

# **GSM Key** PROFI 3

# INSTRUCTIONS FOR USE

# CONTENTS

CONTENTS	2
DECLARATION OF CONFORMITY	
SAFETY INSTRUCTIONS	4
PACKAGE CONTENTS	5
GENERAL DESCRIPTION	6
EXAMPLES OF USE	7
FAMILY HOUSE WITH A GARAGE PARKING IN HOTELS, GUEST HOUSES, AND RESIDENTIAL BLOCKS ENTRANCE TO COMPANY PREMISES	
INSTALLATION AND GETTING STARTED	8
USER'S CONTROL OPTIONS	
CONTROL BY DROP CALL	
ADMINISTRATION BY MOBILE PHONE	
ADMINISTRATION OF USERS ADMINISTRATION OF MANUFACTURER'S SETTING ADMINISTRATION OF INPUTS AND OUTPUTS	
TECHNICAL DESCRIPTION OF INTERFACE	CHYBA! ZÁLOŽKA NENÍ DEFINOVÁNA.
FRONT BACK SIM LED DIODES (INFORMATION ABOUT GSM KEY STATUS) PWR BT OUT, IN1, IN2, 4V ANT	
TECHNICAL PARAMETERS	CHYBA! ZÁLOŽKA NENÍ DEFINOVÁNA.

# **DECLARATION OF CONFORMITY**

A Declaration of Conformity of a device according to provisions of Act No. 22/1997, Coll., as amended, stipulating technical requirements for products.

We, the distributor

SECTRON s. r. o. Josefa Šavla 12 709 00 Ostrava - Mariánské Hory Czech Republic Registered No.: 64617939

hereby declare that the following product

GSM KEY PROFI 3

Description: GSM modem Frequency range: GSM 850/900/1800/1900MHz Purpose of use: wireless data transfer in GSM network

complies with the requirements of the General License of the Czech Telecommunication Office No. GL-1/R/2000 and further complies with the requirements of the following harmonized standards and regulations for such devices:

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

and declare that the above product can be used under conditions of usual use as specified in the Instructions for Use.

The conformity has been assessed according to § 3, section 1, letter b), Amendment No. 3 to the Governmental Decree No. 426/2000, Coll., stipulating technical requirements for radio and telecommunication end devices and equipment, further Governmental Decree No., 168/1997, Coll., stipulating technical requirements for low voltage electrical devices, and according to Governmental Decree No. 169/1997, Coll., stipulating technical requirements for products with respect to their electromagnetic compatibility, and according to the Declaration of Conformity for GSM module EES3 (S30960-S1500-\*, S30960-S1505-\*) produced by Gemalto M2M GmbH, St.-Martin-Str. 60, 81669, Munich, Germany.

This Declaration has been issued at the request of the distributor, who is solely liable for its issuance.

Place: Ostrava Date: 1 January, 2014

Petr Henek Executive SECTRON s. r. o.

# SAFETY INSTRUCTIONS

- When using the device, follow legal regulations and applicable local restrictions.
- Do not use the device in hospitals as this may affect the functioning of medical devices and equipment, for example, close to cardio stimulators or hearing aids.
- Read this manual carefully before you install the product, put it into operation or start using it.
- Do not use the device on a plane.
- Do not use the device near petrol stations, chemical plants or in areas where explosives are used and where there is a danger of explosion. The device may disturb the functioning of some other devices and equipment.
- If close to TV sets, radios or computers, the device may disturb them.
- Use only recommended accessories (see chapter RECOMMENDED ACCESSORIES) to avoid damaging the device, property or violating relevant regulations. The recommended accessories have been tested and their functioning is compatible with the device. The warranty, however, does not cover such accessories.
- We recommend making a suitable copy or back-up of important settings, which are stored on your SIM card.
- Do not open the device. Only the SIM card can be exchanged. For how to remove and replace the SIM card, see the Instructions for Use.
- ATTENTION! Keep the SIM card out of reach of children; danger of swallowing a SIM card.
- Do not expose the device to extreme ambient conditions. Protect it against dust, humidity, liquids, unwanted substances and extreme temperature.
- The voltage of the power supply connector cannot be exceeded under any circumstances.
- The manufacturer is not liable for any defects resulting from not adhering to the Instructions for Use.

# PACKAGE CONTENTS

- 1. 1 GSM Key PROFI 3
- 2. 1 GSM hinged antenna, gain of 2 dB
- 3. 1 2-pin WAGO terminal box
- 4. 1 13-pin WAGO terminal box
- 5. 1 WAGO terminal box tool
- 6. 1 Ethernet cable
- 7. 1 Instructions for Use, EN
- 8. 1 Quick-start guide
- 9. 1 Warranty Certificate



# **GENERAL DESCRIPTION**

SECTRON s.r.o. offers following versions of the GSM Key

- GSM Key LITE 3
- GSM Key PROFI 3

GSM Key is a device that allows you to open gates, doors and many other devices by a phone call. Users are authorized by their phone number. The user list can be edited by administrator using SMS or PC. Since the incoming call is declined, the operation of the gate is free.

