

OptimaGSM - User manual

**OptimaGSM – alarm system with
GSM communication and building automation.**



Ropam Elektronik

Tel. +48 12 272 39 71
Faks +48 12 379 34 10

Polanka 301
32-400 Myślenice, Polska

www.ropam.com.pl
biuro@ropam.com.pl

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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. General description

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

The OptimaGSM alarm control panel with peripheral devices is a solution that integrates the electronic burglary signaling system and building automation using the SmartPLC technology. Built-in GSM communicator allows to remote monitoring and controlling of the system. Thanks to the modular design, the system can be expanded and adapted to changing needs of the user.

The control panel has unique functions compared to competing products and is the most functional system on the market in its class, including:

- building automation functions using communication on the electric network, unique SmartPLC technology,
- the ability to control using the RopamDroid application for Android smartphones,
- flexible control of the armed mode: touch panels, SMS, system input, radio remote controls (RF-4), in accordance with the requirements of current installations: 'from the shell to the residence',
- support of touch panels; surface-mounted version TRP-1-O, TPR-2W-O, TPR-2B-O and concealed TPR-1F-O, TPR-4W, TPR-4B
- visual verification of the object's status: FGR-4 module for sending MMS / E-MAIL messages with photos from industrial cameras,
- VSR-2 speech synthesizer, allowing you to send 16 voice messages containing unique information about the event (VOICE) or VSR-1, allowing you to send a voice message (VOICE),
- AMR-1 audio module (microphone), allowing for eavesdropping of the object and audio verification,
- VAR-1 gateway and FGR-4 module for integration with a video intercom, integration allows for a telephone conversation between a door station and a mobile phone as well as sending pictures in the MMS format,
- integration of audio intercoms and intercoms,
- temperature sensors for controlling and recording temperature and thermostat function,
- RF-4 radio controller for controlling the armed mode and outputs (4) through radio remote controls,
- PSR-ECO power supply system for large systems and in case of working in variable temperatures in order to properly service the battery,
- analog input AI 0-10V for checking physical parameters, eg battery voltage, humidity [% RH], temperature, etc.



SmartPLC technology integrates the OptimaGSM system with distributed "smart connectors". Communication between the control panel and the concentrator is based on the RopamNET bus. SmartPLC while the communication between the concentrator and intelligent connector is carried out after the power supply lines of low-voltage buildings installations. SmartPLC is a unique and innovative approach to communication, transforming electrical installations of building into a communication bus for control and monitoring. SmartPLC technology from Ropam Elektronik opens a new chapter in building automation and gives so far unavailable options for designers and integrators.

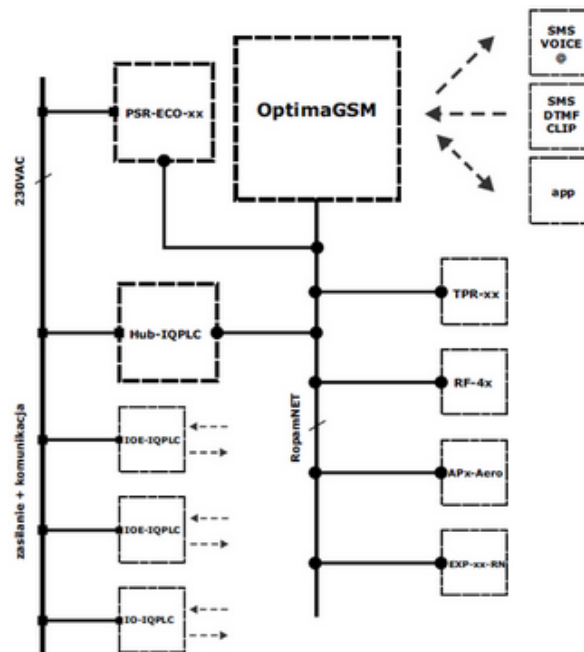
Appliance

The alarm system built on the basis of the OptimaGSM series alarm panels, TPR-xx touch panels and other additional devices is an ideal solution for residential buildings and small commercial facilities. Modern design, proven technology of the touch panel with a spectacular color LCD display is ideal for composing in most interiors and rooms. The intuitive and clear interface makes the control of the alarm system has never been as easy as with TPR-xx. The touch panel in combination with the control panel allows you to build a fully functional alarm system.

The OptimaGSM system also allows you to create simple home automation applications with remote control via SMS / CLIP and Wifi / Ethernet.

Flexible functions also allow use in systems that use binary signal control, temperature, visual verification is required and information transfer is based on SMS, VOICE, MMS, e-mail.

- building automation systems integrated with the OptimaGSM system,
- smart home, home automation,
- electronic intrusion detection systems,
- Remote control and monitoring of electrical equipment,
- intelligent lighting,



Warnings

Ropam Elektronik devices are part of a full alarm system, whose working effectiveness depends on the quality and technical condition of all devices (detectors, signaling devices), cabling, etc. included in the system. The user is obliged to periodically test the operation of the alarm system. It is necessary to check whether the control panel reacts to the violation of individual detectors (PIR, reed switches, etc.) or signaling devices (external and internal) and notifications. The detailed method of system control is determined by the installer that the system has designed. Periodic system maintenance is recommended (with device status check, back-up power supply, system operation, messaging, etc.).

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, RopamDroid and DTMF control.

To service via SMS and RopamDroid mobile phone, the smartphone must encode SMS: GSM or UNICODE alphabet, other formats are not supported!

For the RopamDroid application, the smartphone must have compatible SMS support with the Android API and not have overlays, other SMS interception apps that have priority for the inbox or outbox.

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.

To control the DTMF phone, the smartphone must be able to generate DTMF tones during a phone call.

A single DTMF code (pressing the sign) should last for a minimum of 0.5s.

2. System operation

The user's manual contains information about system operation and how to present events in the system. The basic operation consists in arming and disarming the control panel and responding appropriately to emergency or alarm situations. Since the alarm control panel has a built-in GSM module, it allows for the transmission of events via SMS / VOICE messages, and it is also possible to remotely arm and disarm the system via SMS by mobile applications. Access to remote control can be blocked in the alarm system settings (service) or limited only to user numbers (service).

The system supports: 1 master code and 31 user codes.

Factory main code: 5555.

Code type	Function
Main	<ul style="list-style-type: none"> - controlling arming of all zones, - access to all zones, blocking detectors, - creating and editing users, - granting user rights, - access to the settings menu, - access to the event memory review, - access to the SMS / App control (service), - access to changing settings via SMS (selected functions),
User	<ul style="list-style-type: none"> - control of the armed mode, according to rights, - access to selected zones, blocking detectors, according to rights, - change of own code, - access to the event memory review, - access to the SMS / App control, by permission,

TPR-4x touch panel.

