gsmkey

OPEN GATE

OPEN BARRIER

OPEN DOOR

TURN ON BOILER

EXTEND AWNING

gsmkey
PROFI 3+

U S E R
MANUAL

CONTENT

DECLARATION OF CONFORMITY

of the device with the provisions of Act 22/1997 Coll., as amended, laying down the technical requirements for products.

We, the manufacturer,

hereby declare that the product

GSM KEY PROFI 3+

Description: GSM modem
Frequency band: LTE 700/800/900/1700/1800/2100/2600/2700 MHz
Purpose of usage: wireless data transmission in the GSM network,

meets the requirements for a General License of the Czech Telecommunications Office no. GL-1/R/2000 and it further meets the requirements of the following harmonized standards and regulations applicable to this type of device:

Electrical safety:	ČSN EN 60 950:2001
EMC:	ČSN ETSI EN 301 489-1: V1.2.1; -7: V1.2.1
Radio parameters:	ČSN ETSI EN 301 511, V7.0.1

and we declare that this product is safe under the conditions of normal use and safe in the instructions for the use it is intended for.

Its conformity was assessed pursuant to Section 3, paragraph 1(b) of Annex 3 to Government Regulation 426/2000 Coll., which lays down the technical requirements for radio and telecommunications terminal equipment; pursuant to Government Regulation 168/1997 Coll., which lays down the technical requirements for low-voltage electrical devices; pursuant to Government Regulation 169/1997 Coll., which lays down the technical requirements for products in terms of their electromagnetic compatibility and on the basis of the Declaration of Conformity for GSM module ELS61-R2 (S30960-S1500-*, S30960-S1505-*), whose manufacturer is Gemalto M2M GmbH, St.-Martin-Str. 60, 81669 Munich, Germany.

This declaration is issued under the sole responsibility of the distributor.
Ostrava, 1. 10. 2019

Petr Henek, CEO of SECTRON s. r. o.

SAFETY INSTRUCTIONS

- When using the device, observe the legal regulations and local restrictions in force.

- Do not use the device in hospitals, as it might impair the function of medical instruments; e.g. near pacemakers or hearing aids.

- Read this manual carefully before installation, commissioning and use.

- Do not use this device on board aircraft.

- Do not use this device near petrol stations, chemical plants or in areas where work is underway with explosives or in potentially explosive atmospheres. The device may interfere with some other devices.

- The device may cause interference near televisions, radios or personal computers.

- Use only the recommended accessories and avoid damage to the device and to property or health and prevent violations of the appropriate provisions. The recommended accessories have been tested and work with the device. However, these accessories are not covered under the warranty terms.

- We recommend that you make a viable copy or backup of all the important settings stored on the SIM card or in the device's memory.

- Opening the device is prohibited. Only replacing the SIM card is allowed. The procedure for replacing the SIM card is described in the User Manual.

- Warning! Keep out of the reach of small children, who could swallow the SIM card.

- Do not expose the device to extreme environmental conditions. Protect it from dust, moisture, leaking fluids or foreign substances and extreme temperatures.

- The voltage at the power connector must not be exceeded under any circumstances.

- The manufacturer is not liable for defects caused by using this device in violation of the User Manual!

# CONTENTS OF THE PACKAGE

GSM KEY PROFI 3+
1. 1 pc GSM KEY PROFI 3+
2. 2 pcs Articulated antennas (AO-AGSM-TG09)
3. 1 pc 13-pin WAGO terminal block, 1 pc 2-pin WAGO power terminal block
4. 1 pc WAGO tool for terminal blocks
5. 1 pc UTP Ethernet cable
6. 1 pc Quick Instructions
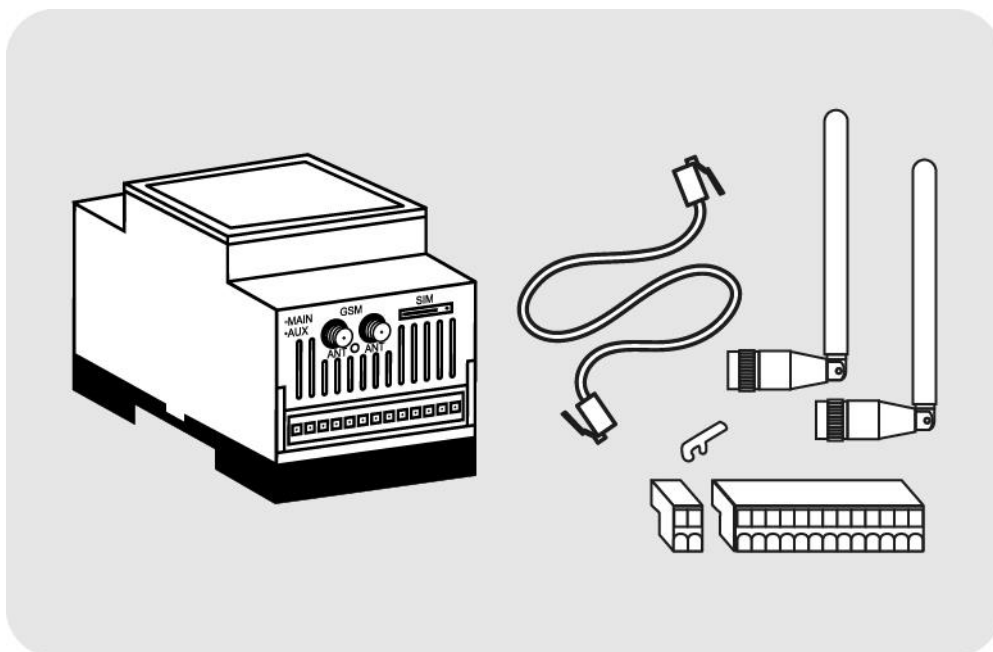
GENERAL DESCRIPTION

SECTRON s.r.o. manufactures the following versions of the **GSM KEY** device

- **GSM KEY LITE 3+**
- **GSM KEY SMART 3**
- **GSM KEY PROFI 3+**
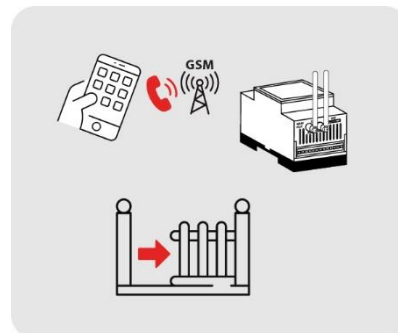
GSM KEY is a device that allows you to remotely open gates, doors and other equipment simply by ringing from your phone. The device administrator manages the list of authorized users, either via SMS or a web browser. During the call, users gain authorization based on their phone number. Since the incoming call is not made (only ringing is involved), opening the gate is done completely for free.

GSM KEY LITE 3+ is good for homes and small businesses with up to **50** users, which places less demand on the number of functions. The contents of the package have been adapted for mounting directly on the control unit or within the motor casing.

The device is managed using
- an application for mobile phones with the Android or iOS operating system,
- using an SMS configuration.

GSM KEY SMART 3 is good for medium-sized companies, larger apartment complexes or hotels with up to 1000 guests.

The device is managed using
- an application for mobile phones with the Android or iOS operating system,
- using an SMS configuration,
- using a PC application (Windows),
- using a cloud service.

GSM KEY PROFI 3+ is good for large companies, office buildings, hotels and guest houses. The advantage of this device is the possibility of connection via Ethernet.

What it is used for: For opening/closing garage doors, gates, barriers and many other types of equipment, working on the principle of switching relay outputs.

Method of control: Simply by ringing GSM KEY PROFI 3+ from your phone, which is free of charge.

Security: Only authorized users (administrators) stored in the memory can control and manage the GSM KEY PROFI 3+.

The device is managed using
- an application for mobile phones with the Android or iOS operating system,
- using an SMS configuration,
- web administration interface.
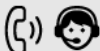
INSTALLATION AND STARTING UP

Pay special attention to safety during installation.

