BasicGSM 2 - GSM notification and control module, GSM terminal.

User manual.

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WARNINGS

For safety reasons, this equipment should be installed only by qualified personnel.
Before proceeding with the installation, refer to the above instruction, the connection must be performed without the power supply.
Do not power on the unit without connecting an external antenna (starting the device without the antenna connected may damage the phone transmissions and void the warranty!).
Do not interfere with construction or carry out repairs yourself.
Protect your electronics against electrostatic discharges.
In order to meet LVD and EMC requirements, the following must be observed: power, installation, shielding - according to application. The device is a source of electromagnetic waves, so it may interfere with other radio devices in specific configurations.
Ropam Elektronik is not responsible for any malfunction of the GSM network and any possible technical problems.

WEEE LABELING

Waste electrical and electronic equipment must not be disposed of with household waste. According to the WEEE directive (EU Directive 2002/96 / EC), electrical and electronic equipment used should be used separately. In Poland, it is prohibited to place together with other wastes of worn equipment marked with a crossed-out wheeled bin symbol in accordance with the regulations on waste electrical and electronic equipment. The user who intends to dispose of this product is obliged to give the above mentioned. to the point of collection of used equipment. Collection points are conducted, among others. by the wholesale and retail sellers of this equipment and the municipal organizational units engaged in waste collection activities. The correct implementation of these obligations is particularly important in the case of hazardous equipment that has a negative impact on the environment and human health.

The power supply unit is compatible with a 12V DC lead acid battery (SLA, VRL). It should not be discarded after use, but must be disposed of in accordance with the applicable regulations.

(European Union Directives 91/157 / EEC and 93/86 / EEC).

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1. Introduction

Introduction

Thank you for choosing Ropam Elektronik products and solutions. We hope that our equipment will meet your requirements and will serve you reliably for years to come. Ropam Elektronik continues to innovate its products and solutions. With the update function products can be enriched with new features and keep up with the modern requirements for the protection of property systems and home automation. We invite you to visit our website www.ropam.com.pl for information on current versions. If you have any additional questions, please contact us by phone or email.

This manual applies to the products in the software version. Since the operation of the device depends on the configuration of the installer all the functions affected by this option are marked (service).

Properties

BasicGSM 2 / - PS terminals are the successors to the series of earlier BasicGSM modules. The first is BasicGSM 2 with 12VDC power supply and BasicGSM 2 - PS power supply with built-in buffer battery support and emergency power supply. New terminals are equipped with the latest GSM modem for 2G networks and many new features.

The basic features of the BasicGSM 2 series are:

- compact design, smaller dimensions,
- versions for a DIN rail, BasicGSM D4M-2 BasicGSM D4M-PS-2 (width four DIN modules),
- basicGSM-BOX in surface-mounted housing, AT-GSM-MINI90 antenna, anti-tamper protection,
- disconnectable connectors,
- antenna socket SMA,
- nanoSIM slot,
- **microUSB - for programming and updating,**
- socket for connecting PSR-ECO-2012 power supply (BasicGSM 2 / -D4M),
- 6 inputs NO/NC (I1-I6)
- 2 inputs NO/NC, GND, +12V, 0-10V, 4..20mA,
- 1 relay output (O1) for controlling eg. a gate,
- 3 OC outputs - protected against short-circuits and overload (0.7A),
- 1 AUX protected output (1A),
- 4 calendar timers, RTC clock, synchronization with GSM network,
- TSR-x temperature sensor support, GSM thermostat,
- **LogicProcessor, logic functions, time relays,**
- CALL, SMS, SMTP e-mail notification),
- Remote programming via GPRS (RopamBridge server),
- **dedicated RopamBasic mobile application (Android, IOS) via GPRS and RopamBridge server (and the current RopamDroid - SMS messaging, Android system),**

- **visualization and control of alarm system** using input / output, the effect is intuitive control of vigil by pictograms "arm", "disarm" (expansion and modernization of DSC, Paradox, Satel, etc. by GPRS / SMS / DTMF control),
- BasicGSM-PS 2 power supply compliant with PN-EN 50131-6, step 1 or 2, power supply type A,
- Operation with PSR-ECO-2012-RS (only BasicGSM 2 modules).