**GSM Key LITE 3** is suitable for family houses and small companies with up to 20 users and is administered by

- an Android or iOS mobile phone app or
- configuration SMS

**GSM key PROFI 3** is suitable for middle-size and large companies, office buildings, hotels and guest houses with up to 1000 user. It can control to four devices, and is administered by

- an Android or iOS mobile phone app or
- configuration SMS,
- web management interface accessible to a local network as well as remotely.



# FAMILY HOUSE WITH A GARAGE

For controlling one garage door of a family house, **GSM key LITE 3** or **GSM key HOME 2** with one output are suitable (see chapter INSTALLATION AND GETTING STARTED). We recommend saving the GSM key phone number on the contacts list as a speed-dial hotkey number, i.e. calling by pressing one key. In order to add or remove a user authorized to open the gate, send an SMS (see chapter ADMINISTRATION).

#### PARKING IN HOTELS, GUEST HOUSES, AND RESIDENTIAL BLOCKS

For controlling gates in hotels and guesthouses, **GSM key PROFI 2** or **GSM key PROFI 3** are suitable. When arriving, guests only provide their mobile phone numbers which they will use to open gates. The administrator will save their phone numbers using software in the GSM key. After guests leave, the administrator will remove guests' telephone numbers. By using the GSM key, you avoid the risk of losing or damaging remote controls. The software enables easy and systematic monitoring of several devices at the same time and the maintenance of a perfect overview of settings and users of individual gates.

# ENTRANCE TO COMPANY PREMISES

For controlling company gates, **GSM key PROFI 2** or **GSM key PROFI 3** are suitable. You can enable your business partners to enter your premises easily and quickly as well as remotely, no matter if they come just for one visit or for regular meetings. If you use GSM key ADMIN software, you will have a perfect overview of settings and users of individual gates. PROFI 3 version also enables you to use the administration interface independently of the operating system of your computer or tablet.

# **INSTALLATION AND GETTING STARTED**



- 1. The device must only be installed by a qualified and properly trained person.
- 2. Before you start installing the device and before you put it into operation, please read this manual carefully.
- 3. If you use a power supply to charge the device, it must comply with requirements for placing SELV circuits; also, it must comply with EN60950. The power supply, which is a part of the package, complies with such requirements. If batteries or accumulators are used, these must also comply with relevant standards.
- 4. Should you have any questions, do not hesitate to contact your installation company or SECTRON Hotline (<u>hotline@sectron.cz</u>, +420 599 509 599).



To install the device, you will need pincers.

Insert the SIM card which you want to use in the GSM KEY in the mobile phone.



Call your mobile phone provider to activate the SIM card, delete the PIN, voicemail, your contacts list and SMS messages.



Insert the SIM card back into the GSM KEY and send an SMS to the SIM card number in the form

AD ADMINISTRATOR +420xxxxxxxx

where +420xxxxxxx is your phone number in the international format. Individual parts of the message must be separated by an empty space.

If you use a VPN service, the displayed number of the caller may be different. Ask your provider for more information.



The device is designed to be installed indoors or in a water-resistant plastic distributor.



You can charge the device by using

- the included power supply for charging from the 230 V AC socket,
- a different power supply of an output of 11 30 V DC or AC, of at least 1 A.

See Fig. 8 for where to plug in the output terminals, input terminals and main power supply.





Plug the signal cable (at least 2x 0.35 mm<sup>2</sup> Cu) into the O1A-01B terminals of the GSM key and START terminals of your gate drive.



Use the power supply terminal last. The device will start working within about one minute.

Now, the GSM Key is ready to be setup in administration.

# **ADMINISTRATION**

Administration of GSM Key Profi 3 is done via SMS from the **administration phone** or by using the **web interface SECTRON GSM Key PROFI 3** 

#### ADMINISTRATION BY MOBILE PHONE – p. 12

Remote administration via a mobile phone can be done without any restrictions from any place.



#### ADMINISTRATION BY WEB INTERFACE - p. 19

It is possible to manage GSM Key PROFI 3 via the web interface. The device is connected to a PC using the Ethernet cable. Additionally, it is possible to connect GSM Key PROFI 3 to the already existing computer network where it will be assigned an IP address, or there's also an option of a remote configuration by GPRS.



# **ADMINISTRATION BY MOBILE PHONE**

To operate the device using SMS, it is necessary to first send the following SMS "AD ADMINISTRATOR +420XXXXXXXX,", where Xs represent your phone number. Doing this, you create the main administrator, which there can be only one. Next user must be added into a group. Default settings includes 3 groups:

Admin: Can write and read using SMS and control the key by calling Readonly: Can read the key's settings using SMS and control the key by calling Guest: Can only control the key by calling

More groups can be added in PC's administration interface.

The key can be operated by calling the key's phone number. The key can be operated only by saved users.

6

When administering via a mobile phone, please follow the shown SMS format (exact text of orders, empty spaces, etc.). In order to send one or more orders in one SMS, divide them by a semi-colon.

In order to make the administration as easy as possible, we recommend using the GSM key app for Android and iOS, which you can download free of charge from Google Play and AppStore.