1. The device should only be installed by qualified and properly trained personnel.
2. Read this manual carefully before starting installation and operation.
3. If a power supply is used to power the device, it must meet the requirements for the location of SELV circuits and be in compliance with EN60950. The included power supply meets this requirement. If batteries are used, they must also comply with the relevant standards.
4. If in doubt, contact your authorized installation company or the SECTRON Hotline (hotline@sectron.cz, +420 599 509 599).

You will need side-cutters (not included) for the installation.

Insert the SIM card you want to use for GSM KEY PROFI 3+ into your mobile phone.

1. Activate the SIM card with an outgoing call (e.g. to an operator's line)

2. Disable the obligation to enter the PIN

3. Disable your voice mail

4. Delete all SMS messages

5. IMPORTANT: Delete all contacts in the SIM card (Credit, Emergency Line, Operator, etc.)
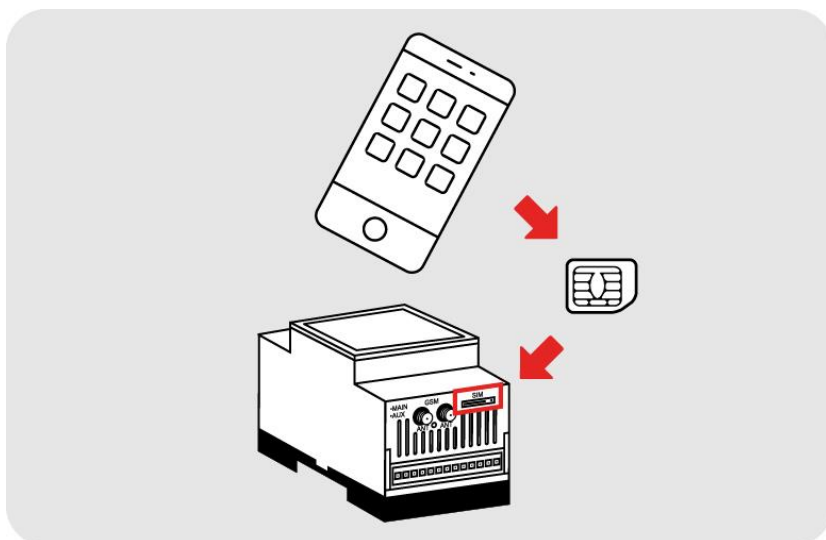
Take the prepared SIM card from your mobile phone and put into GSM KEY PROFI 3+
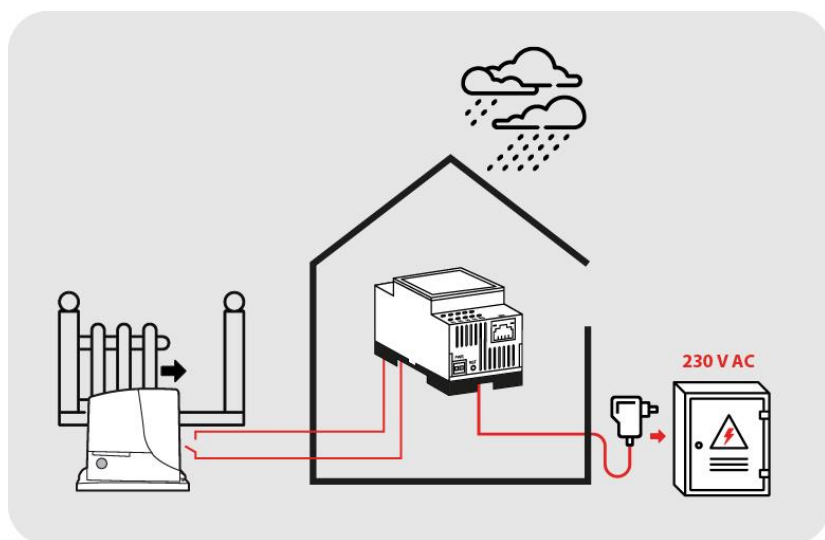
The device is designed for indoor installation or installation in a waterproof plastic switchboard.

230 V AC
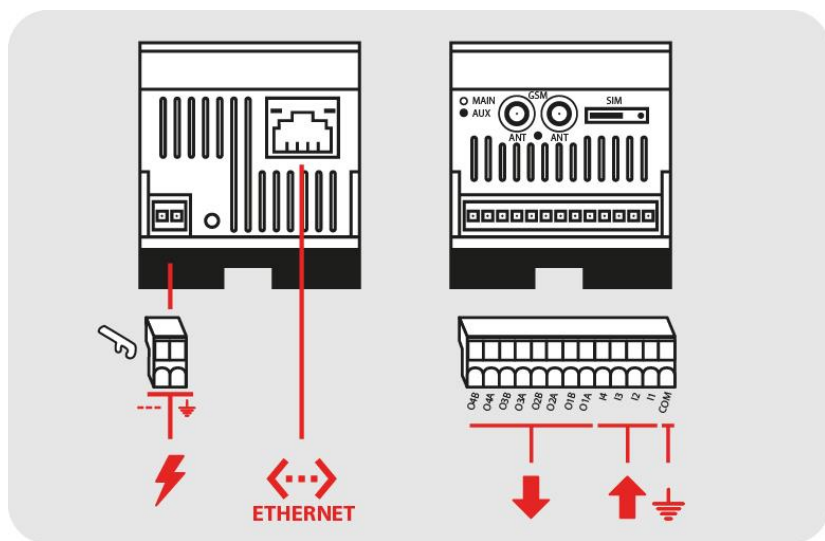
Illustration of an extended 13-pin terminal block for 4 outputs and 4 inputs and grounding.
Illustration of an extended 2-pin terminal block for connecting the power cables.

The device can be powered by a voltage source with an output of **11–30 V DC or AC, at least 1 A. The power supply is not part of the package.** We will be happy to offer you the right power supplies in the form of a 230 V AC socket or DIN 35.

ETHERNET

8

Use the included WAGO tool to connect the contacts to the terminal block.
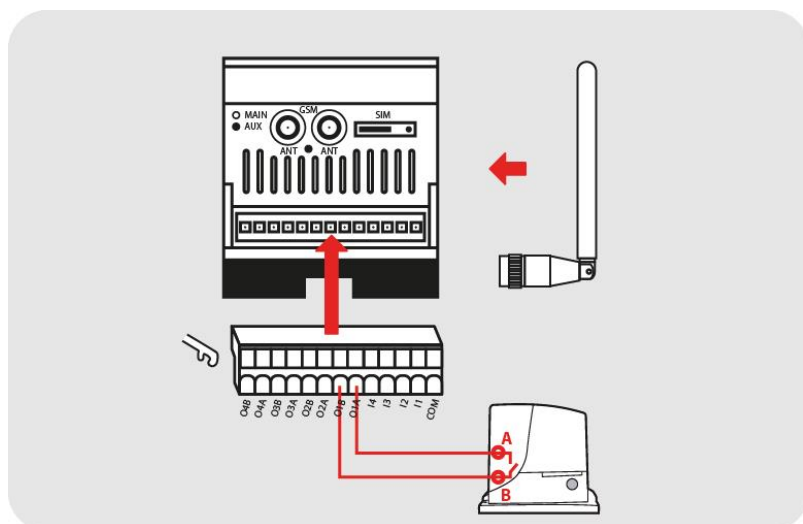
Schematic illustration of the connection of OUTPUT OUT1 with the control unit of the door operator (START terminals).

Screw the antennas into the connectors on the front left. Connect the terminal block with the connected input and output signals to the unit.
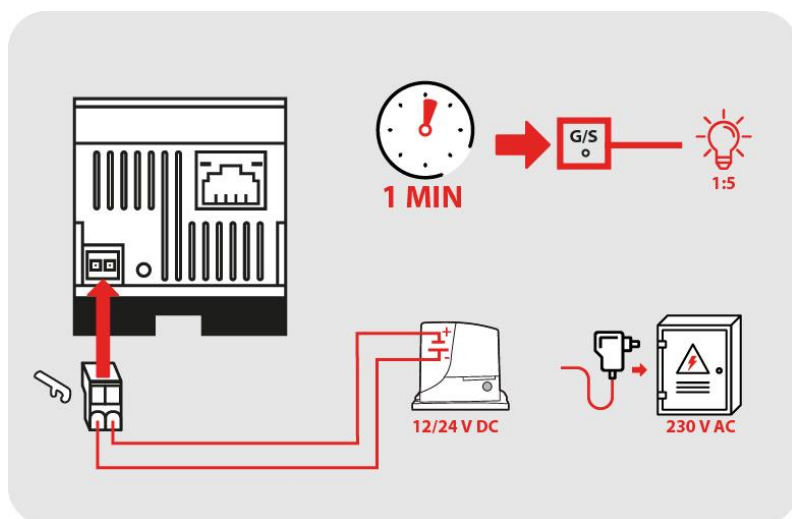
Connect the power terminal block last.