Appliance

BasicGSM 2 / - PS terminals are designed for integration with other devices (eg visualization and control of the alarm system using the input / output), the effect is intuitive control of vigil by pictograms "arm", "disarm" (expansion and modernization of DSC, Paradox, Satel, etc. by GPRS / SMS / DTMF, PLC controllers, relays, drivers) via binary inputs and outputs. With built-in GSM modem it is possible to transmit events from the system via SMS, VOICE, E-MAIL. For servicing and control serves SMS, CLIP, DTMF, RopamBasic, RopamDroid.

Appliance:
- notification for alarm systems,
- notification for Fire Brigades TSO with siren control,
- multi-operator control of gate automation, barrier via CLIP (CallerID),
- home automation systems, timer functions,
- systems for monitoring and control via GSM signals, binary I / O,
- temperature control and monitoring systems eg server rooms, refrigerators (vaccines), refrigerators, thermal processes,
- analogue sensor control and monitoring systems with 0-10 V outputs, 4-20 [mA], eg relative humidity, temperature,
- temperature control,
- access control systems,
- monitoring and control of technological processes, for example. pumping stations, CO boiler, feedlots,
- Buffer 12VDC power supply (UPS 12V) for additional devices, relays, lights. (versions -PS).

Warnings

Ropam Elektronik units are part of a complete alarm system, whose effectiveness depends on the quality and technical condition of all devices (detectors, signalers), wiring, etc. of the system. The user is required to periodically test the operation of the alarm system. Detailed system control is determined by the installer who designed the system. Periodic system maintenance (with state control, backup power, system operation, notification, etc.) is recommended.

Ropam Elektronik is not responsible for the correct operation of operators and GSM network infrastructure used for alarm and remote control messages. It is advisable to use a GSM operator that guarantees min. Two BTSs of the given system location with GSM communication. In addition, we recommend using such services and subscriptions available on the market that guarantee correct operation (human factor minimization, eg blocked outgoing calls due to lack of funds in the account, allow for full configuration of the GSM track (for example, disable advertising services).
We do not recommend using national roaming operators!

In addition, it should be noted that the **services guaranteed by GSM operators are voice services (VOICE)** rather than SMS, so important information should be transmitted via voice calls and the exact identification of the event takes place in the SMS (eg VOICE + SMS, CLIP + SMS).

For service like **e-mail transmission** it is recommended to create a independent e-mail account (eg. Alarm@domena.pl) in a proven provider e-mail accounts. Sharing of data to an SMTP server from a private account can result in unauthorized access to these accounts.

Requirements for SMS control and mobile applications.

For the service via SMS and RopamDroid mobile phone, the smartphone must encode the SMS: GSM or UNICODE alphabet other formats are not supported!
For RopamDroid applications, your smartphone must have compatible SMS support from the Android API, and do not have overlays, other SMS intercept apps that have priority for inbox or outbox.

For proper configuration and operation of RopamDroid you need the proper configuration of the system and knowledge of the data (service):
- knowledge of the phone number of the SIM card installed in the system,
- knowledge of "SMS code / login password for application" and active option: "Possible change of configuration via SMS", "SMS active control", "send confirmation of SMS command execution"
- to control outputs via RopamDroid, the control setting via SMS for the output is required,
- to control TermostatemGSM is required to run a function of temperature measurements and the thermostat.

For proper setup and operation of RopamBasic it is required to have adequate knowledge of system configuration and data (service):
- knowledge of the phone number of the SIM card installed in the system,
- knowledge of "SMS password / application login password" and active option: "Possible remote programming via GPRS",
- knowledge of the encryption key TCP / IP.
- control via the RopamBasic requires the setting triggered by the "Mobile Application" for the output,
- for controlling the GSM thermostat, it is necessary to start the function of temperature measurement and thermostat.

Device versions

BasicGSM 2 is available in several versions, below is the name and options of the device.

