RTUEVO1T (1.ETRSEQ.0051) is a datalogger for the acquisition of data from 1.ETRSEQ.0012 repeaters that collect information from wired and wireless M-Bus compliant devices, such as meters, cost allocators and sensors, via a MESH network. The device can handle up to 3000 meters (2500 wireless + 500 wired) and can store daily readings for 10 years.

Its web interface allows you to display data, generate reports, and setup M-Bus and MESH networks.

It is also equipped with a graphic display panel for setup, viewing real-time data, and checking the status of onboard I/Os without requiring a PC.

Up to 20 M-Bus* meters can be connected to the datalogger directly.

It can be extended using up to 23 smart repeaters, each connected to up to 500 wireless devices. The M-Bus network can be extended with up to 6 level converters (1.ETRSEQ.0006, 1.ETRSEQ.0003).

For easier installation, the package includes a remote antenna with 1.5 metres of cable.

Supports up to 3 user profiles: User, Maintainer, Administrator. Check the power supply based on the required type of installation.

Each "meter" is one M-Bus Unit Load (1.5 mA).

SIMPLE OPERATION

The graphic display helps you to commission the measurement system in just a few steps. The main settings can be configured locally using the device display or using the web interface.
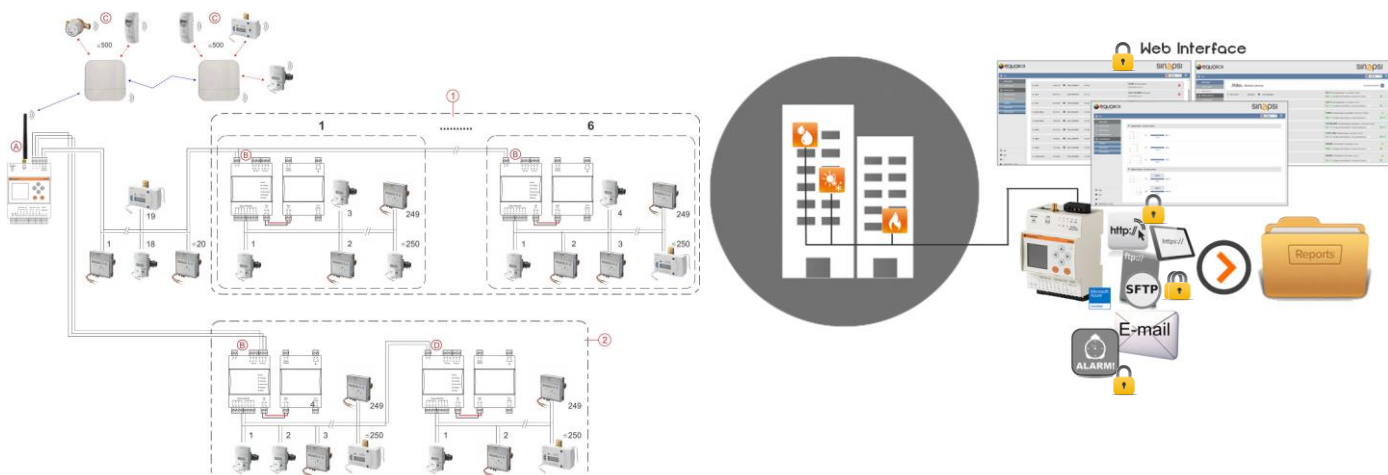
ALWAYS UP TO DATE

Using Internet, the device checks for updates and prompts the user to install them by a single click on the web interface.

SAFE

The device authenticates to the web site and the associated web server using the secure HTTPS protocol for additional protection against man-in-the-middle attacks. It also uses two-way client/server communication encryption for protection against contents interception, tampering and spoofing.

SMART

The user can start scanning the M-Bus network to acquire the wired or wireless connected devices by pressing a single button. With automatic recognition of detected devices, you can start capturing data immediately, and generate automatic reports based on customisable preconfigured data sets, including unit of measurement, value type, description (language), thus eliminating the need of further user activity.

ELECTRICAL CHARACTERISTICS

Power supply	AC/DC 24 V +/- 10% (SEV)
AC frequency	50/60 Hz
Maximum consumption	14.5 W, 15VA
Installation category	III Class
Ethernet	1
RF	Radio interface
M1, M2	Wired M-Bus interface for up to 20 devices
A, B, C	For further applications
B1, B2	For further applications
USB connection	For further applications
Digital inputs	3 for dry contacts
Digital outputs	2 relays

MECHANICAL CHARACTERISTICS

Temperature range	Operating: -10°C to +55°C / Storage: -25°C to +65°C
Dimensions	90x71x62 mm (HxLxD) – DIN
Fitting	35mm DIN Rail (EN60715)
Protection rating	IP20 (EN60529)

WIRED M-BUS INTERFACE

Regulatory references	EN13757-2 (Physical Layer), EN13757-3 (Application Layer)
Baud rate	Min. 300bps – Max. 9600bps
Number of M-Bus meters supported	Without M-Bus repeaters: 20 (M1, M2), with repeaters: max. 500 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
Collision detection on M-Bus network	Yes
Scan and acquisition of devices	Using primary and secondary address

WIRELESS INTERFACE

Radio communication protocol via sinapsitech® smart repeater	MESH / 868MHz
Number of multi-hop repeaters supported	23
Number of W. M-Bus devices supported [EN 13752-4] / OMS	2500 meters (via smart repeaters / each supporting up to 500 meters)

DATALOGGING

Data retention	1 year for intra-day data from wired meters, 2 months for intra-day data from radio meters
Reports	XLS, CSV, TXT formats
Reports download	SMTP Mail, FTP (S) (Client), Webserver (generating and downloading reports)
Report scheduling	Daily / Weekly / Fortnightly / Monthly / 3-4-6-months / Annual

USER INTERFACE

Display	128x128px 262k Colour graphic display
Keypad	6 tactile membrane keys
Power LED	Operating status
HTTPS (secure)	Multilingual, secure web server (SSL) for data display, export, and configuration

ALARMS

Alarm notification from the M-Bus network	Meter faults and alarms, communication errors, threshold triggers
On-board I/Os	E-mail notification of digital input status