

DATALOGGER FOR METERS WITH M-BUS WIRED AND WIRELESS PROTOCOL CONNECTED VIA SMART REPEATER sinapsitech®



EQUOBOX RTUEVO1T (SIN.EQRTUEVO1T) 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, probes. Manages up to 3000 meters (2500 wireless + 500 wired devices) providing storage of daily readings for 10 years. The web interface allows accessing data, reports generating, setup of the M-Bus and MESH networks. It is equipped with a graphical display for setup, accessing data in real time and the status of onboard I/O without the need of a PC.

At the datalogger up to 20 M-Bus meters* can be directly connected. Can be extended up to 23 smart repeaters, each up to 500 wireless devices. M-Bus network can be extended up to 6 level converters (SIN.EQLC1, SIN.EQLC250).

For an easy installation a remote antenna with 1.5 mt of cable is included in the box. It supports up to 3 user's profile: user, maintener, administrator.

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

ALWAYS UPDATED

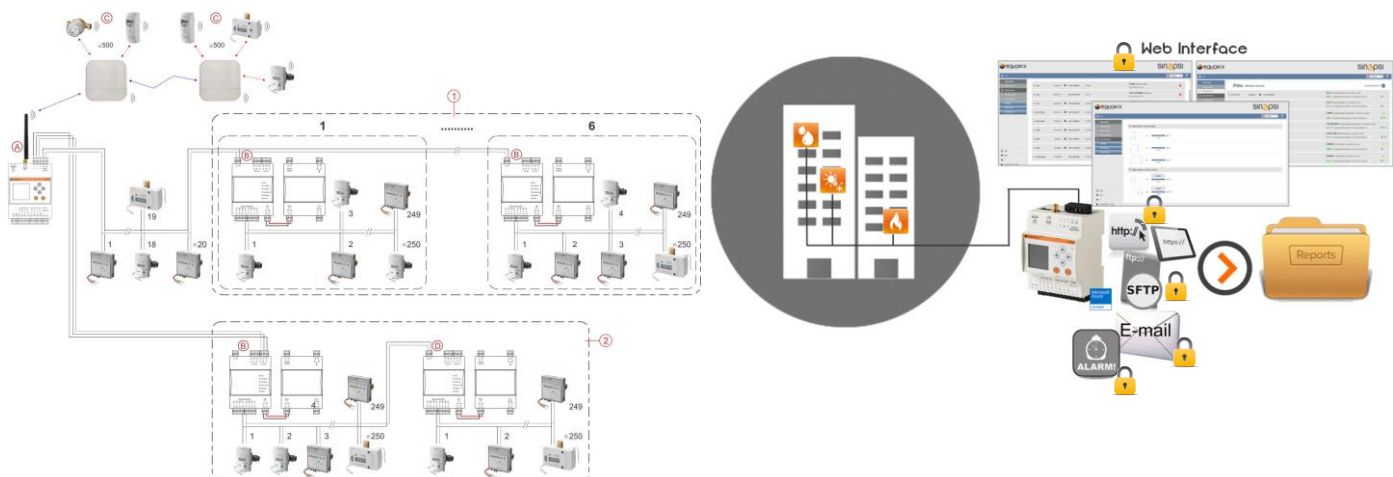
Through the Internet the device will check for updates and notify the user who can decide to install them with a simple click in the web interface.

SECURE

HTTPS provides authentication of the website and associated web server with which one is communicating, which protects against man-in-the-middle attacks. Additionally, it provides bidirectional encryption of communications between a client and server, which protects against eavesdropping and tampering with and/or forging the contents of the communication.

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	AC/DC 24 V +/- 10% (SEV)
AC frequency	50/60 Hz
Maximum Power Consumption	14.5 W, 15VA
Installation category	Class III
Ethernet	N°1
RF	sinapsitech® radio interface
M1, M2	Wired M-Bus interface max 20 dev.
A, B, C	for further applications
B1, B2	for further applications
USB connection	for further applications
Digital Inputs	N°3 for dry contacts
Digital Outputs	N°2 Relays

MECHANICAL CHARACTERISTICS

Temperature range	Operative: -10°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)
Baudrate	Min. 300bps – Max. 9600bps
Number of supported M-Bus meters	Without M-Bus repeaters: 20 (M1, M2); with repeaters: max 500 by using at least one level converter for each Bus (A, B, C and M1, M2)
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

Radio communication protocol with smart repeater sinapsitech®	MESH / 868MHz
Number of supported Multi-hop repeaters	23
Number of supported W. M-Bus devices [EN 13752-4] / OMS	2500 meters (through smart repeater sinapsitech® / each one supports 500 meters)

DATALOGGING

Data storage	1 year for intra-day data from wired meters, 2 months for intra-day data from radio meters
Reports	XLS, CSV, TXT format
Download report	Mail SMTP, FTP (S) (Client), Webserver (report generation and downloading)
Report scheduling	Daily / Weekly / Monthly / Two-monthly/ Three-monthly / Four-month/ Six-month/ Annualy

USER INTERFACE

Display	128x128px 262k colors graphic display
Keyboard	6 tactile membrane key
Led Power	Operating status
HTTPS (secure)	Multilanguage and secure (SSL) web server for data consulting/exporting and configuration

ALARMS

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 on-board output management