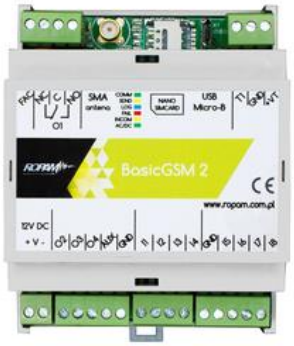
BasicGSM - BOX 2, module equipped with tamper cover:

Introduction

BasicGSM 2:

BasicGSM - PS 2:

BasicGSM - D4M 2:



BasicGSM-D4M-PS 2:

2.System maintenance

System maintenance: SMS commands

Functionality of the module allows to change the selected configuration parameters remotely. This is done by sending an SMS with the appropriate command (command) with the access code. After the correct programming procedure, the module will reply to the SMS: "Configuration changed", in the case of configuration error, the reply is: "Error in configuration message, send again correct!"

check the format of the SMS, then correct the content and resubmit. The factory set parameters:
SMS code / application login: 1111
Sending SMS control confirmation
PIN code request disabled

COMMENTS:
- the character (s) in the command may be arbitrary
- between the commands must be spaced (space)
- there is no obligation to enter all parameters, the parameters skipped in the SMS will remain unchanged
In one SMS you can configure more than one parameter, just remember not to exceed the maximum length of 160 characters, in which case we only enter the access code once (at the beginning of the SMS)
- national characters (Polish)
- the system supports text formatting; GSM or UNICODE alphabet
- maximum number of characters for I / O notifications: 30
- maximum number of characters for switching on / off: 20

Remote configuration of TELEPHONE NUMBERS and SMS CENTER.

The syntax of the configuration SMS is as follows:

Parameter	Description	Example	Comments
#### phonex nnnn	Change or enter a new phone number (nnnn= phone number)	1111 phone1 +48555666777	####= code SMS nnnn= phone number in international format
#### phonex	Removing a phone number from the module memory	1111 phone1	####= code SMS
#### addphone nnnn	Appends number to the first free position. After successful execution the module sends the SMS "Added number", otherwise "Error, no number added!"	1111 addphone +48555666888	####= code SMS nnnn= phone number in international format
#### delphone nnnn	Removes indicated number from memory. After the correct execution, module sends the SMS "Number of removals", otherwise "Error, the number was not deleted!"	1111 delphone +48555666888	####= code SMS nnnn= phone number in international format

#### smscenter nnnn	Change or enter a new SMS center number (nnnn = center number)	1111 smscenter +48100200300	####= code SMS nnnn= phone number in international format

Remote configuration of other parameters

Parameter	Description	Example	Comments
#### code zzzz	Change of SMS code (zzzz = new access code)	1111 code 1234	#### - current SMS code zzzz = new SMS code
#### time rr, mm, dd, gg, mm	Setting, changing date and time (mm, dd, mm, mm = year, month, day, hour, minute)	1111 time 02, 01, 01, 12, 05	After commas, required spacing (space)
#### resettest	Reset transmission test timer and erase sms counters, failure and mms.	1111 resettest	
#### restart	Restart modem and module	1111 restart	
#### replysms x	Remote ON / OFF function confirmation SMS functions performed by SMS	1111 replysms 1	X = 1 function enabled x = 0 function disabled

Mobile Application RopamBasic

RopamBasic Mobile Application is software that facilitates the user to control the BasicGSM 2 module. It can be installed on basic mobile platforms: iOS, Android.

The RopamBasic application is based on GPRS communication, which enables the transmission of small amounts of data and thus saves and controls the costs of operating the system.

The module in continuous connection with the mobile application generates network traffic of about

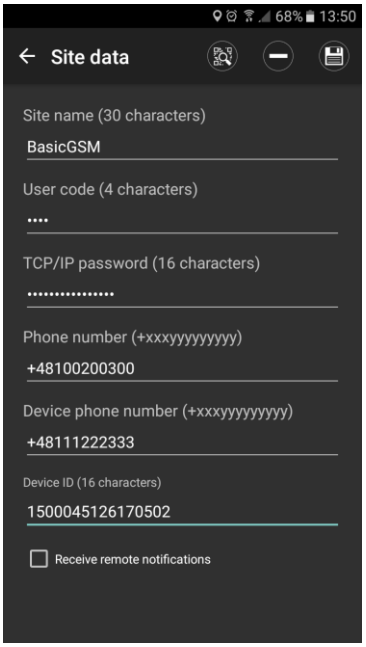
300MB / month.