The device will be started within approximately 1 minute, which will be signaled by a flashing green LED marked G/S in the ratio of 1:5.

Your GSM KEY is now ready for adjusting the settings in administration.

ADMINISTRATION

The administration of GSM KEY PROFI 3+ is done either by SMS messages or by an application in the phone. Another variant of administration is using a web interface in your PC.

ADMINISTRATION USING A MOBILE PHONE PAGE 11
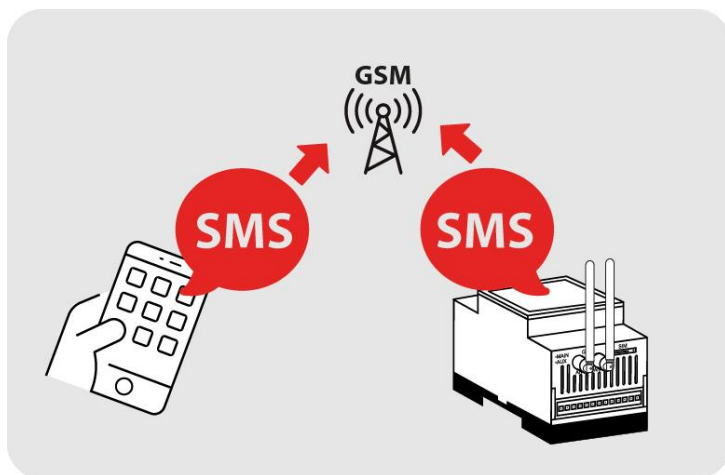
You can do remote administration by mobile phone from anywhere without any restrictions.

ADMINISTRATION VIA WEB INTERFACE PAGE 17
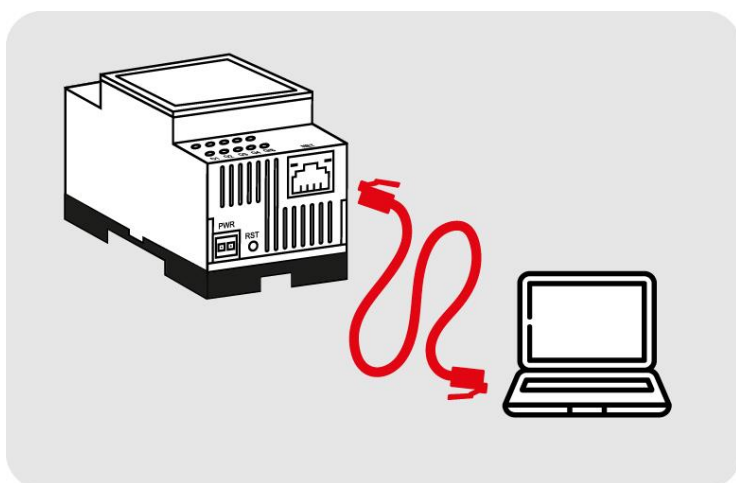
GSM KEY PROFI 3+ administration can be done via a web interface. In order to access the web interface of the device, it needs to be connected to your PC using an Ethernet cable or connected to an existing LAN network. We can assign the IP address to the device either statically (manually) or it will be assigned to us automatically from a DHCP router.

ADMINISTRATION USING A MOBILE PHONE

In order to control the device using SMS, an administrator (authorized user) needs to be added first. Just send an SMS to the GSM KEY PROFI 3+ phone number in the form: **AD ADMINISTRATOR +420XXXXXXXXX ADMIN**,
where XXXXXXXXX is replaced by your phone number. This will configure the **head administrator**, who can be only one. Additional users must be assigned to groups. The factory settings have three groups:

ADMIN: can set and read settings via SMS and control the device by ringing.

READONLY: can read settings via SMS and control the device by ringing.

GUESTS: can only control the device by ringing.

Additional groups can only be created using administration in the web interface via PC.

The device can be controlled by calling the SIM number located in the GSM KEY PROFI 3+ device. The PROFI 3+ version does not include party mode. The device can only be controlled by saved users.

When doing administration via mobile phone, maintain the prescribed form of SMS (exact wording of commands, spaces, etc.). In one SMS you can send one or more commands separated by a semicolon.

To simplify administration, we recommend you use the **SECTRON GSM KEY** mobile application for Android and iOS, available free of charge on Google Play and in the AppStore.

ADMINISTRATION OF USERS

	Description	SMS template	Example of SMS	Description of values
1	Adding a new user	AD name number group	AD ADMINISTRATOR +420602123456 ADMIN	name and number of user and group
2	Removing a user	DE name	DE ADMINISTRATOR	user name
3	Current list of users	LS	LS	-
4	Deleting the phone book	CL	CL	-
5	Number of phone book entries	GT PBS	GT PBS	-

ADMINISTRATION OF THE EVENT REGISTER

	Description			
1	Reading the event register	RG=value	RG=10	Number of required records
2	Deleting the event log	RC	RC	

ADMINISTRATION OF FACTORY SETTINGS

	Description			
1	Restoring the factory settings (does not affect user memory)	DF	DF	
2	Determining the firmware version	GT FW	GT FW	Firmware version
3	Restarting the device (does not affect user memory)	RESET	RESET	

ADMINISTRATION OF INPUTS AND OUTPUTS

	Description			
1	Determining the operating mode	GT OUTLateEval	GT OUTLateEval	0 = Continuous evaluation 1 = Feedback
2	Setting the operating mode	ST OUTLateEval= value	ST OUTLateEval=0	0 = Continuous evaluation 1 = Feedback
3	Setting the operating mode with confirmation	SC OUTLateEval= value	SC OUTLateEval=0	0 = Continuous evaluation 1 = Feedback
4	Determining the number of rings	GT OUT[1,2,3,4]ImpulseRings	GT OUT1ImpulseRings	number of rings
5	Setting the number of rings	ST OUT[1,2,3,4]ImpulseRings= value	ST OUT1ImpulseRings=1	number of rings
6	Setting the number of rings with confirmation	SC OUT[1,2,3,4]ImpulseRings= value	SC OUT1ImpulseRings=1	number of rings
7	Determining call rejection	GT CallHangUpRings	GT CallHangUpRings	number of rings 0 = off
8	Setting call rejection	ST CallHangUpRings= value	ST CallHangUpRings=5	number of rings 0 = off
9	Setting call rejection with confirmation	SC CallHangUpRings= value	SC CallHangUpRings=5	number of rings 0 = off
10	Determining the pulse length	GT OUT[1,2,3,4]ImpulseLength	GT OUT1ImpulseLength	integer number in seconds
11	Setting the pulse length	ST OUT[1,2,3,4]ImpulseLength= value	ST OUT1ImpulseLength=1	integer number in seconds
12	Setting the pulse length with confirmation	SC OUT[1,2,3,4]ImpulseLength= value	SC OUT1ImpulseLength=1	integer number in seconds
13	Determining the action	GT IN[1,2,3,4]Action	GT IN1Action	0 = send SMS 1 = call 2 = call and send SMS
14	Setting the action	ST IN[1,2,3,4]Action= value	ST IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS
15	Setting the action with confirmation	SC IN[1,2,3,4]Action= value	SC IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS
16	Determining the recipient of the action	GT IN[1,2,3,4] GroupName	GT IN1 GroupName	group name
17	Setting the recipient of the action	ST IN[1,2,3,4]GroupName= value	ST IN1 GroupName=Admin	group name
18	Setting the recipient of the action with confirmation	SC IN[1,2,3,4] GroupName = value	SC IN1 GroupName =Admin	group name
19	Determining the SMS text	GT IN[1,2,3,4]SMS[0,1]	GT IN1SMS1	set text

