

## DATA TRANSMISSION MODULE



### GsmAlarm-330 (V1.00)

The device operates in connection with standard alarm systems and is designed for transmission of alarm messages via GSM network.



#### ADVANTAGES OF THE DEVICE

- Transmission of security system messages to a central surveillance station via CONTACT ID protocol.
- Decoding of protection system messages and transfer to user's mobile phone by SMS message.
- Easy installation. The device is connected only four wires.
- Integrated GSM connection device.
- 5 users are informed on the protected unit.
- Info-carrying SMS on the system main voltage, GSM signal strength.
- 2 programmable outputs for remote control.
- Opportunity to remote control via short call.
- 32 programmable protected areas names.
- 9 programmable user names.
- Remote programming option by SMS message.
- 250 users able to control the gate or electromagnetic lock by short free call.
- Cheap maintenance.






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## 1. GENERAL INFORMATION

### 1.1. SAFETY INSTRUCTIONS

In order to protect the safety of yourself and others and to avoid injuries due to the impact of heat and electric voltage, it is necessary to read carefully the following requirements and to follow them strictly! The manual should be preserved as long as the device is in use.

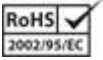
	<p>Device GsmAlarm-330 ensures the level of safety set forth by LST EN 60950-1:2003 standard. The device shows limited area access.</p> <p><b><u>Device power supply (from control panel) must meet the requirements of standard LST EN 60950 –1 !</u></b></p> <p><b><u>Indicated connected devices – surveillance system control panel and remote control relays should meet the requirements of standard LST EN 60950 –1!</u></b></p>
	<p>The installation (mounting) and technical service can be performed by qualified specialists only who have necessary knowledge about the device and general safety requirements.</p> <p>In case of device operation failure, the repair works shall be performed by qualified specialists only.</p> <p><b>There are no parts inside the device that can be replaced locally.</b></p>
	<p><b>Prior to any device installation or service works, the whole system must be disconnected from control panel AC power supply and standby battery. It is forbidden to perform any installation or service work under lightning!</b></p>
	<p><b><u>Standby disconnection device of control panel should be installed in building equipment!</u></b></p> <p><b>Device for current disconnection and protection against surge is control panel standby bipolar disconnection device that disconnects all related devices at the same time.</b></p>
	<p><b>ATTENTION! GsmAlarm-330 cannot operate with wired telephone line. The connection to wired telephone line may cause damage to the device!</b></p>

Device information label is located on the bottom side of the device. Software version label is on the front side of the device.

Device GsmAlarm-330 is equipped with radio transmitter functioning via GSM900 and GSM1800 networks. Do not use the device in the areas where the potential of disturbance or danger may occur. Do not install device nearby medical equipment or appliances. Do not use device in explosive environment. The device is nonresistant to moisture, chemical substances and mechanical impact. Don't attempt to personally repair the system. System label is on the bottom side of the device.



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.



Device compliance to RoHS Directive.

## 1.2. PACKAGE CONTENT

Device GsmAlarm-330 .....	Qty 1
GSM antenna with magnetic fix and 2 m lead cable .....	Qty 1
PCB fastening clips .....	Qty 4
User's manual .....	Qty 1

## 1.3. OPERATION DESCRIPTION

GsmAlarm-330 is designed for the transmission of alarm system messages via GSM network. GsmAlarm-330 simulates the wired telephone line (PSTN) and works in connection with the standard alarm system (Paradox, DSC), that supports the Contact ID data protocol.

The device can transmit information to a central surveillance station by Contact ID protocol and to the user via SMS. If the information on the protected object should be transmitted to the central surveillance station only, GsmAlarm-330 simply retranslates the outgoing data.

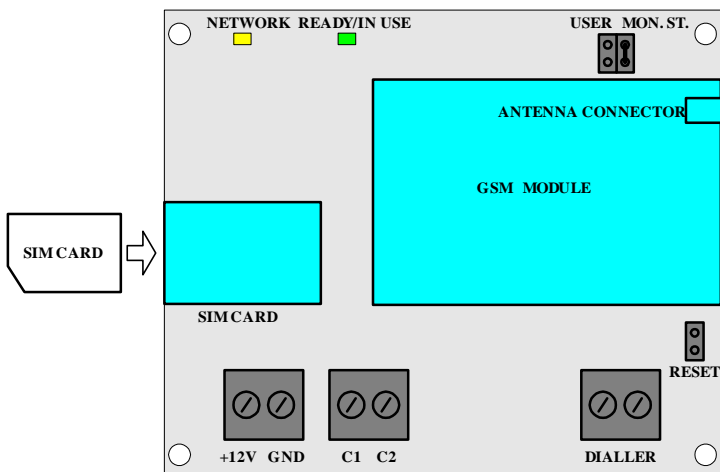
If it is necessary that the information on the protected object should be received by the user and the surveillance station, GsmAlarm-330 decodes the data transmitted by Contact ID protocol and sends to the user an SMS message with the description of an event (events). The device can send SMS messages 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 surveillance station, the SMS messages are send to the users.

