

# GsmAlarm-330



The device works in conjunction with standard alarm systems and is designed for the transmission of alarm messages by GSM network.



## FEATURES

- Transmission of alarm messages to a central monitoring station by Contact ID format.
- Transmission of alarm messages to the user's mobile phone by SMS.
- 5 users are informed on the protected unit.
- 2 programmable outputs for remote control.
- Remote control by short call.
- Programmable user names and names of protected areas.
- Easy installation.





## TABLE OF CONTENTS

1. General information .....	1
1.1. Safety instruction .....	1
1.1. Package content .....	2
1.2. Operation description .....	2
2. Connection contacts .....	3
2.1. Contacts +12V and GND .....	3
2.2. Contacts DIALLER .....	3
2.3. Outputs C1 and C2 .....	3
2.4. Contacts USER and MON. ST .....	4
2.5. Contacts RESET .....	4
3. Purpose of LED's .....	5
3.1. NETWORK: indicator of GSM signal strength and GSM module operating mode .....	5
3.2. READY/IN USE: GsmAlarm-330 operating mode indicator .....	5
4. Installation .....	6
4.1. Mounting instruction and connection diagram .....	6
4.2. Preparation of the device for operation .....	7
5. Programming .....	8
5.1. User numbers programming using standard mobile telephone .....	8
5.2. User numbers programming with SMS .....	9
5.3. System settings programming .....	11
5.3.1. Zone names .....	11
5.3.2. Usernames .....	12
5.3.3. Partition names .....	13
5.3.4. CONTACT ID data decoding, additional events programming .....	14
5.3.5. Output C1, C2 operation mode and common system settings programming .....	16
5.3.5.1. Operating modes of outputs C1, C2 .....	18
5.3.5.2. Parameter F – informing of the user regarding the alarm and reaction of the system on incoming calls .....	18
5.4. SMS password change .....	19
6. Factory default settings .....	20
7. Control using DTMF and SMS commands .....	21
8. Warranty .....	22
9. Technical specifications .....	22

# 1. GENERAL INFORMATION

## 1.1 SAFETY INSTRUCTION

**Important!** Read and strictly follow all safety and operational instructions written in this user manual, before using GsmAlarm-330 in order to guarantee safety and prevent possible injuries for you and surrounding people due to the possible thermal and electrical voltage. Retain all safety and operational instructions for future reference during the whole operation lifetime of the device.

	<p>Device GsmAlarm 330 certifies the required safety level of LST EN 60950-1:2003 standard. <b>All power supplies described above and connected to device must satisfy the safety requirements of LST EN 60950 –1 standard!</b> <b><u>Indicated related devices - alarm control panel and remote control relays must meet the LST EN 60950 -1 standard requirement.</u></b></p>
	<p>Only a qualified specialist possessing strong knowledge about general safety requirements and technology of device can perform the system installation works and maintenance. In case of any failure of the device performance only a qualified specialist can eliminate it. <b>There are no parts you can change at place in the device.</b></p>
	<p><b>Before carrying out any installation or maintenance work, disconnect the entire system from the central AC electricity network and backup battery. When lightens, it is prohibited to perform any installation or service works.</b></p>
	<p><b>Additional circuit breaker</b> should be installed in AC electric power circuit to protect from over-current and short circuits</p>

Designation label/sticker of the device is on the lower side of the product. Label of software is on the front side of the product.

GsmAlarm-330 has built-in radio transmitter operating on GSM900 and GSM1800 networks.  
Do not use the device where it can cause interferences and danger.  
Do not arrange the device close to medical equipment and appliances.  
Do not use the device in explosive environment.  
Device is not resistant to moisture, chemical materials or mechanical damage.



This symbol on the product or on its packaging means that your electrical and electronic equipment should be disposed at the end of life separately from your household wastes. There are separate collection systems for recycling in EU. For more information, please contact the local authority or the dealer where you purchased the product.

## 1.2 PACKAGE CONTENT

Device GsmAlarm-330 .....	1 pcs.
GSM antenna with magnetic fix and lead cable of 2 m.....	1 pcs.
PCB mounting stands .....	4 pcs.
Description.....	1 pcs.

## 1.3 OPERATION DESCRIPTION

GsmAlarm-330 is designed for the alarm messages transmission by GSM network. GsmAlarm-330 simulates the wired phone line and works in conjunction with the standard alarm system (Paradox, DSC), supporting the Contact ID data format.

The device transmits information to a central monitoring station by Contact ID format and to the user by SMS. If the information on the protected object should be transmitted to the central monitoring station only, GsmAlarm-330 simply retranslates the outgoing data.