Pre-set the application.

BasicGSM Manager offers the ability to download data from a program and display it in a single application window to facilitate setting and configuration of basic parameters for connection to the BasicGSM module.

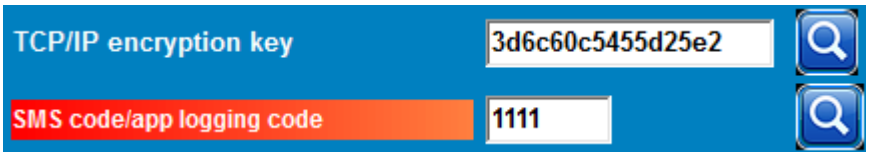
Data needed to configure the correct connection to the module:
- SMS / application code
- TCP / IP password
- User telephone number (first on the list)
- phone number
- device number (disc ID)

Below the parameter download window from BasicGSM Manager and the view of where data is downloaded:

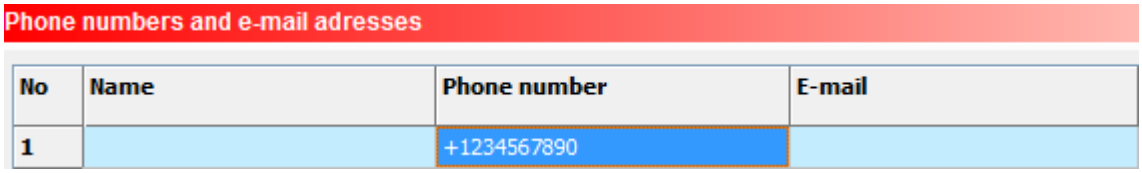


Description of the individual fields in the program:

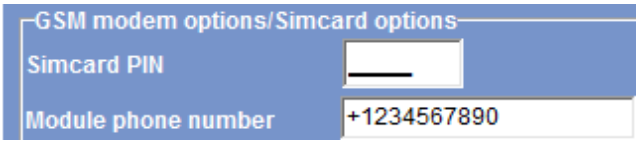
User ID and TCP / IP Password:
- tab: "Communication, tests, counters" - SMS code / app logging code:



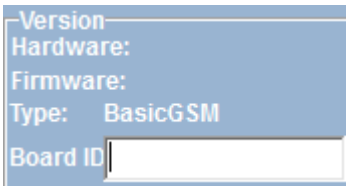
Phone number:
- tab: "Phone numbers and email addresses":



Device phone number:
- tab: "GSM modem options/Simcard options":



Device Number (Board ID):
- bottom left corner in BasicGSM Manager:

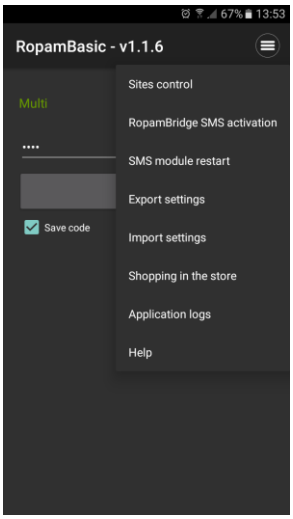


Description of application windows.

RopamBasic application has the ability to define a main window with icons that are defined in BasicGSM Manager.

Application main window:

Available functionality from the application:



Descriptions and features of application icons.

Icon pictograms are assigned to each function of the module whose meaning and operation are described below. BasicGSM Manager allows you to place any icon anywhere on the mobile application screen and assign multiple actions to it.

Icon	A description of the action
	Full system armament. Possible: - required code
	Full system disarming.
	Displays output list: Possible (set in BasicGSM Manager): - display of outputs,
	Viewing of input states (violation, tamper, OK). Possible (set in BasicGSM Manager): - list of displayed inputs, - descriptions of entrances, - operating mode, - operating time,
	Application settings menu.
	View event history in the system.

