WB868-RFG

USAGE

The gateway is designed to receive radio messages from devices for remote reading of consumption meters, sensors and converters operating in the Wireless M-Bus communication system in the 868 MHz band and to transmit these messages via GSM/LTE to the central system.

UNIT DESCRIPTION

The gateway is designed to mediate data transmission between the 868 MHz radio remote readout units and the central computer application that receives and processes the data. The gateway receives radio messages of the "User Data" type encoded according to the Wireless M-Bus standard according to EN 13757-3 / EN 13757-4 for the 868 MHz band, checks their correctness, encodes ("packs") them into an IP/UDP frame and sends them to the configured IP address and port number of the central application. It uses Softlink's proprietary "NEP" encoding system when encoding messages into IP/UDP frames. To access the Internet, the gateway uses mobile data services, for which it uses an integrated GSM/LTE modem; alternatively, an integrated 10/100 Mbps Ethernet port can be used.

TECHNICAL PARAMETERS

Wireless interface

- Frequency Band: 868.0 - 868.6 MHz
- Wireless Technology: wM-BUS
- Protocols: wM-BUS
- Modulation: FSK
- Channel Width: 200 kHz
- Transmission Power: 10-25 mW
- Receiver Sensitivity: -105 dBm

- Data Rate: 2,4 - 38,4 kBd
- Output Impedance: 50 Ω
- Antenna: external, SMA-female connector

Ethernet interface

- Ethernet standard: IEEE 802.3
- Physical layer: 10/100 Base-T
- Ethernet connector: RJ-45

Power

- Power supply: DC 9 - 24V
- Maximum current: 200 mA
- Connector: clamps

Physical Properties

- Length: 58 mm
- Width: 70 mm
- Height: 90 mm
- Weight: 200 g

Operating Conditions

- Operating Temperatures: (-20 to +50) ^{0}C
- Storage Temperatures: (0 to +40) ^{0}C
- Relative Humidity: 90% (non-condensing)
- IP Rating: IP20

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)

USB configuration

- USB Data Rate: 115.2 kbps

IrDA configuration

- IrDA datarate: 115.2 kbps
- IrDA physical layer: IrDA 1.4