

## GECON LITE

[www.zadako.com](http://www.zadako.com)

### Installation guide

Ver.1.0.

#### **WARNING:**

This device conforms to the STN EN 55022 standard, class A. It is designed for the connection to a control panel conforming to STN EM 60950 standard.

Manipulation with the device in other ways than described in this guide could lead to its damage. Don't modify the device and don't try to repair it by yourself. In case of malfunction contact the manufacturer of the product.

To avoid the risk of fire and damage do not expose the device to moisture, rain nor direct sunlight.

#### **Basic information**

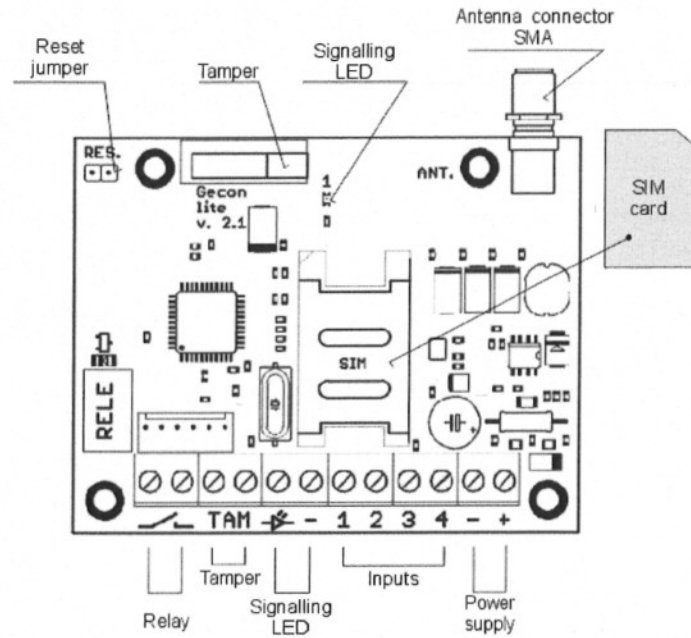
GECON Lite is a GSM communicator that serves for data transfer through the GSM network via text messages and voice calls.

#### **Applications**

GECON is a universal device, it can be used for:

- property protection – through the connection with the security system it can send alarm messages, inform about the system status and differentiate the type of alarm (through a voice or a text message),
- remote control – it can control one electric appliance (1 relay) through a text message,
- technological devices monitoring – the device can inform about the power failure, heating failure, etc.,
- temporary protection of buildings, etc.

## Device description



## Terminal description

+ -	Power supply DC 12 V
1 2 3 4	Activation inputs for alarm caller
LED	Signaling LED output
TAM	Tamper clips
REL	Relay clips
RES	Reset jumper

## Installation

GECON Lite is supplied as a board with four holes for mounting. You can mount the Gecon by attached special stickers or screws.

If you are placing the Gecon inside of metal box, please use an external antenna and place it outside the box. External antenna is also recommended in locations with lower signal level.

## GECON Lite Startup

You have to disable PIN on the SIM card and delete all SMS messages before placing it into the communicator.

- Insert the SIM into the Gecon Lite
- Connect the Gecon to voltage.
- Registration to GSM network. If the Gecon is not registered within 60 seconds, please check the SIM card and signal strength.
- Gecon is ready for use.

## LED status signalization:

- Slow LED blinking (on/off in 1:1 seconds) – GSM network unavailable.
- Short LED blinking (one blink every 4 seconds) – registered into GSM network
- **Permanent shine** – event detected on the input (alarm/trouble), device is sending SMS and calls according to the settings.

If the shines only for few seconds (2.5 seconds) the numbers for the input are not set correctly.

## Gecon Lite Setup

1. Phone numbers
2. Input logic NO/NC
3. Type of input ALARM/TROUBLE
4. Additional functions

### 1. Phone numbers

The settings of Gecon are set by SMS commands. For security reasons, each SMS has to begin with password. Default password is abcd, it is recommended to change the password immediately. Gecon is not case sensitive, you can use both small and capital letters.

#### Current settings:

- You can view the current settings by sending following SMS to GECON phone number. Gecon will reply you with SMS containing current settings

PHONE - phone numbers settings  
SETUP - parameters settings  
TEXT - texts settings

Gecon can send reports to 8 phone numbers. Numbers are set following:

T1=090311111  
T2=  
T3=  
T4=65464464

To delete a number from Gecon, use the command with # character instead of number.

#### Example:

Setup of first phone number  
abcd T1=0901777555

Delete of first number  
abcd T1=#

By inserting a phone number, all events from all inputs are reported to all numbers. You can change this by function of report routing. (See Additional functions)

## 2. Input Logic:

Digital input can have two states – open and close. Therefore it is necessary to determine which state is normal, and which is a reason for triggering of alarm. Two states are commonly used with security devices – NO and NC.