System maintenance

	Overview of system failure. If a system failure occurs, next to the icon on the right side will be displayed a yellow dot indicates the presence of a new failure in the system, check can be made by clicking the triangle icon with an exclamation point.
	View value for analog input I7 or I8. Possible (set in BasicGSM Manager): - Voltage / current scaling to physical values, eg ºC,% Rh, lux,
	Temperature chart from the TSR-1 sensor connected to the system.
	Temperature chart from TSR-1 sensor connected to the system. Input view. Possible (set in BasicGSM Manager): - input number 1-8, - locking the input after pressing the icon (after disarming the input system are unlocked),
	Output control in module (1-4). Possible (set in BasicGSM Manager): - state indication acc. Entry, - Require code to be included,
	Output control of the module. (1-4). Possible (set in BasicGSM Manager): - output number, - state indication acc. Entry, - Require code to be included,
	Output control of the module. (1-4). 1 = white bulb icon 0 = dark bulb icon Possible (set in BasicGSM Manager): - No. of output, - state indication acc. Entry, - Require code to be included,

System maintenance

	Output control of the module (1-4). eg roller blinds. Possible (set in BasicGSM Manager) - No. of output, - state indication acc. Entry, - Require code to be included,
	Output control of the module (1-4). eg roller blinds. Possible (set in BasicGSM Manager) - No. of output, - state indication acc. Entry, - Require code to be included,
	Output control of the module (1-4). eg entrance gate. Possible (set in BasicGSM Manager) - No. of output, - state indication acc. Entry, - Require code to be included,
	Output control of the module (1-4). eg garage gate. Possible (set in BasicGSM Manager) - No. of output, - state indication acc. Entry, - Require code to be included,
	Output control of the module (1-4). eg garage gate. Possible (set in BasicGSM Manager) - No. of output, - state indication acc. Entry, - Require code to be included,
	Enabling the output group. Possible (set in BasicGSM Manager): - no output / outputs,

	Disabling the output group. Possible (set in BasicGSM Manager): - No. of output / outputs
	USSD Account Control (funds available, account balance, top-up, etc.)
	Basic information about the module: Firmware module, Modular and modem power supply

Mobile Application RopamDroid

RopamDroid mobile application is software that facilitates user control of series modules: BasicGSM, BasicGSM 2, MultiGSM, NEO, NeoGSM, OptimaGSM. It can be installed on the Android platform.

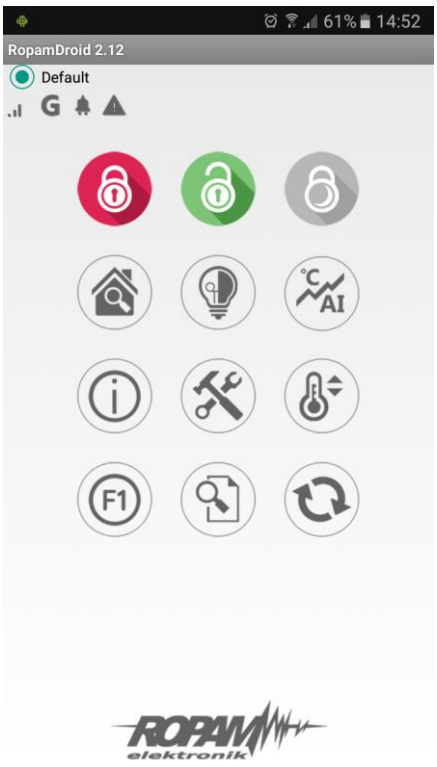
The RopamDroid application is based on SMS communication, which allows the transmission of small amounts of data and thus saves and controls the costs of operating the system.

RopamDroid is a free application for controlling your system. RopamDroid is supported by smartphones running Android.

Basic application properties:
- support Android version 2.1 ÷ 6,
- clear graphical interface and status bar,
- application and service filtering messages from the phone number of the system,
- two-way communication via system SMS,
- password protection for applications,
- access to functions: control of armed status, current status and failures, blocking the view and control inputs, outputs control group, view and change the temperature thresholds for TermostatGSM, a preview of the I7, I8 and change the set thresholds,
- Reduce control costs via SMS by consolidating information into single messages for applications.
- RopamDroid Pro version supports multiple systems, objects.