Basic properties of the TPR-4 touch panel:

- 4.3 "TFT LCD color display, 16.7 million. colors
- "Touch Panel" touch panel, without mechanical contacts
- interactive graphic menus with pictograms (icons)
- the function of a random numeric keypad layout
- configurable panel menu (icons)
- text hints for given functions
- intuitive: system control and monitoring
- control of alarm system outputs
- fast control of the TPR-4 relay output
- system status LEDs
- a bar of additional information about the system status
- displaying information from LogicProcessor on the main screen
- acoustic signaling
- screen saver with calendar and clock function

- two alarm inputs
- RS485 bus for system communication
- local USBmicro port for updating the panel firmware
- software upgrade function
- Aesthetic and solid housing in white or black
- tamper protection of the housing
- detachable terminal strips
- cooperation with headquarters: OptimaGSM

Acoustic signaling

The touch panel can additionally generate acoustic signals. Sounds marked with "service" can be optionally turned off or attached from the installer menu and "user" from the user menu.





Description of sound signals:





one short at 0.2 seconds	signaling of the pressed 'button' on the touch panel (service)
two short at 0.85 seconds	wrong code or command
two sets of four signals in one second	signaling of arming full or night
one series of four signals within 0.5 seconds	signaling the disarming of full or night standby
one long every 1 second	signaling of countdown of entry / exit time (service)
one continuous signal modulated for 0.8 seconds	chime signal from the entrance (user, service)
continuous loud signal	alarm signaling in the system (service)

Status bar

In the upper part of the LCD display there is a status bar, on which the system status is presented by pictograms. The bar is displayed in every window and menu.

Description of pictograms in the status bar:

	GSM network level (level 1-5)
	signaling of supply status - basic AC or battery
	alarm signaling (full or night) + partition number in armed mode (green digits 1-4, displayed alternately with pictogram)
	alarm signaling in the system + partition number in the armed mode (red 1-4 digits, displayed alternately with a pictogram)

	signaling of the call (incoming or outgoing)
	SMS / MMS transmission (incoming or outgoing) or message in inbox (read in user menu)
	trouble signaling in the system
 xx lub T1, T2, T3, T4	temperature value:- xx: local measurement in the TPR-xx panel, if no TSR-1 sensors are installed- T1, T2, T3, T4 temperature measurement from TSR-xx sensors, if min. 1 piece is installed.
GG:MM	system time in the format: hour, minute

Main window

In normal mode, the main window is displayed on the touch panel. The TPR-4 panel has the ability to define two user screens with any configuration of icons on the screen. In the case of inactivity (about 160 seconds), the screen goes into the screensaver mode:








- calendar with date and time, temperature value from system sensors,
- digital photo frame.








In the screensaver mode, information about the armed mode is hidden, and the power supply, alarm and malfunction status are displayed (by means of LED diodes). **Exiting from screen saver mode can be protected by a code. If a code is required, the numeric keypad will be displayed, enter the code and confirm #. If the sequence is correct, the panel will display the main window. In this mode, counting of incorrect attempts to enter codes may also work** (if global counting is set, for attempts to bypass the system by guessing codes).















Description and functions of icons

Icons pictograms are assigned to individual system functions, which meaning and operation are described below. TPR-4 touch panel allows you to place any icons anywhere on the two panel screens and some of them assign multiple actions.

Icon	Description of action
	<p>Full armament system. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - selection of zones - required code - displaying the zone selection screen
	<p>Disarming full system. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - selection of zones - displaying the zone selection screen
	<p>Night time system. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - selection of zones - required code - displaying the zone selection screen
	<p>Controlling the outputs: Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - displaying the outputs to be available (Tab "TPR touch panel -> display options -> controlling outputs) - operation mode - time of operation - description of exits
	<p>View input status (violation, tampering, OK). Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - list of displayed inputs (Tab "TPR touch panel -> display options -> list of displayed inputs) - description of entrances - operation mode - time of operation
	<p>Building plan preview (requires a MicroSD card with files: plan1.bmp to plan4.bmp). Possibility to edit the layout set of detectors from service menu level in the TPR-4 panel.</p>
	<p>Giving, changing, deleting user codes and names (up to 32).</p>



Icon	Description of action
	<p>Menu of user and service settings.</p>
	<p>Blocking an input or group of inputs. Set in OptimaGSM Manager:</p> <ul style="list-style-type: none"> - entry number - group blocking of zones - code request to confirm the block
	<p>View the history of events in the system.</p>
	<p>Overview of system failures. If a system failure occurs, next to the icon on the right side a yellow dot will be displayed indicating the presence of a new failure in the system, you can check by clicking the triangle icon with an exclamation mark.</p>
	<p>Preview values for the analog input. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - scaling of voltage values to physical values, e.g. ° C, % Rh, lux, etc.
	<p>Temperature chart from TSR-1 sensors connected to the system.</p>
	<p>Preview of the entrance. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - selecting the entry number - blocking the input after pressing the icon - indication of the status from the PLC I / O module input
	<p>Controlling the relay in the panel.</p>

Icon	Description of action
	
	<p>Controlling the control panel output. (1-32). Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry - requiring a code to enable <p>- indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon</p>
	<p>Controlling the control panel output. (1-32). 1 = white bulb icon 0 = dark bulb icon</p> <p>Possible (set in OptimaGSM Manager, tab "TPR touch panel -> display options -> output control):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry - requiring a code to enable <p>- indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon</p>
	<p>Controlling the control panel output (1-32). e.g. roller blinds up.</p> <p>Possible (set in OptimaGSM Manager, tab "TPR touch panel -> display options -> output control):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry - requiring a code to enable <p>- indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon</p>
	<p>Controlling the control panel output (1-32). e.g. roller blinds down.</p> <p>Possible (set in OptimaGSM Manager, tab "TPR touch panel -> display options -> output control):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry - requiring a code to enable <p>- indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon</p>
	<p>Controlling the control panel output (1-32). e.g. gate.</p> <p>Possible (set in OptimaGSM Manager, tab "TPR touch panel -> display options -> output control):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry - requiring a code to enable <p>- indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon</p>
	<p>Controlling the control panel output (1-32). e.g. a garage door. Possible (set in OptimaGSM Manager, tab "TPR touch panel -> display options -> output control):</p> <ul style="list-style-type: none"> - the number of the exit - status indication according to entry

Icon	Description of action
	<ul style="list-style-type: none"> - requiring a code to enable - indication of the power measured by the IOE-IQPLC module (if present in the system) on the right side of the icon.
	<p>Attaching the output group. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - number of outputs / outputs - requiring a code to enable
	<p>Turning off the output group. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - No. of output / outputs - requiring a code to enable
	<p>Humidity indicator - Aero radio sensors. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - list of displayed sensors (up to 8) - sensor number on the widget
	<p>Humidity and temperature indicator - radio sensors of the Aero system. Possible (set in OptimaGSM Manager):</p> <ul style="list-style-type: none"> - list of displayed sensors (up to 8) - display only temp., only% Rh or temp and% Rh
	<p>Basic information about the system: Firmware of the control panel, Control panel firmware, Power supply of control panel and modem, Status of the AP-IP module</p>


System operation: touch panel.