NO - normally open  
NC - normally closed

The inputs can be set by SMS following:

O - normally open  
C - normally closed

#### Example:

LOG=OCCO

Input 1 is normally open NO  
Input 2 is normally closed NC  
Input 3 is normally closed NC  
Input 4 is normally open NO

### 3. Setup of input type:

Digital inputs can have two functions- to report alarm and information about trouble/recovery. Alarm is reported by SMS and voice call on predefined numbers. Recovery after alarm is not reported. Trouble/recovery from the trouble is reported by SMS.

A- alarm input  
T- trouble input

#### Example:

IN=AAAA

All inputs are alarm inputs..

IN=ATTT

First input is alarm input and remaining three are trouble inputs.

#### 4. Additional functions

##### Reports routing

By default, all events (alarms and troubles) are reported to all numbers in address book. This setting is possible to change, that selected phone numbers (T1-4) will be only reported about events on selected inputs. In this way, you can sort out the reports according to the level of importance.

VT1=1234 - T1 will be informed about events on all inputs  
VT2=34 - T2 will be informed about events on inputs 3 and 4

##### Example:

VT1=2 - events from input2 are reported to phone number T1

##### Input delay:

For some applications, it is necessary that the events will be reported only in the case their duration is longer as defined period. In this way you can filter out the events that have no impact on the protection of the building.

Input delay is by default set to 0 minutes, meaning that the event is reported immediately. You can set the parameter between 0 and 120 (minutes). You can set it following:

D1=time delay of input 1 reporting and time in minutes  
D2=time delay of input 1 reporting and time in minutes

For example, in most cases it is not necessary to report power cuts immediately (circuit breakers could be switched back on in few minutes). But power cuts longer than few minutes shall be reported.

D1=30 - input 1 will report only events lasting longer than 30 minutes.

##### Alarm filtering:

Alarm filtering is a cost-saving function.

If the time filter is on, subsequent alarms triggered on the same inputs are ignored by Gecon. The idea is not to report any addition alarms during predefined time period (in minutes). This function can save you the prepaid credit. This function is off by default that means set to 0 minutes. Filter works independently for every input.

##### Example:

Set time filter for 15 minutes.

abcd F=15

##### Example:

Turn time filter off: abcd F=0

##### Texts setup:

You can change predefined messages that are send by Gecon.

If you would like to see current text, you can get it by sending short message with dollar sign \$ to Gecon phone number. If you do not want to send the message, delete it according to instruction below.

##### Example:

abcd \$

OBJ - name of object  
AL1..AL4 - alarm/trouble reports  
RE1..RE4 - recovery reports

You will setup the report by typing the message and putting # character at the end. If you would like to delete a message, type only the # sign.

##### Example:

AL1=text#  
AL2=text# - alarm report  
RE4=# - RE4 report will not be sent

##### Password change:

Default password is abcd. It is highly recommended to change the password immediately.

H=pqcr - command to change password

##### Example:

abcd h=pqcr ?

? sign at the end means that Gecon will confirm you the change with SMS message.

##### RELAY output:

Gecon contains one switch relay. Relay is normally switched off. You can control it remotely by SMS command or you can use it for signalization of trouble.

R=OFF - switch off the relay  
R=ON - switch on the relay  
R=TROUBLE - set the relay to signal the trouble  
R=10 - generate 10seconds impulse [time interval can be 1...60 seconds]

##### Practical example of settings:

You would like to set the Gecon following:

First input is alarm with NC logic, second is trouble with NC logic. Alarm is reported to both numbers, and power cut is reported to only the first number.

The configuration message shall look following:

abcd T1=090xxxxx T2=0909yyyyyy VT2=1 IN=AT LOG=CC

##### Factory reset:

Factory reset completely deletes and resets all the user settings and reset the settings to factory defaults. It is recommended to make factory reset before new installation to rule out any pervious settings.

##### Procedure:

1. Disconnect the GECON from power supply.
2. Put the jumper RES on.
3. Connect the GECON to power supply.
4. Signaling LED will blink 10x and stays shining.
5. Gecon is reset to factory defaults.
6. Take away the jumper RES.
7. The LED turns off, GECON will register into network.
8. GECON is ready for use.

**Technical parameters:**

Number of inputs: 4

Inputs modes: alarm/trouble

Number of outputs: 1 relay

Nominal driving voltage: 10 to 20V DC

Idle current consumption: 25 mA at 12V

Maximum current consumption: 350 mA

Operating temperature: -10 to +40 C

Max. voltage RELAY 30 V

Max. current RELE 0,5 A

Device includes 900/1800 industrial GSM module.