GSM3-01M

EN **GSM communicator**

Characteristics

- It serves for communication with the iNELS system via commands sent in short SMS messages from mobile phone GSM.
- With the GSM3-01M and a smartphone, it is possible by SMS message or a call to control the iNELS system or obtain information on its status and current events.
- By means of the software iDM3, you can use up to 8 incoming calls, 8 outgoing calls, 32 incoming SMS messages and 32 outgoing SMS messages.
- For SMS messaging, the message length is limited to 32 characters, and for each message, you can set up to eight telephone numbers. In total, it is possible in iDM3 to use up to 512 telephone numbers.
- One telephone number can be set for each incoming and outgoing call.
- The maximum length of an incoming call is around 30s, and then the GSM3-01M hangs up. The user can set the length of outgoing calls in the software iDM3.
- GSM3-01M can be used for informing users about any system status, e.g. in the event of a fault in some technology or building interference.
- Operating range is 850, 900 as well as 1800, 1900 MHz (quad-band).
- SIM card is inserted into the unit from the front panel.
- The MINI USB connector on the front panel is used for servicing, but configuration of telephone numbers, SMS messages and calls is done from the software iDM3.
- GSM3-01M connects to the central unit CU3-01M(02M) via the EBM system bus (terminals EBM+ and EBM-, terminal GND is only connected under special circumstances).
- In case it involves the last unit on the system bus EBM, it is necessary to terminate the wire with a resistor with rated resistance of 120 Ω. This part adapted to be inserted between terminals is included into central units packages and it is necessary to insert between terminals EBM+ and EBM-.
- The package includes is an external magnetic antenna (cable 3 m, 5 db gain), which is connected to the connector RSMA (F) on the front panel.
- GSM3-01M in 3-MODULE version is designed for mounting into a switchboard, on DIN rail EN60715.

Description of device



1. Terminals of supply voltage
2. LED supply voltage indication
3. LED indication - operation state / fault in BUS
4. Connector of antenna
5. Terminals of system bus EBM
6. SIM Card Slot
7. Mini USB connector

General instrucions

CONNECTION TO THE SYSTEM

The unit connects to the system by means of the EBM system BUS. Wires of the system BUS are connected to the terminal board to terminals EBM+ and EBM-, whereas the wires cannot be confused. The terminal GND is connected only under special circumstances. For the system BUS, it is necessary to use the cable UTP, FTP or STP CAT5e and higher. The maximum length of the EBM system BUS is 500 m (while upholding all cabling rules, especially keeping a safe distance away from power lines - at least 30 cm). Power supply wires are connected to the supply terminals 27 V DC and GND, whereas it is necessary to mind the polarity. For connecting GSM3-01M, it is recommended to use power source PS3-100/ iNELS.

CAPACITY AND CENTRAL UNIT

It is possible using the EBM system BUS to connect to the central unit CU3-01M (02M) one unit GSM3-01M.

COMMUNICATION BUS

For wiring the EBM system BUS, the cable UTP, FTP or STP CAT5e and higher must be used. The cable of the EBM system BUS may not be run in parallel to power lines (maintain a distance of at least 30 cm), near electronic machines or devices, by passage of LV through a switchboard, etc. The BUS cable must be installed in accordance with its mechanical properties as given by the manufacturer (into a tube / bar, under plaster, into the ground, suspended, etc.). To enhance the mechanical resistance of cables, we recommend always installation into a conduit of the appropriate size. The total length of the BUS can be up to 500 m while upholding all rules for correct cable routing. The topology of the EBM system BUS is strictly linear, whereas no branching is permitted on this BUS. At both ends of the BUS EBM, termination is required using a resistor with nominal resistance value of 120 Ω. This resistor is inserted between terminals EBM+ and EBM-.

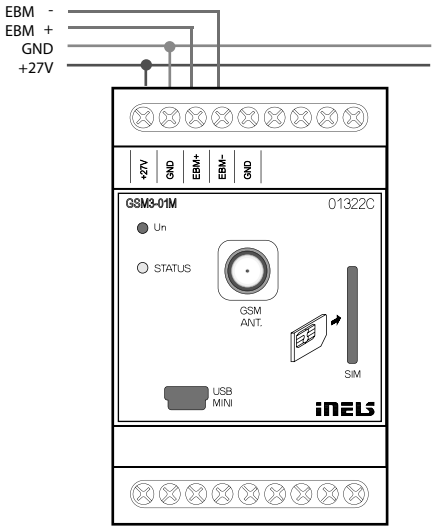
SUPPLYING THE SYSTEM

For supplying the central unit CU3-01M(02M), the external master MI3-02M, the installation BUS (by means of units BPS3-01M(02M)) and the GSM communicator GSM3-01M, we recommend using the power supply PS3-100/ iNELS, which is an ELKO EP product and is designed for this purpose, including e.g. UPS function.

GENERAL INFORMATION

The unit is able to be operated individually without a central unit but very limited on functions. To use all the functions of the unit it is necessary to connect it to a central unit CU3-01M(02M), or to a system that already contains this unit and enlarge thus the system functions. All parameters are set by a central unit in software iNELS3 Designer and Manager. On the front panel there are LED diodes to indicate presence of supply voltage, communication with a central unit.

Connection to CU3-01M



Technical parameters

GSM3-01M	
Communication	
Communication interface:	system BUS EBM
GSM network (Quad-band):	850/900/1800/1900 MHz
Transmitter output power:	2 W for GSM 900, 1 W for GSM 1800
Number of supported calls:	8 incoming, 8 outgoing
Number of informative SMS:	32 incoming, 32 outgoing
Number of telephone numbers:	up to 512
LED indication - operation state / fault in BUS:	LED STATUS
Output for antenna:	SMA connector *
Power supply	
Supply voltage / tolerance:	27 V DC, -20 / +10 %
Rrated current:	250 mA (at 27V DC) / max. 1 A
Suppy voltage indication:	green LED Un
Connection	
Terminals:	max. 2.5 mm^2 / 1.5 mm^2 with sleeve
Operating conditions	
Operating temperature:	-20 .. +55 °C
Storing temperature:	-30 .. +70 °C
Protection degree:	IP20 devices, IP40 with cover in switchboard
Overvoltage category:	II.
Pollution degree:	2
Operation position:	any
Installation:	to DIN rail EN 60715
Design:	3-MODULLE
Dimensions and weight	
Dimensions:	90 x 52 x 65 mm
Weight:	128 g

* Max Tightening Torque for antenna connector is 0.56 Nm.

Warning

Before the device is installed and operated, read this instruction manual carefully and with full understanding and Installation Guide System iNELS3. The instruction manual is designated for mounting the device and for the user of such device. It has to be attached to electro-installation documentation. The instruction manual can be also found on a web site www.inels.com. Attention, danger of injury by electrical current! Mounting and connection can be done only by a professional with an adequate electrical qualification, and all has to be done while observing valid regulations. Do not touch parts of the device that are energized. Danger of life-threat! While mounting, servicing, executing any changes, and repairing it is essential to observe safety regulations, norms, directives and special regulations for working with electrical equipment. Before you start working with the device, it is essential to have all wires, connected parts, and terminals de-energized. This instruction manual contains only general directions which need to be applied in a particular installation. In the course of inspections and maintenance, always check (while de-energized) if terminals are tightened.