RUKRA GSM/PSTN INTERFACE_ENG_V1
ARTICLE NUMBER: RK-1201

Assembled by	:	Engineer:		
Installation date	:			
Phone number elevator	:	PIN	:	PUK:
Battery changed on date	:	Name	:	

Keep this manual on a save place, preferably in the logbook in the machineroom

☞ The RUKRA GSM / PSTN interface replaces a standard PSTN landline and can be installed in the engine room, the elevator shaft or on the roof of the cabin. Up to 5 RUKRA Elevator Phones can be connected parallel to one RUKRA GSM / PSTN interface.

☞ The RUKRA GSM / PSTN interface is simlock free and equipped with an internal battery. Comes with magnetic antenna, internal battery and a power adapter with 230VAC power cord with molded plug and is ready for immediate use without programming.

☞ No programming required, you only need an active SIM-card with or without PIN. The SIM-card can be protected against theft using PIN 1111, with this function the RUKRA GSM / PSTN interface make itself a new unknown PIN code.

Read this manual carefully before you start the installation or programming

FEATURES

- 230 VAC / 9VAC powersupply with integreted backup battery
- Phone line for up to 5 RUKRA Elevator Phones or other brands elevator phones
- Every 14 days automatic control of the capacity of the backup battery
- Theft protection with function PIN 1111, there will be a new unknown PIN code generated
- Additional USB interface for use as a GSM modem (data, programming SMS, SMS, Mail)
- Roaming can be switched off (Roaming is communication between different networks abroad)
- Send SMS periodically from 1 to 30 days with information on network, power, temperature, etc.
- send SMS on the status of the power supply and battery status (power, voltage, capacity and battery defect)
- send SMS when they login to a network
- Send SMS when an input is activated (optional print)

EXTERNAL CONNECTIONS

RUKRA Elevator Phone
(maximimum 5 pieces parallel)

INTERNAL CONNECIONS

The box can be opened without tools

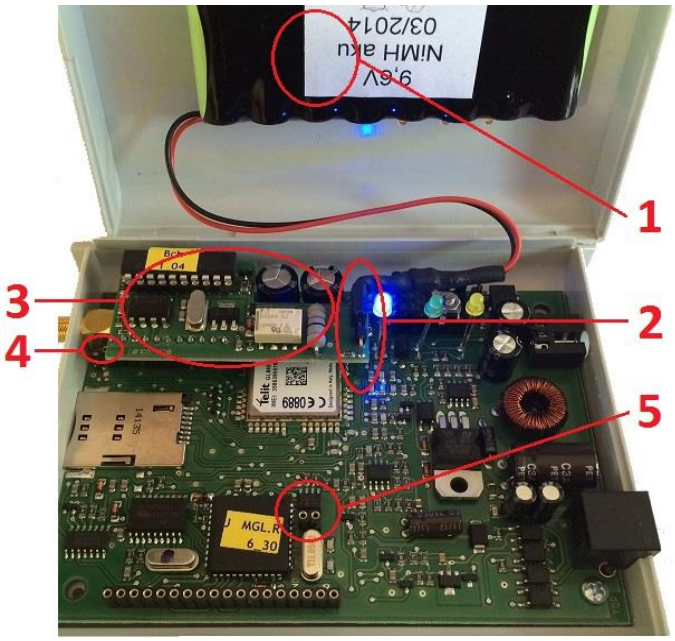
1) Backup battery
   9,6V / 800Mah

2) Connector Backup battery

3) Battery checker (BCH)

4) Be carefull when mounting BCH, always keep first pin free !!

5) Reset to facatorysettings:
   Disconnect the power supply and battery connection and place a wire jumper in this 2-pin connector. Connect the battery or power supply back on, LEDs will flash briefly and you can again remove the jumper, the factory settings are set now.



INSTALLATION

Use only the supplied 230VAC / 9VAC power adapter and the supplied 2-wire phone cord.

