



Central monitoring station **GSM/IP**

PCN2P-GSM-Ethernet

1. Product designation

The GSM/IP central monitoring station (hereinafter referred to as device) is designed for receiving messages through digital (CSD) and voice (DTMF) channels of the GSM network from object panels of different manufactures via Ademco ContactID protocol and transferring them to the monitoring software through TCP/IP.

2. Manufacturer

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3. Package Contents

The GSM/IP central monitoring station	1 pc
MicroSD memory card with operating system	1 pc
Power cable 220V	1 pc
Terminal block for external power source, 12V	1 pc
Antenna SMA	1 pc
Data sheet	1 pc
Package	1 pc

4. Additional equipment

To ensure uninterrupted device operation when power supply is off the following additional equipment are available for purchase:

1. Backup power supply, 12V, 1.5A;
2. Impulse backup power supply, 12V, 5A;
3. Impulse backup power supply, 12V, 7A.

5. Technical Specifications

Option	Value
Communication line	GSM network
GSM communication channel frequency, MHz	850/900/1800/1900
Radiated power, W	2 (at frequency 850/900 MHz)
	1 (at frequency 1800/1900 MHz)
Transmission type through GSM network	Digital (CSD) Voice (DTMF)
Data exchange protocol for security panels	Ademco ContactID
Data exchange protocol for monitoring software server	Surgard
Object security devices	Ritm, ISECO, Ademco, Paradox, Visonic and other supported Ademco ContactID
Monitoring software server connection method	TCP/IP (Ethernet)
VPN ¹	+
Memory	30 events
Main power source voltage, V	220
Backup power source voltage, V	12±2
Energy consumption, A	max 0.15 in standby mode
	max 1 in receipt mode
Dimensions, mm	47×150×150
Weight, g	350
Operating temperature range, °C	-25...+50

¹ Available when using the file "vpn.json" (see section 8).

6. Designation of Elements

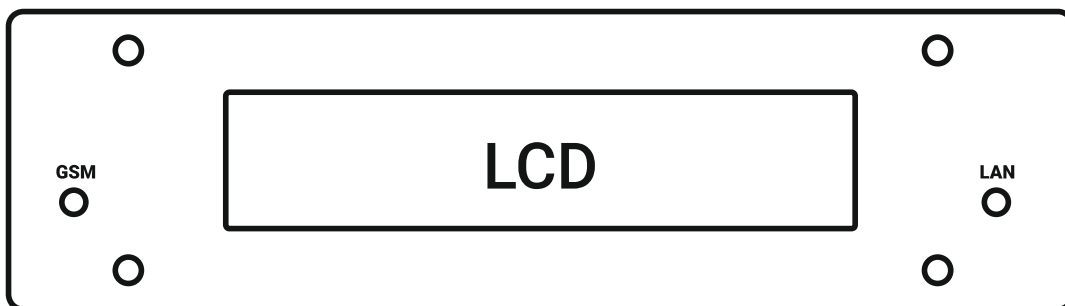


Figure 1 – Device front panel

Element	Designation
GSM	Device network registration LED indicator
LCD	LCD
LAN	Ethernet connection LED indicator