	Description			
20	Setting the SMS text	ST IN[1,2,3,4]SMS[0,1]= value	ST IN1SMS1=open	required text without spaces
21	Determining the number of attempts to send an SMS	GT SendRetry	GT SendRetry	0 = off 1 to x = number of attempts to send
22	Setting the number of attempts to send an SMS	ST SendRetry= value	ST SendRetry=3	0 = off 1 to x = number of attempts to send
23	Setting the number of attempts to send an SMS with confirmation	SC SendRetry= value	SC SendRetry=3	0 = off 1 až x = number of attempts to send
24	Determining the activation condition when starting the device	GT IN[1,2,3,4]TriggerStart	GT IN1TriggerStart	0 = off 1 = switched 2 = disconnected 3 = random status
25	Setting the activation condition when starting the device	ST IN[1,2,3,4]TriggerStart= value	ST IN1TriggerStart=1	0 = off 1 = switched 2 = disconnected 3 = random status
26	Setting the activation condition when starting the device with confirmation	SC IN[1,2,3,4]TriggerStart= value	SC IN1TriggerStart=1	0 = off 1 = switched 2 = disconnected 3 = random status
27	Determining the activation condition during operation	GT IN[1,2,3,4]TriggerRun	GT IN1TriggerRun	0 = off 1 = switching 2 = disconnection 3 = random level
28	Setting the activation condition during operation	ST IN[1,2,3,4]TriggerRun= value	ST IN1TriggerRun=1	0 = off 1 = switching 2 = disconnection 3 = random level
29	Setting the activation condition during operation with confirmation	SC IN[1,2,3,4]TriggerRun= value	SC IN1TriggerRun=1	0 = off 1 = switching 2 = disconnection 3 = random level
30	Determining the switching evaluation time	GT IN[1,2,3,4]AttackTime	GT IN1AttackTime	integer number in seconds
31	Setting the switching evaluation time	ST IN[1,2,3,4]AttackTime=value	ST IN1AttackTime=1	integer number in seconds
32	Setting the switching evaluation time with confirmation	SC IN[1,2,3,4]AttackTime= value	SC IN1AttackTime=1	integer number in seconds
33	Determining the disconnection evaluation time	GT IN[1,2,3,4]ReleaseTime	GT IN1ReleaseTime	integer number in seconds
34	Setting the disconnection evaluation time	ST IN[1,2,3,4]ReleaseTime=value	ST IN1ReleaseTime=2	integer number in seconds

	Description			
35	Setting the disconnection evaluation time with confirmation	SC IN[1,2,3,4]ReleaseTime=value	SC IN1ReleaseTime=2	integer number in seconds

ADMINISTRATION OF OPERATING PARAMETERS

	Description			
1	Determining the time	GT DateTime	GT DateTime	Y-Year, M-Month, D-Day, h-hour, m-minute
2	Setting the time	ST DateTime="RRRR-MM-DD hh:mm"	ST DateTime="2012-10-25 11:35"	Y-Year, M-Month, D-Day, h-hour, m-minute
3	Setting the time with confirmation	SC DateTime="RRRR-MM-DD hh:mm"	SC DateTime="2012-10-25 11:35"	Y-Year, M-Month, D-Day, h-hour, m-minute

ADMINISTRATION OF COMMUNICATION PARAMETERS

	Description			
1	Setting the APN	ST APN=value	ST APT=apn	apn value is set depending on operator
2	APN detection	GT APN	GT APN	set APN name
3	IP detection	GT IP	GT IP	IP address LAN a GPRS/EDGE
4	Setting the FUP limit	ST FUP=value	ST FUP=0	0 = off 1 = on
5	Setting the FUP limit with confirmation	SC FUP=value	SC FUP=0	0 = off 1 = on
6	FUP status detection	GT FUP	GT FUP	0 = off 1 = on
7	DynDNS update	DDNS	DDNS	-

Instead of [1,2,3,4] enter the number of the required input in the command.

Instead of [0,1] enter the number of the required output in the command.

USER CONTROL

CALL CONTROL

Opening and closing doors, gates and barriers with a mobile phone is very easy and is done by simply ringing the GSM KEY phone number. For the complete ease of use, we recommend storing the GSM KEY phone number among the contacts in your phone under speed dial.

SMS CONTROL

Control using SMS messages is available only to administrators, i.e. users who are included in the **ADMIN** group.

	Description			
1	Setting output status	ST OUT[1,2,3,4]=value	ST OUT1=1	0 = disconnect 1 = switch
2	Determining the binary input status	GT IN[1,2,3,4]	GT IN1	0 = disconnect 1 = switch
3	Determining the text input status	GT IN[1,2,3,4]T	GT IN1T	text answer
4	Determining the SMS text	GT IN[1,2,3,4]SMS[0,1]	GT IN1SMS1	set text
5	Setting the SMS text	ST IN[1,2,3,4]SMS[0,1]=value	ST IN1SMS1=open	required text without spaces
6	Setting the SMS text with confirmation	SC IN[1,2,3,4]SMS [0,1]=value	SC IN1SMS1=open	required text without spaces

Instead of [1,2,3,4] enter the number of the required input/output in the command.

Instead of [0,1], enter the status of the input, 0 = open, 1 = closed.

WEB INTERFACE ADMINISTRATION

CONNECTION AND ADMINISTRATION OF GSM KEY PROFI 3+

The device is connected via an Ethernet cable directly to a PC or to an active component in a LAN.

If the **GSM KEY PROFI 3+** is connected to the PC directly, it is necessary to set the static IP address to 192.168.0.1 in the IPv4 control panels and the device is then available at the IP address **192.168.0.22**.

For a detailed description of the configuration, see Network Card Settings – page 33

If you connect the **GSM KEY PROFI 3+** to an integrated network and it will be assigned an unknown IP address from the given network, there is a command in the manual to find out the IP address ("GT IP").

To access the web interface, enter **gsmkey/** in the address bar of your browser.

The default username is "**administrator**" and the password is blank.

SAVING CONFIGURATION CHANGES

When configuring the device, each change needs to be saved using the floppy disk icon at the bottom of the window. A logged in user will be logged out automatically after 10 minutes of inactivity.

DELETING CONFIGURATION CHANGES

A configuration can be deleted using the RST button located next to the power terminals. This is done by pressing the button and connecting the power supply and then continuing to press the button.

Pressing the button for 10 seconds clears the "**Settings**" and "**Communication**" parameters (indicated by the LED marked G/S flashing (red and green) with a frequency of 5 Hz).

Pressing the button for 30 seconds clears the entire GSM KEY PROFI 3+ memory (indicated by the LED marked G/S (red and green) flashing with a frequency of 0.3 Hz).

LOGGING IN TO THE ADMINISTRATION WEB INTERFACE

To access the web interface for the first time, enter the username "**administrator**" without entering a password. We recommend setting your own password. On the login page, you can select the language of the web interface. This change is for a single login only. The default language of the web interface is set in the "**Settings**" tab.

DESCRIPTION OF THE WEB INTERFACE ICONS

Information

The "**Information**" tab contains summary information about the device, see below.

Name	Description
Name of application	GSM KEY PROFI 3+
Company	SECTRON s.r.o.
Application version	Currently uploaded firmware version
Release date	Date the uploaded firmware version was released
Serial number	GSM KEY serial number
IMEI	IMEI GSM KEY
SIM PIN status	OK (not required) OK (set) if the PIN is not entered in the communication tab, the status is given as unknown
GSM registration	Status of SIM card registration to the operator's network
GSM signal strength	Current signal strength value
GSM signal strength per hour (min/average/max)	History of signal strength values per hour
GSM signal strength per day (min/average/max)	History of signal strength values per day
GSM signal strength per month (min/average/max)	History of signal strength values per month
GPRS/EDGE status	Evaluation of the available type of connection in the given GPRS/EDGE area
GPRS IP address	IP address assigned by the operator to the GSM network
LAN IP address	IP address on the physical Ethernet interface
MAC address	MAC address of the physical Ethernet interface
Sent/received last month	Status of of received and sent data for the last month
Sent/received this month	Status of received and sent data for the current month
Date and time	Current date and time downloaded from the operator's GSM network
Runtime	GSM KEY runtime in seconds

COMMUNICATION

The parameters for connecting the GSM KEY to the local network and for remote access are set in the "**Communication**" tab. After changing any parameters, always save the configuration using the floppy disk icon at the bottom of the window and restart the device using the red arrow icon. The device will restart within 10 seconds.