#### **ADMINISTRATION OF USERS**

	Action	SMS Template	Example of SMS	Description
1	Adding a new user	AD name phone number	AD Jones +4201234569056	User's name and phone number
2	Removing a user	DE name	DE Jones	User's name
3	Updated list of users	LS	LS	-
4	Deleting telephone list	CL	CL	-
5	Number of telephone list items	GT PBS	GT PBS	-

#### ADMINISTRATION OF EVENT REGISTER

	Action	SMS Template	Example of SMS	Description
1	Check event register	RG=number	RG=10	Number of requested logs
2	Clear even register	RC	RC	

# ADMINISTRATION OF MANUFACTURER'S SETTING

	Action	SMS Template	Example of SMS	Description
1	Recovery of manufacturer's settings	DF	DF	-
2	Checking firmware version	GT FW	GT FW	Firmware version
3	Device reset	RESET	RESET	-

# ADMINISTRATION OF INPUTS AND OUTPUTS

		Action	SMS Template	Example of SMS	Description
	1	Checking operating mode	GT OUTLateEval	GT OUTLateEval	0 = Continual evaluation 1 = Late evaluation
	2	Setting operating mode	ST OUTLateEval=number	ST OUTLateEval=0	0 = Continual evaluation 1 = Late evaluation
	3	Setting operating mode with confirmation	SC OUTLateEval=number	SC OUTLateEval=0	0 = Continual evaluation 1 = Late evaluation
4	4	Checking number of rings	GT OUT[1,2,3,4]ImpulseRings	GT OUT1ImpulseRings	Number of rings
	5	Setting number of rings	ST OUT[1,2,3,4]ImpulseRings= numbrt	ST OUT1ImpulseRings=1	Number of rings
	6	Setting number of rings with confirmation	SC OUT[1,2,3,4]ImpulseRings= number	SC OUT1ImpulseRings=1	Number of rings
	7	Checking automatic hang- up function	GT CallHangUpRings	GT CallHangUpRings	Number of rings 0 = OFF

	Action	SMS Template	Example of SMS	Description
8	Setting automatic hang-up function	ST CallHangUpRings=number	ST CallHangUpRings=5	Number of rings 0 = OFF
9	Setting automatic hang-up function with confirmation	SC CallHangUpRings=number	SC CallHangUpRings=5	Number of rings 0 = OFF
10	Checking impulse length	GT OUT[1,2,3,4]ImpulseLength	GT OUT1ImpulseLength	Whole number in sec
11	Setting impulse length	ST OUT[1,2,3,4]ImpulseLength =number	ST OUT1ImpulseLength=1	Whole number in sec
12	Setting impulse length with confirmation	SC OUT[1,2,3,4]ImpulseLength =number	SC OUT1ImpulseLength=1	Whole number in sec
13	Checking feedback action	GT IN[1,2,3,4]Action	GT IN1Action	0 = send SMS 1 = call 2 = call and send SMS
14	Setting feedback action	ST IN[1,2,3,4]Action=number	ST IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS
15	Setting feedback action with confirmation	SC IN[1,2,3,4]Action=number	SC IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS
16	Checking relevant groups for operation	GT IN[1,2,3,4] GroupName	GT IN1 GroupName	Group name
17	Setting relevant groups for operation	ST IN[1,2,3,4]GroupName=nu mber	ST IN1 GroupName=Admin	Group name
18	Setting relevant groups for operation with confirmation	SC IN[1,2,3,4] GroupName =number	SC IN1 GroupName =Admin	Group name
19	Checking SMS text	GT IN[1,2,3,4]SMS[0,1]	GT IN1SMS1	Set text

	Action	SMS Template	Example of SMS	Description
20	Setting SMS text	ST IN[1,2,3,4]SMS[0,1]=numb er	ST IN1SMS1=Open	Required text without empty spaces
21	Checking number of attempts to send SMS	GT SendRetry	GT SendRetry	0 = OFF 1 to x = number of send retry attempts
22	Setting number of attempts to send SMS	ST SendRetry=number	ST SendRetry=3	0 = OFF 1 to x = number of send retry attempts
23	Setting number of attempts to send SMS with confirmation	SC SendRetry=number	SC SendRetry=3	0 = OFF 1 to x = number of send retry attempts
24	Checking activation condition at start of device	GT IN[1,2,3,4]TriggerStart	GT IN1TriggerStart	0 = OFF 1 = connected 2 = disconnected 3 = any state
25	Setting activation condition at start of device	ST IN[1,2,3,4]TriggerStart=nu mber	ST IN1TriggerStart=1	0 = OFF 1 = connected 2 = disconnected 3 = any state
26	Setting activation condition at start of device with confirmation	SC IN[1,2,3,4]TriggerStart=nu mber	SC IN1TriggerStart=1	0 = OFF 1 = connected 2 = disconnected 3 = any state
27	Checking activation condition when device is on	GT IN[1,2,3,4]TriggerRun	GT IN1TriggerRun	0 = OFF 1 = connected 2 = disconnected 3 = any state
28	Setting activation condition when device is on	ST IN[1,2,3,4]TriggerRun=num ber	ST IN1TriggerRun=1	0 = OFF 1 = connected 2 = disconnected 3 = any state