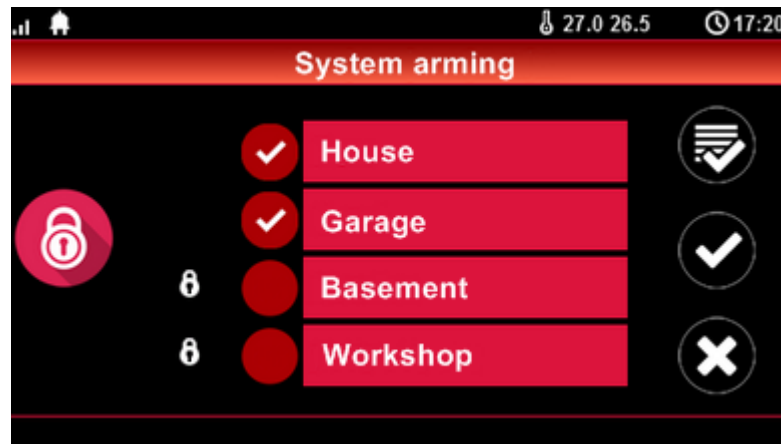
The basic operation of the system consists in pressing the button from the main window and following the instructions. The numeric keypad is displayed for functions that require confirmation with a code (fixed or random arrangement of numbers and characters - service). For functions that require the use of letters and other characters, a full virtual keyboard (QWERTY) is reported. For selected functions an optional application without a code is available (designation: service).

Window type / Keyboard	Confirmation of the function	Exit from function
Numerical	#	*
Full	ENTER	ESC
Graphic		

Full keyboard: buttons	Function
0-9	number buttons
A-Z	alphabetic buttons
SHIFT	changing the size of alphabetic characters
123	calling / hiding the numeric keypad
PL	calling alphanumeric buttons with diacritical signs (Polish)
Bspace	Backspace button, erases one character back
Space	Space button, space
Enter	change approval button
Esc	exit button from the keyboard without saving data

Activation of the full armed mode.

To activate the full armed mode, press  - the numeric keypad will be displayed, enter the code and confirm #. If the sequence is correct, the control panel will display the zone selection window. Select the selected zones (by pressing the zone name) and confirm or select the all button.



- if the "quick exit" (service) option is activated, the control panel will start the countdown of the exit delay for the set zones

Warnings, depending on the system settings (service):

- if the zones of the control panel are violated, a message will be displayed asking for blocking the inputs :

"whether to block violated inputs - YES / NO",

if the zones have been blocked from the menu level, the following message will be displayed: "inputs are blocked".

Entrances violated and not blocked will be normally supervised when they return to normal (not affected). If the control panel was in the night-time armed mode, this state will change to stand-by mode (without disarming the night watch).

- in the event of a failure in the system:


"there is a failure or enable the system - YES / NO".

After confirming the arming, the exit delay countdown begins. Supervision over the detectors will take place after this time has elapsed.

If the control panel has the Aero system installed, supervision (status transfer) over these detectors will take place in accordance with the presence control interval, intervals: 30/60 / 90s (service).

Arming night vigil.

In order to arm the night watch supervision) inputs marked as "night" in the inputs configuration

(service), press 

- if a code is required, the numeric keypad will be displayed, enter the code and confirm #. If the sequence is correct, the control panel will display the zone selection window.

Select the selected zones (by pressing the zone name) and confirm or select the all button.

- if the "quick exit" (service) option is activated, control panel will start the exit delay countdown.

Warnings, depending on the system settings (service):

- if the zones of control panel are violated, a message will be displayed asking for blocking the inputs: **"whether to block violated inputs - YES / NO"**, if the zones have been blocked from the menu level, the following message will be displayed: "inputs are blocked". Entrances violated, not blocked, will be


normally supervised when they return to normal (not affected). If the control panel was in the night-time armed mode, this state will change to stand-by mode (without disarming the night watch).
- if the system is signaling a failure: **"there is a failure or switch on the system - YES / NO"**,

After confirming the arming, the exit delay countdown begins. Supervision over the detectors will take place after this time has elapsed. If the control panel has the Aero system installed, supervision (status transfer) over these detectors will take place in accordance with the presence control interval, intervals: 30/60 / 90s (service).

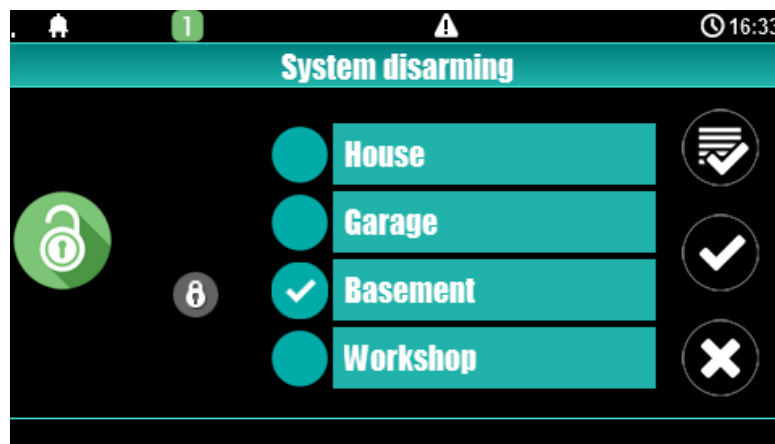
Night-time armed mode is a partial arming of zones with the inputs (detectors) assigned to the NIGHT sub-zone. The division takes place in the system configuration (service). Usually, it is a vigil detector on the ground floor, a garage while in the bedroom or floor.

Disarming.



To disable the full or night standby mode, press , then the numeric keypad will be displayed. Enter the code and confirm #. **If the sequence is correct, the control panel will display a zone selection window with their guard status.**

Select the selected zones (by pressing the zone name) and confirm or select all button.



If the "delayed" input is violated during the armed mode, the numeric keypad will be displayed automatically.

Alarm clearing

If an alarm occurs in the system, it is signaled in the panel by the red "ALARM" LED, acoustic signaling and the "ALARM" information window.




The LCD display in the ALARM window shows the sources of alarms with the name of the zone (detector) and date. After confirming the "ALARM" window, the numeric keyboard will be displayed. Enter the code and confirm #. If the sequence is correct, the control panel will clear the alarm and disarm the partition (if the control panel was in armed mode).






Clearing the alarm can also delete any notification action; SMS, SMS + VOICE, VOICE (service).