Application description

Application main window:



Description of the buttons and functions of the main window:

PIKTOGRAM	FUNKTION
	Disarming the module
	Arming of the module

System maintenance

	View status of zones (detectors) and the possibility of block grouping
	Control of outputs in the system
	Preview of temperature values and analogue AI values and possibility of changing the thresholds A, B, (Hi and Lo)
	Cumulative text of system status, button for querying account status, setting time and date
	Request for current system status (refresh status)
	Function key, eg user command
	Application settings
	System event log (last 7 events)

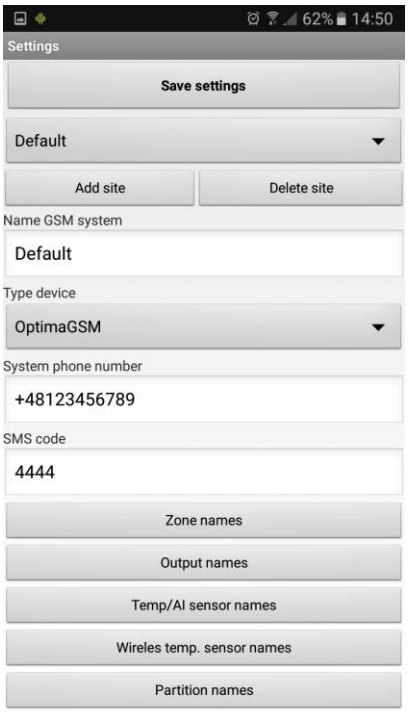
Description of pictograms in status bar:

	GSM network level (level 1-4)
	GPRS coverage (available or not GPRS)
	Power status indication (basic or battery)
	Standby indication
	Alarm signaling on the system
	Failure log on the system

Installation and configuration

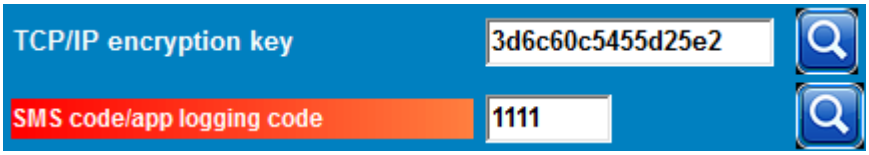
After installing the application, you need to configure it properly.

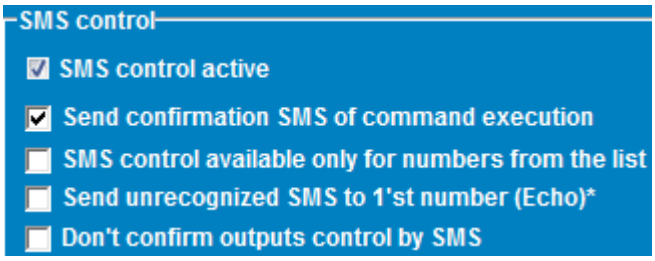
Application settings window.



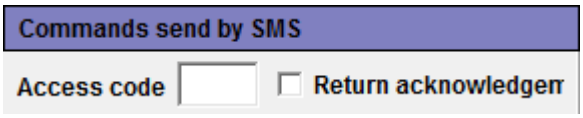
Add / Remove: function add, object recall (RopamDroid PRO version only).
Object name: User's own name eg House.
Module Type: Select the appropriate device type.
Phone number of the facility: Enter the number of the SIM card installed in the system (International (recommended) or abbreviated).
SMS password: enter the user code of the system (same as BasicGSM Manager - SMS code / application login)

BasicGSM Manager / Komunikacja, testy, liczniki:

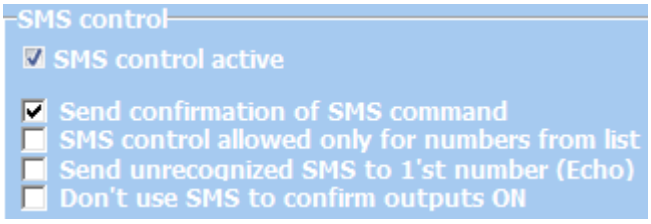




PartnerGSM / Opcje:



OptimaGSM Manager / System Options:



Remarks: On the OptimaGSM, the SMS password is the user code set in the touch panel operating on the user's system or set by the SMS command.