	Action	SMS Template	Example of SMS	Description
29	Setting activation condition when device is on with confirmation	SC IN[1,2,3,4]TriggerRun=num ber	SC IN1TriggerRun=1	0 = OFF 1 = connected 2 = disconnected 3 = any state
30	Checking connection delay time	GT IN[1,2,3,4]AttackTime	GT IN1AttackTime	Whole number in sec
31	Setting connection delay time	ST IN[1,2,3,4]AttackTime=nu mber	ST IN1AttackTime=1	Whole number in sec
32	Setting connection delay time with confirmation	SC IN[1,2,3,4]AttackTime=num ber	SC IN1AttackTime=1	Whole number in sec
33	Checking disconnection delay time	GT IN[1,2,3,4]ReleaseTime	GT IN1ReleaseTime	Whole number in sec
34	Setting disconnection delay time	ST IN[1,2,3,4]ReleaseTime=nu mber	ST IN1ReleaseTime=2	Whole number in sec
35	Setting disconnection delay time with confirmation	SC IN[1,2,3,4]ReleaseTime=nu mber	SC IN1ReleaseTime=2	Whole number in sec

# ADMINISTRATION OF OPERATING PARAMETERS

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

		Action	SMS Template	SMS Example	Description
Γ	1	Setting APN	ST APN=number	ST APT=apn	APN number setup depends on your operator
	2	Checking APN	GT APN	GT APN	Name of APN
	3	Checking IP	GT IP	GT IP	IP address LAN and GPRS/EDGE
	4	Setting FUP limit	ST FUP=number	ST FUP=0	0 = OFF 1 = ON
	5	Setting FUP limit with confirmation	SC FUP=number	SC FUP=0	0 = OFF 1 = ON
	6	Checking FUP state	GT FUP	GT FUP	0 = OFF 1 = ON

Instead of [1,2,3,4] in the order, enter number of the requested input.

Instead [0,1] in the order, enter number of the requested output.

# **USER'S CONTROL OPTIONS**

#### CONTROL BY DROP CALL

It is very easy to open and close gates, barriers and doors by a mobile phone. Simply call the GSM key phone number and hang up. To make it as easy as possible, we recommend adding the GSM key phone number to your mobile phone contacts as a pre-selected number.

#### **CONTROL BY SMS**

Control by SMS is only available to administrators, i.e. users whose names start with the word Admin.

	Action	SMS template	Example of SMS	Description
1	Setting output status	ST OUT[1,2,3,4]=number	ST OUT1=1	0 = disconnect 1 = connect
2	Checking input status – binary	GT IN[1,2,3,4]	GT IN1	0 = disconnected 1 = connected
3	Checking input status – text	GT IN[1,2,3,4]T	GT IN1T	Text message
4	Checking SMS text	GT IN[1,2,3,4]SMS[0,1]	GT IN1SMS1	Pre-set text
5	Setting SMS text	ST IN[1,2,3,4]SMS[0,1]=number	ST IN1SMS1=open	Required text without empty spaces
6	Setting SMS text with confirmation	SC IN[1,2,3,4]SMS[0,1]=number	SC IN1SMS1=open	Required text without empty spaces

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

Instead of [0, 1], enter the input status -0 = disconnected, 1 = connected.

# ADMINISTRATION BY WEB INTERFACE

#### **CONNECTING AND ADMINISTRATION OF GSM KEY PROFI 3**

The device connects to a pc or to an active element by an ethernet cable.

If the **GSM Key PROFI 3** is connected directly to a PC, it is necessary to change the IPv4 address in control panels to 192.168.0.1. The device will be then available on the IP adress **192.168.0.22**.

Detailed description of the configuration can be found in the section Network card settings - p. 36

If you connect **GSM Key PROFI 3** to an existing network, it will be assigned an ip address from the corresponding network.

For the access to the web interface, enter **gsmkey/** into the address bar in your internet browser.

Default username is "administrator" the password is blank.

#### SAVING CONFIGURATION CHANGES

Any configuration change of the key needs to be saved. This can be done by clicking the icon of a floppy disk at the bottom part of the window. The current logged in user will be automatically signed out affter 10 minutes of inactivity.

# **DELETING CONFIGURATION CHANGES**

Deleting configuration of the key can be done by using the button situated next to the charging input. You can do so by pressing the button and then connecting the charger.

After holding the button for 10s, parameters "**Settings**" and "**Communication**" (indicated by flickering red diode with frequency of 5Hz).

After holding the button for 30s, the entire memory of the key gets deleted (indicated by the flickering diode with frequency of 0,3Hz).

# SIGNING INTO ADMINISTRATION INTERFACE

To access the web interface, enter the username "**administrator**" and leave the password blank. We strongly recommend to set your own password after. You can change the language settings in the login screen of the web interface. This change applies only for the one-time login. The default language of the web interface can be changed in "**Settings**" tab.