If the system has alarms configured from temperature sensors T1-T4 and / or from the analog input AI, they can be presented as alarms, in accordance with the entered descriptions


(service) eg high temp. Boiler CO. Above signalling alarms of temperature or analogue alarms do not generate the alarm status of the intrusion system.

System status overview.


In order to view the current state of inputs, press . The subscription is entered after pressing the button  (if the system has EXP-I8, EXP-I8-RN input modules installed, the Aero system and touch keyboards). The next press  will return to the preview of previous inputs. During the preview, the display will show the graphic status of the inputs: status + name of the input. The status is presented through a colored semaphore, where the color means:


-  **green: entry intact**
-  **red - input violated**
-  **yellow: entrance sabotage**
-  **burgundy: blocked entrance**
-  **gray: input disabled (inactive)**

The touch panel will remain in the input preview mode until the function exits via X. The screen saver


will also be inactive. If the Aero system is in the system, the following symbol  may appear next to the input status (detector): low voltage of the battery, which informs about the need for replacement of the battery in a given device by the service.

Pressing the button  enables preview

-  synoptic board: if there is an SD card installed in the panel with the file 'plan.bmp' and detectors (service) are arranged, then the view of the building plan with the detectors deployed (service) is available.


-  temperature histogram: after pressing the button and if the TSR-1 sensors are installed in the system, the panel switches to the display mode of current measurements from temperature sensors: T1- red, T2 - blue, T3- yellow, T4 - green.

The graph is scaled automatically and refreshed every 1 minute, ie one pixel is one measurement. In addition to the histogram, the function of registering the temperature history on the SD card (service) is available on the display, for each day a file with data in the format yy_mm_dd.txt is created for further data processing,

-  analog value measured by AI input, 0-10V, unit [mV]. The measurement can be scaled (service) to the actual physical unit, eg voltage = volta [V], relative humidity =% RH, etc. In addition to presenting

the current value on the display, the function of recording the temperature history on the SD card (service) is available, the measurement is recorded analogically to the temperature (frequency 1 / 60s.).


History of events.

In order to view the history of events in the system, press , then the numeric keypad will be displayed. Enter the code and confirm #. If the sequence is correct, the control panel will display the event memory, line syntax with a single event:

YY.MM.DD HH.MM EVENT IN THE SYSTEM.

Navigation in history takes place via buttons  . The exit from the browse follows the button.

Edit codes.

To enter the code editing function in the system, press , then the numeric keypad will be displayed. Enter the code and confirm #. The following functions are available for the user with the main code:

- new code (user) + permission setting,
- change of the main code,
- removing codes,

The following functions are available for other users:


- user code change.

The system may have a maximum of 32 codes (users): 1 main and 31 users.

The main code has access to all functions, user codes have limited permissions.

View system failure.

In order to view the failure in the system, indicated by a yellow LED; TROUBLE should be

pressed . "SYSTEM FAILURES" will appear on the display.

Settings.




To enter the settings available to the user, press , then the "user" button.

Enter the main code and confirm #. The following settings are available:

- set the clock: set the clock and system date,
- relay time: sets the relay operation time in the panel, monostable mode: min. 1s, bistable mode: 0s,
- on / off chime: enables or disables chime signaling from inputs in a given touch panel (the chime configuration is not remembered when the touch panel loses power),
- SMS reading: allows reading the last SMS from the inbox (only an SMS is shown and displayed, which has no access code and is not a system command, eg information from the GSM network), reading the SMS deletes memory and signaling incoming message,
- LCD brightness: allows the user to adjust the brightness of the display in screen saver mode or digital photo frame function (factory settings 30%),

- service access: the launch of the function allows access to the service through the service code for system configuration for a period of 8 hours (access via the touch panel).








Blocking inputs.

To enter the function of blocking zone (detectors), press ; if a code is required, a numeric keypad will be displayed, enter the code and confirm #. Blocking consists on selecting X at the selected input. The output and confirmation is done via , exit from blocking without confirmation occurs via .


Zone blocking is also available during system arming, except that the system will ask you to enter the code before activating blocking.

Output control.



The TPR-4 touch panel allows you to control the outputs in several ways:

- controlling the group of outputs - icon: ,
- single output control - icons: , , , , , .

In order to enter the control functions of selected outputs (service), one of the symbols shown above should be pressed. If required (service), enter the code and confirm #. The control consists in pressing the field with the description of the given output. Activation of the output (group of outputs) is signaled by a red semaphore next to the name of the output. The detailed parameters of the outputs and their names are configured by the installer in the system configuration phase (service). In each touch panel you can configure a different list of outputs, available for control (service). The exit from the control

function is carried out by pressing .

Controlling the relay.

Controlling the relay output in the touch panel called quick control (eg gates, wickets.) consists in pressing . If required (service), enter the code and confirm #. The output activation is signaled by the changed pictogram .

Parameters of the relay output in a given touch panel are defined by the main user in the menu:



-> User -> Relay time.

The relay output can work in MONOSTABLE mode (pressing switches on for a given time) with a minimum activation time of 1s. or BISTABLE (the next press changes the status to the opposite) **then the operating time should be set to 0s.**

The relay output can also be remotely controlled via SMS commands:

Command (#### = access code, X = touch panel number, address; 1,2,3,4)	Description	Example
#### ontpX	ATTACHING the relay output in the TP1 panel (service)	1212 ontp1
#### offtpX	TURNING OFF relay output in TP1 panel (service)	1212 offtp1

The system address for a given touch panel is defined by the installer. When configuring a given output in monostable mode, sending the "offtpX" command shortens the time of this output.

SD, SDHC card.

The panel supports microSD and microSDHC cards, the card is required for the function:

- building plan (synoptic board), 'plan.bmp' (service),

file location: SD / plan.bmp, file type: BMP, size: 320x240px or smaller in proportions, number of colors: 256 (8bit) or 16 mln. (24bit)

- digital photo frame, 100 photos maximum, photo display time 10 sec., sequence: file date order (oldest = first)

file location: SD / pics,

file type: BMP, size: 320x240px or smaller in proportions, number of colors: 256 (8bit) or 16 mln. (24bit)

file type: JPG, size: 320x240px or smaller in proportions, number of colors: 256 (8bit) or 16 million. (24bit)

- recording temperature history and / or analog value, for each day a data file is created (frequency of recording 1 / 60s.) in the format rr_mm_dd.txt. for further data processing

NOTES: Installation of the microSD / microSDHC card - see: TPR-4 installer manual, page no. 10.

TK-3W / TK-3B touch keyboard

Touch and zone keyboard.






Description.


The TK-3x touch keypad is used to control the OptimaGSM, NeoGSM, NEO alarm control panel. Due to the limited functions of the 'partition keypad', a touch panel (dedicated to a given system) or an IP module (AP-IP) should be installed in the system.

Keyboard support.

View of the TK-3B touch keyboard.



