Grupa City Security 7

NEW GENERATION
RAPID DEPLOYABLE
SECURITY ALARM SYSTEM
ЩИТ
Marka CERBER

CIVIL APPLICATIONS

Grupa City Security 7

- **Monitoring of moving vehicles and people:**
  - **in areas of environmental disasters with radioactive or chemical contamination;**
  - **on access roads and paths to important state facilities.**
- **Monitoring of protected areas from unauthorized deforestation, fishing, hunting and other economic activities.**
- **Protection of:**
  - **industrial facilities, including nuclear, thermal and water power stations;**
  - **infrastructure facilities, including power lines, oil and gas pipelines;**
  - **temporary deployment sites for road and construction equipment, aviation.**

MILITARY APPLICATIONS

Grupa City Security 7

- **Monitoring of the movement of technics and subdivisions on:**
  - **the line of military contact, especially in the neutral zone;**
  - **the access roads and trails to the battlefield.**
- **Monitoring of the movement of sabotage, intelligence and terrorist groups in special operations areas.**
- **Detection of low flying objects.**
- **State border protection.**
- **Protection of:**
  - **important military facilities, bases,**
  - **roadblocks;**
  - **command and control posts;**
  - **RRS positions, SAM systems and other; warehouses with ammo, weapons and military equipment…**

PURPOSE OF THE SYSTEM

Grupa City Security 7

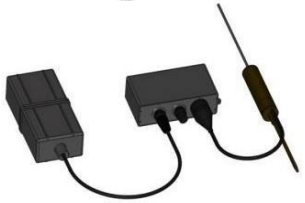
1. **The system is an autonomous, fast-deployable, small-sized means of detection and recognition of moving objects of the classes "Human", "Vehicle", "Low flying object".**

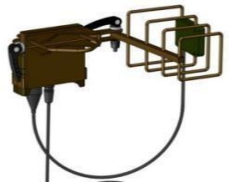
2. **The System can be made in wireless or wired versions or combinations thereof.**

3. **The System is designed for round-the-clock monitoring of extended and / or localized segments of terrain, borders or perimeters of objects, routes of approach, for the purpose of temporary or long-term protection of remote territories by transmitting alarms, seismic and photographic information to a control station.**

SYSTEM COMPONENTS

Grupa City Security 7





CONTROL STATION COMPONENTS:

1. Stationary transmit-recieving device (STD) with antenna.
2. PC in conventional or protected design.

FIELD COMPONENTS:

1. Mobile control device (MCD).
2. Combined seismic sensor (CSS), including pluggable break wire lines or infrared sensors up to 2 pcs. operating in parallel.
3. Combined photo camera device (CPD) with IR illumination, including pluggable break wires or infrared sensors up to 2 pcs. operating in parallel.
4. Repeater (any network device can be used), including pluggable break wires or infrared sensors up to 2 pcs. operating in parallel.

TOTAL: up to 40 ID or 116 devices in the network.

TECHNICAL SPECIFICATIONS
Combined seismic sensor (CSS)

Grupa City Security 7

Range of detection and classification of: “Human“ class objects, up to, m “Vehicle“ class objects, up to, m	100 300
Probability of correct detection	0,98
Number of recognized classes (“Human“ , “Vehicle“ , “LFO”)	3
Data transmission range on the radio channel within the line-of-sight: between two CSS with whip short antennas up to, m between two CSS with whip high antennas up to, m between two CSS with cable antennas up to, m between CSS and STD with frame antennas up to, m between Repeater and STD with frame antennas up to, m	1 500 3 000 5 000 10 000 15 000

TECHNICAL SPECIFICATIONS
Combined seismic sensor

Grupa City Security 7

Operating frequency range, MHz	433, 868
Length of the downloadable seismogram, s: at any time; by alarm	5 1,6
Type of battery (non-rechargeable)	Li-SOCl2
Type of rechargeable battery	Li-Ion, LI-Po
Battery life of the sensor, up to, months	12

TECHNICAL SPECIFICATIONS
Mobile control device (MCD)

Grupa City Security 7

MCD to CSS data transmission range on the radio channel within the line-of-sight : without additional antennas up to, m with additional antennas, m	500 5 000 - 10 000
Time of continuous operation of MCD without recharging or replacing battery (in economy mode) up to, h	72