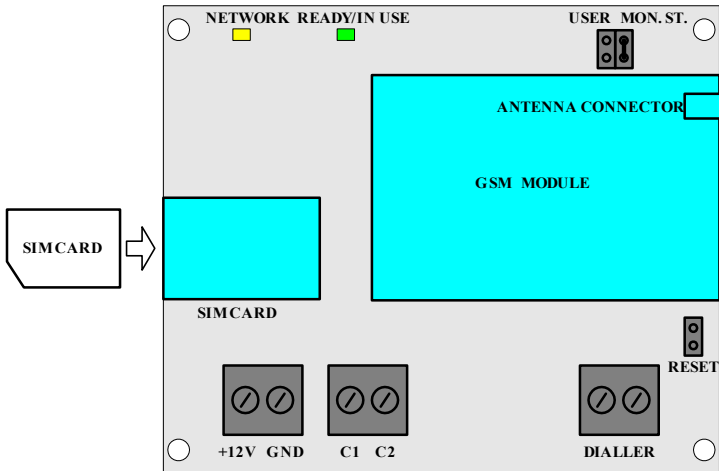
If it is necessary that the information on the protected object should be got by the user and the central monitoring station, GsmAlarm-330 decodes the Contact ID format data and sends to the user an SMS message with the description of an event (events). The device can send SMS messages to five independent users.

It is possible to use the mode when the information on the protected object is received by the user (users) only. In this case the reports are not send to the central monitoring station, the SMS messages are send to the users.

GsmAlarm-330 has two programmable outputs for remote control. Outputs can be controlled by a short call, SMS or DTMF commands from the user's phone. The programmable outputs can be used for the switching on or off of the remote storage system, switching on or off of the lighting, heating and ventilation system, for the control of the electromagnetic lock or gates.

All settings of GsmAlarm-330 device are programmable remotely, by sending a SMS message of the appropriate content.

## 2. CONNECTION CONTACTS



*GsmAlarm-330 connection contacts and LED indicators*

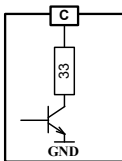
### 2.1 CONTACTS +12V and GND

Contacts +12V and GND are used for the connection of power supply.

### 2.2 CONTACTS DIALLER

Contacts DIALLER are used for the connection of the central safety communicator (see section 4.1).

### 2.3 OUTPUTS C1 and C2



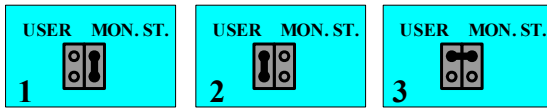
Programmable outputs C1 and C2 used for the remote control of the additional devices. Maximum switching current: 150 mA max (for one relay).

The operating modes of the outputs are described in the section 5.3.5.1.

*C1 and C2 equivalent circuit diagram*

## 2.4 CONTACTS *USER* and *MON. ST*

These contacts are intended for the setting of operating mode of GsmAlarm-330. The operating mode is selected by putting the jumper on the appropriate contacts.



Positions and operating modes of the jumper:

1. Alarm messages are transmitted only to a central monitoring station.
2. Alarm messages are transmitted only to the user (users).
3. Alarm messages are transmitted to the central monitoring station and the user.

Modes can be modified programmatically by changing the parameter of A00 (see section 5.3.5).

## 2.5 CONTACTS *RESET*

RESET contacts are used to restore factory default settings (see Section 6).

### 3. PURPOSE OF LED's

#### 3.1 NETWORK: INDICATOR OF SIGNAL STRENGTH AND GSM MODULE OPERATING MODE

Indicator state	Explanation
Out.	GSM module is not in use. No power supply or system failure.
Continuously On.	There is no GSM operator network registration. Possible causes: SIM card PIN code request is not deactivated, antenna not connected or poor network signal quality.
Is blinking much frequently than once a second.	GSM module is in use: outgoing call or SMS is being sent.
Blinks 5 times, short break after.	Very good signal.
Blinks 4 times, short break after.	Good signal.
Blinks 3 times, short break after.	Satisfactory signal.
Blinks 2 times, short break after.	Weak signal.
Blinks once, short break after.	Poor signal.

#### 3.2 READY/IN USE: GsmAlarm-330 OPERATING MODE INDICATOR

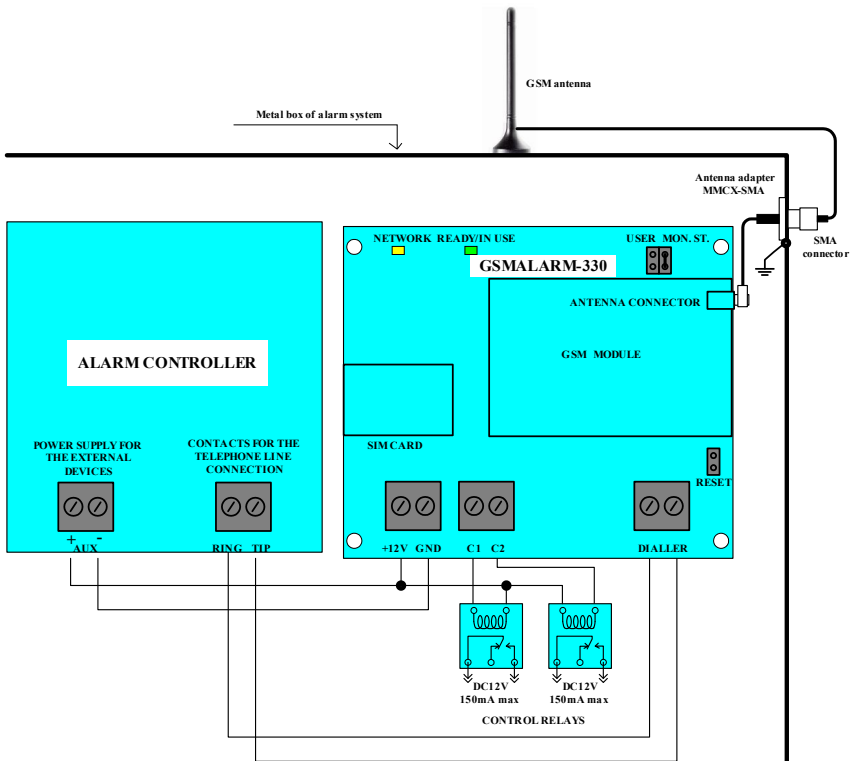
Indicator state	Explanation
Out.	No power supply or system failure.
Continuously On.	The device is ready for operation and in still mode.
On with short breaks.	Communicator of alarm system operates, the device is in the active mode.
Is blinking for a second very fast (several times per second)	SMS command is accepted or the command CONTACT ID is decoded.

