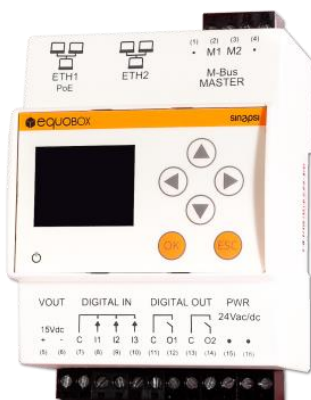


## DATALOGGER FOR METERS WITH WIRED M-BUS PROTOCOL



EQUOBOX RTU4 (SIN.EQRTU4) is a datalogger to acquire data from devices that use wired standard M-Bus protocol such as meters, heat cost allocators.

Manages up to 250 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 local 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 perform actions with combinatory AND/OR logics, sending emails, and manual controls via WEB interface.

### EASY TO USE

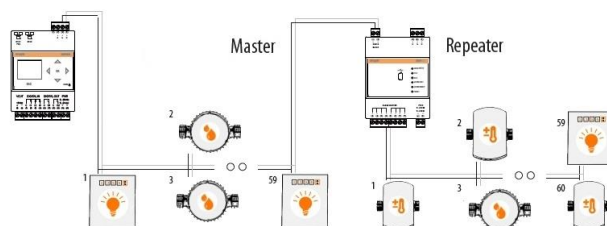
The graphic display allows to make the commissioning of the metering system in a few steps guided by a setup wizard. The main settings can be performed locally on the display or via WEB interface.

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).

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

### 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 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%, 24Vac (min 20Vac, max 40Vac) 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: 250 Wired M-Bus interface max 20 meters**
Digital Inputs	N°3 - OFF=Vin<12Vdc, ON=Vin>12Vdc, max Vin=24vdc
Digital Outputs	N°2 Relay, Contact load: 5A@30Vdc (Resistive Load) 2A@30Vdc (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	35mm DIN Rail (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 M-Bus repeater: 20, with repeater: max 250
Reading frequency	15 min / 60 min / 6 hours / 12 hours / 1 day
Recognition of collisions on M-Bus network	Yes
Devices search / acquisition	Via Primary and Secondary Address

## DATALOGGING

Data storage	1 year for intra-day data from wired meters, 2 months for intra-day data from radio meters
Reports	XLS or CSV format
Download report	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 grayscale, multilanguage
Keyboard	6 tactile membrane key
Led Power	Operating status
HTTP	Multilanguage web server for data consulting and configuration

## LOGICS / ALARMS/PLANNING

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

\*\* Meter means an M-Bus load unit (= 1.5 mA).