LAN

Parameters for connection via an Ethernet cable.

Name	Description
Host name	The KEY name used to identify the device and also as the address when entering it into the address bar of the Internet browser
DHCP client	Option to enable or disable DHCP of the client KEY
IP address	Default IP address of the device
Network mask	Network mask settings
Default gateway	Setting the IP address of the default gateway
DNS server	Setting the IP address of the DNS server

Modem

Parameters for the GPRS/EDGE connection.

Name	Description
GPRS	Turn the data connection on or off
PIN	Enter the SIM card PIN, if required
Username	If a username is required for the connection, otherwise leave blank
Password	If a password is required for the connection, otherwise leave blank
APN	APN according to the operator's instructions
Start of billing	Starting day of the month in which the data connection is billed
Data limit	Setting the FUP data limit If a value of 0 is entered, the data limit is unlimited.

Set only if the SIM card has a fixed public IP address.

SETTINGS

General parameters are specified in the "**Settings**" tab. After any changes in the parameters, the configuration must always be saved using the floppy disk icon at the bottom of the window.

Administrator

Phone number and password of the administrator, for access to the web interface. This is the head administrator, who has unrestricted rights. When configuring the GSM KEY using SMS commands, the administrator account is added first.

Name	Description
Password	The password for access to the web interface may contain only uppercase and lowercase letters without accents or numbers
Telephone	Telephone number of the administrator

Date and time

Setting the parameters for updating the date and time. When the unit is connected to the Internet or a PC with an Internet connection, the time from the preset server is automatically updated. The time can also be set manually.

Name	Description
NTP Server	The address of the server where the synchronization of time takes place
Time zone	Setting the time zone
Daylight saving time	Setting whether it is daylight saving time
Time	Manually setting the date and time

Main settings

Setting the main parameters of the GSM KEY.

Name	Description
Default language	Setting the default web interface language
Maximum SMS repetition	Number of attempts to send an SMS
Hanging up after ringing	Setting the number of rings after which a call is rejected
SMS after power on	In the event of a power failure, an SMS is sent to a preset group of users after power on

SMS forwarding

This is used to define up to 3 telephone numbers from which SMS messages will be forwarded to a user administrator.

Name	Description
Telephone number	Setting the telephone number from which SMSes are to be redirected to the administrator

IO PARAMETERS

The parameters for inputs and outputs are set in the "**IO parameters**" tab. After any changes in the parameters, the configuration must always be saved using the floppy disk icon at the bottom of the window.
Setting the IN parameters
The first table is used to set the conditions for activation.

Name	Description
After turning on	This option sets the activation condition valid when the GSM KEY is switched on. After the device is switched on, it checks the value of the input and if the condition is met, performs the action. The options are Off/Rising Edge/Falling Edge/Either Edge
In progress	This option sets the activation condition valid when the GSM KEY is running. After the device is switched on, it checks the value of the input and if the condition is met, performs the action. The options are Off/Rising Edge/Falling Edge/Either Edge
Switching time	Enter the time interval during which the input must remain closed in order for the activation condition to be met
Opening time	Enter the time interval during which the input must remain open in order for the activation condition to be met
Action	The action to be invoked after the GSM KEY conditions are met. The options are SMS/Call/SMS and Call

The second table is used to set up an informed group and to name statuses.

Name	Description
Group	Settings of the group to be informed about the status of inputs
SMS Log 0	Setting the SMS text if the input is opened
SMS Log 1	Setting the SMS text if the input is closed

Setting the OUT parameters
Setting the output conditions.

Name	Description
Output response	The options are: switch on for a preset time/switch to the opposite status
Length	Length of output switching
Ringing	The number of rings after which the output is activated

Setting the outputs
Setting output evaluation.

Name	Description
Evaluation	Setting the types of output evaluation

*What is the difference between the operating modes?*

In the **Continuous Evaluation** mode, you can open up to four entrances with one call, during one call without interruption.

In the **Feedback** mode, the individual relay outputs can be switched separately. The relay outputs (OUT1-OUT4) close only after a predefined condition is met. E.g. you set it up so that in the event of 1-2 rings, OUT1 closes, in the range of 2-3 rings, OUT2 closes, etc. The evaluation of the action takes place only after the end of the call.

The factory setting is **Continuous Evaluation** mode, which can be changed by the administrator.

Simulation
Double-clicking on the IO parameters icon opens the simulation window. Here you can see the current status of the inputs/outputs and the option to set the output to the desired state. Simulation is available only to the head administrator.
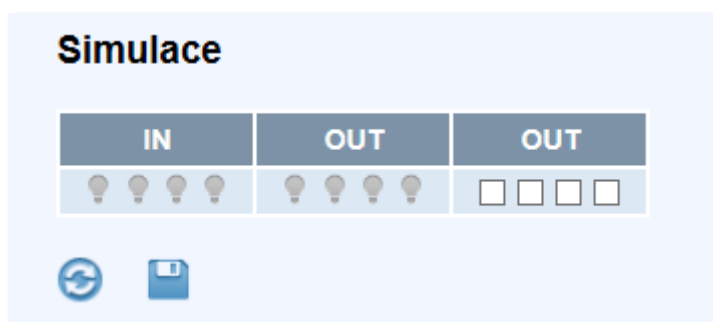
USERS

The administration of users is performed in the "**Users**" tab. The web interface offers the possibility of sorting them ascending/descending in alphabetic order, according to searching, filtering and paging. All rights (web, SMS, control) of an expired user are removed. A user whose account has expired is highlighted in red. To remove all expired users, a red clock icon will appear at the bottom of the window. After any changes in the parameters, the configuration must always be saved using the floppy disk icon at the bottom of the window.

To add a new user, click the **+** icon at the end of the line and fill in the required parameters. After setting all the parameters, the **+** icon needs to be clicked again to add a completed user or the **–** icon to cancel the user. Added users need to be saved in the device memory using the floppy disk at the bottom of the window.

Backing up and restoring the user database is done using the icons for "**Export to CSV**" and "**Import from CSV**". Use a comma "," to separate individual items. If the data content is incorrect, the file will be rejected. **A time value of 0 means unlimited validity**. The time is filled in in the UTC format. Converting the expiration time to UTC format can be done at http://www.epochconverter.com/. For creating a database in a CSV file, do not fill in the WPIN. This value is encoded during export and import.