Touch keyboard TK-3x.	
Element	Description
0-9, *, # touch keyboard	Numeric, touch (capacitive) keyboard without mechanical contacts, with LED brightness. Dedicated for use with fingers.
	LED Power (green) Lit (ON) = AC supply present Blinks (1x / 1s) = no AC power (battery operation)
	LED Alarm (red color) Lit (ON) = alarm in the system (zone) Off (OFF) = no alarm
	LED Vigil (green color) Lit (ON) = armed mode (full or night) Unlit (OFF) = Standby Off Blinks (1x / 1s) = time to enter or leave
	LED Failure (yellow) Lit (ON) = system failure Blinks (1x / 1s) = failure reading or programming mode
	LED [Alarm + Failure] Blink simultaneously (1x / 1s) = SERVICE MODE

	<p>LED [Power + Alarm + Standby + Failure] They blink simultaneously (1x / 1s) = no connection to the control panel.</p>
---	--

System operation.

Standard system operation. (factory [CODE] for the OptimaGSM system and NeoGSM is [5555])	
[CODE][#]	Arming (arming).
[*]	Disarming (disarming) or clearing an alarm.
[*]	Deleting entered digits in case of error or canceling the function.
Acoustic and optical signaling (backlight).	
5x of high tones, 1x backlight	Correct weaponry or disarmament (code adoption).
1x tone long, low 6x backlight + LED [power + alarm + standby + failure]	Wrong code.
5x medium tones	Entry violations during arming (forced arming).
5x tone modulated low / medium	Tampering or entry failure during arming (forced arming).
2x medium tones 1x backlight + LED [power + alarm + standby + failure]	Violent inputs with set control during arming (priority), arming lock.
3x high tone	Automatic cancellation, too long time between characters (inactivity 15s)

Additional functions.	
[*][#][1][#][CODE][#][NEW CODE][#][NEW CODE][#]	Change of access code.
[*][#][2][#]	Reading the current failure (last, range 1-99): 'xy' Failure number indication displayed by backlight keyboard digit: 'x' first digit 1s → pause 1s → 'y' second number 1s → pause 3s ... etc.

	The number of the failure in accordance with the failure code in SMS STAN for a given system. Exit from the failure overview: [*] (there is no automatic exit from viewing failures)
[*][#][3][#][ALARM TIME][#]	Changing the signal time of a loud alarm in the TK-3x keypad. The value 1-9999 seconds, 0 s disables the signaling.
[*][#][0][#][MAIN CODE][#][SERVICE CODE][#]	Entering the service mode. (Service mode only after permission of the main user).
[*][#][0][#]	Exit from the service mode.

Service support.

The system does not require any specific maintenance. During periodic technical inspections, check the condition of the screw joints, clean the PCB with compressed air. The system should be periodically tested for proper operation and communication. If the casing of touch panel is dirty, clean it with the usual means for LCD computer monitors.

System support: RopamDroid application.

The RopamDroid app is a free application to control the system. RopamDroid is operated by smartphones with Android.

Basic application properties:

- support for Android version 2.1 ÷ 6,
- application dedicated for smartphones with 3 "÷ 5" displays.
- clear graphical interface and status bar analogy to TPR-xx touch panels,
- application and service filtering messages from the system telephone number,
- two-way communication via system SMS messages,
- securing the application with the password of access,
- access to functions: armed mode, current status and failures, preview and control of zone blocking, group control of outputs, temperature view and change of thresholds for thermostatGSM, preview of analog input AI value and change of set thresholds,
- reduction of control costs through SMSs thanks to consolidation of information in individual messages for applications,
- RopamDroid Pro application with support for many systems, objects,
- optimaGSM system service from the RopamDroid 1.8 version.

Installation and configuration of RopamDroid.

The application is available on Google Play in the Ropam Elektronik store (link: click the icon or button).

[RopamDroid \(link\)](#)

After installing the application, it must be properly configured. Application settings window.

The screenshot displays the 'Ustawienia' (Settings) screen for the Ropam OptimaGSM application. The interface is in Polish. At the top, there's a dropdown menu for 'Ropam OptimaGSM' with 'Dodaj' (Add) and 'Usuń' (Remove) buttons. Below are several input fields: 'Nazwa obiektu' (Object name) with 'Ropam OptimaGSM', 'Typ modulu' (Module type) with 'OptimaGSM', and 'Numer telefonu obiektu' (Object phone number) with '501945473'. There are also fields for 'Hasło SMS' (SMS password) with '5555', 'Stan konta USSD', and 'Komenda użytkownika'. A 'Zachowaj ustawienia' (Save settings) button is present, along with 'Export' and 'Import' buttons at the bottom. Two checkboxes are checked: 'Wymagaj hasła do programu' (Require program password) and 'Pytaj o wysyłanie SMS' (Ask for sending SMS).

Add / remove: the function of adding, deleting objects (ONLY the RopamDroid PRO version).

Object name: user's own name e.g. House.

Module type: select the appropriate device type.

Telephone number of the facility: enter the number of the SIM card installed in the system (international format is allowed (recommended) or shortened).

SMS password: enter the system user code (the same as in touch panels), depending on the code permissions, the application will have access to all or selected zones.

The names of inputs: the name of zones in the system can be analogous to those in TPR-xx panels.

Output names: the name of outputs in the system can be analogous to those in TPR-xx panels.

The names of temperature sensors: name of temperature sensors T1 - T4, can be analogous to those in TPR-xx panels, e.g. Temp CO, Temp. external, Temp. ground floor, Temp. DHW.

Zone names: the names of zones in the system may be analogous to those in TPR-xx panels, eg Ground Floor, Floor, Garage.

Require a program password: the option enables access to the application after authorization (recommended).

Ask for sending an SMS: the option allows you to disable control confirmations from the application, eg when controlling outputs. **Confirmations of the arming control are always displayed.**

Change program password: this option allows you to set or change the password to authorize access to the application.

USSD account status: a field for entering a short USSD code for checking the account balance (eg Orange * 124 * #), the code will be automatically sent after pressing the USSD Account Status button.

USSD account status: field for entering another SMS command, eg an MMS query, the code will be automatically sent when the F1 button is pressed.

Export: the function of exporting settings to a file (without codes).

Import: the function of importing settings into a file, after importing you must complete the settings with the SMS codes.

RopamDroid Application description.

Application window:



Description of pictograms in the status bar:

	GSM network level (level 1-4)
	GPRS coverage (available or no GPRS)
	power status indication (basic or battery)
	standby signal (full or night) + zone number
	alarm signaling in the system + zone number
	trouble signaling in the system

System operation: radio remote controls.

The OptimaGSM system has the ability to operate with the TR-4 and Keyfob-Aero radio remote controls manufactured by Ropam Elektronik.

Keyfob Aero

If the system has an APm-Aero or AP-Aero radio controller installed, remote control of system standby and system functions via two-way radio remote controls is available. In addition, it is possible to set up a help call, so-called PANIC (service).