SECTRON GSM Key PROFI 3
Username: Password: Language: EN V
© 2015 SECTRON s.r.o., Výstavní 10, Ostrava - Mariánské Hory, Czech Republic

Web interface icon description

0	Info
ഫ്ര)	Communication
*	Settings (Simulation)
٩,	IO Parameters
	Users
2	Groups
Ţ	Event Log
$\bigotimes$	FW update
Ð	Logout

#### INFO

**SECTRON GSM Key PROFI 3** Info 0 Application Name GSM KEY PROFES Application Vendor SECTRON s.r.o. ഫ്ര) 154.01 Application Version 2015/10/22 Release Date ✿ Serial Number 100120 IMEL 356611020936799 Ф., SIM PIN Status Unknown GSM Network Registration Not registered GSM Signal Level N/A GSM Signal Level in Hour (min/avr/max) N/A <u>Ø</u> GSM Signal Level in Day (min/avr/max) N/A GSM Signal Level in Week (min/avr/max) N/A (!) GPRS/EDGE Status N/A GPRS IP Address N/A LAN IP Address 192.168.68.68  $\bigcirc$ MAC Address 00-04-A3-FE-18-C4 Last Month Tx/Rx 0 B / 0 B A This Month Tx/Rx 0 B / 0 B Uptime 19013725 s Θ © 2015 SECTRON s.r.o., Výstavní 10, Ostrava - Mariánské Hory, Czech Republic

Summarized informations about the GSM Key can be found in the "Info" tab.

#### Name Meaning **GSM KEY PROFI 3** Application name Company SECTRON s.r.o. Application version Actual version of FW Release date Date of release actual FW version Serial number Serial number of GSM Key IMEI IMEI of GSM key OK (Is not required) SIM PIN status OK (set) If PIN is not filled in communication bookmark, status is unknow **GSM** registration Status of SIM card registration in GSM network GSM signal strength Actual value of signal strength GSM signal strength per hour History of signal strength values per hour (min/average/max) GSM signal strength per day History of signal strength values per day (min/average/max) GSM signal strength per History of signal strength values per month month (min/average/max) **GPRS/EDGE** status Evaluation of available connection type in area GPRS / EDGE **GPRS IP address** IP address Allocated by the operator to the GSM network

Name	Meaning
LAN IP address	IP address of physical Ethernet interface
MAC address	MAC address of physical Ethernet interface
Last month send/received	Status of received and sent data in lasted month
This month send/received	Status of received and sent data in actual month
Runtime	Runtime of GSM Key in second

#### COMMUNICATION

Parameters for connecting the GSM Key in the local network and remote access can be setup in the "**Communication**" tab. Any change of parameters needs to be saved by using the floppy disk icon in the bottom part of the screen and then the modem has to be restarted using the red icon with an arrow in it. Modem restart is done in 5s.



#### LAN

Parameters for connection via Ethernet cable.

Name	Meaning
Hostname	Name the key used to designate the device as well as the address when entering the Internet browser address bar
DHCP client	Option to turn on or off the DHCP client on the key
IP address	Default IP address on the key

Name	Meaning
Network mask	Network mask setting
Default gateway	Default gateway IP address setting
DNS server	DNS server IP address setting

#### Modem

Parameters for connection via GPRS/EDGE.

Name	Meaning
GPRS	Turn on or off data connection
PIN	Enter the SIM card pin if requested
Username	If a username is required for the connection, otherwise leave it blank
Password	If a password is required for the connection, otherwise leave it blank
APN	APN as instructed by the operator
Account start	The starting day of the month when the data connection is being charged
Data limit	Set the FUP data limit. If the value of 0 is specified, the data limit is unlimited.

#### SETTING

General parameters are specified in the "**Setting**" tab. Any change of parameters needs to be saved by using the floppy disk icon in the bottom part of the screen.

	SEC	TRON GSM K	ey PROFI 3	Ċ
0	Setting			
	Adn	ninistrator		
( <u>(</u> ))	Password	****	1	
	Phone		1	
*	Date	and Time		
	NTP Server	pool.ntp.org	1	
Φ,	Timezone	CET	1 Alexandre State	
-	Daylight Saving Time	No	1	
	Time		l'	
	Gene	ral Settings		
	Default Language	EN	ll and a second s	
	Max. SMS Retry	0	1	
$\bigcirc$	Call HangUp Rings	8	1	
Ŷ	SMS on Power Up		1	
<b>A</b>	SMS	Forwarder		
3	Phone Number 1		1	
0	Phone Number 2		le la constance de la constance	
i T	Phone Number 3		1	
		20N c.o. Wetwei 10 Octave	darihaski Hanı Asach Dasublic	
	© 2015 SECT	RON S.I.O., VYSIAVNI 10, OSITAVA - I	viananske Hory, Czech Republic	

#### Administrator

Phone number and password of the administrator for the acces to web interface. This is the main administrator, who has unlimited rights. The administrator has to be added first before configuring the GSM key using the SMS commands.

Name	Meaning
Password	Password for access to web interface it can only content small and big letters and numbers.
Phone number	Admin phone number

#### Date and time

Date and time parameters settings. When the unit is connected to the internet or a PC that has access to the internet, the time gets updated from the preset server. It's also possible to setup time manually.

Name	Meaning
NTP Server	Server address for time synchronization
Time zone	Time zone setting
Daylight Saving Time	Set whether it is daylight saving time
Time	Manually set date and time

#### Main settings

Main parameters settings of the GSM Key.