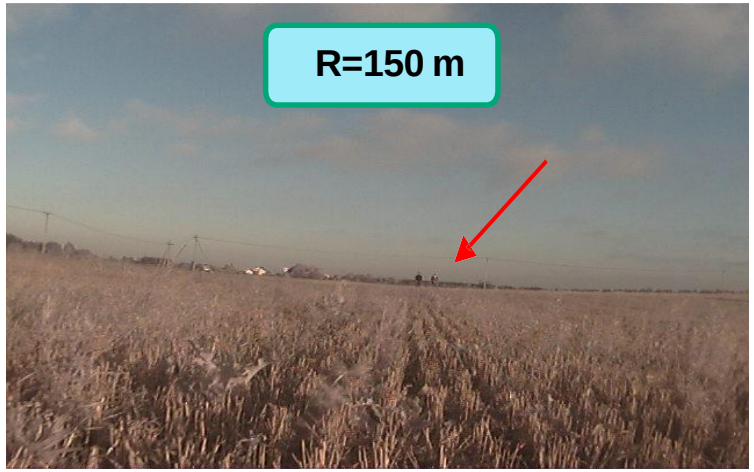
TECHNICAL SPECIFICATIONS
Combined photo device (CPD)

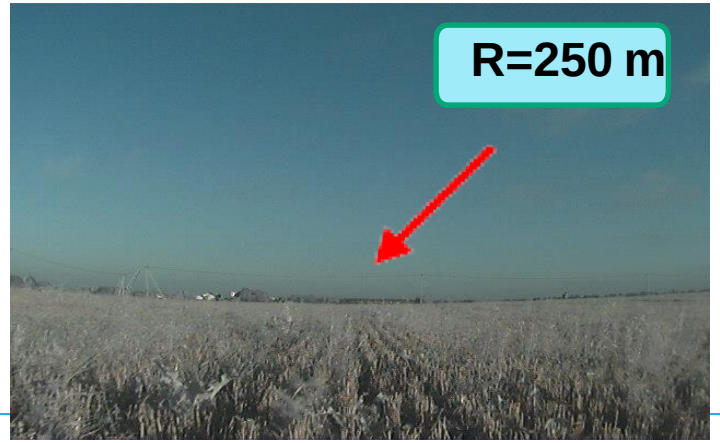
Grupa City Security 7

Size of the transmitted photo image, pixels: hVGA; qVGA; VGA	 160x120 320x240 640x480
Time of a photo image downloading, s	15, 45, 150
Automatic IR illumination at night	+
Type of rechargeable batteries	Li-Ion
Operation time from one power source without recharging, up to, days	60
Transmission range of the photo image, up to, km	6
Range of visibility of the person up to, m: in the afternoon; at night	 100 30

CPD PHOTOS DAY MODE (REAL EXAMPLES)

Grupa City Security 7





CPD PHOTOS DAY MODE (REAL EXAMPLES)

Grupa City Security 7

160×120

320×240

640×480

CPD PHOTOS DAY MODE (REAL EXAMPLES)