The buttons A, B, C, D, E can have the following functions:

- no function + relay control,
- on / off full standby + output / output control (service),
- on / off night standby + output / output control (service),
- full arming + control of the output / outputs (service),
- night-time arming + output / output control (service),
- disarming standbz / alarm + output / output control (service),
- loud panic + output / output control (service),
- system status check + output / output control (service),

It is possible to configure (service) confirmation of acoustic arming at a given control panel output, then the siren, LED diode will signal:

- arming with 1 signal (1x 0.5s.),
- disarming with two signals (2x 0.5s.),
- arming with violated zones (detectors) 5 signals (5x 0.5s.),
- arming system when sabotage (detectors) of 10 signals (10x 0.5s.),
- information on remote arming can be sent via SMS to selected telephone numbers.

Clearing the alarm can also delete any notification action; SMS, SMS + VOICE, VOICE (service).

TR-4

If a system power supply with an RF-4 radio controller is installed in the system, remote control of system standby via radio remote controls is available. In addition, it is possible to set up a help call, so-called PANIC.

The buttons A, B, C, D can have the following functions:

- no function + relay control,
- on / off full standby + output control,
- on / off night standby + output control,
- arming full standby + control of the output,
- night-time arming + output control,
- disarming / alarm + output control,
- loud panic + output control,

It is possible to configure (service) confirmation of acoustic arming at a given control panel output, then the siren, LED diode will signal:

- arming with 1 signal (1x 0.5s.),
- disarming with two signals (2x 0.5s.),
- arming with violated zones (detectors) 5 signals (5x 0.5s.),
- arming the sabotage of the system (detectors) with 10 signals (10x 0.5s.),
- information on remote arming can be sent via SMS to selected telephone numbers.

Clearing the alarm can also delete any notification action; SMS, SMS + VOICE, VOICE (service).

System control: ON / OFF input vigil

If it is required in the system, you can configure the zone with the function of arming / disarming. For example, a button, reader for access control etc can be connected to the input. The system will interpret the control identically as in the control from the touch panel, i.e.:

- arming will be signaled in all panels, system outputs (signaling device, LED, etc.)
- disarming will cause the system to exit from the standby together with the signaling as above, if the system has alarm clears the alarm will disarm alarm (+ alarm reset options set).

System control: SMS.

The system supports SMSs: GSM or UNICODE alphabet other formats are not supported! The installer (service) can block remote control, then control panel will respond with a message when attempting to control SMS: "SMS control not possible, check settings!".

SMS control: system arming.

The control of armed mode by SMS consists in sending an SMS in form, access to functions and zones, determining the authorization of the given code.

Command	Description	Example	Reply
#### arm #### arm 1,2,3,4	Arming the system (supervision) (full or indicated zones)	5555 arm 5555 arm 1,2	System armed. Arming error, check the code permission to zones.
#### arm night #### arm night 1,2,3,4	Arming (supervision) of the night system (all or selected zones)	5555 arm night 5555 arm night 1,2	Night vigil included. Arming error, check the code permission to zones.
#### disarm	Disarming the system (supervision) (full or night, all or selected zones)	5555 disarm 5555 disarm 1,2,	The system disarmed. Disarm error, check code authorizations to zones.

The armed mode control via SMSs is interpreted by the system in the same way as control from the touch panel.

SMS control: blocking inputs.

It is possible to remotely block or unblock any device inputs by sending an SMS command in the form:

Command	Description	Example	Reply
#### lock I1,...I48	The function blocks selected zones in the system.	5555 lock 1, 3 (input I1 and I3 will be blocked)	The entries have been blocked
#### unlock	Unlocks all blocked inputs	5555 unlock (all inputs will be unlocked).	The inputs have been unblocked

Blocking via SMS is interpreted by the system in the same way as blocking from the touch panel.

SMS control: outputs.

Controlling the outputs via SMS consists in sending an SMS with a specific content, the control command may require an access code or not (service). The flexible software of the module allows that: the content of SMSs controlling the outputs can have any content, eg pump on, pump off. The exact parameters of the outputs and their intended use are determined by the installer.

The control syntax using the factory control commands is shown below:

Command	Description	Example	Reply
#### onx	Enable output x , where x is the exit number	5555 lighton	Output on (x) 'text SMS On' where: x = the number of the output in the system, 'text SMS on / Off' = SMS text to control the given output
#### offx	Disable output x , where x is the exit number	5555 lightoff	Output off (x) 'text SMS off' where: x = the number of the output in the system, 'text SMS On / Off' = SMS text set to control the given output

If touch panels are installed in the system, the relay output can also be remotely controlled via SMS commands:

Command	Description	Example
#### ontpx	Enable relay output on the TP panel , where X = panel number (address, service)	5555 ontp1

Command	Description	Example
#### offtpx	Disable relay output in the TP panel, where X = panel number (address, service)	5555 offtp1

If a radio controller is installed in the system, the control of two relay outputs is additionally available. Controlling via SMS consists in sending an SMS about the form:

Command (#### = access code)	Description	Example
#### onrx	ENABLE relay x, where x (1,2,3,4) is the RF-4 relay / output number	1212 onr1
#### offrx	DISABLE relay x, where x (1,2,3,4) is the RF-4 relay / output number	1212 offr1

ThermostatGSM: monitoring and changing temperature thresholds.

If the temperature sensor (i) is installed in the system and SMS notification is configured, VOICE when the alarm thresholds L / H are exceeded, it is possible to disable notifications via the SMS command.

Command	Description	Example	Reply
#### tempmonit x	Remote on / off SMS / VOICE notification function when the L / H temperature thresholds T1, T2 are exceeded. X = 1 function included x = 0 function disabled #### - current access code	1111 tempmonit 0	Temperature monitoring included. Temperature monitoring switched off

The notification is active at the factory (TEMPMONIT 1). Turning off the SMS / VOICE notification does not affect the functions of the thermostat (controlling the outputs via temperature parameters) and does not block the presentation of the current temperature in the SMS STATUS.

If the temperature sensor (s) is installed in the system, it is possible to remotely change the temperature thresholds TEMP1, TEMP2 via SMS.

Command	Description	Example	Reply
#### tempa x yy	Remote change of threshold A (default Hi) for a given thermostat, X = number of thermostat, temperature sensor. yy = set temperature in [° C] from the range of values - 55 ÷ 125,	5555 tempa 1 55	Configuration changed

Command	Description	Example	Reply
#### tempb x yy	Remote change of threshold B (default Lo) for a given thermostat, X = number of thermostat, temperature sensor yy = set temperature in [° C] from the range of values - 55 ÷ 125,	5555 tempb 1 -5	Configuration changed

AI input: change of voltage thresholds.

If an analog input is used in the system, it is possible to remotely change the L and H temperature thresholds via SMS.