Name	Meaning
Default language	Setting default language for web interface
Max. SMS Retry	Number of try to send SMS
Call HangUp Rings	The setting that determinates how many rings will be made before the call will be declined
SMS on Power Up	In case of a power outage, the SMS is sent to selected user group after switching on

#### **SMS forwarding**

Serves for defining up to 3 phone numbers from which all SMS will be forwarded to the administrator user.

Name	Meaning
Phone number	Set the phone number from which SMS should be redirected to the administrator

# **IO PARAMETERS**

Inputs and outputs can be setup in the "**IO Parameters**" tab. Any change of parameters needs to be saved by using the floppy disk icon in the bottom part of the screen.



#### **IN parameters settings**

The first table serves for the setting up of conditions for activation.

Name	Meaning
Start	This option sets the activation condition valid when the GSM key is turned on. After turning on the device, it checks the input value and performs the action if the condition is met. Options are Off / Rising Edge / Falling Edge / Any Edge
Run	This option sets the activation condition valid during the GSM key run. After turning on the device, it checks the input value and performs the action if the condition is met. Options are Off / Rising Edge / Falling Edge / Any Edge
Attack time	This option sets the activation condition valid during the GSM key run. Specifying the time interval for which the input must remain closed in order for the activation condition to be met
Release time	Specify the time interval for which the input must remain open so that the activation condition is met
Action	The action that has to be triggered after meeting the GSM Key conditions. The options are SMS / Call / SMS and Call

The second table serves for setup of the informed group and for naming different states.

Name	Meaning
Group	Set the group to be informed about the input status
SMS Log 0	Set SMS text if the input is open
SMS Log 1	Set SMS text when the input is connected

#### **OUT** parameters settings

Output conditions settings.

Name	Meaning
Output response	The options are switches to pre-set time / switches to the opposite state
Length	Length of pre-set impulse in second
Rings	The number of rings after which the output response takes place

#### Input settings.

Output evaluation settings.

Name	Meaning	
Elevation	Set output elevation types	

	What are the different modes of operation?
3	In <b>Continuous Evaluation</b> mode, you can open the first or both gates with one call without interrupting it.
	In Late Evaluation Mode, you can open the first or second gate. At least two calls are required to the GSM Key to open both gates.
	The factory setting is the <b>Continuous Evaluation</b> mode, which can be changed by the administrator.

#### Simulation

The simulation window can be opened by using the double-click on the IO parameters icon. Current state of inputs and outputs is visible in this window, with possibility of setting output into any state.

# Simulation



# USERS

User administration is done in the "**Users**" tab. Web interface offers the option of sorting users in ascending or descending order, search, filter and paging. After the user expires, all of their rights are removed (web, SMS, controls). An expired user is highlighted red. To remove all expired users, a red clock icon appears at the bottom part of the window. Any change of parameters needs to be saved by using the floppy disk icon in the bottom part of the screen.

To add a new user, press the "+" icon at the end of the line and fill out the required parameters. After all parameters are changed, the administrator needs to press the "+" icon again to add the filled out user or the "-" icon to delete it. Added users need to be saved by using the floppy disk icon at the bottom part of the screen.

User database back up and its restoration is done using the icons "**Export to CSV**" and "**Import to CSV**". To separate items use ",". In case of an error in the data content the file will be refused. Number 0 for time means no expiration date. Time is filled in the UTC format. To convert time of expiration into the UTC format, use <u>http://www.epochconverter.com/</u>. In case of creating a database in CSV file, don't fill in WPIN. This number is encoded at export and import.

#### Format of one line of CSV

name, phone number, group index, UTC time, WPIN Pavel,+420123456789,1,1390828577,0



Name	Meaning	
User	User name can only content small and big letters and numbers. Is not possible to use "administrator" as name	
Phone	Phone number in international format +420123456789. Phone number used for " <b>administrator</b> " is possible to reuse on different user in database.	
Group	Select the group for user	
Expiration	Date and time to which the user have permission to control the key. In default, there is no expiration selected	
WPIN	It is an user password to log in into web interface (0 = deactivation)	

# GROUPS

In the "**Groups**" tab are groups, into which users can be added. There are three basic groups in the GSM Key, that are impossible to remove.

		S	ECTRO	N GSM	Key PROFI	3		C)
0	Group	IS						
•	#	Group	Rights	Outputs	Day in week	Hour		
( <u>(</u> ))	1	Guests	None		• • • • • •	0:00 - 0:00	×	
	2	Admin	Write/Read			0:00 - 0:00	×	
*	3	ReadOnly	Read		<b>.</b>	0:00 - 0:00	×	
	4						0	
Ф,	•	D						
*								
4								
$\bigotimes$								
<b>A</b>								
				Výstavní 10. Ostrav	a Mariánské Hony Czech Po	nublic		

Name	Meaning
Group	User group name. When you add a new group can use only uppercase and lowercase letters. Removing the group in which the users are assigned will move to the Guest group
Rights	Rights assigned to individual groups. None - The group can only activate the allowed outputs Reading - The group has access to the web interface but has limited rights Write / Read - The group has unlimited rights, except for editing the "administrator"
Outputs	Enable activation of certain outputs for that group
Day in week	Set which days of the week the group can activate outputs

Name	Meaning
Hour	Setting access time for a given group

# **EVENT LOG**

The behavious of the GSM Key and activation of the interface is recorded in the "**Event log**" tab. Only part of the event log is shown in the window. Using the first icon "**Download history**" the file containing all activity will be downloaded and using the "**Download events**" icon will download the activity of the interface only. The maximum number of lines is 4000 for history and 2000 for events.