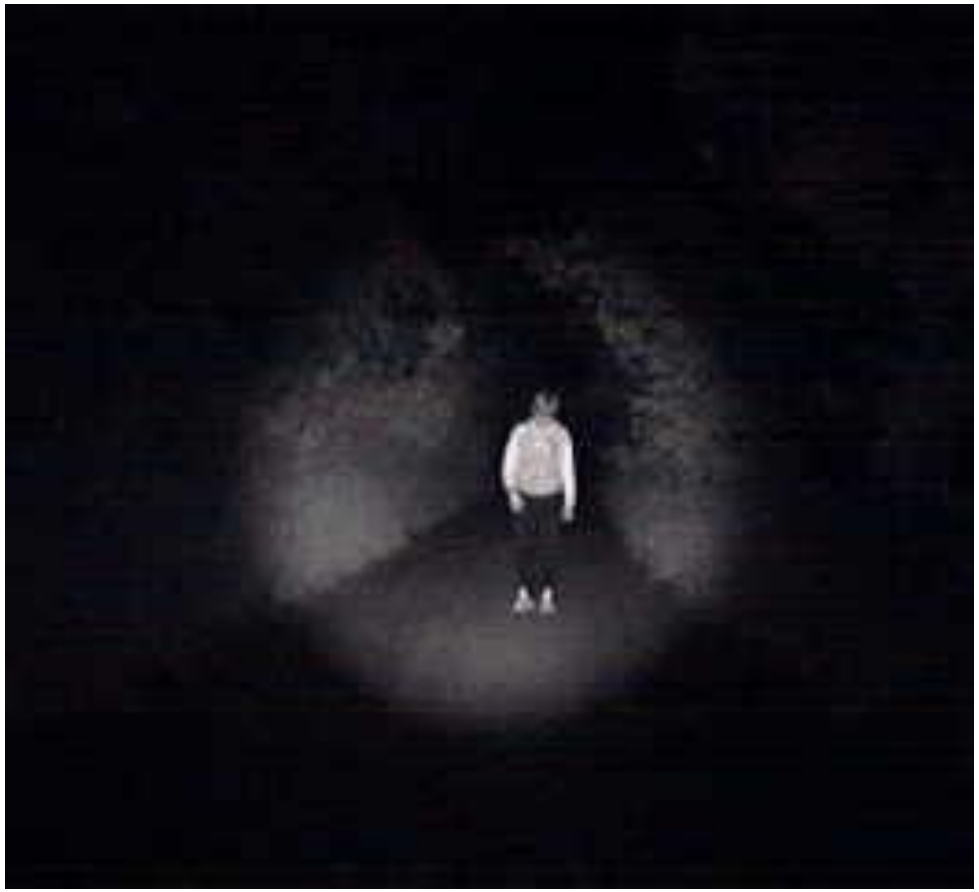
Grupa City Security 7

CPD PHOTOS DAY MODE (REAL EXAMPLES)

Grupa City Security 7

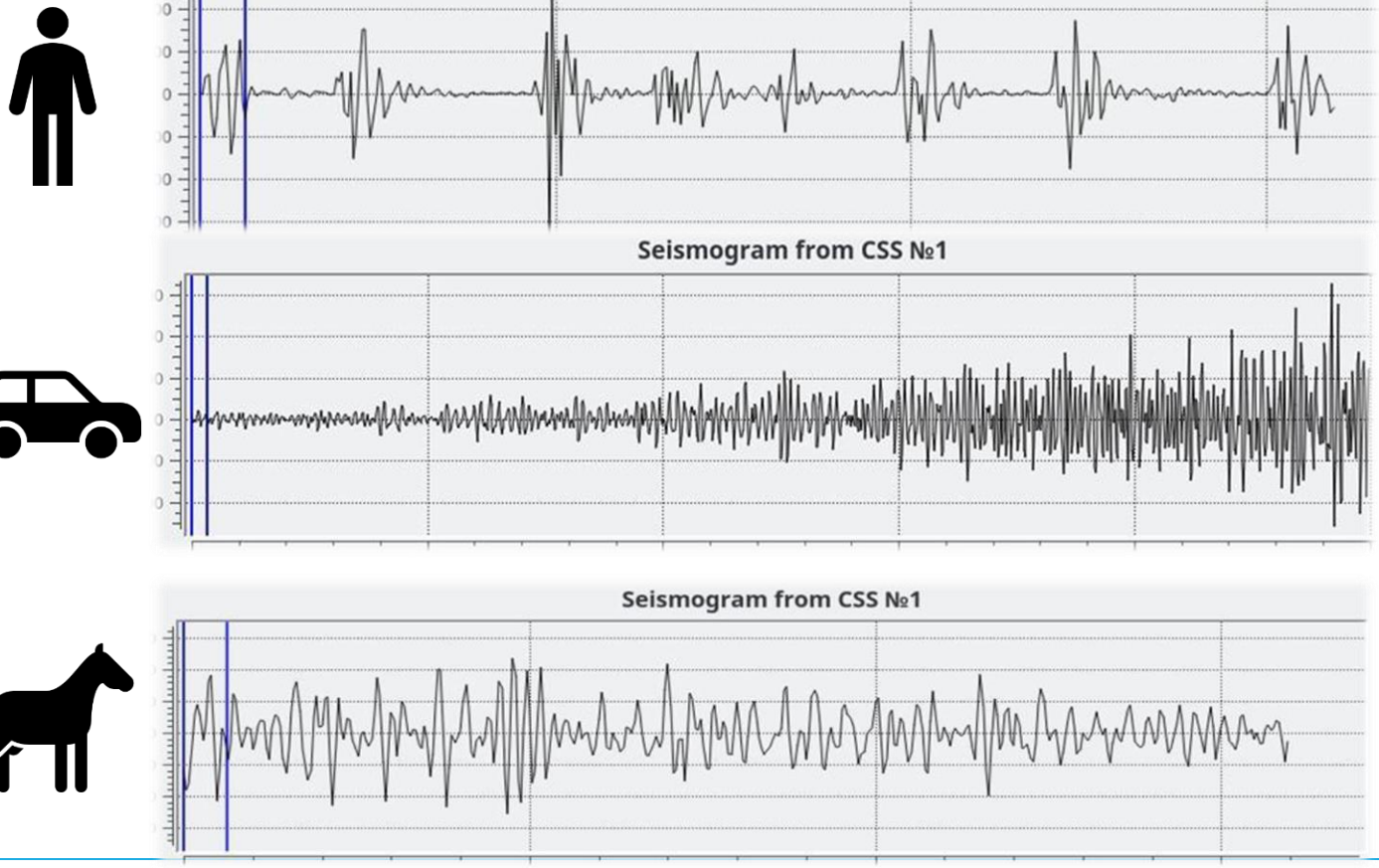
CPD PHOTOS NIGHT MODE (REAL EXAMPLES)