GsmAlarm-330 is equipped with 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 alarm system, switching on or off of the lighting, heating or 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 with the appropriate content.

## 2. PURPOSE OF CONNECTION CONTACTS



GsmAlarm-330 connection contacts and light indicators.

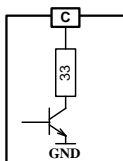
### 2.1. CONTACTS “+12V” and “GND”

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

### 2.2. CONTACTS “DIALLER”

Contacts DIALLER are used for connection of control panel communicator (refer to section. 4.1).

### 2.3. OUTPUTS “C1” and “C2”



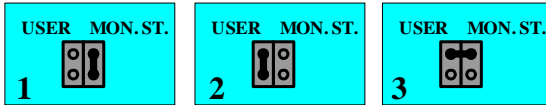
Programmable outputs *C1* and *C2* are used for remote control of additional devices. Maximum commutated current - 150 mA max (for one relay).

Operating conditions of outputs are provided in section 5.3.5.1.

*C1* and *C2* equivalent scheme

## 2.4. CONTACTS “USER” and “MON. ST”

These contacts are used for setting of GsmAlarm-330 operating conditions. Operating conditions are selected by placing jumper on relative contacts.



Jumper positions and operating conditions:

1. Information on protected object is transmitted to central surveillance station only.
2. Information on protected object is received by user (users) only.
3. Information on protected object is received by both the surveillance station and the user.

Operating conditions can be changed both by program and by changing the parameter A00 (refer to section 5.3.5).

## 2.5. CONTACTS “RESET”

*RESET* contacts are used for factory settings (refer to section 6).

### 3. PURPOSE OF LIGHT INDICATORS

#### 3.1. NETWORK: INDICATOR FOR GSM MODULE OPERATING CONDITIONS AND SIGNAL QUALITY

Indicator status	Description
No light	GSM module does not work. No supply voltage present or damage.
Constant light	No network registration. Possible causes – request of PIN code for SIM card is not turned off, antenna is not attached or bad signal quality.
Blinking several times per second.	GSM module is in active status: calls are made or SMS's are sent.
Blinking 5 times, after that – short pause.	Excellent connection.
Blinking 4 times, after that – short pause.	Good connection.
Blinking 3 times, after that – short pause.	Satisfactory connection.
Blinking 2 times, after that – short pause	Weak connection.
Blinking 1 time, after that – short pause.	Extremely weak connection.

#### 3.2. READY / IN USE: GsmAlarm-330 WORKING CONDITIONS INDICATOR

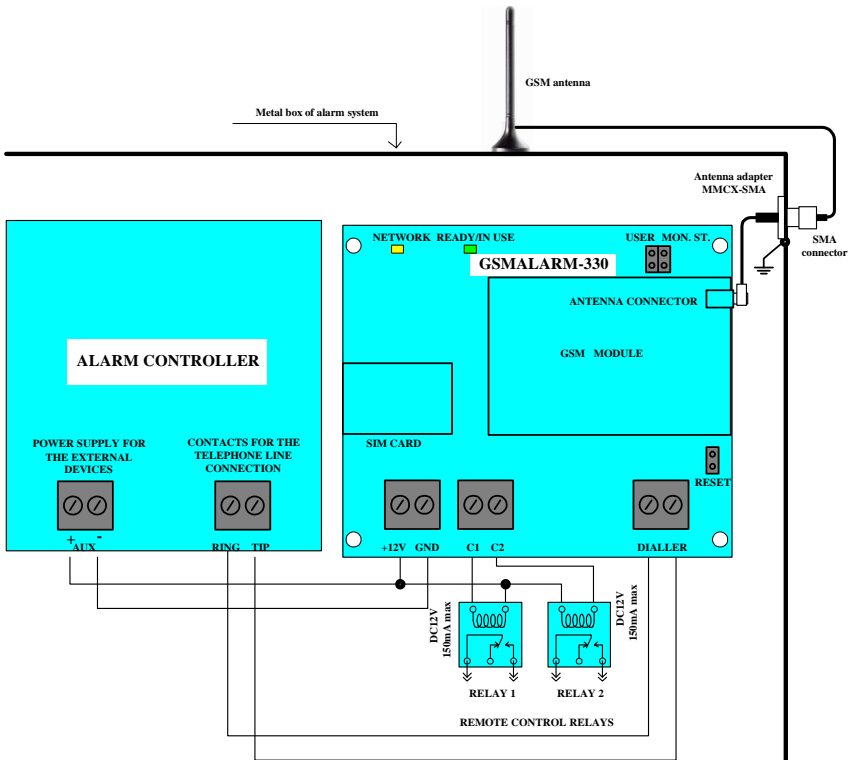
Indicator status	Description
No light	No supply voltage present or damage.
Constant light	The device is set-up and in standby status.
Blinking one time per second.	Alarm system is trying to connect to alarm monitoring station or is preparing to transmit data to module GsmAlarm-330.
Blinking fast (2-3 times per second).	Alarm system is transmitting data to alarm monitoring station or GsmAlarm-330.
Blinking very fast (about 10 times per second)	SMS or decoded CONTACT ID command is received.