Command	Description	Example	Comments
#### alhi zzzz	Remote change of H threshold for AI input, zzzz = set voltage in [mV] in the range of 0 ÷ 10000	1111 alhi 8000	Configuration changed
#### allo zzzz	Remote change of L threshold for AI input, zzzz = set voltage in [mV] in the range of 0 ÷ 10000	1111 allo 150	

Control of the Aero wireless system.

If the system uses the Aero wireless system, the user has the option of switching on the motion detector test (operation test = starting the LED).

In order to save energy in the detectors, WalkTest works for 30 minutes. since launch, the WalkOff command allows you to disable after testing within 30 minutes.

Transmission of the command will take place in accordance with the interval of detector presence monitoring, intervals: 30/60 / 90s (service).

WalkTest control consists in sending SMS commands to the system:

Command	Description	Example	Comments
#### walkon	Remote activation of the operation test (LED) in the detectors.	5555 walkon	where: #### = access code, the test works for 30 min.
#### walkoff	Remote disable of the operation test (LED) in the detectors.	5555 walkoff	

System status.

Transmission test.

Functions starts and configures the installer. The test can be performed at a fixed time, at a specified time interval or controlled by Timer 1. Available transmission test options.

- SMS (eg. GSM module OK)
- CLIP (ie. bell)
- SMS STAN (system status in an SMS message max. 16 characters),
- MMS STAN (multimedia message with photos from selected cameras + SMS content),
- E-Mail STATUS (an e-mail sent via a configurable SMTP account, e-mail can all possible information from the system).

The system status can contain (display parameters are configured in the control panel):

- system time (STATE state timestamp),
- state of zones,
- GSM network status, coverage,
- system version,
- power supply status and DC power supply voltage,
- temperature value from sensors,
- analog AI input value after scaling,
- failures in the system,
- state of inputs,
- stan wyjść.

In addition, at any time, the user can "ask" about:

- system status (SMS STATUS),
- MMS with images from cameras connected to the FGR-4 module and the content of SMS STAN,
- e-mail with the system status and photos from IP cameras (activation of the output eg by SMS or CLIP sends an e-mail with the necessary data) (service).

System status: SMS STATUS.

Checking the status of the module. consists in sending an SMS command in the form:

Command	Example
#### status	15/02/20 15:00 Inputs: 00000000000000000000000000000000 Outputs: 00000000000000000000000000000000 AI 250mV sv: 1.0 GSM: 3,24dbm Uz: 13.7V Temperature Sensor 1: 22.5 Sensor 2: 18.5 Sensor 3: 35.5 Sensor 4: 25.5 Zone 1: armed

Command	Example
	Zone 2: disarmed Zone 3: alarm Zone 4: sabotage FGR-4: CH1 CH2 CH3 CH4 S

Contents SMS STATUS	Description
Inputs (I): I1 ... I40	<p>0 - entry intact 1 - zone violated (active detector) X - input disabled (service) ! - tamper input B - input / time block or after 3 alarms b - blocking of entry by the user A - alarm memory and input violated a - alarm memory and input intact F - failure / screening of the detector (service) ? - no connection to the Aero wireless device W - zone violated (active detector) + weak battery of Aero wireless device w - input intact + weak battery of the Aero wireless device (the visibility of individual inputs is configured by the installer)</p>
Outputs (O): O1 ...O8	output status, 0 = inactive output, 1 = active output (logic state) (the visibility of individual outputs is configured by the installer)
AI: xx	the instantaneous value of the analog input expressed in [mV] or scaled to the physical value (the visibility of the input and its scaling is configured by the installer)
sv x.x	version of the control panel firmware (firmware)
GSM: P, xx dBm	GSM network status status (2G) P: 1-5 ('dashes'), value in dBm
Uz: xx.x V	value of DC power supply voltage in the unit [V]
Failure: xx	<p>status of failure status, the failure code is synonymous with the number of blinks in the series of FAIL diode on the control panel:</p> <p>01 - low level network below 2 "dashes" (RSSI <15) 02 - modem not logged in to the GSM network 03 - unsuccessful sending of SMSes in the series 04 - no connection to the GPRS monitoring station (ARC) 05 - no GPRS 06 - no communication with the GSM modem 07 - PIN code error (PUK lock) 08 - SIM error, no SIM 09 - required PIN card not logged in 10 - GSM jamming (jamming) 11 - no AC 12 - overload / short circuit O1 output 13 - overload / short circuit O2 output</p>

Contents SMS STATUS	Description
	14 - no load on the O1 output 15 - no load of the O2 output 16 - overloading / shorting of the AUX output 17 - overload / shorting of the output + KB 18 - low DC power supply voltage (<11V) 19 - failure / lack of battery (<11V) 20 - EEPROM memory error 21 - overload / short circuit of the + VT output 22 - modem power failure 23 - FLASH memory error (serial) 24 - RTC clock chip error 25 - failure of the motherboard inputs 26 - internal error of the MCU microcontroller 27 - blocking SMS / CALL / MMS / E-MAIL, exceeding 24h counter 28 - loss of connection with the IQPLC device (in the SMS STATUS, only the trouble codes are shown. all failures are signaled in the panels)
Temperature Sensor 1 ... Sensor 4	instantaneous temperature value from temperature sensors in the unit [° C], (the visibility of individual sensors and their names is configured by the installer)
Zone 1 ... Zone 4	state of zones in the system (visibility of zones and their names is configured by the installer)
FGR-4: CH1 CH2 CH3 CH4 S	status of VIDEO inputs, 0 = no signal, 1 = signal correct, presence of SD memory card in FGR-4 is signaled with the letter 'S'

Warning:

- SMS STATUS contains a maximum of 160 characters, you must configure the display of the required parameters according to your needs.
- STATUS e-mail can contain all system parameters.

System status: SMS zone status.

Remote check of module input status. consists in sending an SMS command in the form:

Command (#### = access code)	Description	Example
#### zones	The command returns the state of inputs with its name in the system and status. The range of inputs is identical to SMS STAN. 0 - zone intact 1 - zone violated (active detector) X - zone disabled (service)	1 ZONE 1 0 2 ZONE 2 1 3 ZONE 3 ! 4 ZONE 4 b 5 ZONE 5 B 6 ZONE 6 A 7 ZONE 7 0

Command (#### = access code)	Description	Example
	! - tamper zone B -zone / time block or after 3 alarms b - blocking of entry by the user A - alarm memory and zone violated a - alarm memory and zone intact F - failure / screening of the detector (service) ? - no connection to the Aero wireless device W - zone violated (active detector) + weak battery of Aero wireless device w - zone intact + weak battery of the Aero wireless device (the visibility of individual inputs is configured by the installer)	8 ZONE 8 X

Sms control: other functions

Command	Description	Example
#### doorlock	switching on the system of bolt relay doorbell transceiver in Kenwei door station (opening the gate / gate)	5555 doorlock
#### resettest	Reset transmission test timer and erase sms counters, failure and mms.	5555 resettest
#### addphone	Appends number to the first free position. After successful execution the module sends the SMS "Added number", otherwise "Error, no number added!" (phone number in international format)	5555 addphone +1123456789
#### delphone	Removes indicated number from memory. After the correct execution, module sends the SMS "Number of removals", otherwise "Error, the number was not deleted!" (phone number in international format)	5555 delphone +1123456789
#### smscenter	Change or enter a new SMS center number (nnnn = center number) (phone number in international format)	5555 smscenter +1123456789
#### email	Adding an email address to the first free spot in the user list.	5555 email user@exampl e.com
#### events	Request to retrieve the history of the last 7 events from the module	5555 email

USSD codes; recharge prepaid account.