	SECTRON GSM Key PROFI 3	Ċ
0	Event Log	
( <u>(</u> ))	2017/08/14 11:10:09 MDM Reset Request(0). Connection time-out 2017/08/14 11:10:09 MDM PWR Off 2017/08/14 11:10:20 MDM PWR On	
\$	2017/08/14 11:10:23 MDM START 2017/08/14 11:11:33 MDM Reset Request(0). Connection time-out 2017/08/14 11:11:33 MDM PWR Off 2017/08/14 11:11:44 MDM PWR On	
۰,	2017/08/14 11:11:47 MDM START 2017/08/14 11:12:57 MDM Reset Request(0). Connection time-out 2017/08/14 11:12:57 MDM PWR Off	
	2017/08/14 11:12:57 USER: administrator was logged. 2017/08/14 11:13:08 MDM PWR On 2017/08/14 11:13:10 MDM START 2017/08/14 11:14:20 MDM Reset Request(0). Connection time-out	
æ	2017/08/14 11:14:20 MDM PWR Off 2017/08/14 11:14:31 MDM PWR On 2017/08/14 11:14:34 MDM START 2017/08/14 11:15:44 MDM Rest Request(0) Connection time-out	
Þ	2017/08/14 11:15:44 MOM PWR Off 2017/08/14 11:15:55 MDM PWR On 2017/08/14 11:15:58 MDM START	
$\langle \mathbf{S} \rangle$	🚱 Max. lines: 4000 🖺 Max. lines: 2000 📘	
a	Downloading complete.	
	© 2015 SECTRON e.c.o. Wietawai 40. Octravia, Matiánská Unav. Czach Bonublic	

# UPDATE FW

The firmware update of the **GSM Key PROFI 3** is done in the "**Update FW**" tab. By pressing the folder icon you select a new version of the firmware and by pressing the floppy disk icon you start the update. After the update is finished, the restart will be done automatically. Updates are publicized on <u>www.gsmklic.cz</u>.



# LOG OUT

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

# **TECHNICAL DESCRIPTION OF THE INTERFACE**

#### **FRONT PANEL**



LED diodes: information about the state of the device (I1, I2, I3, I4, P, O1, O2, O3, O4, G/S) PWR: connector for power supplykonektor k připojení napájecího zdroje NET: interface for connection to pc or active component RST: the button for device reset.

#### **BACK PANEL**



SIM: plug-in SIM card reader
ANT: connector FME(m) for connecting the GSM antena
O4A – O1A: output connectors
I4 – I1: input connectors
COM: signal ground

# SIM

SIM card reader with retractable bracket. Insert and remove the SIM card only if the device is turned off. To remove the SIM card, use a needle-like tool of a radius aproximately 1 mm, with which you push on the removal button situated on the left of the SIM card.



# LED DIODES (INFORMATIONS ABOUT THE DEVICE STATUS)

On the front panel are situated 8 LED diodes that inform about the device status.



LED	Meaning
l1 (input 1)	Off - Contacts I1 and GND are 0-7 V AC / DC On - Contacts I1 and GND have a voltage of 15-40 V AC / DC
I2 (input 2)	Off - Contacts I2 and GND are 0-7 V AC / DC On - Contacts I2 and GND have a voltage of 15-40 V AC / DC
I3 (input 3)	Off - Contacts I3 and GND are 0-7 V AC / DC On - Contacts I3 and GND have a voltage of 15-40 V AC / DC
l4 (input 4)	Off - Contacts I4 and GND are 0-7 V AC / DC

	On - Contacts I4 and GND have a voltage of 15-40 V AC / DC		
P (power supply)	Permanently Off - no power supply Permanently on - GSM Key is on		
O1 (output 1)	Off – O1A and O1B contacts disconnected On - contacts O1A and O1B are connected		
O2 (output 2)	Off – O2A and O2B contacts disconnected On - contacts O2A and O2B are connected		
O3 (output 3)	Off – O3A and O3B contacts disconnected On - contacts O3A and O3B are connected		
O4 (output 4)	Off - O4A and O4B contacts disconnected On - contacts O4A and O4B are connected		
G (GSM signal)	Constantly lit - malfunction Blinking - communication with GSM network		

# SWITCHING INPUTS

At the bottom of the GSM key there is a switch that switches the active / passive input type.



DI	Meaning
А	Active mode switches to internal power and waits for passive input.
Ρ	Passive mode disconnects the internal power supply and expects active voltage input.