## 4. INSTALLATION

### 4.1. INSTALLATION GUIDE AND MOUNTING SCHEME

**Prior to installation works it is necessary to disconnect alarm system power supply and standby battery! During installation and after it do not leave any lateral metal things!**

GsmAlarm-330 is installed in the same box, where the alarm system is mounted, near control panel. GsmAlarm-330 panel is fastened with four supports included in the scope of delivery. GSM antenna is installed outside the box.



GsmAlarm-330 mounting scheme

GsmAlarm-330 power supply contacts are connected to contacts AUX of system control panel external devices. Use single-thread cable ( $2 \times 0.75 \text{ mm}^2$ ) for connection to power supply.

Contacts DIALLER are connected to wired telephone line connection contacts of control panel. It is recommended to use single thread cable ( $2 \times 0.5 \text{ mm}^2$ ) for connection.



**ATTENTION! GsmAlarm-330 cannot operate with wired telephone line. The connection to wired telephone line may cause damage to the device!**

We recommend installing remote control relays to sockets (e.g., F95913). The sockets can be easily fastened in metal box. The operating current of one relay winding should not exceed 150mA max. (e.g., F4031-12). Relays should be checked by desirable commutation voltage and current.

GsmAlarm-330 operates superbly in the gate control mode. In this case, a stabilized 12V 0.8A power supply is connected to +12V and GND terminals. Relay 1 is connected to terminals C1 and +12V. The gate control system is connected to the commutating contacts of the relay. The output C2 can be used for gate control as well. Programming of gate control mode of the device is described in Chapter 5.5.

## 4.2. DEVICE SET-UP

GsmAlarm-330 requires SIM card that can be purchased from GSM service provider. It is recommended to choose the GSM operator the services of which are used by most part of protected object users. Thus, the fastest transmission of information is ensured.

Prior to inserting SIM card to GsmAlarm-330 card holder, it is necessary to turn off the function of PIN code request. To do so you should insert SIM card to any standard mobile telephone and follow the instructions of particular apparatus.

After the system circuit was connected according to the scheme provided in section 4.1 and the SIM card was inserted to GsmAlarm-330 card holder, the power supply is switched on and it is necessary to wait until indicator *NETWORK* starts blinking cyclically and the light of indicator *READY/IV USE* flashes. If *NETWORK* flashes constantly, it is necessary to check whether the function of PIN code request for SIM card is turned off and GSM antenna is attached. According to the number of blinks of indicator *NETWORK* it is possible to evaluate the quality of GSM signal. If indicator flashes 5 or 4 times and then the pause of 2 seconds follows – the quality of signal is good. If the number of flashes is lower – the connection is weak. In such case, the place of GSM antenna may be changed.

If GsmAlarm-330 is used for data retranslation to central surveillance station only, the jumper of mode setting should be in the position *MON.ST.* (refer to section 2.4). No additional programming is necessary in this case.

If it is necessary for the user (users) to receive information on protected object, the operating mode of GsmAlarm-330 should be set up and users' telephone numbers as well as names of areas and users should be programmed (refer to section 5).

### **ATTENTION!**

*CONTACT ID data transmission protocol should be activated, tonal dial mode should be turned on and telephone number of central surveillance station should be programmed in the alarm system (control panel).*

*The number of station should be programmed even in such case if it is not necessary to transmit data to station and GsmAlarm-330 is used for transmitting SMS only. In this case, any number for surveillance station can be used, even the number consisting of one figure.*

## 5. PROGRAMMING

If GsmAlarm-330 is used for data transfer to central surveillance station, no additional programming is necessary. If the device is used for SMS transmission and (or) remote control, programming is required.

GsmAlarm-330 parameters can be divided into two groups. The first group consists of telephone numbers of users who receive SMS's. These numbers are stored in the SIM card. Users' numbers can be programmed by using any standard mobile phone (refer to section 5.1.) or by remote control by sending SMS with user numbers to GsmAlarm-330 (refer to section 5.2.).

The second group includes parameters defining system operation algorithm, names of protected areas, user names, operating conditions of programmable outputs. These parameters are stored in the memory of GsmAlarm-330. System parameters can be programmed by SMS only (refer to section 5.3).

