in the "Fence" mode | continuously in discharge-pause mode |

Flashbang module

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|---|-----------|
| Removable magazine of PSSH cartridges, pcs. | 1 |
| Cartridge PSSH, pcs | 8 |
| Operating mode | 1x1 / 1x2 |

Light module

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| Mode of operation of the built-in LED flashlight | spotlight 100% power/ spotlight 50% power/ strobe |
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Variants of execution

Version 1 (basic): electroshock, light and flashbang module

Version 2: electroshock, light, flashbang module, video recording module, the possibility to connect mobile security barriers

Version 3: electroshock, light, flashbang module, video recording module, telemetry, the ability to connect mobile security barriers



ABOUT THE COMPANY

ZAO OBERON-ALPHA is a licensed developer and producer of weapons.

The company specializes in development, production and sale of class A special equipment for the police, as well as civilian electric self-defense weapons - powerful Class 1 electroshock devices.

OBERON-ALPHA provides:

- Development and production of Class A electroshock devices for police and legal entities with special statutory tasks.
- Development of police special equipment (including made to order).
- Development and production of civilian stun guns.
- Development and installation of protective high-voltage barriers.
- Production of colour smoke cartridges.
- Engineering services and design of devices of any complexity to order.

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