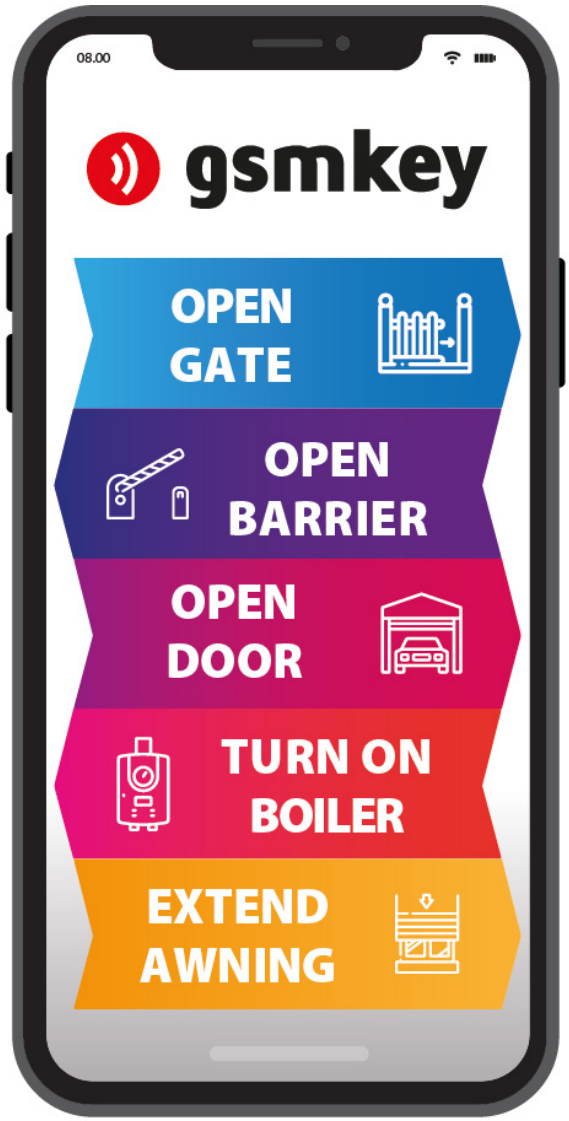


gsmkey LITE 3+

USER MANUAL

CONTENTS

DECLARATION OF CONFORMITY

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

We, the manufacturer

SECTRON s. r. o.
Josefa Šavla 12, 709 00 Ostrava - Mariánské Hory, Czech Republic
IDN: 64617939

We hereby declare that the product

GSM KEY LITE 3+

Description: GSM modem
Frequency band: GSM 850/900/1800/1900MHz
Purpose of use: wireless data transmission on the GSM network,

meets the requirements of the General License of the Czech Telecommunications Authority
No. GL-1/R/2000 and further complies with the requirements of the following harmonized standards and regulations applicable to the following 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 normal conditions and safe for the use intended in the user instructions.

The conformity was assessed in accordance with Section 3, paragraph 1(b) of Annex 3 to Government Regulation 426/2000 Coll., laying down technical requirements for radio and telecommunications equipment; pursuant to Government Regulation 168/1997 Coll., laying down the technical requirements for low-voltage electrical equipment; pursuant to Government Regulation 169/1997 Coll., laying down the technical requirements for products with regard to their electromagnetic compatibility and on the basis of the Declaration of Conformity for GSM module Cinterion BGS5 (L30960N1530A100), produced by Gemalto M2M GmbH, St.-Martin-Str. 60, 81669 Munich, Germany.

This declaration shall be issued under the sole responsibility of the distributor.
Ostrava, date 1. 10. 2019

Petr Henek, Managing Director of SECTRON s.r.o.