GsmAlarm-330 can send SMS's up to five users. In the SIM card user names should be as the following: *ALNRN1*, *ALNRN2*, *ALNRN3*, *ALNRN4* and *ALNRN5*. Correspondent numbers are attributed to each name.

If GsmAlarm-330 is used for control by short call and it is not necessary to send users the information on protected object, it is not required to program *ALNRN1* - *ALNRN5*. In this case, it is possible to program up to 250 users' numbers that have a possibility to control outputs *C1* or *C2* by short call. User name can be of any kind. Output operating conditions have to be *M02* or *M03* (refer to section 5.3.5.1.)

After programming of user names, system parameters should be programmed (refer to section 5.3). After programming is accomplished, it is recommended to change SMS password (refer to section 5.4).

### 5.1. PROGRAMMING OF USER NUMBERS BY USING STANDARD CELL PHONE

SIM card is inserted into standard mobile phone. The user names (e.g., first user **ALNRN1**) are entered in capital letters to the phone book of SIM card and particular telephone number is attributed to each name. It is recommended to enter numbers with international codes.

If GsmAlarm-330 is used for the control of gates, it is possible to enter as much additional user numbers as can be stored in the SIM card (up to 250). User name can be of any kind

#### **Important:**

*When programming it is necessary to ensure that the memory of SIM card and not that of the phone is turned on. Otherwise, user number will be stored to the memory of the phone used for programming, while SIM card will remain empty.*

After programming of user numbers, it is recommended to check whether the number of SMS centre is programmed. The simple way to do so is to send a message from the phone used for programming. If the message is sent successfully, the number of SMS centre is programmed and correctly. Otherwise, it is necessary to program SMS centre number by following user guide for particular cell phone. SMS centre number can be provided by GSM service supplier.

After the programming is accomplished and it is ensured that the request of PIN code for SIM card is turned off, the SIM card is taken out from mobile phone and inserted to GsmAlarm-330 SIM card holder.



It is possible to program up to 8 user number with one SMS. If the number programming is successful, the user who sent the message receives an SMS with newly programmed number. In this case the confirmation message will be as follows:

USR1:+3701234567891	USR2:+3701234567892	USR3:+3701234567893
---------------------	---------------------	---------------------

**USR1** – name attributed to the new number.

In order to delete additional user number (numbers), it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	D	E	L	N	R	:	+	3	7	0	1	2	3	4	5	6	7	8	9	1	D	E	L	N	R	:	+	3	7	0
1	2	3	4	5	6	7	8	9	2	D	E	L	N	R	:	+	3	7	0	1	2	3	4	5	6	7	8	9	3								

The indicated numbers will be deleted and user will receive the following SMS:

DELET:+3701234567891	DELET:+3701234567892	DELET:+3701234567893
----------------------	----------------------	----------------------

It is possible to delete up to 8 users’ number with one SMS.

In order to receive SMS with all programmed numbers, it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	N	R	L	I	S	T
---	---	---	---	---	---	---	---	---	---	---	---	---	---

The user receives SMS (SMS’s) with all programmed numbers.

**ATTENTION!** One SMS stores up to 8 users’ numbers. If 250 numbers are programmed, GsmAlarm-330 sends 32 SMS’s!

### 5.3. PROGRAMMING OF PARAMETERS

GsmAlarm-330 parameters are programmable by SMS. First of all, it is recommended to receive an SMS with programmed parameters from GsmAlarm-330 and send the same message with modified parameters back to the device.

In order to receive the message with names of areas, it is necessary to send the following SMS to j GsmAlarm-330: AAAAAAAAA ZPARAM (refer to section 5.3.1). In order to receive the message with user names, the message is sent to GsmAlarm-330 as follows: AAAAAAAAA UPARAM (refer to section 5.3.2). In order to receive message with output and general system parameters, it is necessary to send the following message to GsmAlarm-330: AAAAAAAAA CPARAM (refer to section 5.3.5). The messages can be sent from any mobile device (not only of user’s). GsmAlarm-330 verifies the password (in this instance, AAAAAAAAA) and in case of match, the sender receives SMS with programmed parameters.

#### 5.3.1. PROGRAMMING OF PROTECTED AREA NAMES

The user can attribute names for areas Z1 ... Z32 that will be shown in the SMS in case of alarm. The names of areas indicated by number 33 or higher cannot be changed. These names will be shown as “ZONE:33“, “ZONE:34“, etc in the SMS.

In order to receive a message with names of areas it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	Z	P	A	R	A	M
---	---	---	---	---	---	---	---	---	---	---	---	---	---

GsmAlarm-330 sends user five messages with names of areas Z1-Z32.