## 4. INSTALLATION

### 4.1 MOUNTING INSTRUCTION AND CONNECTION DIAGRAM

Before the beginning of installation, it is necessary to disconnect the power supply of the protection system and backup battery! During the mounting and after it do not leave extraneous metal objects!

The device GsmAlarm-330 is mounted in the same box, where the alarm system is installed, near the the main alarm controller. GsmAlarm-330 board is fastened using four mounting stands found in complete with the components of the products. GSM antenna is mounted outside the box.



*GsmAlarm-330 connection diagram*

Power supply contacts of GsmAlarm-330 are connected to the AUX contacts of alarm controller. Use 2x0.75 mm<sup>2</sup> cable for power power supply connection.



Contacts DIALLER are connected to the telephone line connection contacts of the alarm controller. For connection it is recommended to use 2x0.5 mm<sup>2</sup> cable.

**ATTENTION! GsmAlarm-330 can not operate in conjunction with a wired telephone line. Wired line connection can damage the device!**

It is recommended to install remote control relays into sockets which can be easily fixed to metal housing. Operating current of relay coil can not exceed 150mA max. Relays are selected depending on desirable commutative voltage and current.

## 4.2 PREPARATION OF THE DEVICE FOR OPERATION

GsmAlarm-330 requires a SIM card, which can be purchased from the GSM service provider. It is recommended to choose GSM operator, whose services are used by the most users of the protected object. This will ensure the fastest information transmission to the user.

Before placing the SIM card into the GsmAlarm-330 socket of the card, it is necessary to disable the PIN requirement. This can be done by inserting SIM card into any standard mobile phone and referring the instruction of telephone used.

After finishing installation, place SIM card into GsmAlarm-330 SIM card holder, turn system power on, then wait till indicator *NETWORK* will start to blink periodically and indicator *READY/IN USE* will be constantly alight. In case *NETWORK* is constantly alight, check if SIM card's PIN code request is off and GSM antenna is connected. GSM signal quality can be evaluated according to the blinking frequency of *NETWORK* indicator. Connection is very good if it blinks 5 times with short break after. *NETWORK* indicator blinking fewer times, indicates weaker connection. System works in steady state if indicator blinks 3-5 times. Position of GSM antenna might be changed in order to improve signal quality.

If GsmAlarm-330 is used only for data retransmission into a central monitoring station, the jumper of mode setting should be placed in a position *MON.ST.* (See section 2.4). Additional programming is not required in this case.

If it is necessary that the information on the protected object should be received by the user (users), it is required to set operating mode of GsmAlarm-330 and to program telephone numbers of the users as well as the names of the protected zones and usernames (see section 5).

### *IMPORTANT!*

*In the alarm controller CONTACT ID data transmission format must be activated, tone dialing mode enabled and phone number of the central monitoring station programmed.*

*The number of monitoring station must be programmed, when it is not required to forward the data to the monitoring station and GsmAlarm-330 is used only for sending SMS messages. In this case the telephone number could be any. The number which consists of one digit is acceptable.*

## 5. PROGRAMMING

If GsmAlarm-330 is used only for data transmission to a central monitoring station, the additional programming is not required. If the device is used for sending SMS messages and/or for remote control, the programming is required.

GsmAlarm-330 settings can be divided into two groups. The first group - is the telephone numbers of the users that are receiving SMS messages. These numbers are stored in the SIM card memory. The numbers of the users can be programmed using any standard mobile phone (see section 5.1.) or by remote control by sending SMS message with the numbers of the users to GsmAlarm-330 (see section 5.2.).

The second group is the settings defining the system operation algorithms, names of the protected zones, usernames, and operational modes of the programmable outputs. These settings are stored in the memory block of GsmAlarm-330 device. The system settings can be programmed by sending SMS message (see section 5.3).