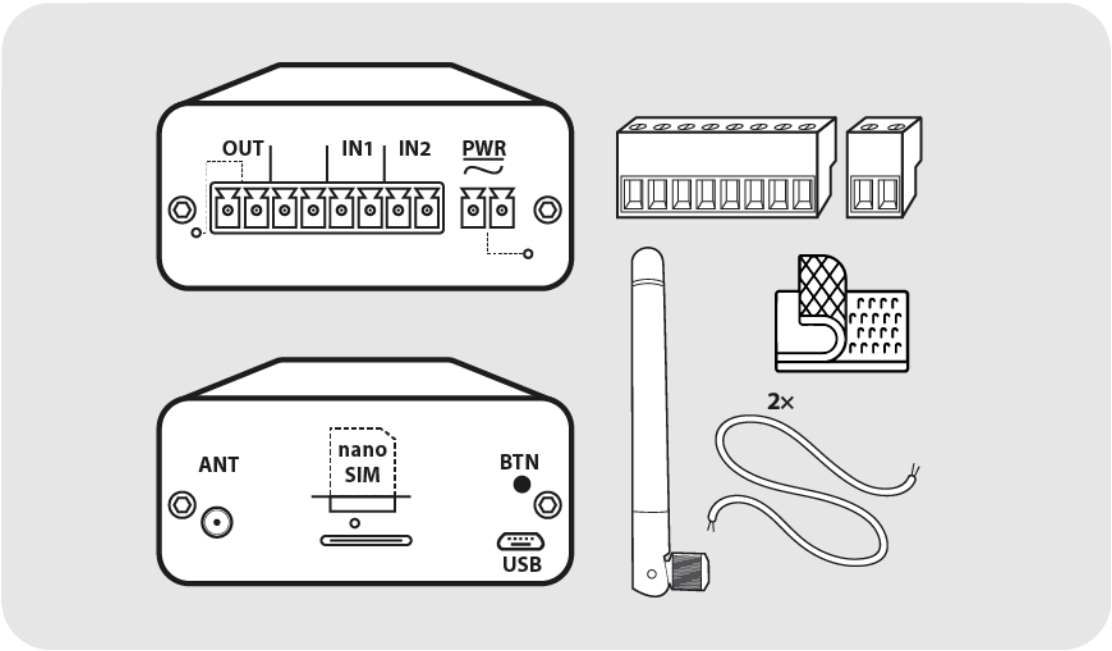
SAFETY INSTRUCTIONS

- When using the device, be sure to comply with legal regulations and local restrictions.
- Do not use the device in hospitals, as the operation of medical instruments could be impaired; e.g. near pacemakers or hearing aids.
- Please read this manual carefully before installation, commissioning and use.
- Do not use this device on board an aircraft.
- Do not use this device near petrol stations, chemical facilities or in areas where work with explosives is being carried out and in areas where there is a risk of explosion. The device may interfere with the operation of certain equipment.
- In the vicinity of TVs, radios and personal computers, the device may cause interference.
- Use only recommended accessories (see the chapter RECOMMENDED ACCESSORIES) to prevent damage to the device, or damage to property or health and violations of relevant provisions. These recommended accessories have been tested and work with the device. However, the warranty terms do not cover these accessories.
- We recommend that you make a suitable copy or backup of any important settings that are stored on your SIM card.
- The device must not be opened. Only replacing the SIM card is permitted. The procedure for replacing the SIM card is given in the User Instructions.
- Attention! Prevent small children from swallowing the SIM card.
- Do not expose the device to extreme environmental conditions. Protect it from dust, moisture, the leakage of liquids or foreign substances and extreme temperatures.
- Never exceed the voltage value on the power connector under any circumstances.
- The manufacturer is not responsible for defects arising from the use of this device in violation of the User Instructions!

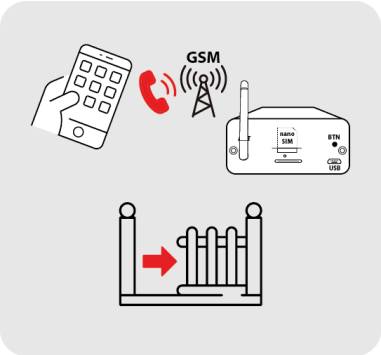
CONTENTS OF THE PACKAGE

GSM KEY LITE 3+

1. 1 pc GSM KEY LITE 3+
2. 1 pc articulated GSM antenna, gain 2 dBi
3. 1 pc 8-pin MRT9 terminal cord, 2-pin MRT-2B power connector
4. 2 pcs 3M Dual Lock mounting tape
5. 2 pcs 2-shielded interconnected leads 0.5 m
6. 1 pc quick manual



GENERAL DESCRIPTION



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

- **GSM KEY LITE 3+**
- **GSM KEY SMART 3**
- **GSM KEY PROFI 3**

GSM KEY LITE 3+ is good to use at home and in small businesses with up to **50** users, which is less demanding for the number of functions. The contents of the package have been adapted for installation directly into the control unit or under the motor housing.

The administration of the device is done using
- apps for Android or iOS mobile phones,
- using SMS configuration messages.

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

The administration of the device is done using
- apps for Android or iOS mobile phones,
- using SMS configuration messages
- apps for PC (Windows).

GSM KEY PROFI 3 is good for use in large companies, office buildings, hotels and guesthouses. The advantage of this device is the option to connect via Ethernet.

The administration of the device is done using
- apps for Android or iOS mobile phones,
- using SMS configuration messages
- or a web administration interface.

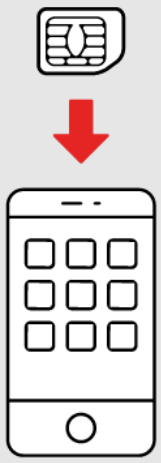
INSTALLATION AND COMMISSIONING

When assembling, pay close attention to work safety.

1. Only qualified and properly trained personnel should install the device.
2. Please read this manual carefully before starting installation and commissioning.
3. If a power supply is used to power the device, then it must comply with SELV circuit location requirements and comply with EN60950. The power supply included in the package complies with this requirement. If batteries or accumulators are used, they must also comply with the appropriate standards.
4. In case of confusion, please contact your authorized installation company or SECTRON Hotline (hotline@sectron.cz , +420 599 509 599).

NENÍ SOUČÁSTÍ
NOT INCLUDED

For installation, you will need pliers and a Phillips screwdriver.



