

DATALOGGER FOR METERS WITH M-BUSWIRED AND WIRELESS PROTOCOL CONNECTED VIA REPEATER



EQUOBOX RTU1T (SIN.EQRTU1T) is a datalogger to acquire data from SIN.EQRPT868XT, which, through the mesh network, collect information from devices that use M-Bus wired and wireless protocol such as meters, heat cost allocators, digital inputs / outputs, analog inputs / outputs. Manages up to 500 meters providing storage of daily readings for 10 years. The web interface allows accessing data, reports generating, the setup of the M-Bus networks and the management of I / O.

It is equipped with a graphical display for setup, accessing data in real time and the status of the I / O without the need of a PC. It has inputs and outputs through which it is possible to interact with the system and sending emails, acting with combinatory AND / OR logics and manual controls via WEB interface.

At the datalogger up to 20 M-Bus meters* can be directly connected, with the help of SIN.EQLC1 repeater it is possible to increase the number of up to 250 meters.

For an easy installation a remote antenna with 1.5 mt of cable is included in the box.

*Meter means an M-Bus load unit (≤ 1.5 mA)

EASY TO USE

The graphic display allows to make the commissioning of the metering system in a few steps guided by a setup wizard.

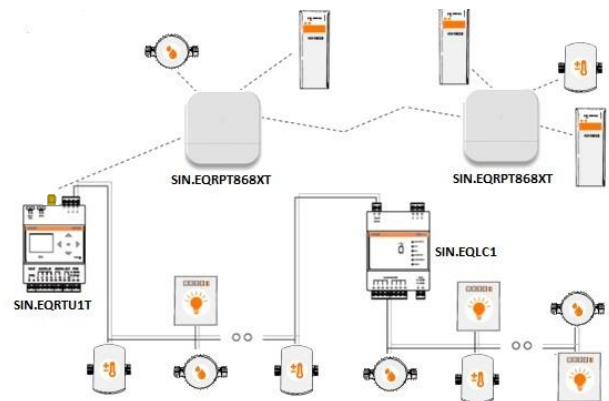
The main settings can be performed locally on the display or via WEB interface.

Equipped with two Ethernet ports with switch functionality, it allows to connect multiple devices in cascade without the aid of network devices, moreover it is possible to power the device also via Power over Ethernet (PoE).

| Maximum number of meters for interface | |
|--|-----------------|
| WIRED METERS | WIRELESS METERS |
| 250 (with SIN.EQLC1 repeaters) | 250 |
| 20 | 480 |
| 0 | 500 |

ALWAYS UPDATED

Through the Internet the device will check for updates and notify the user who can decide to install them with a simple click in the web interface.



SMART

The user can start scanning the M-Bus network to allow the acquisition of devices connected via cable or via radio through a single button. Automatic recognition of detected devices allows to immediately start the data acquisition and the automatic creation of reports using predefined data sets, user-changeable, complete with measurement unit, size type and description (language), with resulting elimination of need for further user activities.



ELECTRICAL CHARACTERISTICS

| | |
|--------------------------------------|--|
| Power Supply | 24Vdc +/- 10%, 24 Vac (min 20 Vac, max 40 Vac) or PoE (IEEE 802.3) |
| Installation category | Class II |
| Maximum consumption | 7.5W |
| Ethernet | N°2 (1 MAC): ETH1: Ethernet 1(PoE), ETH2: Ethernet 2 |
| Fieldbus | Total number of supported meters: 500 (wireless + wired) |
| | Wired M-BUS interface max 20 meters |
| | sinapsitech® radio interface |
| Digital Inputs | N°3 - OFF=Vin<12Vdc, ON=Vin>12Vdc, max Vin=24vdc |
| Digital Outputs | N°2Relays, Contact load: |
| | 5A@30V ac/dc (Resistive Load) |
| | 2A@30Vac/dc (Inductive Load cosfi=0.4; L/R=7ms) |
| Auxiliary voltage for digital Inputs | 15Vdcmax10mA |

MECHANICAL CHARACTERISTICS

| | |
|-------------------|---|
| Temperature range | Operative: -20°C a +55°C / Storage: -25°C a +65°C |
| Dimensions | 90x71x62 mm (HxLxP) – DIN |
| Mounting | 35mmDINRail (EN60715) |
| Protection Grade | IP20 (EN60529) |

WIRED M-BUS INTERFACE

| | |
|--|--|
| Reference standard | EN13757-2 (Physical Layer), EN13757-3 (Application Layer) |
| Baud rate | Min. 300bps – Max. 9600bps |
| Number of supported M-Bus meters | Without repeater MBUS: 20, with repeater: max 250 |
| Reading frequency | 15 min / 60 min / 6 hours / 12 hours / 1 day / 7 days/ 1 month |
| Recognition of collisions on M-Bus network | Yes |
| Devices search / acquisition | Via Primary and Secondary Address |

WIRELESS INTERFACE

| | |
|-------------------------------|-------------------------------------|
| Frequency | 868MHz |
| Number of supported repeater | 23 |
| Supported application Layer | Wireless M-Bus |
| Methods of meters recognition | Automatic or via import system file |

DATALOGGING

| | |
|-------------------|--|
| Data storage | 1 year for intra-day data from wired meters, 2 monthsfor intra-day data from radio meters |
| Reports | XLS or CSV format |
| Download report | Mail SMTP, FTP (Client), Webserver (report generation and downloading) |
| Report scheduling | Daily / Monthly / Two-monthly/ Three-monthly / Four-month/ Biannual / Yearly |

USER INTERFACE

| | |
|-----------|--|
| Display | Graphic, bright, 16 grayscales, multilingual |
| Keyboard | 6 tactile membrane keys |
| Led Power | Operating status |
| HTTP | Multilanguage web server for data consulting and configuration |

LOGICS / ALARMS/PLANNING

| | |
|---------------------------------------|---|
| Alarm notification from M-Bus network | Anomalies /alarmsmeters, communication failure, thresholds violation |
| On board I/O | notification by e-mail of digital Inputs status |
| Logic | AND/OR based on local I/O and M-Bus network |
| | Thresholds violation (max value, min value, range, maximum consumption) |
| Planned actions | Sending of readings reports |