Grupa City Security 7



Grupa City Security 7

SEISMOGRAMS (REAL EXAMPLES)

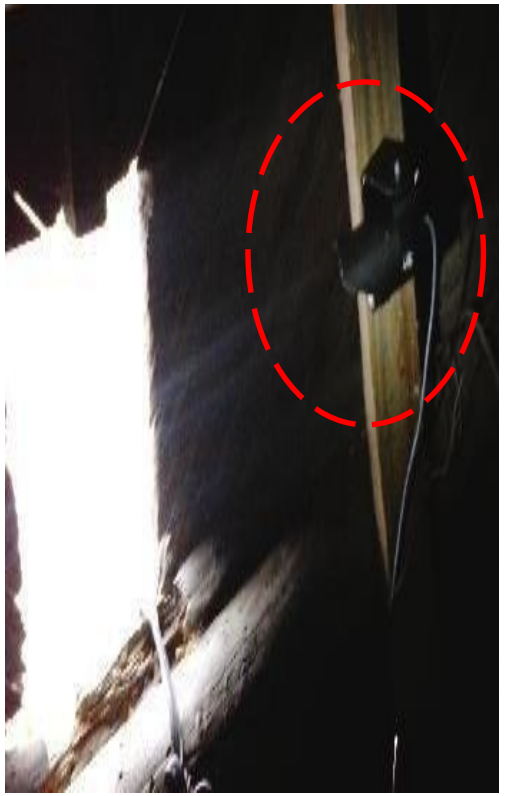


APPLICATION IN DIFFERENT CONDITIONS (REAL EXAMPLES)

Grupa City Security 7

APPLICATION IN DIFFERENT CONDITIONS (REAL EXAMPLES)

Grupa City Security 7



APPLICATION IN DIFFERENT CONDITIONS (REAL EXAMPLES)

Grupa City Security 7

ADVANTAGES

Grupa City Security 7

1. Reliable functioning in difficult interference conditions:
   a) in bad weather:
   b) in close proximity to: railways and highways high noise industrial facilities
   c) during the use of artillery and aviation: separate guns shots separate ruptures of shells and bombs

2. Customer pre-selected operating frequency bands of the system (433 or 868 MHz).

3. Functioning of the system via radio, wired channels, or a combination thereof.

4. Single data exchange channel (transmission and receipt of alarm information, control commands, information packets and media - photographs and seismograms) without additional equipment.

5. Possibility of integration with technical means of other manufacturers, as well as integration into existing security systems of the Customer.