1 ZAVOLEJTE OPERÁTOROVI
CALL OPERATOR

2 PIN
ZRUŠTE PIN
DISABLE PIN

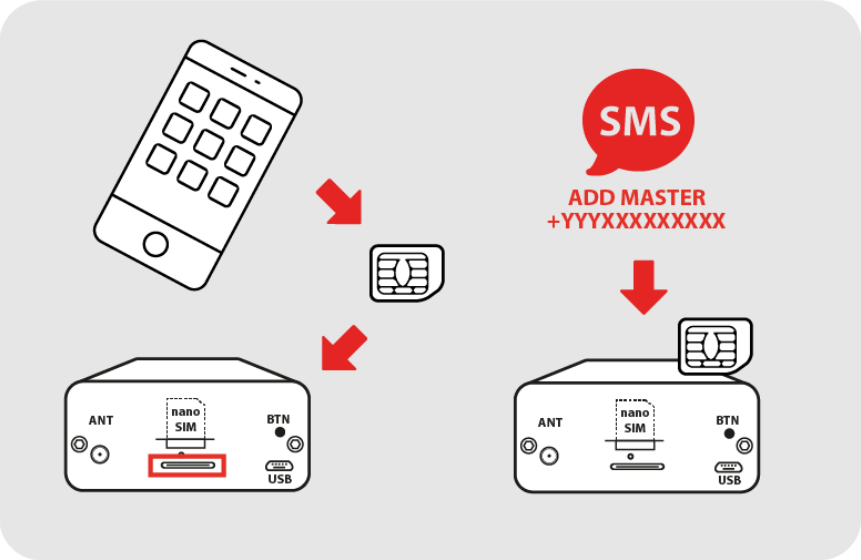
3 ZRUŠTE HLASOVOU SCHRÁNKU
DISABLE VOICEMAIL

4 SMAŽTE KONTAKTY NA SIM
DELETE CONTACTS ON SIM

5 SMS
SMAŽTE VŠECHNY SMS
DELETE ALL SMS

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

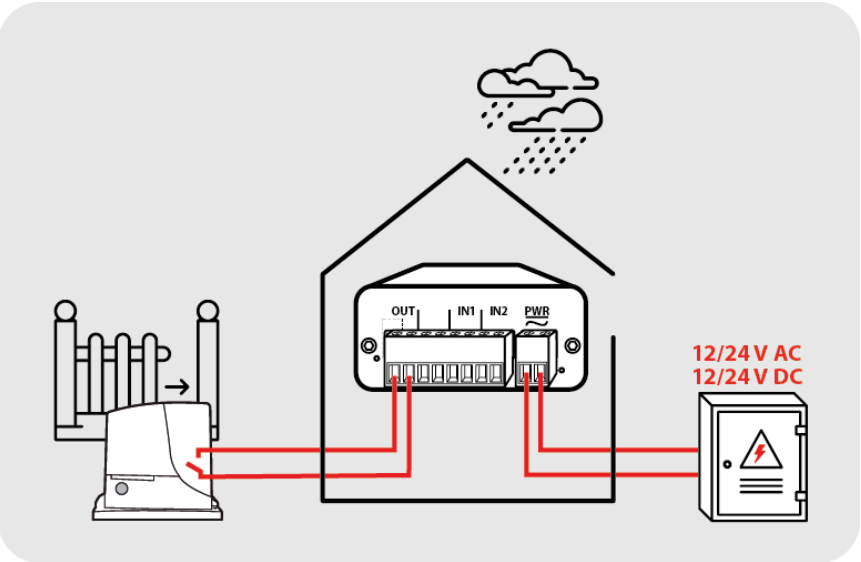
Activate the SIM card with an outgoing call to the operator line, cancel the PIN, voicemail, delete the phone book and SMS messages.



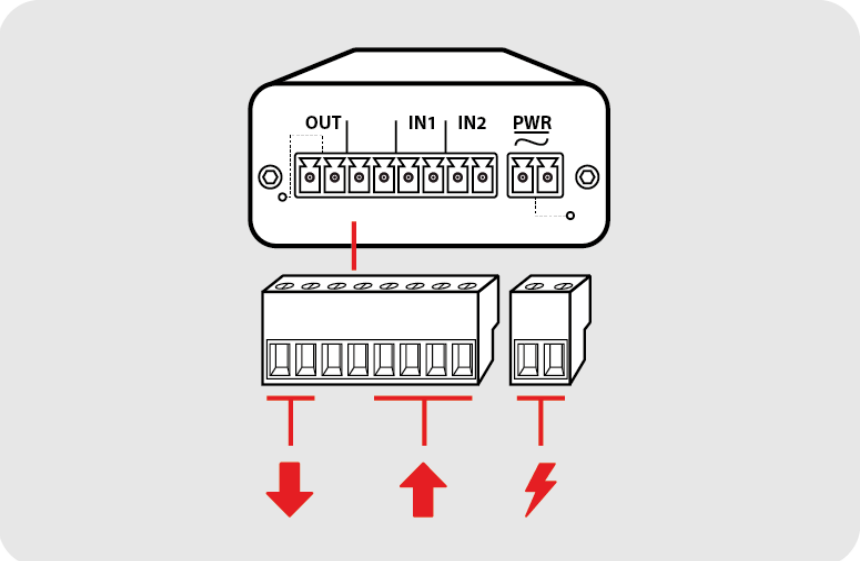
Insert the SIM card back into GSM KEY and send an SMS to its number in this form

ADD MASTER +yyyxxxxxxxxx

where +yyyxxxxxxxxx is your phone number in international format. Each part of the form is separated by a space.
If you are using a **VPN (virtual private network)** service or not using a **CLIP (calling line identification presentation)** service, the caller's number displayed may vary. Check with your operator.



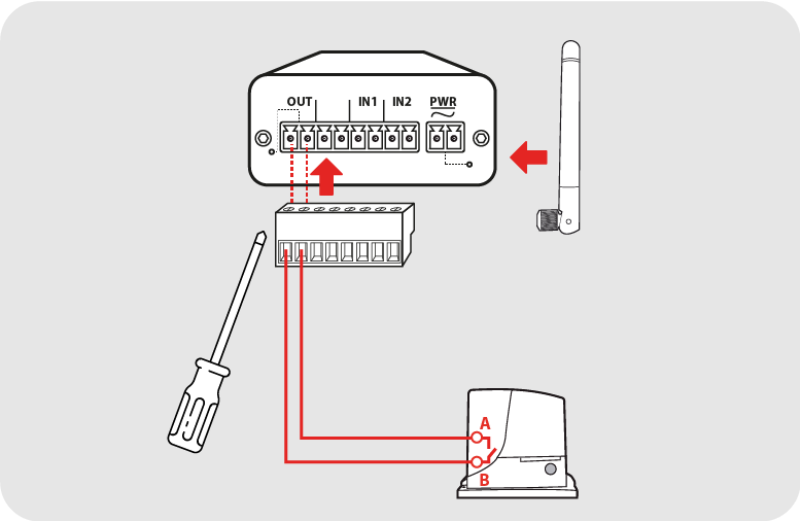
The device is designed for internal installation or installation in a waterproof plastic switchboard.



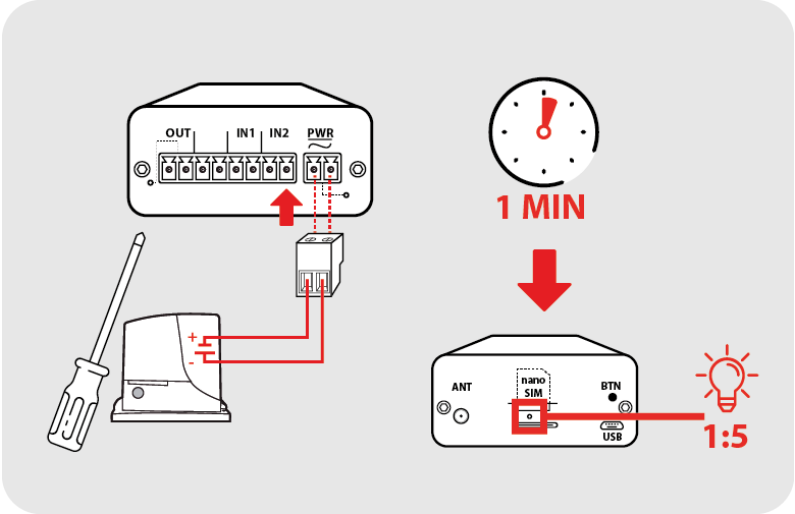
The device can be powered:

- with another voltage supply with an output of **12 – 24 VDC or AC, min. 1 A**

The connection of the output terminal, input terminals, power supply of external sensors and main power supply is shown and described in the figure.