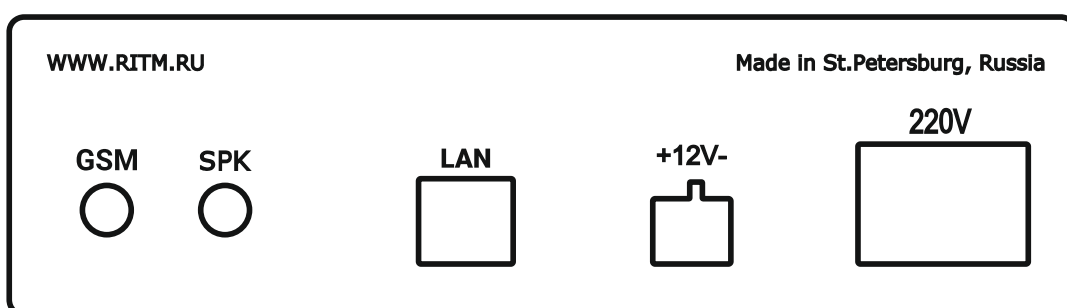


Figure 2 – Device back panel

Element	Designation
GSM	SMA connector for GSM antenna
SPK	Connector for speakers
LAN	Connector for Ethernet cable
+12V-	Connector for external power, 12V
220V	Connector for mains power, 220V, 50Hz

7. Visual Indication

GSM indicator state	Mode
1 flash per sec	Device modem not registered the network
1 flash per 3 sec	The device modem registered to the network
Off	The device modem is switched off

LAN indicator state	Mode
Off	No connection on port 10000
Always on	Established connection on port 10000

The LCD shows all details required for device operation.

8. Getting Ready for Operation

1. Turn off the PIN request for the SIM-card. Install the SIM-card into the phone and cancel PIN request in the phone menu.
2. Turn off device power.
3. Open the device enclosure.
4. Insert the SIM card into the holder.

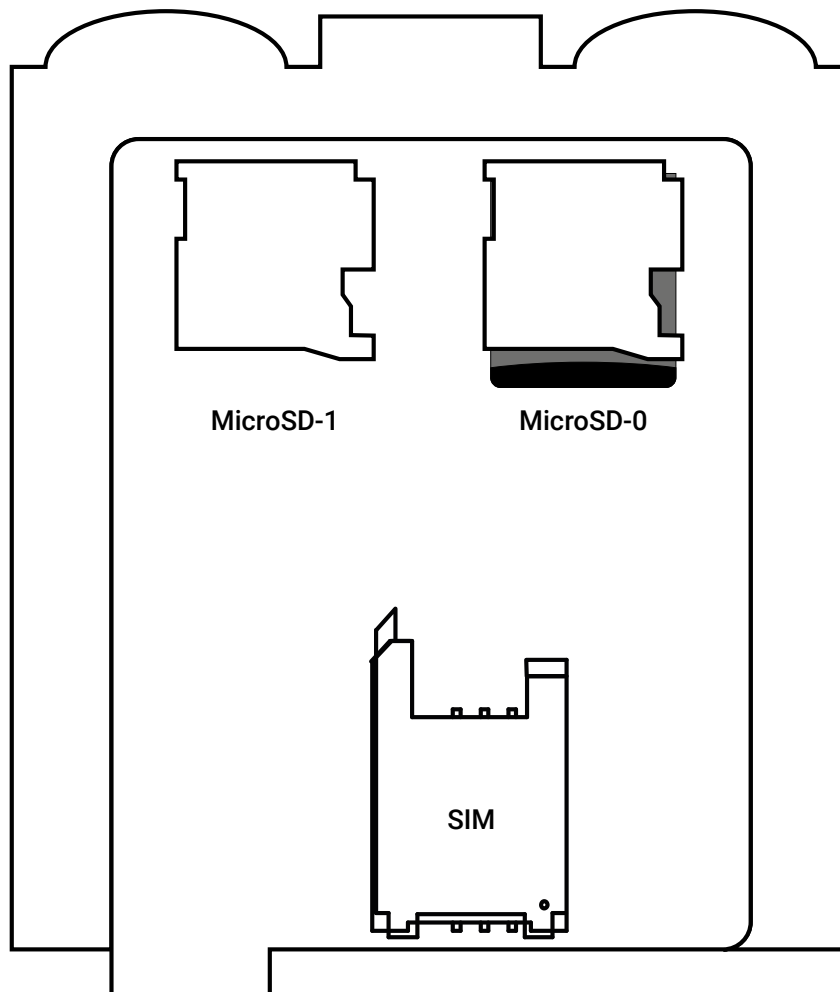


Figure 3 – Elements under the cover

Element	Designation
SIM	SIM card holder.
MicroSD-0	OS MicroSD holder. Attention! Do not remove the card from the holder and do not write anything on it!
MicroSD-1	MicroSD holder for configure files.