The first message includes names of areas Z1 ... Z7:

AAAAAAA Z01:ZONE1, Z02:ZONE2, Z03: ZONE3, Z04:ZONE4, Z05:ZONES, Z06:ZONE6, Z07:ZONE7,
------------------------------------------------------------------------------------------

The second, third, fourth and fifth message includes names of areas Z8 ... Z14, Z15 ... Z21, Z22 ... Z28 and Z29 ... Z32.

**AAAAAAA** - password

**Z01:** - number of alarm system area.

**ZONE1, ZONE2** - names of areas shown in SMS.

User can change the name at his own discretion (e.g., Z01:Doors, Z02:Windows). The maximal number of symbols for name is 15.

#### **ATTENTION!**

*No symbols and spaces should be inserted at the beginning of the password.  
A space should not be inserted after the colon.*

### **5.3.2. PROGRAMMING OF USER NAMES**

Individual names can be attributed to alarm system users. These names are shown in the SMS sent by GsmAlarm-330 when the user arms or disarms alarm system. It is possible to change the names of first - ninth user. The names of other users will be shown as "USER:10", "USER:11", etc in the SMS.

In order to receive the message with user names, it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	U	P	A	R	A	M
---	---	---	---	---	---	---	---	---	---	---	---	---	---

GsmAlarm-330 sends the user a message with user names:

AAAAAAA U01:USER1, U02:USER2, U03:USER3, U04:USER4, U05:USER5, U06:USER6, U07:USER7, U08:USER8, U09:USER9,
---------------------------------------------------------------------------------------------------------------

**AAAAAAA** - password.

**U01:** - number of alarm system user.

**USER1, USER2** - names of users shown in the SMS

The user can change the names of users at his own discretion. The maximal number of symbols for one name is 11. The name should be composed of one word without spaces.

#### **ATTENTION!**

*No symbols and spaces should be inserted at the beginning of the password.  
A space should not be inserted after the colon.*

### 5.3.3. PROGRAMMING OF PARTITIONS' NAMES

Many alarm systems have a possibility to divide protected object into several independent objects (partitions). The user can attribute correspondent name to each partition. It is possible to program four names of partitions. The names of other partitions will be shown as "OBJECT:05", "OBJECT:06", etc in the SMS.

It is possible to receive the message with names of partitions by sending the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	R	P	A	R	A	M
---	---	---	---	---	---	---	---	---	---	---	---	---	---

GsmAlarm-330 sends user a message with names of partitions:

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

**AAAAAAAA** – password

**R01:** - number of alarm system partition

**OBJECT1, OBJECT2** - names of partitions shown in SMS

The user can change the names at his own discretion. The maximal number of symbols for one name is 15.

***ATTENTION!***

*The name of partition will be shown in SMS only when parameter B01 is programmed (refer to section 5.3.5).*

*No symbols and spaces should be inserted at the beginning of the password.*

*A space should not be inserted after the colon.*

### 5.3.4. CONTACT ID DATA DECODING AND PROGRAMMING OF ADDITIONAL EVENTS

Each event transmitted by CONTACT ID protocol corresponds to a particular code of three numbers. The codes that can be decoded by GsmAlarm-330 and sent by SMS are provided in the table below.

CONTACT ID code	Information visible in SMS message
100	SILENT ALARM BUTTON, ACTIVATED (RESTORED);
110 111	ZONE, FIRE ALARM, ACTIVATED (RESTORED);
120 121 122 123	ZONE, PANIC ALARM, ACTIVATED (RESTORED);
130 131 132 133	ZONE, ACTIVATED (RESTORED);
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 information about the event the code of which is not provided in the table, the SMS generated by GsmAlarm-330 shows user the code of event (e.g., EVENT:158) and the group to which it belongs (ALARM, DIAGNOSIS, PROBLEM, OPENING/CLOSING, DEACTIVATION, TEST). In order to receive SMS with more detailed information, it is possible to attribute event description to event code. In this case, the description of event programmed by the user will be shown in the SMS instead of event code.

In order to program additional event description, it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	A	A	A	D	D	E	V	:	1	5	8		N	E	W	_	E	V	E	N	T	,
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---	---	---	---	---	---	---	---

- AAAAAAAA** - password
- ADDEV:** - programming command
- 158** - new event code
- NEW\_EVENT** - description of new event shown in the SMS sent to the user.

It is possible to program up to eight additional event descriptions. The description should consist of no more than 13 symbols (letters or numbers). Information on CONTACT ID protocol event codes is provided in security system guide or can be provided by system installer.