Note: *A 4 or 6 wire phone cord may cause interference and the yellow and green LEDs will blink.*

The RUKRA GSM / PSTN interface can be installed in the engine room, the lift shaft or on the roof of the elevator cabin. Always connect the 230VAC adapter to a fixed voltage (never on the cabin lights), always check if the RUKRA GSM / PSTN interface operates on only the power of the battery and only on the 230VAC / 9VAC power adapter. Install the RUKRA GSM / PSTN interface and the antenna always as far away from the RUKRA Lift Phone. The back of the housing is equipped with two slots for mounting and there is double sided tape included for attachment.

SIM CARD

The SIM card can be used in two ways: without a PIN-Code or PIN-Code

- Without PIN-Code: 1- Install the sim card in a regular mobile phone.
  2- Go to the menu "Security Settings" and set the option "Request PIN" on "OFF"

- With PIN-Code: 1- Install the sim card in a regular mobile phone.
  2- In the “Security settings” menu, change the PIN code to “1111”.
  3- When the SIM card is inserted in the RUKRA GSM/PSTN Interface, the code will be changed to a random number, thus making it impossible to use the card in another mobile phone unless it is unblocked by means of the PUK code.

NOTE!
If you enter the wrong PIN code 3 times, the SIM card will be blocked (requires PUK code to unblock).

Insert the SIM card into the RUKRA GSM / PSTN interface (note the angled corner) and connect the power supply adapter and the battery backup power alternately and check the LEDs to go on both times. The blue LED turns on and the green and yellow LEDs will flash. Wait an average of 60 seconds until the middle LED goes off and the lower LED continues to flash 1 to 5 times, the RUKRA GSM / PSTN interface is ready for use now.

PROGRAMMING

From the factory the RUKRA GSM / PSTN interface is set with standard settings which have normally not te be changed. Programming can be connected with a normal PSTN phone or by the USB interface.

☞ With a PSTN telephone:

With an attached phone, you can change the parameters but you can not change phone numbers and SMS settings. Programming can be with or without the presence of a SIM card.

☞ With the USB interface:

SMS settings, phone numbers and all other parameters can be programmed with a computer using the "GGSET" program and the USB Interface. Programming can be done with and without the presence of a SIM card.

Programming procedure with a PSTN phone:

Connect a phone to the line out, lift the handset and enter: # 0000 (0000 = default password) as the password is correct you will hear one after another short dial tones. After entering a correct setting you will hear three tones and then you dial hedge (#) and you hear a longer confirmation tone. Wait until you hear at least 2 short dialtones and then continue with programming.

PARAMETER		VALUE				DESCRIPTION	FACTORY SETTING			
0	**0**	**n**	**n**	**n**	**n**	Password for programming	0	0	0	0
2	**7**	**n**				Ask for PIN, n =0 Ask PIN disabled / n =1 Ask PIN enabled	0			
7	**5**	**n**				Roaming, 0 = Roaming OFF / 1 = Roaming ON	1			
3	**2**	**n**	**n**			Waiting time after calling the numbers (2N setting n n = 1 0)	0	1		
9	**9**					Reset to factorysettings				

Programming procedure with the USB interface:

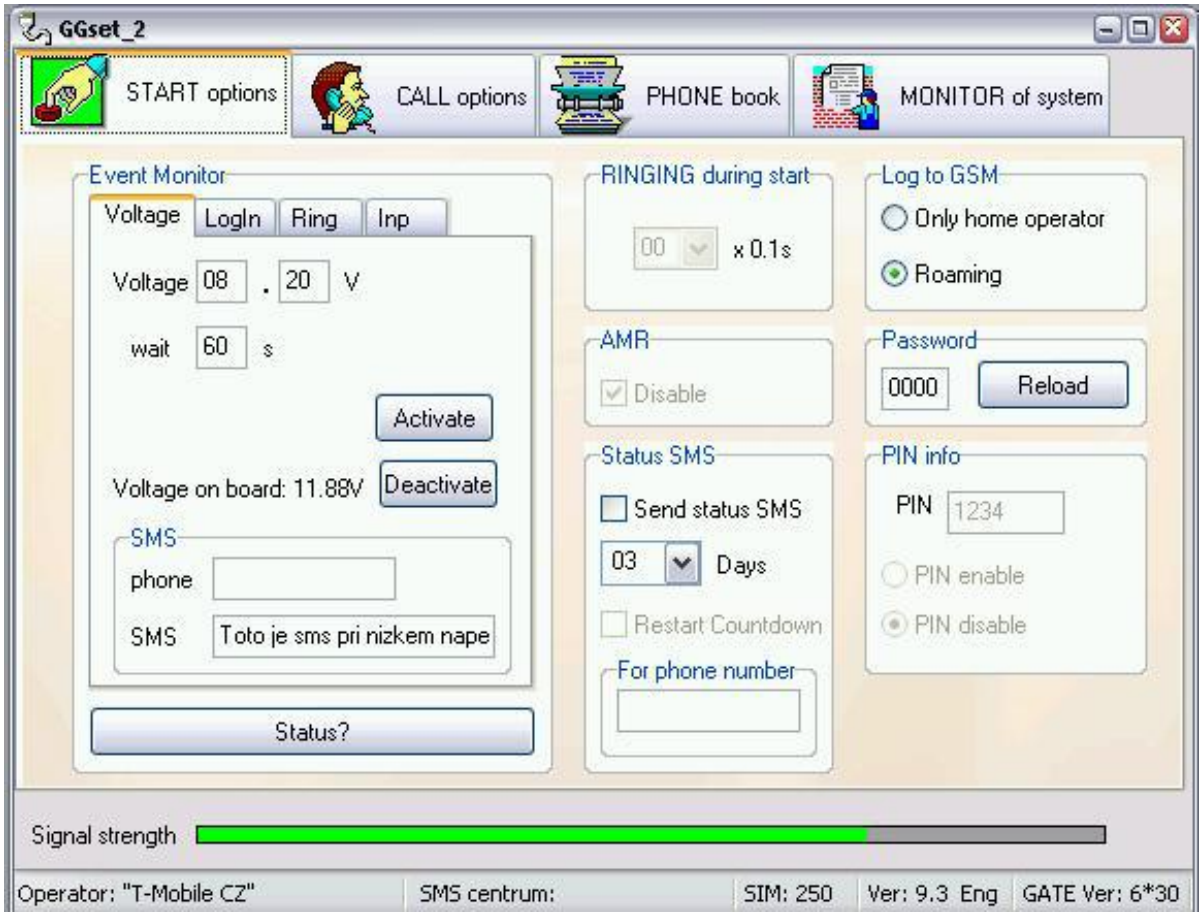
the RUKRA GSM / PSTN interface can be programmed with a computer and the necessary software "GGSET" and the USB interface. The USB interface is connneted with a 6 conductor flat cable to the RUKRA GSM / PSTN interface. Parameters that are programmed with an attached phone can also be programmed with the PC except the PIN code of the SIM card.

Phone numbers for SMS messages can only be programmed with a computer using the "GGSET" program and the USB Interface.
Programming can be with or without the presence of a SIM card.

On the website www.rukra.eu you can download the required software and the manual "Configuration software for RUKRA GSM / PSTN interface"

USB Interface:

You can control RUKRA GSM/PSTN interface directly via the USB Interface. The RUKRA GSM/PSTN interface can further be used like an ordinary GSM modem for data transmission, internet connection or for SMS messages. When the RUKRA GSM/PSTN interface is working as GSM modem then it is busy for voice connection. When you pick up the line you will hear busy tone. The RUKRA GSM/PSTN interface is monitoring data transmission by modem. The data transmission can not be permanent therefore the RUKRA GSM/PSTN interface stays in data mode 10 seconds after finishing of data transmission. Then is going back to Voice mode (calling). The same is when you are calling over RUKRA GSM/PSTN interface. It is busy for data transmission. The optional software supply to unit for sending and receiving SMS messages is SMS mail. It is working under Outlook and you can work with SMS as with normal e mails. It works in batches and allows programm communication interval (1 to 99 minutes) to RUKRA GSM/PSTN interface for sending and receiving SMS. Due this we avoid situation that the RUKRA GSM/PSTN interface is permanentlky blocked by data mode for voice communication. Further functionality of USB is monitoring RUKRA GSM/PSTN interface operation. It is possible record even incoming calls includes time and CLIP, signal strength, etc..