5. Close the device enclosure.
6. Connect the GSM antenna to the GSM connector.
7. Connect the device to the router or to the device with DHCP service (the device gets its IP-address from DHCP service or uses the settings specified in the file "network.json"²).
8. Install the device in the preferred location. Do not place the device in the vicinity of EMI sources, large metal objects and structures, power cable runs. The device installation location should have high quality GSM signal.

² See section 10 "Network settings manual configuring".

9. Connect the mains power cable to the 220V connector and a 12V backup power source to the +12V- connector.



When the main power (220V) fails the device automatically switches to the backup power supply (12V).

10. Power on.
11. To work with RITM-Link application add incoming stream through TCP/IP communication channel:
 - Specify "Input TCP Surgard (Client)" as the protocol.
 - Specify the IP-address of the monitoring station obtained from DHCP or specified in the file "network.json" and the port number – 10000.



The monitoring station supports only a 4-digit number transmitted by the device in the Ademco ContactID parcel as an object device ID.

12. For the device operation in the VPN network, you must place the file "vpn.json"³ with the correct connection settings to an external storage device installed in a slot MicroSD-1 (see Fig. 3).

9. Device Operation Algorithm

1. Registration at the GSM network.
2. Switching to the waiting mode of incoming calls from security panels.
3. Upon incoming call showing the caller number (SIM-card) on the display.
4. Alternative output of event digital codes to the display.
5. Event details transferring through TCP/IP connection if the connection on the port 10000 is active.
6. Disconnecting the station from the panel and switching to the section 12.2.

10. Network Settings Manual Configuring

To configure the network settings (IP address, gateway, mask, DNS) you must place the file "network.json"⁴ to an external storage device installed in a slot MicroSD-1 (see Fig. 3). Before doing this, open the file with any text editor (e.g., Notepad) and enter the parameters in accordance with the configuration of your network.

If necessary, refine the network settings from your system administrator.

The "network.json" file is described in section 11.

³ <https://goo.gl/nUfh7B>

⁴ <https://goo.gl/gFhiwJ>

11. The "network.json" Structure

```
{
  "eth0":{
    "ip" : "192.168.13.91",
    "mask" : "255.255.255.0",
    "gate" : "192.168.13.1",
    "dns" : "8.8.8.8 8.8.4.4"
  }
}
```

The "network.json" file contains general parameters required for connecting the device to the local network:

Option	Value
ip	The device IP address
mask	The subnet mask
gate	The default gateway
dns	The DNS addresses (entered using "space")

12. Maintenance and Safety Measures

Personnel with the appropriate qualifications should carry out maintenance and settings of the device.

13. Transportation and Storage

Transportation of the device should be in the package and closed vehicles.

Storage and transport conditions must comply with storage conditions EU Directives: 2014/35/EU and 2014/30/EU. Storage premises should be free of current-conducting dust, acid and alkaline fumes, corrosive gases and gases harmful to insulation.

14. Manufacturer's Warranties

The manufacturer guarantees that the device complies to requirements of the technical specifications, provided the client ensures compliances to conditions of transportation, storage, installation and operation.

Although **the warranty period is 12 months** from the commissioning date, it may not exceed 18 months from the production date.

The warranty storage period is 6 months from the production date.



Removing the SD-card with the operating system leads to early termination of the warranty!

The manufacturer reserves the right for modification of the device in any way that does not degrade its functional characteristics without prior notice.

15. Information on Claims

In case of a device failure or defect during the warranty period, please fill in a malfunction report specifying the dates of issue and commissioning of the device and nature of the defect and submit it to the manufacturer.

For Notes