

1. OVERVIEW

- System formation with up to 500 logical M-Bus devices and 2500 wireless devices
- It can be extended with up to 23 gateway, each with up to 500 wireless devices
- The M-Bus network can be extended with up to 6 level converter (GE552Y050, GE552Y059)
- Local and remote reading with PC/browser over Ethernet and Internet
- Meters data acquisition interval from 15' to 1 month
- Meters reading, reports sending, system remote management
- 24Vac/dc +/-10% power supply
- DIN rail mounting (4 modules)
- 128x128px 262K colors graphic display and onboard I/O

- A.** Graphic display
- B.** Navigation keys
- C.** Power supply led
- D.** Ethernet Port
- E.** SMA antenna connector for gateway
- F1.** Serial connector for M-Bus level converter
- F2.** M-Bus connector (up to 20 M-Bus loads*)
- G.** Power supply connector
- H.** Relay 1 connector
- I.** Relay 2 connector
- L.** Digital input connectors for gateway
- M.** For future applications

* An M-Bus load unit ≤ 1.5 mA

2. CONNECTIONS

Digital Inputs:

- (8) - Common for digital Inputs
- (9) - Digital Input 1 (free contact)
- (10) - Digital Input 2 (free contact)
- (11) - Digital Input 3 (free contact)

Power supply:

- (16) - Input 1 for device power supply
- (17) - Input 2 for device power supply

Relay Output:

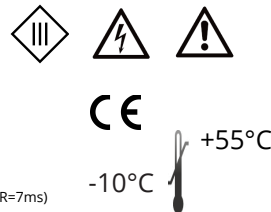
- (12) - Common Relay 1
- (13) - NO Relay 1 Contact
- (14) - Common Relay 2
- (15) - NO Relay 2 Contact

Direct connection with meters:

- (4) - M1 for connection with M-Bus dev.
- (5) - M2 for connection with M-Bus dev.

Other connections:

- (1) - A RS232-RX
- (2) - B RS232-TX
- (3) - C RS232-GND
- (ETH) - Ethernet Port for LAN connection (10/100 Mbps)
- (USB) - For future applications
- (SMA) - Female antenna connector for gateway



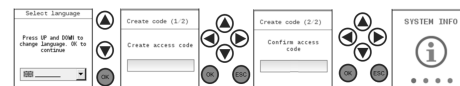
3. TECHNICAL DATA

- Temperature range: Operative: -10°C ... +55°C
Storage: -25°C ... +65°C
- Degree of protection: IP 20 (EN60529)
- Mounting: 35 mm DIN Rail (EN60715)
- Dimensions: 4 DIN modules (90x72x64,5)
- Power supply: 24Vac/dc +/- 10%
- Consumption: 14,5W , 15 VA
- Relays max load: 5A@24Vac (Resistive Load)
2A@24Vac (Inductive Load cosφ=0.4; L/R=7ms)

4. FIRST ACCESS VIA DISPLAY

On first use of the device

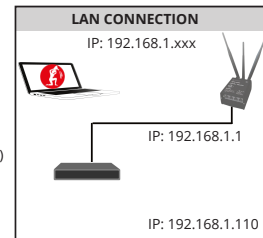
Create a new 8-digit PIN code



5. FIRST ACCESS TO THE WEBSERVER

LOCAL ACCESS

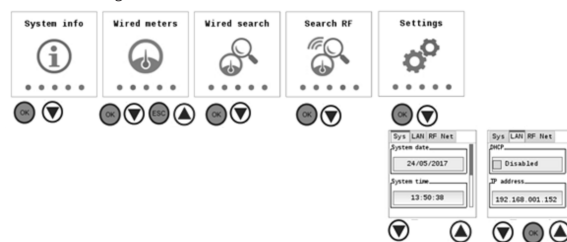
- 1) Connect the Ethernet port to the PC or LAN
- 2) Make sure that the PC has an IP address such as 192.168.1.xxx where xxx is a number between 1 and 254 other than 110
- 3) Open an internet browser (Chrome, Firefox, Safari or I.Explorer)
- 4) On the address bar type **192.168.1.110**
- 5) At the authentication request click on "First Access" and follow the instructions given



REMOTE ACCESS

- 1) Connect the Ethernet port to a modem/router with an internet connection.
- 2) Use the local display to set the device to DHCP.

