

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



RTUEVO1T (1.ETRSEQ.0051) is a datalogger to acquire data from 1.ETRSEQ.0012, 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 (1.ETRSEQ.0006, 1.ETRSEQ.0003).

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, maintainer, administrator.

Check power supply to be provided based on the required installation

\* 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

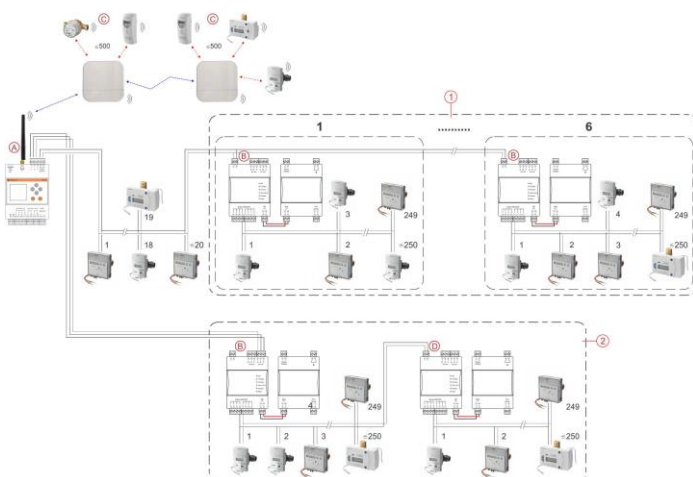
Through the Internet the device will check for updates and notify the user who can decide to install them with a simple click in the web interface.

### 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	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/ 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