In order to delete event description, it is necessary to send the following message to GsmAlarm-310:

A	A	A	A	A	A	A	A	A	A	D	E	L	E	V	:	1	5	8	,
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- AAAAAAAA** - password
- DELEV:** - deletion command
- 158** - event code

It is possible to program or delete several events by one SMS by separating command with commas. For example:

A	A	A	A	A	A	A	A	A	A	D	D	E	V	:	1	5	8		N	E	W	_	E	V	E	N	T	,
D	E	L	E	V	:	1	5	4	,	D	E	L	E	V	:	1	5	5	,									

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

A	A	A	A	A	A	A	A	A	A	E	V	L	I	S	T
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**ATTENTION!**

- No symbols and spaces should be inserted at the beginning of the password.*
- A space should be inserted after the password.*
- A space should not be inserted after the colon.*
- It is necessary to insert space between event code and description.*



### 5.3.5. PROGRAMMING OF OUTPUTS C1, C2 AND GENERAL SYSTEM PARAMETERS

In order to receive message with parameters for outputs C1, C2 and general system, it is necessary to send a following message to GsmAlarm-330:

A	A	A	A	A	A	A	C	P	A	R	A	M
---	---	---	---	---	---	---	---	---	---	---	---	---

The system sends user the message with parameters of outputs and general system:

AAAAAAAA C1:M01T00 OutC1, C2:M03T05 OutC2, P01:A00B00D50F03L01,
-----------------------------------------------------------------

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

**M01** - output operating conditions (refer to section 5.3.5.1).

**T05** - output operation time in seconds.

**OutC1, OutC2:** names of programmed outputs. The user can change these names at his own discretion. The maximal number of symbols for one name is 11.

**P01:A00B00D00F11L01,**

**P01:** command for programming of general system parameters.

**A00** Parameter that indicates to whom the information will be sent in case of alarm. The function of this parameter is analogous to the one of contacts USER and MON. ST. (refer to section 2.4). The parameter allows the change of GsmAlarm-330 operating conditions by remote control without changing jumper position.

Possible meanings:

1. A00 – operating conditions are set by jumper and contacts USER and MON. ST.
2. A01 – information is transmitted to central surveillance station only.
3. A10 – information is transmitted to user only.
4. A11 – information is transmitted to both the station and the users.

**ATTENTION!** If the mentioned parameter is not A00, the position of jumper on contacts USER and MON. ST. will have no influence on operating conditions.

**B00** This parameter is used for indicating whether there is protected object partition number or name in SMS that is sent to user or not. The number or name of partition is informative only if the protected object is divided into several independent partitions. The user can see in the SMS which partition of the protected object the area with alarm activated belongs to or to which partition the alarm mode is turned on or turned off.

Possible meanings:

1. B00 – the number and name of partition will not be shown in the SMS.
2. B01 – the number and name of partition will be shown in the SMS.

**D50** The first number (5) shows, after how many unsuccessful connections with central surveillance station the SMS “NO CONNECTION WITH STATION” will be sent to the users. If the number is “zero”, the message will not be sent.

The second number (0) indicates which users receive SMS when system is armed or disarmed.

Possible meanings:

**0:** after the system is armed or disarmed, SMS notification are sent to all users (ALRNR1 ... ALRNR5).

**1:** SMS is sent to the user who armed or disarmed the system. E.g.: if system is armed by user U01 (USER1), SMS is transmitted to ALRNR1 phone. If system is armed by user U5 (USER5), SMS is sent to ALRNR5 phone. If user number is higher than five in the security system or the number is absent in the SIM card, SMS with information that system is armed or disarmed is sent to user ALRNR1.

**2:** the mode is analogous to mode **1**, however, if user number is higher than five in the security system or the number is absent in the SIM card, SMS with information that system is armed or disarmed is sent to all users (ALRNR1 ... ALRNR5).

**F03** User notification about alarm and system reaction to incoming calls (refer to section 5.3.5.2).

**L01** The language in which the SMS is transmitted. L00: English. L01: Lithuanian.

***ATTENTION!***

*No symbols and spaces should be inserted at the beginning of the password.*

*A space should be inserted after the password.*

*A space should be inserted before output name.*

*A space should not be inserted after the colon.*

**5.3.5.1. OPERATING MODES OF UOTPUTS C1 AND C2**

Output mode	Description of operation
M00, M01	Output is controlled by DTMF and SMS commands. If zero operation time is programmed (T00), output is turned on and turned off after DTMF or SMS commands and remains in the same status. If programmed operation time is not zero, after DTMF or SMS commands output is turned on and automatically turns off after programmed period of time is passed.
M02	Operation by short call without number recognition function. Output is activated by call from any number. If zero operation time is programmed (T00), after the call output status changes and remains like that until the next call. If programmed operation time is not zero, after the call output is turned on and automatically turns off after programmed period of time is passed.
M03	Operation by short call with number recognition function (gate control mode). This mode is analogous to mode M02, however it becomes activated only if the number of caller matches with the number programmed in the SIM card.
M04*	The output is turned on by short call (the user starts the call and ends it after the first signal). The output is turned off by longer call (the user calls and waits until the call is automatically ended). It is convenient to use this mode to turn on or turn off the alarm mode by short call.
M05	Output is activated in case of GSM connection failure.