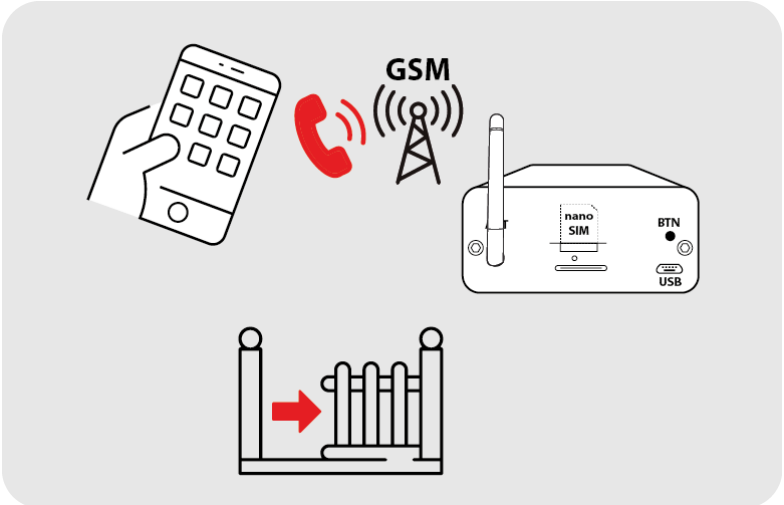
Connect the signal wire (minimum 2x 0.35 mm^2 Cu) to the OUT GSM KEY terminals and START terminals of your gate drive. Connect the antenna.



Connect the power terminal last.

The position of connection to the positive and negative poles (+, -) is irrelevant.

The device will start within 30 sec, which will be signaled by the flashing blue SIM LED (short flashing, long delay - means it is connected to the operator network).



Your GSM KEY is now ready to use. To test that it is working, call the phone number of the SIM located in GSM KEY.

USER CONTROL

CALL CONTROL

Opening and closing doors, gates and barriers with a mobile phone is very easy and done by simply ringing the GSM KEY phone number. For complete simplicity, we recommend that you save your GSM KEY phone number in your phone contacts under speed dialing.

ADMINISTRATION BY SMS MESSAGES

SMS message administration is only available to administrators, i.e. users whose names begin with **MASTER**.

	Significance	SMS template	SMS example	Description of values
1	Setting up the output condition	SET OUT1=value	SET OUT1=1	0 = disconnect 1 = switch on
2	Detecting the condition of the binary input	GET IN[1,2]	GET IN1	0 = disconnected 1 = switched on
3	Detecting the condition of the input text	GET IN[1,2] T	GET IN1T	Text reply
4	Detecting the SMS text	GET IN[1,2]SMS[0,1]	GET IN1SMS1	set text
5	Setting up the SMS text	SET IN[1,2]SMS[0,1]=value	SET IN1SMS1=open	required text without spaces
6	Setting up the SMS text with confirmation	SETC IN[1,2]SMS[0,1]=value	SETC IN1SMS1=open	required text without spaces
7	Detecting the condition of the signal at the installation site	SIGNAL	SIGNAL	See table on p. 11

Instead of [1,2], enter the number of the input you want in the command.

Instead of [0,1], enter the input status, 0 = disconnected, 1 = switched on.

SIGNAL STATUS TABLE

Example of a returned Signal value: Value, 99 e.g. Signal: 27.99, where the first number indicates the condition. The second number 99 indicates that there was no error during sending.

Value	RSSI dBm	Condition
2	-109	Marginal (Very weak)
3	-107	Marginal (Very weak)
4	-105	Marginal (Very weak)
5	-103	Marginal (Very weak)
6	-101	Marginal (Very weak)
7	-99	Marginal (Very weak)
8	-97	Marginal (Very weak)
9	-95	Marginal (Very weak)
10	-93	OK (Weak)
11	-91	OK (Weak)
12	-89	OK (Weak)
13	-87	OK (Weak)
14	-85	OK (Weak)
15	-83	Good (Strong)
16	-81	Good (Strong)
17	-79	Good (Strong)
18	-77	Good (Strong)
19	-75	Good (Strong)
20	-73	Excellent (Very strong)
21	-71	Excellent (Very strong)
22	-69	Excellent (Very strong)
23	-67	Excellent (Very strong)
24	-65	Excellent (Very strong)
25	-63	Excellent (Very strong)
26	-61	Excellent (Very strong)
27	-59	Excellent (Very strong)
28	-57	Excellent (Very strong)
29	-55	Excellent (Very strong)
30	-53	Excellent (Very strong)
31	-51 and less	Excellent (Very strong)
99		No signal

ADMINISTRATION BY MOBILE PHONE

When administering by mobile phone, follow the prescribed SMS form (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 using the **SECTRON GSM KEY** app for Android and iOS available for free on Google Play and in the AppStore.