MEANING OF THE LED'S

		**Permanent light** (lights up after power connection) Power supply or battery of GSM unit
		10 seconds on, and off for 1 second PIN-code is wrong, can not read PIN-code
		**Permanent light** line OFF HOOK
		Doesnt light line ON HOOK
		Flashing in rhytm of busy tone Programming or PC connection mode
		**Flashing in rhytm of busy tone** Initialization mode after power supply connection, restart after programming etc..
		1- 5 flashes with period 4 sec. stand by mode. Number of flashes = signal strength
		Permanent light GSM connection is running (call)
		Short lights off with period 2 sec. GSM modul doesnt communicate to CPU
		Flashing in period 2sec SIM is not ready
		Short flashes in period 2 sec. Gate is not registrate to GSM network

SOLUTIONS FOR PROBLEMS

- All LED are not lighting:Problem in power supply. Check connection to main 230V as same as connection of adapter to RUKRA GSM/PSTN interface and the connection of the internal battery.
- The LED "power supply" lights. When you make connection to RUKRA GSM/PSTN interface green LED is ON and in handset you hear busy tone. Yellow LED flashing in period „GSM modul doesnt communicate with CPU". During work with USB could be programmed fix communication rate for GSM modul. Use USB to programm rate on „autobauding".
- The yellow LED flashing in period „PIN unreadable". After calling to RUKRA GSM/PSTN interface you get busy tone. The SIM card requires PIN, which is not preprogrammed or is preprogrammed wrongly.
- The LED „communication to GSM„ is flash shortly one for 2 sec. After calling to RUKRA GSM/PSTN interface you are hearing busy tone. RUKRA GSM/PSTN interface is not log into GSM network – bad signal.
- The yellow LED „communication to GSM„ is flashing up signal strength". After calling to RUKRA GSM/PSTN interface Green LED is not light up and in analogue phone is quiet. It interrupted conduction of analogue line or so much big resistance in current loop (for example:(Too long cabel between elevator and RUKRA GSM/PSTN interface).
- The RUKRA GSM/PSTN interface works but call is disturbed by interference. Incorrect position of antenna against telephone line. Change antenna position.

TECHNICAL SPECIFICATIONS

Power

Powersupply	: 9VAC / 1000mA **(ONLY USE THE SUPPLIED RUKRA POWER ADAPTER)**
Protection	: Thermal fuse in powersupply
Battery	: 9,6V / 800MAh
Dimensions	: H x W x D - 130 x 100 x 36mm
Type antenna connector	: SMA (MAN)

SMS MESSAGES

SMS messages can only be programmed and activated with a computer

Batteriycheck (BCH) : The battery voltage, capacity and battery or absence will be checked automatically. If There is something wrong with the battery an SMS will be send one phone number.
The following SMS messages can be send:
ACCU DEATH OR NOT CONNECTED = battery defect or not connected (check battery)
POWER ACCU LOW (CONTROL 230V) = Power battery is low (Fault with 230V)
CAPACITY ACCU LOW (CHANGE ACCU) = Capacity of the battery is low (replace battery)

NOTE !! BATTERY MESSAGES ARE SENT ONCE AN EVENT

Login network :Every time the RUKRA GSM interface is logged into the network a SMS message will be send to one phone number

Network / linetest :The RUKRA GSM interface can send periodic (1 to 30 days) a SMS message to one phone-number with information about the battery, last number called, temperature and signal strength.

Analog PSTN phone connection

Phoneconnector	: RJ12 6/2
Impedantie	: 600Ω ±20%
Calling	: Tone DTMF t > 30ms
Voltage of the line	: 24V
Current of the line	: 29mA
Ringvoltage	: 55V / 50Hz
Signaling	: 425Hz ± 20%
Caller ID	: FSK / CLIP
Start and end connection	: Polarity reversal
Cable length	: Maximum 200meter (from the RUKRA GSM/PSTN interface to the elevatorphone)
Programming	: USB interface or with connected PSTN phone

GSM Module

Fabricated	: Telit GL865-DUAL
Mobile network	: GSM-module, quadband 850/900/1800/1900 MHz
Sim Card	: 3V en 1,8V
CE 0889	: The CE symbol indicates that the product complies with the European directives.

WARRANTY:

Time	: 1 Year Carry in after deliveringdate
Battery	: No warranty on the battery