It is possible to remotely recharge the SIM account of the PREPAID card (with the scratch code). This requires sending an SMS command in the form:

Command	Description	Example
#### ussd xxxx	Reply: "SMS from the network" for a correctly executed command or "Problem sending USSD code" for error, delivering messages to the network.	5555 ussd *109*289458790238 92#

where xxxx = command to recharge a given operator using a 14-character code from "scratch cards" (zzzzzzzzzzzzzzzz = scratchcard):

- Heyah: *109*zzzzzzzzzzzzzzzz#
- Tak-Tak: *111*zzzzzzzzzzzzzzzz#
- Plus GSM: *123*zzzzzzzzzzzzzzzz#
- Orange: *125*zzzzzzzzzzzzzzzz#
- Play: *100*zzzzzzzzzzzzzzzz#

USSD check codes for prepaid account status.

The control panel supports and transmits USSD codes. With the help of USSD codes, you can manage and control your subscription or prepaid account.

The basic function that can be implemented using the USSD codes is to check the prepaid card account.

Command	Description	Example
#### ussd 'code for a given operator'	Reply: "SMS from the network" for a correctly executed command or "Problem sending USSD code" for error, delivering messages to the network.	5555 ussd *124*#

USSD codes to control the account balance for selected operators:

- Orange: *124*#
- Plus GSM: *100#
- T-mobile: *101#
- Play: *101#
- Heyah: *108#
- njumobile: *127*1#
- Lycamobile: *131#

A full list of USSD codes is available at a given GSM operator and allows you to manage services and promotions in a given tariff.

Remote configuration of selected functions: SMS.

Access to the remote control can be blocked in the control panel settings (service), the selected commands are only available for the main code in the system or the service code.

Parameter	Description	Example	Reply
#### code zzzz	Change of the SMS access code zzzz = new access code	5555 code 0987	Configuration changed
#### time yy, mm, dd, gg, mm	Setting or changing the date and time (yy, mm, dd, hh, mm = year, month, day, hour, minute)	5555 time 02, 01, 01, 12, 05	Time set 15/02/20 15:00
#### restart	Restart control panel	5555 restart	
#### downloading x	Remote activation / deactivation of the modem connection function X = 1 function included x = 0 function disabled	5555 downloading 1	Configuration changed
##### replysms x	Remote activation / deactivation of the confirmation return function for SMS commands X = 1 function included x = 0 function disabled	5555 replysms 1	Configuration changed
##### echo x	Remote on / off the function of sending undetectable SMSes from the ECHO network, e.g. passwords to the www account, information from the network X = 1 function included x = 0 function disabled	5555 echo 1	Configuration changed

System control: DTMF.

Controlling via DTMF consists on sending DTMF characters during a voice call to the system. A VOICE voice call can be coming from the system (eg an alarm) or by calling an authorized number to the system (service).

A single DTMF code (pressing the sign) should last for a minimum of 0.5s.

Voice synthesizer VSR-2 is required for voice confirmation of performed controls.

DTMF control: vigil.

The control of armed mode through DTMF consists in connecting to the system by voice and during connection, selecting the appropriate sequence of digits and confirming [#] (service). **Voice synthesizer VSR-2 is required for voice confirmation of performed controls.**

Command	Description	Example	Comments
zzzz #1	Arming (supervision) of the system of everyone to whom the code has permission.	5555 #1	The access code zzzz = the user's access code or the main access code If VSR-2 is installed, a voice message will be played: "Armed" or "Disarmed". in case of error message: "error"
zzzz #0	Disarming the system fully armed (supervision on) and clearing the alarm when the system was in alarm.	5555 #0	
zzzz #0	Clearing the alarm when the system was not armed and an alarm was triggered.	5555 #0	

DTMF control: outputs.

Controlling the outputs via DTMF consists in connecting to the system with the voice (service) and during the connection selecting the appropriate sequence of digits and confirming [*] (service). Voice synthesizer VSR-2 is required for voice confirmation of performed controls.

Command	Description	Example	Comments
zzzz*	ON Ox output, where zzzz DTMFOn code for the given output	2221*	It is not recommended to use a single digit, do not use #. If VSR-2 is installed, a voice message will be played: "Output is attached" or "Output is turned off". in case of error: message: "error"
www*	OFF output Ox, where www DTMFOff code for a given output	2220*	

DTMF control: queue ending for VOICE.

The end of the ringing queue via DTMF consists in selecting [#] on the keypad during a voice call (service). If you use the function, set the appropriate order of numbers to VOICE notifications according to the priority for this type of notification.

Command	Description	Example	Comments
#	End voice notification for subsequent numbers in this queue.	#	This is a system option and requires inclusion in the system configuration.

DTMF control: door intercom.

If the system has a VAR-1 gateway for integration with a video intercom, it is possible to control the system output to open the gate or the door (service). The control consists on providing the 'DTMF code of the bolt opening' during a voice connection with the video intercom and confirmation [*] (service). **Voice synthesizer VSR-2 is required for voice confirmation of performed controls.**

Command	Description	Example	Comments
rrrr*	Enable output responsible for opening bolt in the video door phone.	1234*	Code: yyyy = opening bolt DTMF code (service) It is not recommended to use a single digit, do not use #.

3. Settings list, notes

Notes

Version history.

This manual applies to the device version:

Urządzenie	Wersja
OptimaGSM	3.0
TPR-xx-O (OptimaGSM)	1.4
RF-4-xx	1.0
VSR-2	1.0
VAR-1U	1.0
PSR-ECO-5012-RS/ PSR-ECO-2012	1.0
EXP-I8, EXP-I8-RN	1.0
APm-Aero	3.4
SmartPIR-Aero	3.0
Hub-IQPLC	1.6
TK-3 x	1.3
AP-IP	1.8

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MANUFACTURER:

Ropam Elektronik

Polanka 301
32-400 Myślenice, Polska

Tel. +48 12 272 39 71

Faks +48 12 379 34 10

www.ropam.com.pl