USER ADMINISTRATION

	Significance	SMS template	SMS example	Description of values
1	Adding a new user	ADD name number	ADD MASTERNovak +420602123456	user name and number
2	Deleting a user	DEL name	DEL MASTERNovak	user name
3	Current list of users	LIST	LIST	-
4	Clearing your phone book	CLEAR	CLEAR	-
5	Number of phone book items	GET PBS	GET PBS	-

FACTORY SETUP ADMINISTRATION

	Significance	SMS template	SMS example	Description of values
1	Factory reset (does not affect user memory)	DEFAULTS	DEFAULTS	
2	Detecting the firmware version	GET FW	GET FW	firmware version
3	Restarting the device (does not affect user memory)	HWRESET	HWRESET	

ADMINISTRATION OF INPUTS AND OUTPUTS

	Significance	SMS template	SMS example	Description of values
1	Detecting the number of rings	GET OUT1ImpulseRings	GET OUT1ImpulseRings	number of rings
2	Setting up the number of rings	SET OUT1ImpulseRings=value	SET OUT1ImpulseRings=1	number of rings
3	Setting up the number of rings with confirmation	SETC OUT1ImpulseRings=value	SETC OUT1ImpulseRings=1	number of rings
4	Detecting call hangup	GET CallHangUpRings	GET CallHangUpRings	number of rings 0 = off
5	Setting up call hangup	SET CallHangUpRings=value	SET CallHangUpRings=5	number of rings 0 = off
6	Setting up call hangup with confirmation	SETC CallHangUpRings=value	SETC CallHangUpRings=5	number of rings 0 = off
7	Detecting impulse length	GET OUT1ImpulseLength	GET OUT1ImpulseLength	integer in seconds
8	Setting up impulse length	SET OUT1ImpulseLength=value	SET OUT1ImpulseLength=1	integer in seconds
9	Setting up impulse length with confirmation	SETC OUT1ImpulseLength=value	SETC OUT1ImpulseLength=1	integer in seconds
10	Detecting an action	GET IN[1,2]Action	GET IN1Action	0 = send SMS 1 = call 2 = call and send SMS
11	Setting up an action	SET IN[1,2]Action=value	SET IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS
12	Setting up an action with confirmation	SETC IN[1,2]Action=value	SETC IN1Action=0	0 = send SMS 1 = call 2 = call and send SMS

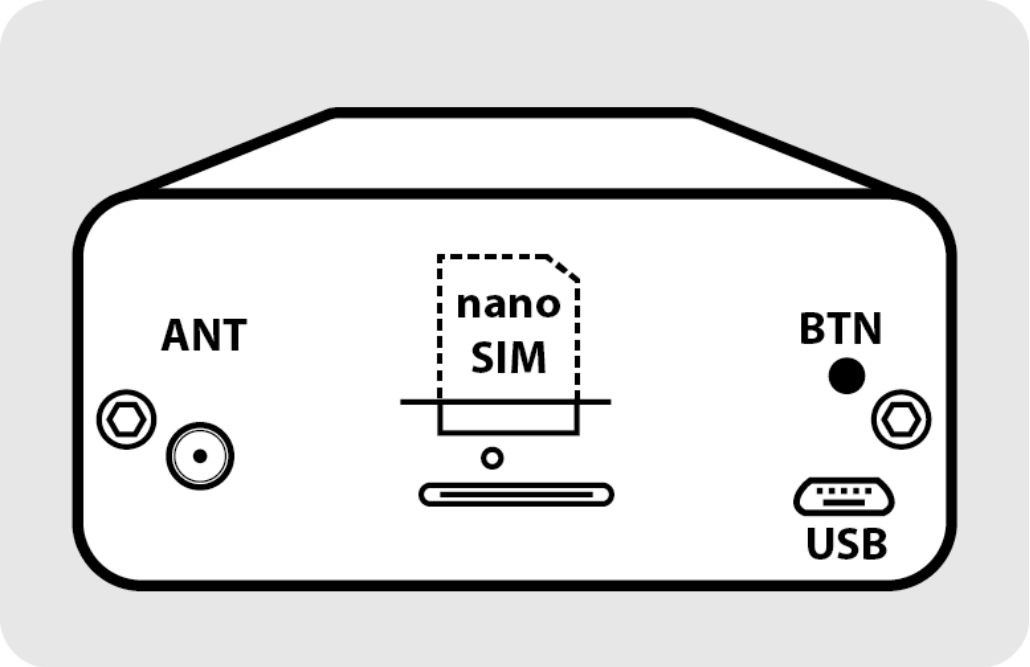
	Significance	SMS template	SMS example	Description of values
13	Detecting the recipient of an action	GET IN[1,2]UserName	GET IN1UserName	user name
14	Setting up the recipient of an action	SET IN[1,2]UserName=value	SET IN1UserName=Jan	User name
15	Setting up the recipient of an action with confirmation	SETC IN[1,2]UserName=value	SETC IN1UserName=Jan	User name
16	Detecting the SMS text	GET IN[1,2]SMS[0,1]	GET IN1SMS1	set text
17	Setting up SMS text	SET IN[1,2]SMS[0,1]=value	SET IN1SMS1=Open	required text without spaces
18	Detecting the number of attempts to send an SMS	GET SendRetry	GET SendRetry	0 = off 1 up to x = number of attempts to send
19	Setting up the number of attempts to send an SMS	SET SendRetry=value	SET SendRetry=3	0 = off 1 up to x = number of attempts to send
20	Setting up the number of attempts to send an SMS with confirmation	SETC SendRetry=value	SETC SendRetry=3	0 = off 1 up to x = number of attempts to send
21	Detecting the trigger when starting the device	GET IN[1,2]TriggerStart	GET IN1TriggerStart	0 = off 1 = switched on 2 = disconnected 3 = any state
22	Setting up the trigger when the device is started	SET IN[1,2]TriggerStart=value	SET IN1TriggerStart=1	0 = off 1 = switched on 2 = disconnected 3 = any state

	Significance	SMS template	SMS example	Description of values
23	Setting up the trigger when the device is started with confirmation	SETC IN[1,2]TriggerStart=value	SETC IN1TriggerStart=1	0 = off 1 = switched on 2 = disconnected 3 = any state
24	Detecting the trigger during runtime	GET IN[1,2]TriggerRun	GET IN1TriggerRun	0 = off 1 = switching 2 = disconnecting 3 = any level
25	Setting up the trigger during runtime	SET IN[1,2]TriggerRun=value	SET IN1TriggerRun=1	0 = off 1 = switching 2 = disconnecting 3 = any level
26	Setting up the trigger during runtime with confirmation	SETC IN[1,2]TriggerRun=value	SETC IN1TriggerRun=1	0 = off 1 = switching 2 = disconnecting 3 = any level
27	Detecting the attack time	GET IN[1,2]AttackTime	GET IN1AttackTime	integer in seconds
28	Setting up the attack time	SET IN[1,2]AttackTime=value	SET IN1AttackTime=1	integer in seconds
29	Setting up the attack time with confirmation	SETC IN[1,2]AttackTime=value	SETC IN1AttackTime=1	integer in seconds
30	Detecting the release time	GET IN[1,2]ReleaseTime	GET IN1ReleaseTime	integer in seconds
31	Setting up the release time	SET IN[1,2]ReleaseTime=value	SET IN1ReleaseTime=2	integer in seconds
32	Setting up the release time with confirmation	SETC IN[1,2]ReleaseTime=value	SETC IN1ReleaseTime=2	integer in seconds

