WM868-MM-B

USAGE

The converter is designed for remote reading of electronic consumption meters (electricity meter, gas meter, calorimeter), which are equipped with M-Bus interface.

UNIT DESCRIPTION

The converter acts as an M-Bus Master on the bus segment where it is installed and up to 2 M-Bus Slave devices can be connected to it, e.g. electricity, gas, water and other meters. At regular intervals, the converter acquires data from the connected meters and sends this data to the master system via the radio network.

TECHNICAL PARAMETERS

Wireless interface

- Frequency Band: 868.0 - 868.6 MHz
- Wireless Technology: WACO, wM-BUS, LoRa
- Protocols: WACO, wM-BUS
- Modulation: WACO GFSK, wM-BUS FSK, LoRa spread spectrum
- Channel Width: WACO 100 kHz, 15 kHz, wM-BUS 200 kHz, LoRa 125 kHz
- Transmission Power: 10-25 mW
- Receiver Sensitivity: WACO -114 dBm, wM-BUS -105 dBm, LoRa -148 dBm
- Data Rate: WACO 2400, 3800 bps, wM-BUS 100 kbps, LoRa 250-11000 bps
- Output Impedance: 50 Ω
- Antenna: external, SMA-female connector

Data interface

- Physical interface: M-Bus
- Transmission speed: 300 - 9600 Bd
- Data protocols: M-Bus, IEC 62056, Modbus
- Maximum number of devices: 2

Bluetooth Specifications

- Bluetooth Version: BLE 5.2
- Bluetooth Frequency: 2.4 GHz
- Bluetooth Data Rate: 1 Mbps
- Bluetooth Maximum Power: 8 dBm

Power

- Battery: Li-SOCl2
- Battery Capacity: 13 Ah
- Battery Life: 6 years

Physical Properties

- Length: 121 mm (box alone), 153 mm (including mounting flanges), 190 mm (including small antenna)
- Width: 57 mm
- Height: 51 mm
- Weight: 220 g

Operating Conditions

- Operating Temperatures: (-20 to +50) $^{\circ}$C
- Storage Temperatures: (0 to +40) $^{\circ}$C
- Relative Humidity: 90% (non-condensing)
- IP Rating: IP65

UART configuration

- UART Data Rate: 9.6 kbps
- Transmission method: Asynchronous
- UART parameters: 8 data bits, 1 stop bit, no parity
- Voltage Level: 3.6 V (CMOS)