| Single line CSV format |
|---|
| Name, phone, group index, UTC time, WPIN |
| Pavel, +420123456789,1,1390828577,0 |
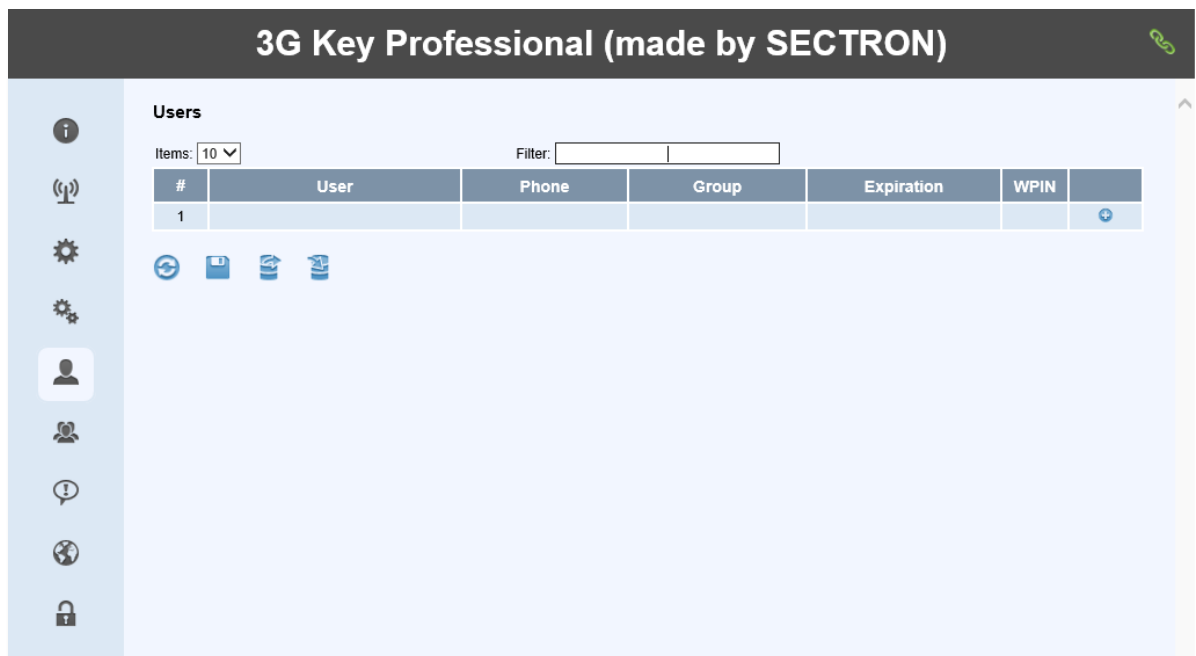
Name	Description
User	The user name can only contain uppercase and lowercase letters without accents or numbers. The name "**administrator**" cannot be used more than once.
Phone	The phone number is entered in the international format +420123456789. Do not add duplicate contacts. Each user has exactly one assigned phone number.
Group	Putting the user in a selected group.
Expiration	Fill in the date and time until which the user has the right to activate. The unlimited validity icon is checked by default.
WPIN	This is the user password to be used to log in to the web interface (0 = deactivation)

GROUPS

The "**Groups**" tab contains groups to which users can be assigned. By default, 3 basic groups are created in GSM KEY PROFI 3 and cannot be removed.
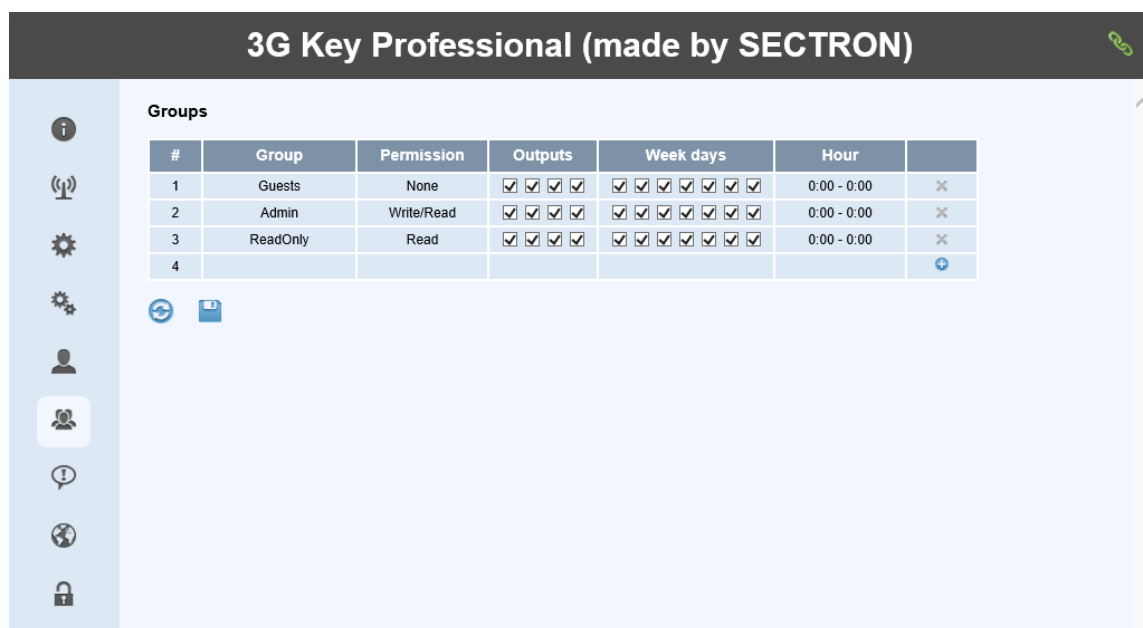
Name	Description
Group	Name of the user group. Only lowercase and uppercase letters can be used when adding a new group. If a group to which users are assigned is removed, they are automatically moved to the Guests group.
Rights	Rights assigned to individual groups. None – the group can activate only enabled outputs Read – the group has access to the web interface, but has restricted rights Write/Read – the group has unrestricted rights, apart from editing a user "**administrator**"
Outputs	Permitting activation of certain outputs for a given group
Day of the week	Setting the days of the week to activate the output
Hour	Setting the access interval for a given group

SYSTEM LOG

The behavior of the GSM KEY and activation of the interface is recorded in the "**System log**" tab. Only part of the system log is displayed in the window. The first icon "**download history**" can be used to save a file containing all activity and the second "**download events**" to save a file containing only interface activity. The maximum number of records is 4000 for history and 2000 for events.

FW

UPDATE

GSM KEY PROFI 3+ firmware is updated in the "**FW update**" tab. Proceed by clicking the icon showing the folder and then select the file with the new firmware version and the icon showing the floppy disk to perform the update. A reset will automatically occur when the update is complete. Updates are continuously published at https://www.gsmkey.cz/ke-stazeni/.

LOGGING OUT

The lock icon is used to log out of the web interface.

TECHNICAL DESCRIPTION OF THE INTERFACE

FRONT PANEL

LEDs: device status information (I1, I2, I3, I4, P, O1, O2, O3, O4, G/S)
PWR: connector to connect the power supply
NET: interface for connecting to a PC or active component (router, switch).
RST: device reset button

BACK PANEL

SIM: plug-in SIM card reader
2 ANT: SMA(f) connector for connecting LTE antennas
O4A – O1A: connector for connecting outputs
I4 – I1: connector for connecting inputs
COM: ground signal

SIM

NanoSIM card reader with pull-out tray. **Insert and remove the SIM card only when the device is switched off.**
To eject the SIM card, push the eject button located to the left of the SIM card tray using a needle tool with a diameter of approximately 1 mm.

LEDS (DEVICE STATUS INFORMATION)

There are 8 LEDs on the front panel that inform about the status of the device.

LED	Description
I1 (input 1)	Off – the voltage between contacts I1 and GND is 0-7 V AC/DC On – the voltage between contacts I1 and GND is 15-40 V AC/DC
I2 (input 2)	Off – the voltage between contacts I2 and GND is 0-7 V AC/DC On – the voltage between contacts I1 and GND is 15-40 V AC/DC
I3 (input 3)	Off – the voltage between contacts I3 and GND is 0-7 V AC/DC On – the voltage between contacts I1 and GND is 15-40 V AC/DC
I4 (input 4)	Off – the voltage between contacts I4 and GND is 0-7 V AC/DC On – the voltage between contacts I1 and GND is 15-40 V AC/DC
P (power supply)	Continuously off – no power Continuously on – GSM KEY is on
O1 (output 1)	Off – contacts O1A and O1B open On – contacts O1A and O1B connected
O2 (output 2)	Off – contacts O2A and O2B open On – contacts O2A and O2B connected
O3 (output 3)	Off – contacts O3A and O3B open On – contacts O3A and O3B connected
O4 (output 4)	Off – contacts O4A and O4B open On – contacts O4A and O4B connected
G (GSM signal)	Continuously lit **red** – malfunction Flashing **green** – communication with the GSM network

SWITCHING INPUTS

There is a switch at the bottom of the GSM KEY used to switch the type of inputs to active/passive.

DI	Description
A	Active mode – the inputs use their own power supply and expect a passive input.
P	Passive mode – disconnects the internal power supply and the inputs expect an active voltage input.