Instead of [1,2] enter the number of the input you want in the command

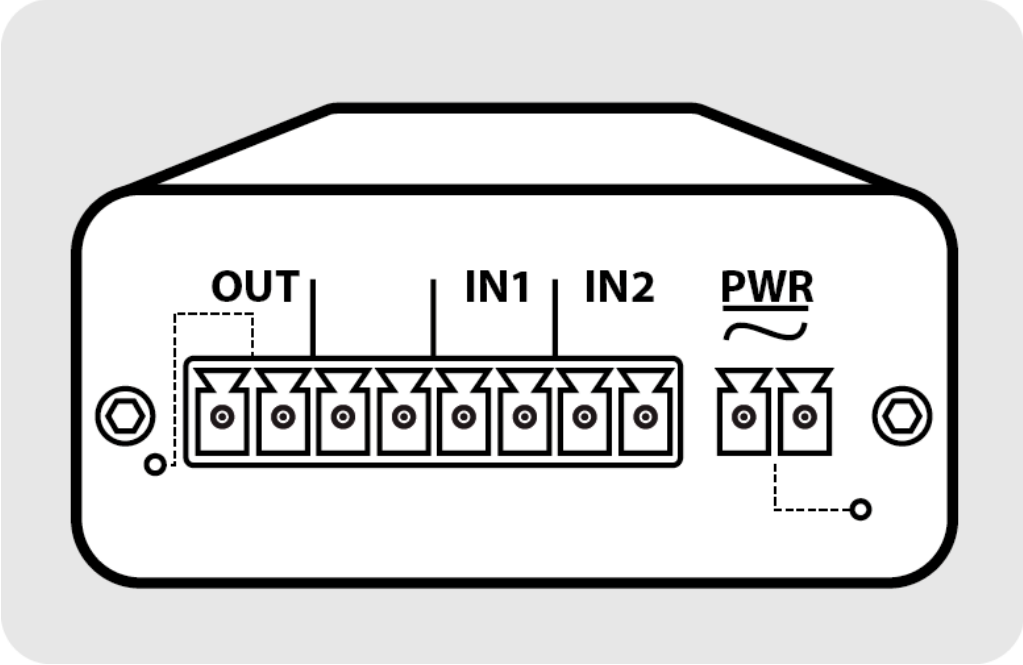
TECHNICAL DESCRIPTION OF THE INTERFACE

FRONT PANEL



nano SIM: nanoSIM card insertion slot and blue LED signal
ANT: SMA(f) connector for antenna connection
BTN: button used for reset, resetting to default factory settings and switching on relays
Micro USB: The USB interface is for service purposes only

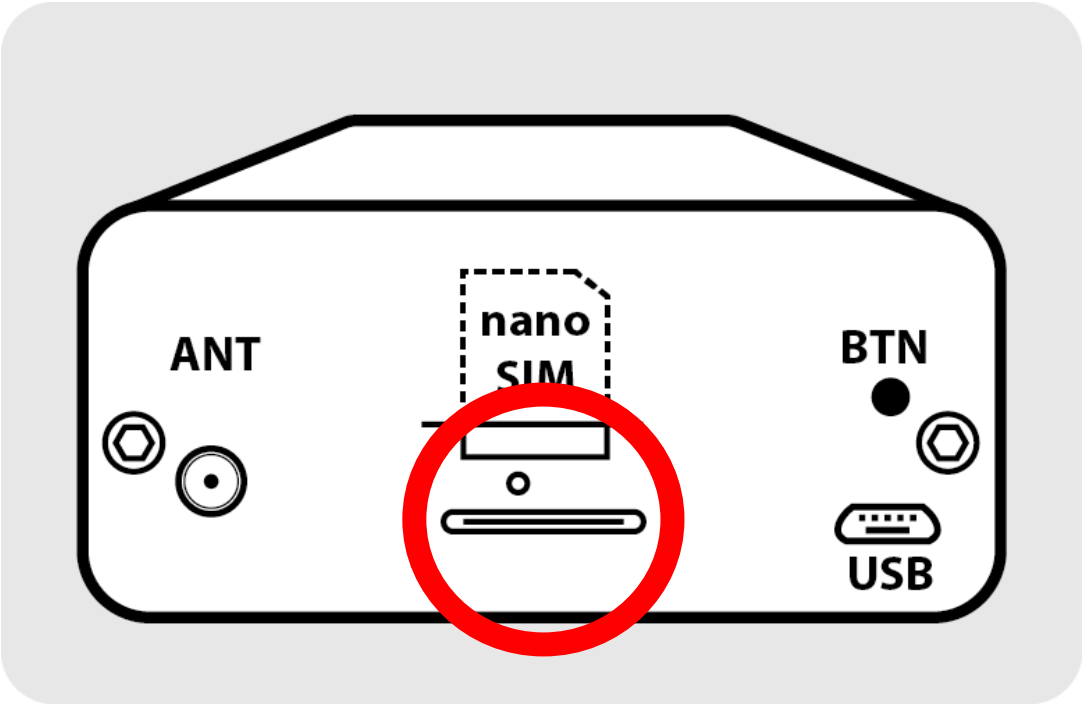
REAR PANEL



OUT: terminals for connecting relay-operated equipment (gate, door, barrier, boiler, etc.) with LED signal
IN1, IN2: terminals for connecting input devices (stop sensor, thermostat, ...)
PWR: power terminal 8 – 24V AC/DC with LED signal