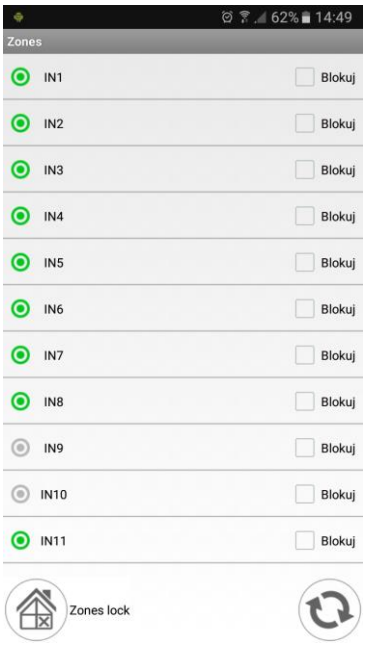
Input names: input names in the system,
Output names: output names in the system,
Temperature sensor names: Temperature sensor name T1, for example, Temp CO, Temp. outside, Temp. ground floor., Temp. DHW.
Zone names: zone names in the system, may be the same as in TPR-xx panels, eg Ground floor, Garage.

Require program password: This option enables access to the application after authorization **(recommended).**
Ask for SMS: This option allows you to deactivate control commands from the application, for example, when controlling the outputs. **Arming control acknowledgments are always displayed.**
Change program password: This option allows you to set or change an application access authorization password.
USSD account status: a field to enter a USSD short code for checking account status (eg Orange * 124 * #), the code will be automatically sent by pressing the **USSD Account Status button**. **For this function must be selected in the service program "send confirmation".**
User command F1: field to enter another SMS command eg MMS request, the code will be automatically sent after pressing the **F1** button.
Save settings: the button confirms and saves all changes made in the settings!
Export: function to export settings to file (without codes).
Import: function to import settings into a file, after import, you have to complete the settings with SMS codes.

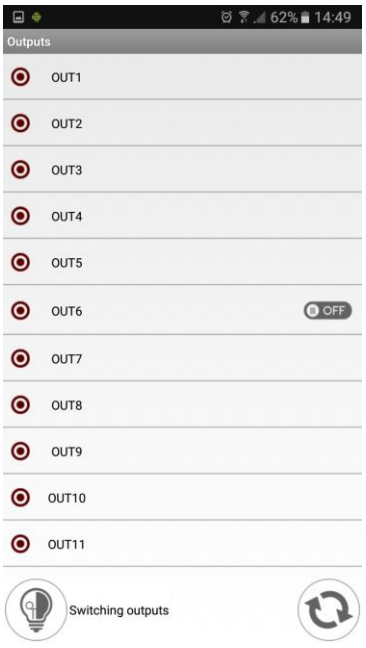
View of application windows

In order to be able to control module outputs from the RopamDroid application, select the appropriate tool for the device during configuration that is to be controlled by SMS!

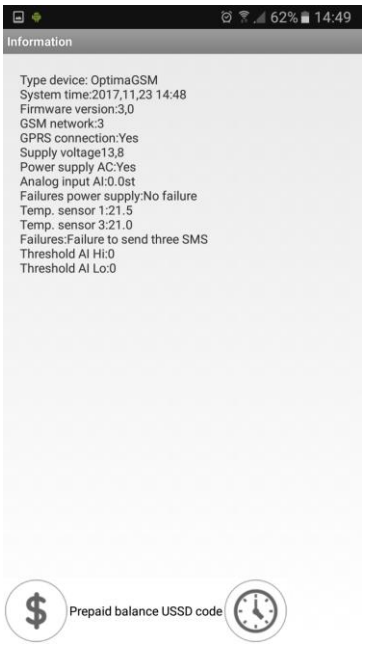
Inputs:



Outputs:



Information about the module:



3. Settings, notes.

Inputs settings

No.	Description	SMS violation	SMS return	VOICE	Comments
I1					
I2					
I3					
I4					
I4					
I6					
I7					
I8					

Outputs settings

No.	Description	Mode	SMS on	SMS off	DTMF on	DTMF off	CLIP	Code	Comments
O1									
O2									
O3									
O4									

GSM and AI thermostat settings.

No.	Description	Value	SMS	VOICE	Comments
TLo					
THi					
AILo					
AIHi					

Version history.

BasicGSM	Date	Opis
1.0	2017-10-06	Description

Information.

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