### PWR

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

The "**RST**" button is used to reset the device. Holding the reset button after connecting the power supply for:

10s - Clear "Settings" and "Communication" (5Hz flicker)

30s - Erase entire memory (flicker at 0.3Hz)



I/O (VSTUP/VÝSTUP)



Pin Number	Signal Mark	Description
1	O4B	Relay output 4 (max. 30 V / 1 A)
2	04A	Relay output 4 (max. 30 V / 1 A)
3	O3B	Relay output 3 (max. 30 V / 1 A)
4	03A	Relay output 3 (max. 30 V / 1 A)
5	O2B	Relay output 2 (max. 30 V / 1 A)
6	O2A	Relay output 2 (max. 30 V / 1 A)

7	O1B	Relay output 1 (max. 30 V / 1 A)
8	O1A	Relay output 1 (max. 30 V / 1 A)
9	14	Optically isolated input 4 (LOG 0: 0-7 V / LOG 1: 15 - 40 V DC)
10	13	Optically isolated input 3 (LOG 0: 0-7 V / LOG 1: 15 - 40 V DC)
11	12	Optically isolated input 2 (LOG 0: 0-7 V / LOG 1: 15 - 40 V DC)
12	11	Optically isolated input 1 (LOG 0: 0-7 V / LOG 1: 15 - 40 V DC)
13	СОМ	Signal ground

# ANT

The radio frequency interface marked "**ANT**" is used to connect the GSM 900/1800 dual-band antenna with the FME (f) connector.



# **Application manuals**

#### NETWORK CARD SETTINGS

If the **GSM Key PROFI 3** is directly connected to the PC, it is necessary to set the desired address range on the network card of the computer and the key will then be available at **192.168.0.22**.

Launch the START - SETTINGS and then select Network & Internet.



In the left part of the window, click Change Adapter Options.



The Network Connections window opens.

On the computer network card, right-click and select **Properties**.

On the open tab, select IP Protocol Version (TCP / IPv4) and select the Additional Options using the Properties button.

Retwork Connections			- 🗆	×
			Q	
Organize   Disable this network device Diagnose this connectio	🖗 Ethernet Properties 🛛 🗙	Change settings of this connection		?
Ethernet sectron.local Realtek PCIe GBE Family Controller	Networking Sharing Connect using: Realtek PCIe GBE Family Controller Configure This connection uses the following items: Configure This connection uses the following items: Configure.	Wi-Fi Not connected Qualcomm Atheros QCA9377	' Wir	
4 items 1 item selected				

On this tab, you need to set **IP address from the range**. Select *Use the following IP address* and set these parameters:

IP Address: 192.168.0.1 Subnet mask: 255.255.255.0 Then save the settings.

😰 Network Connections – 🗆 🗙				
A Search Network and Internet > Network Connections     Search Network Connections     Search Network Connections     A				9
Organize 🔻 Disable this network device Diagnose this connectio	ngs of this connection	■ ■ ■		?
Ethernet sectron.local Realtek PCIe GBE Family Controller       Kerio Virtual Net Kerio Virtual Net       Networking       haring       Wi-Fi         Optimum Sectors       Protokol IP verze 4 (TCP/IPv4) Properties       X       Sectors       X         General       You can get IP settings assigned automatically if your network administrator for the appropriate IP settings.       Optian an IP address:       192 . 168 . 0 . 1       Submit Sectors       Submit Sectors         Optian DNS server address       IP address:       192 . 168 . 0 . 1       Submit Sectors       Submit Sectors         Image: Sector Sectors       Optian DNS server address       Image: Sectors       Image: Sectors       Image: Sectors         Image: Sector Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors         Image: Sector Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors         Image: Sector Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors         Image: Sector Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors         Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors       Image: Sectors	onnected :omm Atheros QCA9377	Wir		
4 items 1 item selected				-

Now the GSM Key PROFI3 is ready for configuration. In the browser, type **192.168.0.22** or **gsmkey/** into the address bar.

# **CONNECTION OF WAGO TERMINAL BLOCK**

In the GSM Key package you'll find 2 WAGO terminal blocks and hook for cable installation.

1x 13-pin a 1x 2-pin WAGO terminal block



1x hook for WAGO terminal block cable installation



The hook gets attached into the upper opening, which is situated above the cable locks. Then, by applying pressure on the hook downwards, the locks will open enough for the stripped cable to be put in.



In case of losing the hook, it is possible to also use flat 2mm screwdriver, which is put in the upper opening. The lock will open by applying slight pressure inside into the opening. In case of inadequate opening, the screwdriver can be slightly lifted to open the lock more.



# TECHNICAL PARAMETERS

Name	Parameter
GSM module	Cinterion Wireless Module EES3
Frequency bands	850/900/1800/1900 MHz
The user interface	4x relay outputs (for parallel motor control connection) 4x optically isolated inputs (for sensor connection) Ethernet (Configuration Interface)
Temperature range working	-20ºC to +55ºC
Storage temperature range	-40°C to +85°C
Power voltage	10 ÷ 30 V AC/DC
Consumption	0,4 W / 0,42 W (reception / transmission)
Antenna connector	FME(m) 50 Ohm
Dimensions	89 x 52 x 58 mm
Mounting	DIN rail 35 mm
Weight	160 g



Josefa Šavla 1271/12 709 00 Ostrava - Mariánské Hory +420 556 621 000 www.gsmklic.cz