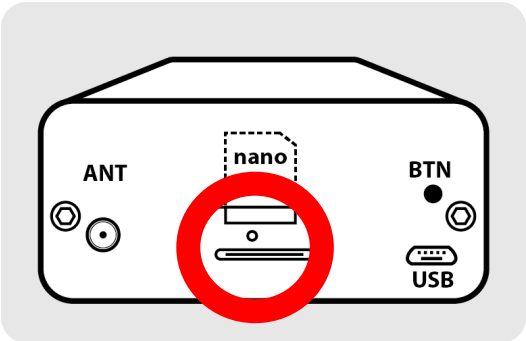
NANO SIM

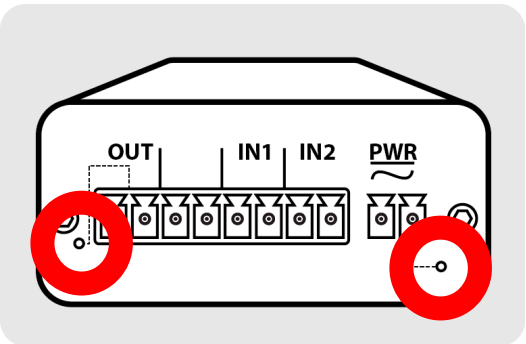
SIM card insertion slot. Insert and remove the SIM card only when the device is turned off.



LEDS (DEVICE STATUS INFORMATION)

There are 3 LEDs on the front and rear panel.

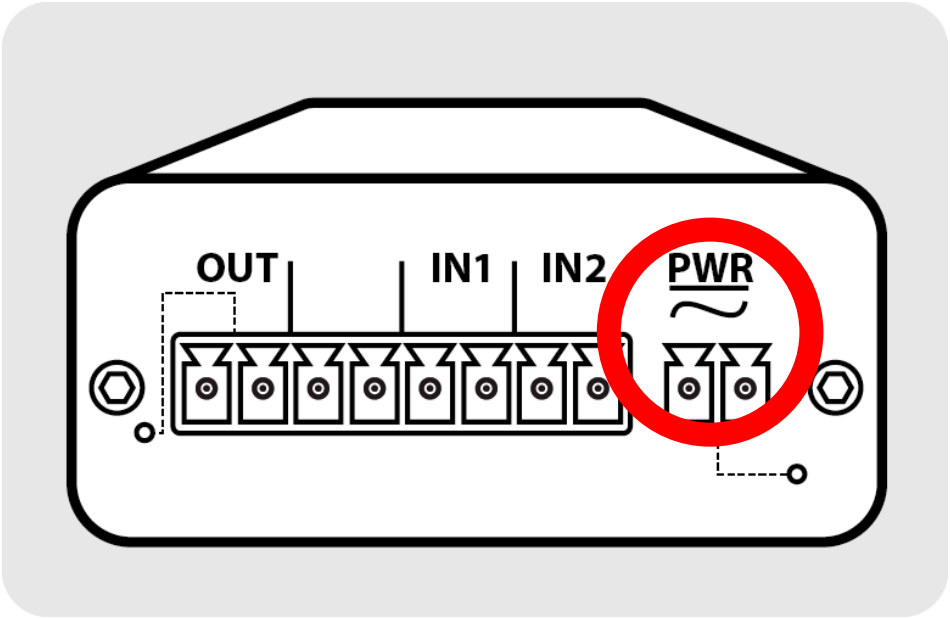




Location	LED	Significance
Front panel	SIM	Blinks 1:1 – not logged into the GSM network Blinks 1:5 – logged into the GSM network
Rear panel	OUT	Off – OUT contact disconnected On – OUT contact switched on
Rear panel	PWR	Off – no power On – power from an external source

PWR

The PWR interface is used to connect the power supply with a 2-pin MRT9 connector. The device requires a DC or AC voltage of 12–24 V. For proper operation, the power supply must cover a peak current of 1000 mA. A voltage lower than 8 V may cause the device to behave abnormally or to switch off.

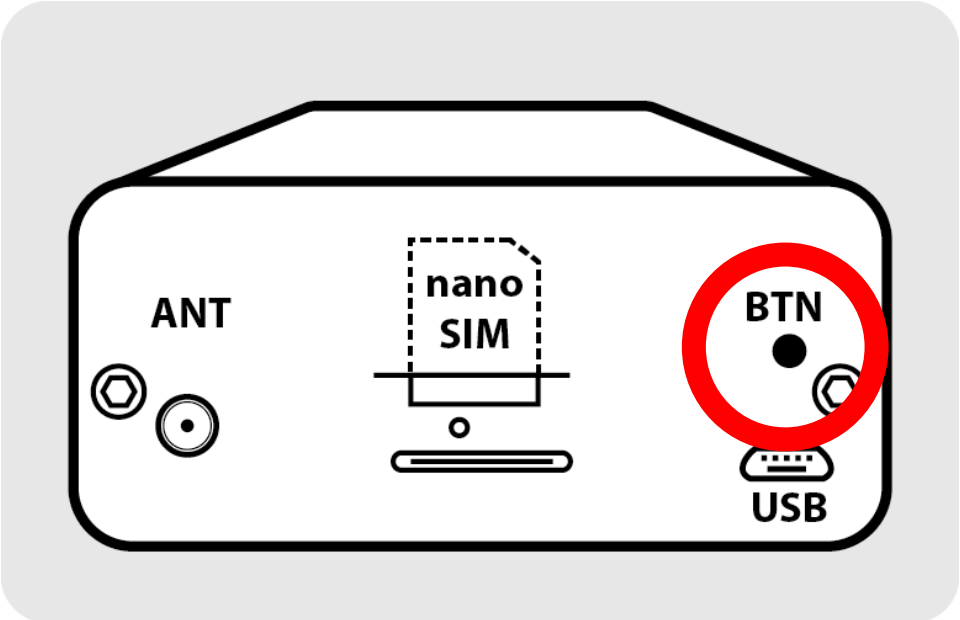


BTN

For **GSM KEY LITE 3+**, this button is used to manually switch the OUT output on/off.
One press switches the output on, the second press switches it off.