GsmAlarm-330 may send SMS messages to five users. The usernames in SIM card must be: *ALRNR1*, *ALRNR2*, *ALRNR3*, *ALRNR4* and *ALRNR5*. For each name the appropriate number shall be assigned.

If GsmAlarm-330 is used for the control by short call only and information about stored object does not require being send to the users, *ALRNR1* - *ALRNR5* programming is not necessary. In this case, up to 250 numbers of the users can be programmed, with the possibility to control the outputs C1 or C2 by a short call. An username can be any. The operating mode of output should be M02 or M03 (see section 5.3.5.1.)

Under the programming of users' numbers, the system settings are programmed (see section 5.3). It is recommended to change SMS password at the end of the programming (see section 5.4).

### 5.1 USER NUMBERS PROGRAMMING USING STANDARD MOBILE TELEPHONE

Insert SIM card into a standard mobile phone. Enter user name into SIM card number book using capital letters e.g. *ALRNR1* and corresponding phone number. We recommend enter the number with international code. (E.g. +372....)

If GsmAlarm-330 is used for gate control, number of extra user numbers can be as large as fits into the SIM card (up to 250). Any name can be ascribed to user.

#### *Important:*

*It's important to note that while programming SIM card memory should be active (not phone memory!). Otherwise the user number will be recorded in the mobile phone memory used for programming and the SIM card will remain empty.*

After having programmed all user numbers, it is recommended to check whether SMS service centre number is programmed. Simplest way to check: send any SMS from the phone used for programming. If it is sent successfully we can be sure that SMS centre number has been programmed correctly. Otherwise, programme SMS centre number following the mobile phone's user manual. SMS centre number can be learnt from GSM service provider.

After completion of programming and checking whether SIM card PIN code request is switched off, take the SIM card off from the mobile phone and insert it into GsmAlarm-330 SIM card slot.

## 5.2 USER NUMBERS PROGRAMMING WITH SMS

In order to programme user numbers, send the following SMS from any mobile phone into GsmAlarm-330:

*AAAAAAAA ALRNR1:+37251234556 ALRNR2:+37251234567 ALRNR3:+37251234578  
ALRNR4:+37251234589 ALRNR5:+37251234590*

*AAAAAAAA*: eight digit alphanumeric SMS password, which is obligatory in the beginning of each SMS. Manufacturer-programmed password is *AAAAAAAA*. User can change the password on his own desire (see section 5.4).

*ALRNR1 ... ALRNR5*: user numbers.

*IMPORTANT:*

- a) No characters/spaces can be used before the password;*
- b) No spaces are allowed before and after the colon;*
- c) Spaces must follow the password and each phone number;*
- d) It is recommended to enter user numbers with international code (e.g. +372...).*

It is not necessarily to send all user numbers. E.g., in order to program only the first user number, send the following SMS:

*AAAAAAAA ALRNR1:+ 37251234556*

Receipt and decrypting of the SMS by GsmAlarm-330 is confirmed by blink of indicator READY/IN USE. The phone, which has sent the programming SMS, immediately receives a confirming SMS with programmed numbers.

In order to delete unnecessary number, send the following SMS:

*AAAAAAAA ALRNR2:N*

Number ALRNR2 is deleted, user receives SMS with programmed numbers. In order to replace one number with another, no separate instruction for deletion needs to be sent.

In order to receive SMS with programmed numbers ALRNR1 ... ALRNR5, send GsmAlarm-330 the following SMS:

*AAAAAAAA NRINFO*

Extra user numbers (only for gate control) are programmed by sending the following SMS:

*AAAAAAAA ADDNR:+37251234567 ADDNR:+37251234568 ADDNR:+37251234569*

*ADDNR*: – new number entering instruction.  
*+37251234567* – new user number.

Up to 8 user numbers might be programmed with one SMS message.

If number was programmed successfully, the user, who sent the message, receives SMS with newly programmed number. In this case the confirmation message will be:

*USR1:+ 37251234567 USR2:+ 37251234568 USR3:+ 37251234569*

*USR1* – name, assigned to the new number.

In order to delete the extra user number, send to GsmAlarm-330 the following message:

*AAAAAAAA DELNR:+ 37251234567 DELNR:+ 37251234568 DELNR:+ 37251234569*

Specified numbers will be deleted and user receives the confirming SMS:

*DELET:+ 37251234567 DELET:+ 37251234568 DELET:+ 37251234569*

Up to 8 user numbers might be deleted with one SMS message.

In order to receive SMS message indicating all programmed numbers, following message must be sent to GsmAlarm-330:

*AAAAAAAA NRLIST*

User receives one or more SMS messages with all programmed numbers listed.

*Note! Up to 8 user numbers can be sent in one SMS message. If 250 numbers are programmed GsmAlarm-330 will send 32 SMS messages!*

### 5.3 SYSTEM SETTINGS PROGRAMMING

The settings of GsmAlarm-330 are programmed by SMS message. Firstly, we recommend to receive the SMS with the programmed settings from GsmAlarm-330 and send back to GsmAlarm-330 the same SMS message with the adjusted settings.