**\*ATTENTION!** If at least one output operates in mode M04, GsmAlarm-330 automatically ends the call after 3-4 signals and does not proceed to conversation mode.

**5.3.5.2. PARAMETER F – USER WARNING ABOUT ALARM AND SYSTEM REACTION TO INCOMING CALLS**

User warning in case of alarm	FX Y		Reaction to incoming call
	X	Y	
The functions described below are deactivated.	0	0	The functions described below are deactivated.
User receives a call and later an SMS *	1	1	The function of check by short call is turned on (after the user makes a short call, GsmAlarm-330 responds with short call).
In case of the system trouble, SMS message is send to user ALRNR1 only.	2	2	After the call to GsmAlarm-330 from unrecognized number, the user ALRNR1 SMS with caller's number.

\* In case of alarm, before sending an SMS the system calls each user for one time. The duration of call – approx. 20 seconds. If at least one user answers in 20 seconds or ends the call, other users do not receive the call.

In order to activate several functions it is necessary to use the sum of numbers. E.g., in order to activate all functions, F should be F33 (1+2=3).

#### 5.4. CHANGE OF SMS PASSWORD

In order to change factory programmed SMS password, it is necessary to send the following message to GsmAlarm-330:

A	A	A	A	A	A	A	P	A	S	S	W	:	A	B	C	D	e	f	g	h
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**AAAAAAAA** - an old SMS password.

**PASSW:** - password change command.

**ABCDefgh** - new SMS password. It must consist of 8 symbols!

**Important:**

- a) No symbols and spaces should be inserted at the beginning of the password;
- b) A space should be inserted after the password.

If programming command is successful, the user receives confirmation SMS with new SMS password.

#### 5.5. PROGRAMMING OF GATE CONTROL MODE

Connect the system after the wiring diagram presented in Chapter 4.1. Send the message AAAAAAAAA CPARAM to GsmAlarm-330 to instruct it to operate in the gate control mode (see Ch. 5.3.5). If output C1 is used for control of the gate, change C1 output parameter M01 in the message received from the device to M02 or M03 and send it back. Output response time is determined by the value of parameter T. When C2 output is used for gate control, the device is programmed in the same fashion. Output operation mode is described in Chapter 5.3.5.1 (M02 or M03).

Programming of user numbers is described in Chapters 5.1, 5.2 and 7 (ADDNR: DELNR:).

**Important!** Two identical telephone numbers cannot be programmed under different names!

Use the command NRLIST for testing (see Ch. 7).

## 6. FACTORY SETTINGS

In order to restore all system parameters to initial factory settings, it should be done in the following order:

- a) turn off GsmAlarm-330 power supply;
- b) place jumper on contacts RESET (refer to section 2);
- c) turn on power supply and wait until indicator READY/IN USE goes off and indicator NETWORK starts to gleam.
- d) Remove jumper from contacts RESET.

In this case only the parameters stored in internal module memory are reprogrammed. Users' numbers stored in SIM card will not be deleted.

Input parameters							
Area No.	Name	Area No.	Name	Area No.	Name	Area No.	Name
Z01	ZONE1	Z09	ZONE9	Z17	ZONE17	Z25	ZONE25
Z02	ZONE2	Z10	ZONE10	Z18	ZONE18	Z26	ZONE26
Z03	ZONE3	Z11	ZONE11	Z19	ZONE19	Z27	ZONE27
Z04	ZONE4	Z12	ZONE12	Z20	ZONE20	Z28	ZONE28
Z05	ZONE5	Z13	ZONE13	Z21	ZONE21	Z29	ZONE29
Z06	ZONE6	Z14	ZONE14	Z22	ZONE22	Z30	ZONE30
Z07	ZONE7	Z15	ZONE15	Z23	ZONE23	Z31	ZONE31
Z08	ZONE8	Z16	ZONE16	Z24	ZONE24	Z32	ZONE32

User names					
User No.	Name		User No.	Name	
U01	USER1		U06	USER6	
U02	USER2		U07	USER7	
U03	USER3		U08	USER8	
U04	USER4		U09	USER9	
U05	USER5				

Partition names						
Partition No.	Name			Partition No.	Name	
R01	OBJECT1			R03	OBJECT3	
R02	OBJECT2			R04	OBJECT4	

Output parameters			
Output	Name	Parameter M	Operation time T
C01	OutC1	M01	T00 (sec.)
C02	OutC2	M03	T05 (sec.)