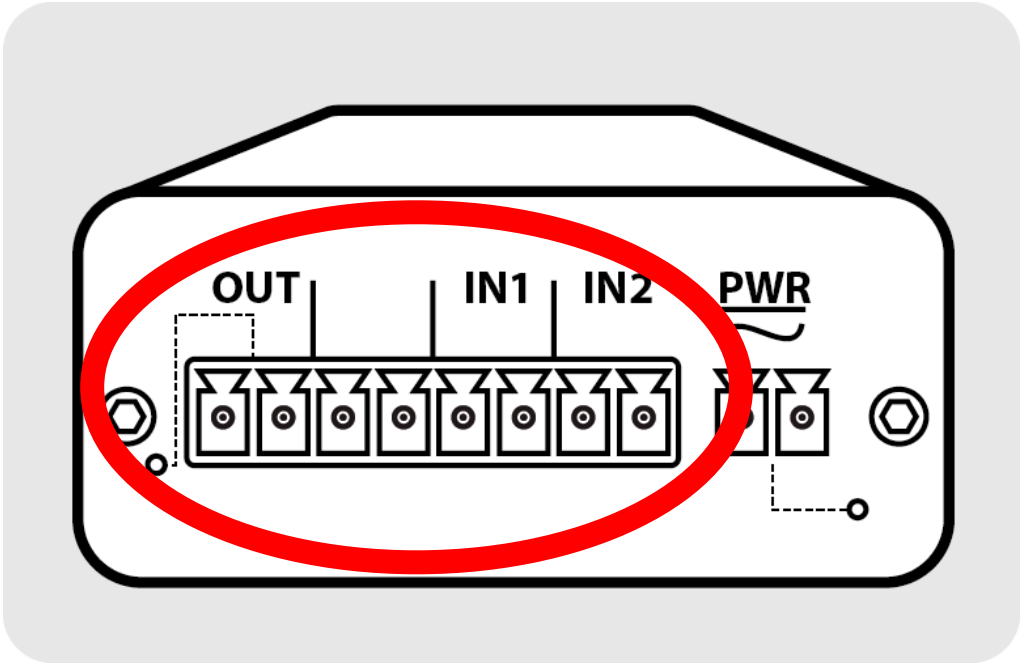
BTN also serves as a **reset button**. If you hold it for longer than 5 sec, the device will restart normally. The correctness of the process can be recognized by the blue LED, which in case of a restart flashes faster in a 1:1 ratio, just as in the case of logging into the GSM network.

To reset to **factory settings,** first press BTN on the device disconnected from the power supply and hold it. While pressing the button, connect the device to the power supply. After 10 sec of holding it, **the device will reset to its factory settings including the complete deletion of the user list.**



OUT, IN1, IN2, 4V

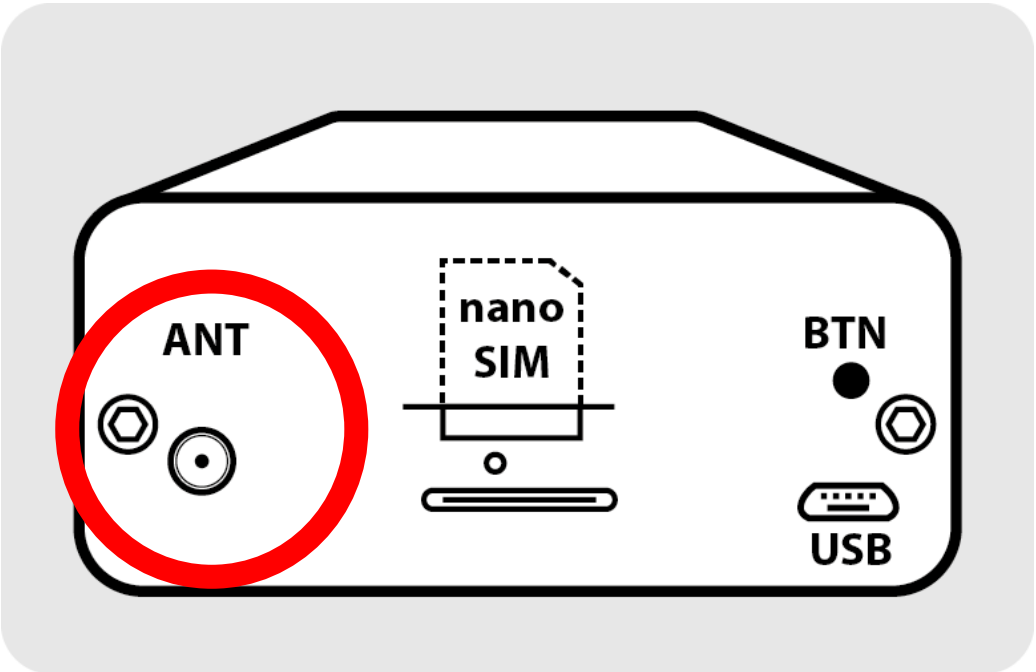
User interface for connecting the output, inputs and power sensors.



Pin Number	Signal marking	Description
1–2	OUT	Relay output (max. 30 V / 1 A)
3–4	IN1	Optically separated input 1 (LOG 0: 0-1 V / LOG 1: 3-30 DC)
5–6	IN2	Optically separated input 2 (LOG 0: 0-1 V / LOG 1: 3-30 DC)

ANT

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



TECHNICAL PARAMETERS

Name	Parameter
GSM module	Gemalto M2M GmbH - Cinterion BGS5
GSM frequency bands	850/900/1800/1900 MHz
User interface	1x relay output (for the parallel connection of motor control) 2x optically separated inputs (for connecting sensors)
Working temperature range	-20°C to +65°C
Storage temperature range	-40°C to +85°C
Supply voltage	12 – 30 V AC / 8 – 30 V DC
Recommended voltage	12 - 24 V AC/DC
Consumption	1 W / 3.5 W (reception / broadcast)
Antenna connector	SMA(f) 50 Ohm
Dimensions	24 × 54 × 86 mm
Mounting	DIN bar 35 mm
Weight	120 g

SECTRON GSM KEY mobile phone applications

Stáhnout v App Store

NYNÍ NA Google Play

SECTRON

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