If it is required to get a message with the names of protected zones, an SMS message is send to GsmAlarm-330: AAAAAAAAA ZPARAM (see section 5.3.1). If you need to get a message with the usernames, the SMS message is send to GsmAlarm-330: AAAAAAAAA UPARAM (see section 5.3.2). If you need to get a message with the output and common system settings, the SMS message is send to GsmAlarm-330: AAAAAAAAA CPARAM (see section 5.3.5). The messages can be sent from any (not necessarily from the user's) mobile phone. GsmAlarm-330 checks the password (in this case AAAAAAAAA), and in coincidence of the case, the SMS message including the programmed settings is send to the sender's number.

#### 5.3.1 ZONE NAMES

For the zones Z1 ... Z16 the user can assign names that are visible in the sent SMS message during alarm. The names of zones which numbers are 17 and over can not be changed. These names will appear in the SMS message as "ZONE17", "ZONE18" etc.

In order to receive zone names you should send the message to GsmAlarm-330:

*AAAAAAAA ZPARAM*

GsmAlarm-330 sends two messages with names of zones Z1-Z16 to the user.

The first message with names of zones Z1 ... Z8:

*AAAAAAAA Z01:ZONE1, Z02:ZONE2, Z03:ZONE3, Z04:ZONE4, Z05:ZONE5, Z06:ZONE6, Z07:ZONE7, Z08:ZONE8,*

The second message with names of zones Z9 ... Z16:

*AAAAAAAA Z09:ZONE9, Z10:ZONE10, Z11:ZONE11, Z12:ZONE12, Z13:ZONE13, Z14:ZONE14, Z15:ZONE15, Z16: ZONE16,*

*AAAAAAAA – password.*

*Z01: - a zone's number of alarm system.*

*ZONE1, ZONE2 – the names of zones are visible in the SMS message.*

User can change the name of zone under his own discretion (for example, Z01:Doors, Z02:Windows). The maximum number of characters of the name is: 11. The name should consist of one word, without spaces.

#### *IMPORTANT!*

*Before the password any characters and spaces should not be.*

*After the password the space should be.*

*After the colon the space should not be.*

### 5.3.2 USERNAMES

The appropriate names can be assigned to the alarm system's users. These names appear in the SMS message sent by GsmAlarm-330, the user arms or disarms alarm system. It is possible change only the first, second, third, fourth and fifth username. Other usernames will be displayed as "USER:06", "USER:07 ", etc. in the SMS message .

In order to receive SMS message with the usernames you should send SMS message to GsmAlarm-330:

*AAAAAAAA UPARAM*

GsmAlarm-330 sends SMS message to the user including usernames:

*AAAAAAAA U01:USER1, U02:USER2, U03:USER3, U04:USER4, U05:USER5,*

*AAAAAAAA - password.*

*U01:* - user's number.

*USER1, USER2* - usernames are visible on SMS message.

User can change the usernames under his own discretion. The maximum number of the characters of the name is: 11. Name must consist of one word, without spaces.

#### *IMPORTANT!*

*Before the password any characters and spaces should not be.*

*After the password the space should be.*

*After the colon the space should not be.*

### 5.3.3 PARTITION NAMES

The most alarm systems have the possibility to divide the protected object into several partitions. For each partition the user can assign the appropriate name. It is possible to program the names of the four partitions. Other names of partitions will be seen as the "OBJECT:05", "OBJECT:06", etc. in the SMS message.

In order to receive the SMS message with the names of partitions you should send SMS to GsmAlarm-330:

*AAAAAAAA RPARAM*

GsmAlarm-330 sends SMS message including names of partitions to the user:

*AAAAAAAA R01:OBJECT1, R02:OBJECT2, R03:OBJECT3, R04:OBJECT4,*

*AAAAAAAA* – a password.

*R01:* - a number of subsystem of the protection system.

*OBJECT1, OBJECT2* - the names of partitions are visible in SMS message.

User can change the partitions names under his own discretion. The maximum number of the characters of the name is: 11. The name must consist of one word, without spaces.

#### *IMPORTANT!*

*The partition name is visible in the SMS message only when the parameter B01 is programmed (see section 5.3.5).*

*Before the password any characters and spaces should not be.*

*After the password the space should be.*

*After the colon the space should not be.*

### 5.3.4 DECODING OF CONTACT ID DATA, ADDITIONAL EVENTS PROGRAMMING

Each event which is transmitted by COTACT ID format corresponds to the appropriate three-digit code. The codes which can be decoded and transmitted by SMS message of GsmAlarm-330 are listed in the table below.