General system parameters					
SMS password	Param. A	Param. B	Param. D	Param. F	Param. L
AAAAAAA	A00	B00	D50	F03	L00

GsmAlarm-330 factory parameters

## 7. CONTROL BY DTMF AND SMS COMMANDS

During speech mode the user can control system by entering relative code in phone keyboard. The command consists of two numbers and it is confirmed by pressing an asterisk. If the command is accomplished, the user hears three tonal confirmation signals. The activation of speech mode is possible via call and after waiting until the system answers (3-4 call signals). If at least one output is in M04 mode (refer to section 5.3.5.1), the system does not answer after 3-4 signals (ends the call). In this case, it is necessary to make a short call to GsmAlarm-330 number, to wait for call from GsmAlarm-330 and to answer in order to activate conversation mode.

Control commands can also be transmitted by SMS. At first the password is entered and the commands. E.g., in order to switch on output *C1*, to switch off output *C2* and receive SMS with information on output status, the following SMS should be sent: AAAAAAAA 11\* 20\* 77\*

DTMF or SMS command	Purpose of command
11*	Output <i>C1</i> switch on
10*	Output <i>C1</i> switch off
22*	Output <i>C2</i> switch on
20*	Output <i>C2</i> switch off
77*	The request to send SMS with information on output status.
88*	The request to send SMS with information on connection quality and power supply voltage.

DTMF and SMS control commands

SMS command	Purpose of command
<i>ZPARAM</i>	The request to send SMS with names of areas.
<i>UPARAM</i>	The request to send SMS with names of users.
<i>RPARAM</i>	The request to send SMS with names of partitions.
<i>CPARAM</i>	The request to send SMS with parameters of outputs <i>C1</i> , <i>C2</i> and general system.
<i>NRINFO</i>	The request to send SMS with numbers <i>ALRNR1</i> – <i>ALRNR5</i> of alarm system users.
<i>PASSW:</i>	Command to change SMS password.
<i>ALRNR1:</i> <i>ALRNR2:</i> <i>ALRNR3:</i> <i>ALRNR4:</i> <i>ALRNR5:</i>	Command to program numbers of alarm system users.
<i>EVLIST</i>	The request to send SMS with additional CONTACT ID events.
<i>ADDEV:</i>	Command for additional CONTACT ID event programming.
<i>DELEV:</i>	Command for additional CONTACT ID event deletion.
<i>NRLIST</i>	Request to send SMS (SMS's) with all number in the SIM card.
<i>ADDNR:</i>	Command for programming numbers of users of gate control mode.
<i>DELNR:</i>	Command for deleting numbers of users of gate control mode.

SMS commands applied for system programming and diagnosis

## 8. WARRANTY

Both the MANUFACTURER and the DISTRIBUTOR shall not be responsible for potential theft in objects protected by alarm system GsmAlarm-330. GSM operators providing cellular connection are not related to “UAB Elektroninės technologijos“, therefore the company does not take responsibility for connection services, its coverage and operation.

System “GsmAlarm-330” is covered by 24 month warranty. The warranty period starts from the date of purchase. If no purchase documents exist, the start of the warranty period shall be that of the date of manufacture (indicated on the identification label of security system). The warranty does not apply in the cases of security system recompose, improper installation and usage, as well as in case of mechanical, chemical and eclectic damages and other cases irrelative to security system manufacture defect.

In case of security system failure or improper functioning, it is necessary to contact the company that installed alarm system for warranty and post-warranty service. Usually, the most common failure of security systems is related to improper installation.



Company “Elektroninės technologijos“ declares that device “GsmAlarm-330” corresponds to essential requirements of EU Directive 2006/95EC EN 60950-1:2003 standard. The declaration of conformity may be consulted at [www.eltech.lt](http://www.eltech.lt)

Ademco Contact ID is a registered trademark of Pittway Corporation.

PARADOX is a registered trademark of Paradox Security Systems Ltd.

DSC is a registered trademark of Dealer Services Corporation.

## 9. TECHNICAL CHARACTERISTICS

<b>GSM MODULE</b>	
Operating frequency	<b>EGSM-900 MHz DCS-1800 MHz</b>
<b>POWER SUPPLY (attached to clamps“+12V“and “GND”)</b>	
Power supply voltage	<b>DC 10,5 – 15V</b>
Maximal used current on rest mode (without additional control relays).	<b>--- 70mA max</b>
Maximal used current when GSM transmitter is in operation (without additional control relays).	<b>--- 300mA max</b>
<b>OUTPUTS C1 and C2</b>	
Commutated voltage	<b>DC 10,5 – 15V</b>
Maximum current 2x150mA max	<b>300 mA max</b>
Output switched on	<b>Connected with GND</b>
Output switched off	<b>Open contact</b>
<b>OPERATIONAL TEMPERATURE</b>	
	<b>-20°C...+55°C</b>
<b>DIMENSIONS (antenna excluded)</b>	
	<b>89x71x17 mm</b>

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