

G2 misuratori

THE VALUE OF METERING



PORTABLE RECEIVER WIRELESS M-BUS RPWMB

- ❑ Walk-by/drive-by RECEIVER
- ❑ Range up to 100 mt free field/20mt in buildings (depending from the building type and electromagnetic polluting conditions)
- ❑ USB interface to connect via cable to a portable notebook
- ❑ Communication via COM virtual gate
- ❑ Compliance to Wireless M-Bus EN 13757-4:2013 standard
- ❑ Supporting OMS standard (Opening Metering System)
- ❑ It can manage bidirectional transmission of specifically pre-set devices
- ❑ It can manage an AES 128 data cryptography

M-Bus
wireless

OMS®

TX Led

RX Led

Power Led



USB Port



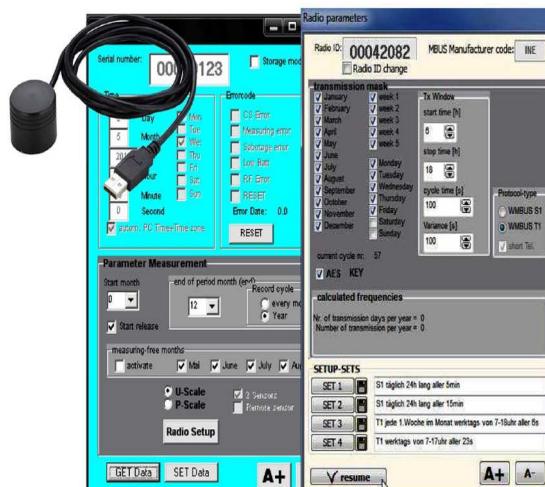
Technical data	
Frequency / protocol	868 MHz / Wireless M-Bus
PC interface	USB with FTDI-Chip
Required driver	VCP driver - http://www.ftdichip.com/Drivers/VCP.htm
Display led	1 x power - 1 x transmit - 1 x receive
Dimensions	120 x 65 x 25 mm without antenna
Weight	100 g
Cable length	1 m



SOFTWARE WIRELESS M-BUS 1.1

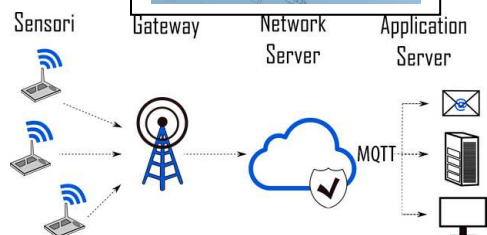
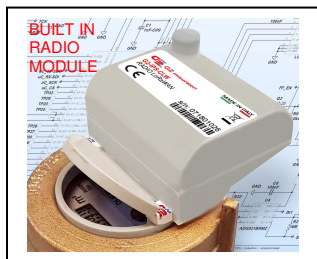
- ❑ Working with Windows programs (Xp/Vista/7/8/10)
- ❑ Windows minimum requirements: 1 MB RAM/13 MB free space on hard-disk
- ❑ Suitable hardware:
 - Receiver USB RPWMB to receive/analyse wireless protocols coming from:
 - Heat cost allocator
 - Compact radio
 - Super-Dry with radio M-Bus module
 - Ultrasonic radio
 - Optical head with OT-USB cable for local I/O set up and reading:
 - Heat cost allocator
 - Compact radio
 - Super-Dry with radio M-Bus module
 - Ultrasonic radio
- ❑ Automatic search of wireless devices
- ❑ The software manages personal water meter information and number of reading rounds
- ❑ It is possible to set up search criteria for single network, for reading analysis
- ❑ Generation of reading reports in .CSV format

OPTICAL HEAD USB OT-USB



The company's policy is one of continuous product improvement and the right is reserved to modify the specifications herein contained without notice – 08/23

REMOTE READING SYSTEM FOR WATER METERS EQUIPPED WITH **LoRaWAN™** INTERFACE RADIO MODULE FOR FIXED TYPE INFRASTRUCTURE



FIXED TYPE RADIO SYSTEM

- Transmission of data from various meters installed in manholes, niches, flats, etc.
- Radio communication interface with LoRa modulation on 868Mhz free frequency and LoRaWAN transmission protocol
- Dual communication
- Fixed system of collection and transmission via Gateway/Concentrator of data coming from the devices at regular intervals to the Network Server with dual and multicast communication
- Transmission distance about 15 km in open field (2-3 km in high populated towns), at the location of the gateway (distances may have variations in excess or defect due to natural obstacles from environmental conditions and electromagnetic pollution)
- Transmission data package including:
 - Instant consumption data
 - Historic reading of consumption per hour of previous 24 hours period
 - Low Battery
 - Possible alarms (general, fraud, reverse flow, low battery level,)
 - Leakage (loss report)
- The same radio module can be used for Walk By / Drive By readings via LoRa protocol transmission without configurations in the field

NETWORK SERVER FOR FIXED TYPE INFRASTRUCTURE

- Control layers, authentication, and quality of data received in the LoRaWAN network
- Receiving and storing the data transmitted by each device and elimination of unwanted or duplicate packets
- Dual and multicast communication to all covered devices
- Battery life optimized via Adaptive Data Rate (ADR) mechanism that modulates the output RF power of each individual node
- Through the application of the data management platform each data can be monitored and retrieved constantly and periodically via MQTT communication protocol

DATA MANAGEMENT PLATFORM FOR FIXED TYPE INFRASTRUCTURE

- Web interface accessible from any consultation and export of data collected during reading internet location with monitoring, shifts, analysis.
- Data synchronizing between back office operators and operations personnel on the field. Processing of reading shifts, user profiles, data reference
- Map representation of where the meter is located
- Analysis tools and statistical charts
- Import/export tools compatible with the BILLING CRM format
- Network analysis of the devices installed in the field
- It also supports infrastructure of fixed type with LoRaWAN communication protocol
- Cloud data storage at multiple levels of data security and data privacy
- Scheduled back up storage



L'Azienda si riserva di apportare modifiche ai dati tecnici e alle illustrazioni dei prodotti – 11/19