CONTACT ID code	Information visible in SMS message
100	SILENT ALARM BUTTON, ACTIVATION (RECOVERING);
110 111	ZONE, FIRE ALARM, ACTIVATION (RECOVERING);
120 121 122 123	ZONE, PANIC ALARM, ACTIVATION (RECOVERING);
130 131 132 133	ZONE, ACTIVATION (RECOVERING);
139	ACTIVATED SEVERAL ZONES;
301	AC VOLTAGE FAULT (FAULT ELIMINATED);
302 309 311	BATTERY FAULT(FAULT ELIMINATED);
308	SYSTEM SHUTDOWN;
321	BELL FAULT ( FAULT ELIMINATED);
350 354	COMMUNICATOR FAULT ( FAULT ELIMINATED);
351 352	TELEPHONE LINE FAULT( FAULT ELIMINATED);
373	FIRE ZONE FAULT( FAULT ELIMINATED);
374	EXIT FAULT( FAULT IS ELIMINATED);
383	TAMPER FAULT (FAULT ELIMINATED);
400 401 402	SYSTEM ARMED (DISARMED), USER;
406 458	ALARM CANCELED, USER;
408	QUICK ARM;
456	PARTIAL ARM, USER;
459	RECENT CLOSING;
570 571 572 573	ZONE BYPASS (BYPASS ELIMINATED), ZONE;
601 602	PERIODICAL TEST;
626	INACCURATE TIME/DATE;
627	PROGRAM MODE ENTRY;
628	PROGRAM MODE EXIT;



If the alarm system sends the information about the event which code is not found in a table, the user can see the code of event (example: EVENT: 158) and the group, which includes an event (ALARM, SUPERVISORY, TRUOBLE, OPENING/CLOSING, BYPASS, TEST) in the structured SMS report of GsmAlarm-330. In order that the information would be more specified in SMS message, the appropriate description of the event can be assigned to it. In this case, the description of the programmed event made by the user will be visible in the SMS message instead of the event code and group.

In order to program the description of the additional event, the following SMS message will be send to GsmAlarm-330:

*AAAAAAAA ADDEV: 158 NEW\_EVENT,*

*AAAAAAAA* - a password.

*ADDEV:* - a programming command.

*158* - a code of the new event.

*NEW\_EVENT* - the description of new event is visible in sent SMS message of the user.

You can program up to eight additional event descriptions. The description should consist of not more than 13 characters (letters or numbers). The information on codes of the events of the Contact ID format can be found in the alarm system's installation manual.

In order to delete a description of the event, the following SMS message is sendto GsmAlarm-330:

*AAAAAAAA DELEV:158,*

*AAAAAAAA* - a password.

*DELEV:* - a deleting command.

*158* - a code of the event.

By one SMS message you can programme or delete several events by dividing them with the commas, for example:

*AAAAAAAA ADDEV:158 NEW\_EVENT, DELEV:154, DELEV:155,*

In order to receive an SMS message with the additional list of the programmed events, the following SMS is send to GsmAlarm-330:

*AAAAAAAA EVLIST*

*IMPORTANT!*

*Before the password any characters and spaces should not be.*

*After the password the space should be.*

*After the colon the space should not be.*

*Between event code and the description should be the space.*

### 5.3.5 OUTPUT C1, C2 OPERATION MODE AND COMMON SYSTEM SETTINGS PROGRAMMING

In order to receive the SMS message with the common system settings and operating modes of outputs C1 and C2, the following SMS is send to GsmAlarm-330:

*AAAAAAA CPARAM*

The GsmAlarm-330 sends SMS to the user including the outputs C1 and C2 operating modes and the system common settings:

*AAAAAAA C1:M01T00 OutC1, C2:M03T05 OutC2, P01:A00B00D50F03L00,*

*C1:* - a number of the programmable output.

*M01* - the operating mode of the output (see section 5.3.5.1).

*T05* - the operating time of the output in seconds.

*OutC1, OutC2:* are the names of the programmable outputs. The user can change these names under his own discretion. The maximum number of the characters of the name is: 11.

*P01:A00B00D00F03L00,*

*P01:* the programming command of the common system settings.

*A00* The parameter indicating to whom the information will be sent when the alarm is activated. The function of this parameter is similar to the function of the contacts USER and MON. ST. (see section 2.4). The parameter allows changing the operation mode of GsmAlarm-330 remotely without changing the jumper's position.

Possible values:

1. *A00* – an operation mode is determined by the jumper and contacts USER and MON. ST.
2. *A01* - the information is send to a central monitoring station only.
3. *A10* - the information is send to the users only.
4. *A11* – the information is send to the monitoring station and users.

*ATTENTION!* If the mentioned parameter is not *A00*, the position of the jumper on the contacts USER and MON. ST. has not influence for the operation mode.

*B00* This parameter conditions whether the partition number or the partition name would be in the SMS message send to the user. The partition number is informative only when the protected object is divided into several independent partitions. In the SMS message the user sees for which partition the activated zone belongs to or which partition is armed (disarmed).

Possible values:

1. *B00* – a partition number (name) will not be visible in the SMS message.
2. *B01* – a partition number (name) will be visible in SMS message.

*D50* The first number (5) shows after how many times of unsuccessful connections with the central monitoring station, an SMS message with the text "MONITORING STATION IS UNREACHABLE" will be sent to the users. If this number is equal to zero, the message will not be sent.

The second number (**0**) conditions which users receive SMS messages when the save mode is enabled or disabled.