Follow the settings below



- 3) Open an internet browser (Chrome, Firefox, Safari or Internet Explorer).
- 4) On the address bar type <serialdevice>.net.sghiot.com (e.g. EV12345678.net.sghiot.com)
- 5) At the authentication request click on "First Access" and follow the instructions provided.

To facilitate access, the procedure referred to in the previous points is also indicated on a label next to the device, showing in full and on QR code the address to be typed to access remotely

TROUBLESHOOTING

1) The datalogger does not turn ON:

- Check with the aid of a multimeter that the voltage between the terminals (16) and (17) is 24Vac/dc +/- 10%

2) The display is off:

- After 10 minutes of inactivity, the display turns off. To turn on again, press any key

3) Not all wired meters are detected:

- Verify that not detected meters support 2400bps default communication speed and addressing for primary and secondary address
- Verify that the maximum number of allowed wired meters hasn't been already configured

4) Not all W. M-Bus are detected:

- Verify that a radio scan of meters has been performed
- Verify that the gateway is connected to the power, supply and that is properly configured
- Make sure that the blue led light is on and does not blink, otherwise verify that ID-Mesh and Mesh channel are correctly set in GE552Y058 and in the gateway
- Verify that there are no other active Mesh networks with the same ID-Mesh of your system. If so, select another ID-Mesh for all the gateways and for GE552Y058 of the plant
- Verify that W.M-Bus meters are working and active
- Verify the mode of operation on GE552Y058 is correctly set in S-Mode, T-Mode or C-Mode.

5) None of the meters is detected:

- Check the M-Bus interface connection to the meter
- Check the connections (4) - M1 and (5) - M2 to the M-Bus slave interface of the GE552Y050 (if present)
- Check for short circuit on M-Bus wiring

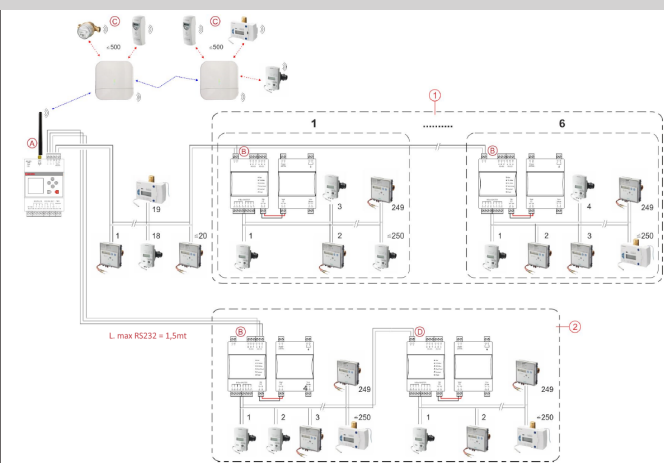
6) Unable to access the webserver:

- Verify that your PC has an address in the same network as the datalogger. The datalogger default IP address is 192.168.1.110, then the PC must have a 192.1.168.1. xxx address different from 192.168.1.110
- Ensure that the PC does not have an active DHCP
- Verify that there is no firewall blocking the TCP / IP 80 and 443 port.

7) Cannot access the webserver remotely:

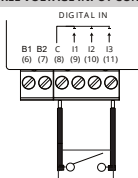
- Check if there is an IP address under the item internet_status which can be reached from the local display through the System Info menu.

CONNECTION WITH LEVEL CONVERTER (GE552Y050/GE552Y059) AND M-Bus DEVICES, AND WITH GATEWAY (GE552Y053) AND WIRELESS M-Bus DEVICES

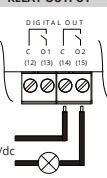


Apply to the device a supply voltage equal to 24Vac/dc +/- 10%
Before making any connections, turn off the power, remove the terminals, complete wiring and then plug terminals with the correct position

FREE VOLTAGE INPUT CONNECTION



RELAY OUTPUT



Vmax = 24Vac/dc