

WIRELESS REPEATER/RECEIVER FOR METERS COMPATIBLE WITH WIRELESS M-BUS PROTOCOL (EN13757-4)



This family includes a range of wireless repeaters able to acquire the signal from one or more meters compatible with the Wireless M-BUS communication standard (868 MHz) and retransmit the received data to a network of other devices, thus extending the wireless range of the meters themselves.

The data can also be logged by the 1.ETRSEQ.0051 datalogger.

Each RPT can handle up to 500 meters and has a coverage extending up to 500 m in free space and 40 m inside buildings.

With a clean and elegant plastic case, fully hidden electrical connections and internal built-in antennas, the repeater is ideal for wall installation in visible locations as well. Commissioning is made easier by the device LEDs that show the strength of the radio signal available in the different tentative locations.

The device can be powered from its USB port so that it can be easily moved while searching for the best installation location that provides the best signal-to-distance ratio.

HIGHLIGHTS

- Multi-hop management with system ID network identification
- Open to third-party Wireless M-Bus Transmitters
- Different operating modes available: S / T / C+T / S&T+C
- Built-in USB port for settings configuration and firmware update (using the "Equobox Toolkit" software), and power supply (useful for commissioning)
- Mains power (no need to change batteries)
- Constant data storage
- Management of data transmitted by devices that communicate at up to 10 second intervals
- (Wireless M-Bus channel reception always available)
- Wide area coverage, when compared to any other wireless M-Bus system on the market

Multi-HOP and open

The repeater has a multi-hop function which allows you to extend the network coverage when used with other repeaters. It is also able to handle meters compliant with Wireless M-Bus (868 MHz) and OMS. The received signals are retransmitted immediately, without time-shifting so as to provide consumption data in real time.



SMART

The repeater supports stand-alone mode, and it memorises the latest data received from each meter, thus making it possible to download the data it acquired using a datalogger.



ELECTRICAL CHARACTERISTICS

Power supply 100 to 240 Vac at 50-60Hz

During commissioning/data reading: 5Vdc

via USB port (500mA)

Installation categoryClass IIMaximum consumption4.5W

MECHANICAL CHARACTERISTICS

Temperature range Operating: -20°C to +55°C / Storage: -25°C to

+85°C

Dimensions160x160x35 mm (HxLxD) – DINFittingWall-mounted, with screws

Protection rating IP 40 (EN60529)

MESH NETWORK INTERFACE

Frequency 868MHz – max. transmission power: 27 dBm

Maximum distance between two 500m free space – 40m in building

RPTs

WMBUS NETWORK INTERFACE

Regulatory references EN13757-4 (Physical Layer), EN13757-3

(Application Layer)
Wireless M-Bus, OMS

Supported application layers (in

combination

with SIN.EQRTU1T or with

SIN.EQSW)

Frequency 868MHz Number of W-MBus meters 500

supported

W-MBus Mode

S/T/T+C/S&T+C

Meter recognition mode Based on data reception

Based on SND_IR message receipt Meter list

import from file

DATALOGGING

Data retention Latest sample received, 100 years

USER INTERFACE

Power LED Operating status

Signal strength LEDs 4 LEDs for displaying wireless network signal

strength

TX/RX status LEDs 4 LEDs for displaying the status of the radio

network and transmission/reception from

meters