Possible values:

**0**: when the system is armed or disarmed, the SMS messages are send to all users (ALRNR1 ... ALRNR5).

**1**: SMS message is send only, to the user who has armed or disarmed the system. For example, if the system is armed by the user U01 (USER1), SMS message is send to the ALRNR1 phone. If the system is armed by the user U05 (USER5), the SMS message is send to the ALRNR5 phone. If the number of the user in protection system is bigger than five or the user's phone number is not in the SIM card, an SMS message regarding to the arming or disarming is send to the user ALRNR1.

**2**: the mode is parallel to mode **1**, but if the number of the user in alarm system is bigger than five or phone number of the user is not in the SIM card, an SMS message regarding to the arming or disarming is send to all users (ALRNR1 ... ALRNR5).

*F03* Informing of the user regarding to alarm and system's reaction to incoming calls (see section 5.3.5.2).

*L00* Language for sending SMS messages. L00: English.

*IMPORTANT!*

*Before the password any characters and spaces should not be.*

*After the password the space should be.*

*Before the name of the output space should be.*

*After the colon the space should not be.*

### 5.3.5.1 OPERATING MODES OF OUTPUTS C1, C2

Output mode	Explanation of operation
M00, M01	Output controlled by DTMF or SMS command. If zero operation time is programmed (T00), the output is activated/deactivated and remains in the same status after receiving DTMF or SMS command. If not zero operation time is programmed, after receiving DTMF or SMS command, the output is activated, it deactivates automatically after the expiration of the programmed time.
M02	Control by short call without a number recognition function. Output is activated with a call from any number. If zero operation time is programmed (T00), the output status changes after the call and remains unchanged till the next short call. If not zero operation time is programmed, after receiving the short call command the output is activated, it deactivates automatically after expiration of the programmed time.
M03	Control by short call with a number recognition function (gate control mode). This mode operates analogue to M02, thus it is activated only if a short call number coincides with the programmed numbers.
M04*	Output is switched on by a short call (user calls and after the first call a signal cancels the call). Output is switched off by a longer call (user calls and is waiting till the call will be canceled automatically). This mode is convenient to use for switching on or switching off the save mode by the short call.
M05	Output is activated under loss of GSM connection.

\* **ATTENTION!** If at least one output operates in M04 mode, after 3-4 calls GsmAlarm-330 cancels the call automatically and do not pass into the conversation mode.

### 5.3.5.2 F PARAMETER – INFORMING OF THE USER REGARDING THE ALARM AND REACTION OF THE SYSTEM ON INCOMING CALLS

Information of the user in case of alarm or system trouble	FXY		Reaction on incoming call
	X	Y	
Described functions below are deactivated.	0	0	Described functions below are deactivated.
Calling to the user, then SMS message is send. **	1	1	The function of checking is switched on by a short call (calling briefly to the user, GsmAlarm-330 responses by a short call).
In case of the system system trouble, SMS message is send to user ALRNR1 only.	2	2	When calling to GsmAlarm-330 from an unidentified number, the user ALRNR1 will receive an SMS message with the caller's number.

\* In order to activate few functions, please use the sum of numbers. For example: in order to activate all functions, the number F must be F33 (1 + 2 = 3).

\*\* In case of alarm, the system, prior sending an SMS message, calls once in a sequence to the all users. Call duration - about 20 seconds. If at least one user responds to the call or cancels it during 20 seconds, the calling to other users is cancelled.

## 5.4 SMS PASSWORD CHANGE

In order to change the manufacturer-programmed SMS password, please send the following message to the GsmAlarm:

*AAAAAAAA PASSW: ABCDefgh*

*AAAAAAAA* - an old SMS password.

*PASSW:* - a password changing command.

*ABCDefgh* - a new SMS password. Password must be 8 characters long!

*Note!*

*No characters/spaces can be used before password, space must follow the password.*

If the programming command is executed successfully, the user gets a confirming SMS message with the new SMS password.

## 6. FACTORY DEFAULT SETTINGS

In order to reset system settings to the factory default settings, you should:

- a) To disconnect *GsmAlarm-330* power supply;
- b) Put the jumper on the contacts RESET (see section 2);
- c) To connect the power supply and wait till the indicator READY/IN USE will not light, and the indicator NETWORK will light.
- d) To remove the jumper from the contacts RESET.

In this case the settings stored in the inner memory of the module are programmed only. The numbers of the users stored in the SIM card will not be erased.

Zone names					
Zone No.	Name		Zone No.	Name	
Z01	ZONE1		Z09	ZONE9	
Z02	ZONE2		Z10	ZONE10	
Z03	ZONE3		Z11	ZONE11	
Z04	ZONE4		Z12	ZONE12	
Z05	ZONE5		Z13	ZONE13	
Z06	ZONE6		Z14	ZONE14	
Z07	ZONE7		Z15	ZONE15	
Z08	ZONE8		Z16	ZONE16	
Usernames					
User No.	Name		User No.	Name	
U01	USER1		U04	USER4	
U02	USER2		U05	USER5	
U03	USER3				
Partition names					
Partition No.	Name		Partition No.	Name	
R01	OBJECT1		R03	OBJECT3	
R02	OBJECT2		R04	OBJECT4	
Output mode					
Output	Title	M parameter	Operation time T		
C01	OutC1	M01	T00 (sec.)		
C02	OutC2	M03	T05 (sec.)		
Common system settings					
SMS password	Param. A	Param. B	Param. D	Param. F	Param. L
AAAAAAAA	A00	B00	D50	F03	L00

GsmAlarm-330 manufacturer's settings

## 7. CONTROL USING SMS AND DTMF COMMANDS

In the speech mode user can control the system, after having entered relevant code from his phone keypad. Instruction consists of two digits; it is entered by pressing asterisk key. If the instruction is completed, user hears three tone confirmation signals.