PWR

The "**PWR**" power supply interface is used to connect the power supply via a 2-pin WAGO connector. The device can be powered by DC and AC voltage in the range of 10-30 V.

RST

The "**RST**" button is used to reset the device. Hold down the reset button after connecting the power for:
10 seconds – Deleting the "Settings" and "Communication" parameters (flashing at a frequency of 5 Hz)
30 seconds – Deleting the entire memory (flashing at a frequency of 0.3 Hz)

I/O (INPUT/OUTPUT)

Pin number	Signal designation	Description
1	O4B	Relay output 4 (maximum 30 V / 1 A)
2	O4A	Relay output 4 (maximum 30 V / 1 A)
3	O3B	Relay output 3 (maximum 30 V / 1 A)
4	O3A	Relay output 3 (maximum 30 V / 1 A)
5	O2B	Relay output 2 (maximum 30 V / 1 A)
6	O2A	Relay output 2 (maximum 30 V / 1 A)
7	O1B	Relay output 1 (maximum 30 V / 1 A)
8	O1A	Relay output 1 (maximum 30 V / 1 A)
9	I4	Optically isolated input 4 (LOG 0: 0-7 V / LOG 1: 15–40 V DC)
10	I3	Optically isolated input 3 (LOG 0: 0-7 V / LOG 1: 15–40 V DC)
11	I2	Optically isolated input 2 (LOG 0: 0-7 V / LOG 1: 15–40 V DC)
12	I1	Optically isolated input 1 (LOG 0: 0-7 V / LOG 1: 15–40 V DC)
13	COM	Ground signal

ANT

The radio frequency interface marked "**ANT**" equipped with two VF SMA(f) connectors is used to connect two LTE antennas with SMA(m) connectors.

Application manuals

NETWORK CARD SETTINGS

If the **GSM KEY PROFI 3+** is connected to the PC directly, it is necessary to set the required range of addresses on the network card of the computer and the device will be available at the address **192.168.0.22**.

Enter "**Control panels**" in the search menu and choose the option "**Network and Internet** ", then proceed to the "**Network and Sharing Center**"
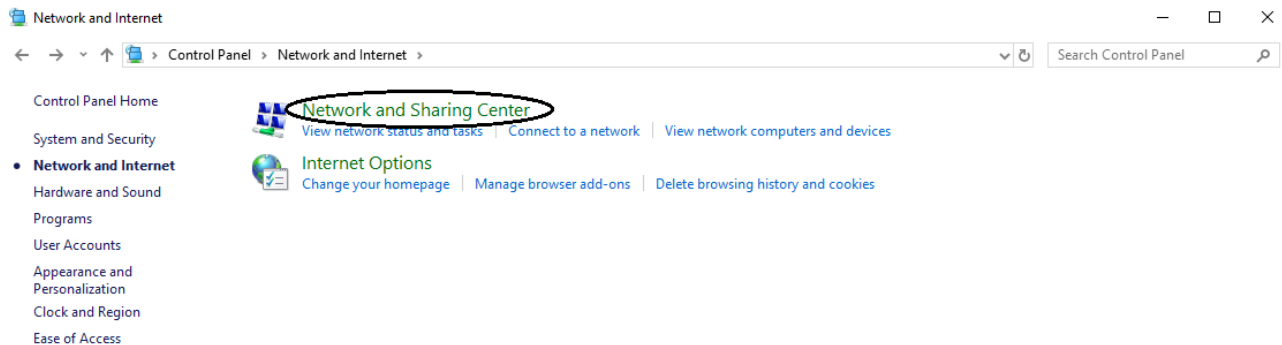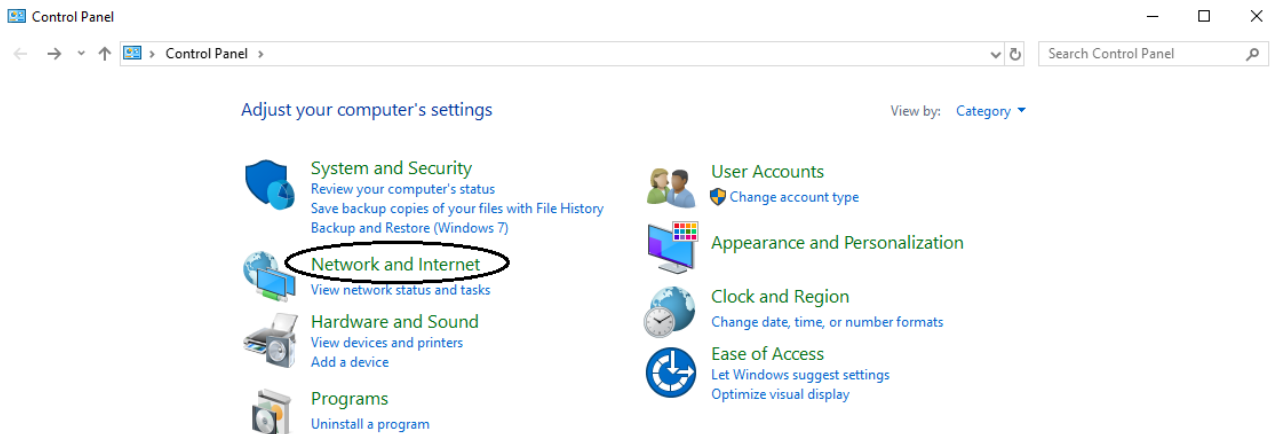
Click on **Change adapter settings** in the left part of the window.
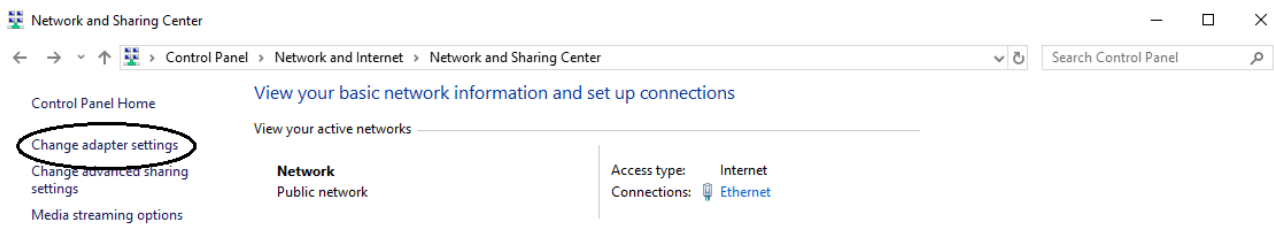
The **Network connections** window opens, open the menu by right-clicking on the **Ethernet** icon and selecting Properties.
In the open tab, select **Internet Protocol Version 4 (TCP/IPv4)** and use the Properties button to select additional options.
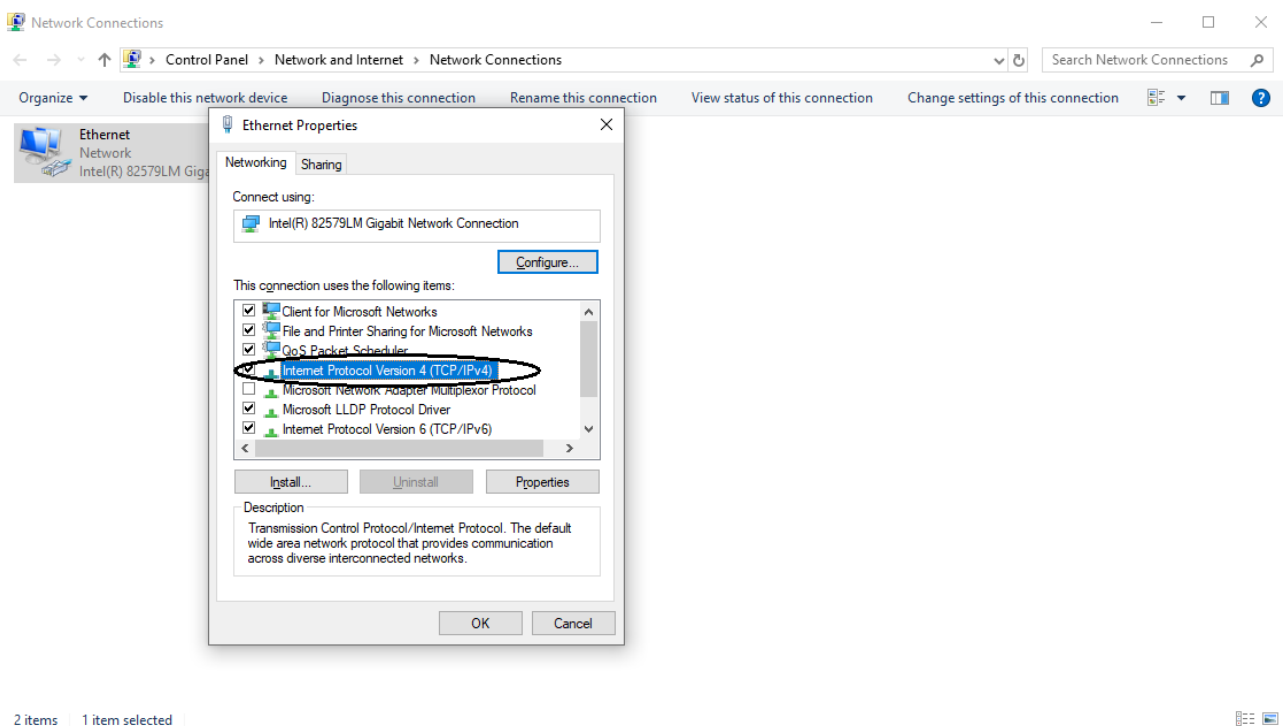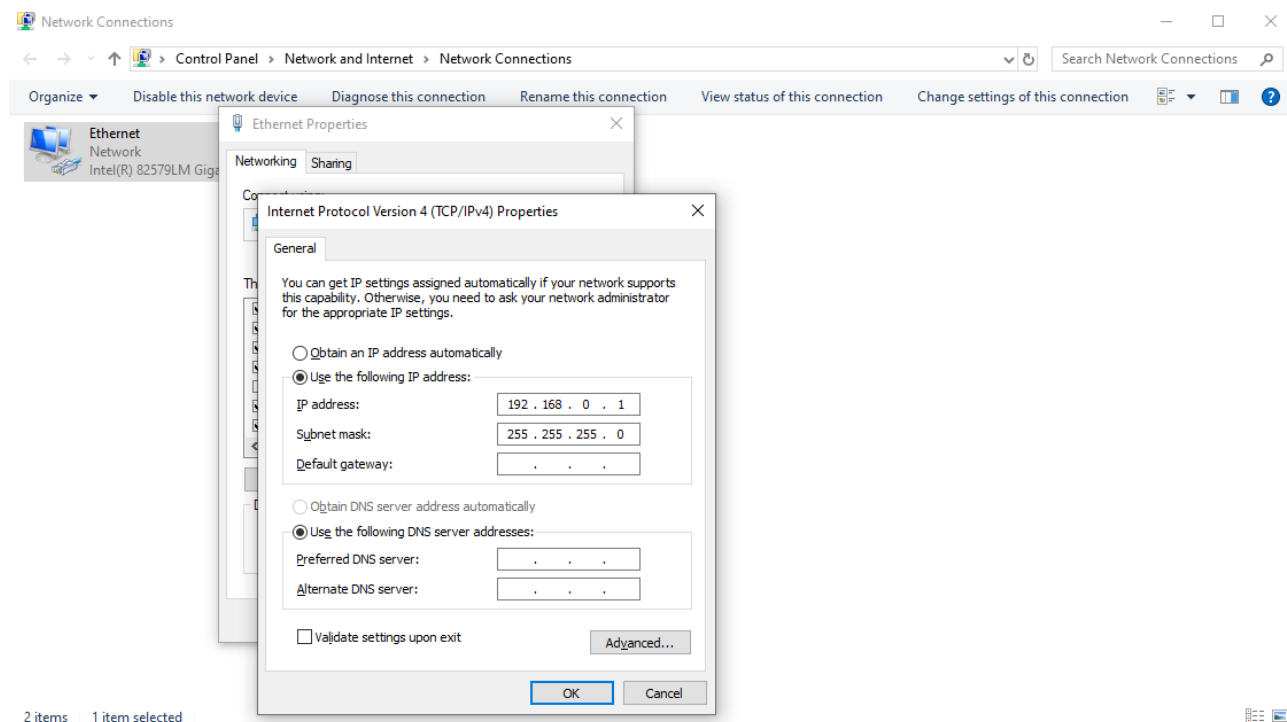
In this tab, it is necessary to set the **IP addresses from the given range**. Select **Use the following IP address** option and set these parameters:
IP address: 192.168.0.1
Subnet mask: 255.255.255.0
No additional parameters need to be filled in.
Then save the settings.

