

DATA SHEET



mH-MRG
GSM Controller
of the F&Home system

The logo for F&Home, featuring a red roof-like shape above the text "F&Home".

Text message communication module Requires a SIM card from any provider. It is powered by 24 V from the SU-50 system power supply. The module communicates with the system via CAN bus (cable included). For proper operation, it is required to expose the GSM communication antenna from the switchgear. GSM module allows for remote control of the system via SMS text messages. By sending a text message we can switch on or off any receiver in the building, check if the indicated circuit is switched on or activate a specific scene (for example raise the temperature, open the gate and light the driveway - "I will be at home in 15 minutes"). The module allows you to control only from the whitelisted GSM numbers to prevent unauthorized access. In addition, it is possible to create groups, which means the distribution of permissions, so that dedicated users (with a specific phone number) can control only selected devices in the system.

The antenna is supplied with the mH-MRG module. It should be connected to the module according to the description on the enclosure and moved out of the switchgear. It is not recommended to install the antenna in boxes, switchgear or inside walls (for example plasterboard) due to the decrease in the operating range of the GSM module. The length of the GSM antenna cable is 2.5 m. If there is no GSM network coverage in the place where the module is installed - do not extend the antenna cable. The best solution is to find a place on the building where at least one of the GSM network is in range and install a GSM module with an antenna there (and lead the 24 V power supply and CAN bus to it). The application on the touch panel shows information about the connection to the GSM network and GSM signal strength.

Power supply

The mH-MRG module is supplied with 24 V DC voltage. A polarization of the supply voltage is important.

CAN

Two RJ-45 sockets on the module front panel are used to connect the CAN communication network cables, which must be connected to adjacent modules using the CAN cables provided with the system.

Operating principle

The mH-MRG communication module is connected to the F&Home system via the CAN communication network and communicates directly with the host computer of the system. The system can be remotely controlled by sending SMS text messages. Configuration of the GSM module for SMS communication is done via the touch panel (Options -> GSM tab). First of all, it is necessary to specify the phone numbers from which text message commands will be received. You can then define shortcuts to the existing names of all scenes and devices available in the F&Home system (making it easier to send control commands, because instead of, for example, full scene name "roller blinds down" the user can set shortcut "rd").

Operation signaling

The operation of the mH-MRG module is indicated by LEDs located on the front of the module. The meaning of the individual controls is as follows:

U	The blinking of the U diode means that the device is connected to the power supply and is working properly. The constantly lighted U diode indicates an error or malfunction of the module.
RX	Indicates that the module is in the process of receiving data through the CAN network.
TX	Indicates that the module is in the process of sending data through the CAN network.
Err	Indicates that there is no communication between the mH-MRG module and the host computer (possible power outage/damage to the host computer or damage to the communication cables).
GSM-C	GSM module operation signaling
GSM-D	GSM module operation signaling

Technical data table

Module type	logic
Rated supply voltage	24 V DC
Power supply voltage tolerance	-20%, +10%
Maximum current	800 mA
Storage temperature	-20°C to +50°C
Operating temperature	0°C, +45°C
Humidity	<=85% (without condensation or aggressive gases)
Dimensions	87.5 x 65 x 90 mm (5 modules)
Dimensions of the packaging	212 x 104 x 75 mm
Ingress protection	IP20
Operating position	any
Enclosure type	for DIN rail
Net weight	163 g
Gross weight (including packaging)	361 g

WARNING

The method of connection is specified in this manual. Installation, connection and adjustment should be carried out by authorized electricians who are familiar with the operating instructions and the functions of the module.

The correct operation is affected by the way the module is transported, stored and used. Installation of the module is not recommended in the following cases: missing components, damage to the module or its deformation.

In case of malfunction, please contact the manufacturer.