Speech mode can be activated by calling and waiting until the system answers (3-4 call signals). If at least one output operates in the mode M04 (see section 5.3.5.1), the system does not answer (cancels the call) after 3-4 calls. In this case, in order to activate the speech mode, it is necessary to call briefly to the GsmAlarm-330, wait for a call from GsmAlarm-330, and then to answer.

The control instructions may be given by SMS. Insert password in the beginning, then type the instruction. E.g.: in order to switch on output C1, to switch off output C2 and to receive a SMS with information on the status of the protected site, send the following SMS : *AAAAAAA 11\* 20\* 77\**

DTMF or SMS command	Purpose of the command
<i>11*</i>	Switching on the output C1.
<i>10*</i>	Switching off the output C1.
<i>22*</i>	Switching on the output C2.
<i>20*</i>	Switching off the output C2.
<i>77*</i>	The requirement to send SMS message including information regarding the status of the outputs.
<i>88*</i>	The requirement to send SMS message including information regarding the quality of the connection and voltage of the power supply.

Control commands of DTMF and SMS

SMS command	Purpose of the command
<i>ZPARAM</i>	The requirement to send the SMS message including zone names.
<i>UPARAM</i>	The requirement to send the SMS message including usernames.
<i>RPARAM</i>	The requirement to send the SMS message including partition names.
<i>CPARAM</i>	The requirement to send the SMS message including outputs C1, C2 operating modes and common system parameters.
<i>NRINFO</i>	The requirement to send SMS message including user ALRNR1 – ALRNR5 telephone numbers.
<i>PASSW:</i>	Command for changing the SMS password.
<i>ALRNR1:</i> <i>ALRNR2:</i> <i>ALRNR3:</i> <i>ALRNR4:</i> <i>ALRNR5:</i>	Programming command for the users' telephone numbers.
<i>EVLIST</i>	The requirement to send the SMS message including additional CONTACT ID events description.
<i>ADDEV:</i>	Programming the additional CONTACT ID event description.
<i>DELEV:</i>	Deleting the additional CONTACT ID event description.
<i>NRLIST</i>	The requirement to send the SMS message (messages) including all telephone numbers that are in the SIM card.
<i>ADDNR:</i>	The programming command for the user's telephone number of the gate control mode.
<i>DELNR:</i>	Erasing the user's telephone number of the gate control mode.

The SMS commands used for programming and diagnostics of the system

## 8. WARRANTY

The MANUFACTURER AND DISTRIBUTOR is not responsible for possible theft from GsmAlarm-330 protected premises. The GSM service operators are not associated to the company “Orvos Monitoring OÜ”, therefore, the company takes no responsibility due to the GSM network services, coverage and functioning.

The GsmAlarm-330 module is PROVIDED with the warranty of 24 month. The warranty period starts on the purchase date. If there are no purchasing documents, the period is started to be counted from the manufacturing date of the system (dated on the protection system identification label). The warranty is not valid if system: is reverse engineered; wrongly assembled; used not according to the purpose; in case of mechanical, chemical, electric damage and in other cases that are not related with the manufacturing defects of GsmAlarm-330.

If the alarm system is not operating properly or breaks down, for guarantee or post-guarantee service, please contact the company that performed assembling and installation works of the system. The practice shows that the reason main for the operation failure of the system is incorrectly performed system assembling.

The company “Orvos Monitoring“ declares that the product “GsmAlarm-330” satisfies all essential requirements of the standard EN 60950-1:2003 following the European Union directive 2006/95EC.

## 9. TECHNICAL SPECIFICATIONS

<b>GSM MODULE</b>	
Operating frequency	<b>900/1800/1900 MHz</b>
<b>MAIN POWER SUPPLY (connecting to the terminals “+12V“ and “GND”)</b>	
Power supply voltage	<b>DC 10,5 – 15V</b>
The maximum current consumption in still mode (without additional control relays).	<b>--- 70mA max</b>
The maximum current consumption when the GSM transmitter is operating (without additional control relays).	<b>--- 300mA max</b>
<b>OUTPUTS C1 and C2</b>	
Commutation voltage	<b>DC 10,5 – 15V</b>
Maximum current 2x150mA max	<b>300 mA max</b>
Output is switched on	<b>Connected with GND</b>
Output is switched off	<b>Open contact</b>
<b>OPERATING TEMPERATURE</b>	<b>-20°C...+55°C</b>
<b>DIMENSIONS (without antenna)</b>	<b>89x71x17 mm</b>

<http://www.orvos.ee>