The GSM KEY PROFI3 + is now ready for configuration. Open your web browser and enter the IP address **192.168.0.22** or **gsmkey/** in the address bar.

USEFUL TIPS:

- Non-functional GSM KEY, which ends the call after 1 ring.
  If you hear one-half tone when calling GSM KEY, it means the device is fully functional and it has evaluated you as an unauthorized caller.
  Therefore check to see whether you have added the user correctly and whether you have an active **CLIP** service (especially with an O2 operator).
  Also avoid using VPNs and other non-standard phone services.

- In case of an accidental failure of the GSM KEY, first check all the options; a very common case is the expiration of the SIM card tariff or the blocking of a SIM with poor credit.

- If the first user has been added incorrectly, restart the device with the RST button. Please follow the instructions – section: "DELETING CONFIGURATION CHANGES".

WAGO TERMINAL BLOCK CONNECTION

In the GSM KEY package, you will find 2 WAGO terminal blocks and a hook for wiring installation.

One 13-pin and one 2-pin WAGO terminal block

One hook for installing the wiring in the WAGO terminal block

The hook hooks into the upper hole, which is located above the wiring locks. Then push the hook down to open the wiring lock and insert the stripped wire.

In the event the hook gets lost, it is possible to use a thin flat 2mm screwdriver, which is inserted into the upper hole. Gently push inwards until the wiring lock opens. In the case of a small opening, it is possible to open the lock up more by gently lifting up the screwdriver.
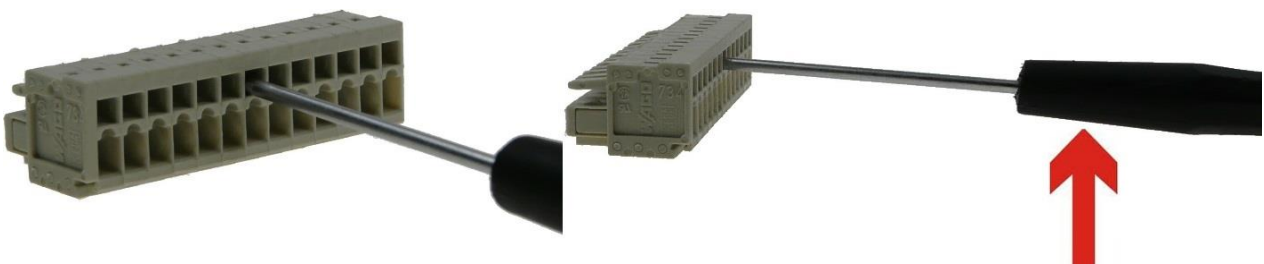
TECHNICAL PARAMETERS

Name	Parameter
GSM module	Cinterion Wireless Module ELS61-R2
Frequency bands	700/800/900/1700/1800/2100/2600/2700 MHz
User interface	4 relay outputs (for the parallel connection of motor control) 4 optically separated inputs (for connecting sensors) Ethernet (configuration interface)
Working temperature range	-20°C to +55°C
Storage temperature range	-40°C to +85°C
Power voltage	10 ÷ 30 V AC/DC
Consumption	0.4 W / 0.42 W (receiving/transmitting)
Antenna connector	2x SMA(f) 50 OHM
Dimensions	89 x 52 x 58 mm
Attachment	DIN rail 35 mm
Weight	160 g

SECTRON GSM KEY Application for mobile phones