Wireless M-BUS Solutions

Battery-powered Wireless M-BUS Repeater



The AMB8627-M-RP2 is a battery powered unidirectional repeater according to the EN 13757 Wireless M-BUS standard. It is suitable for environments needing range extension in order to reduce the amount of Smart Meter Gateways in the meter reading network. Repeating of OMS frames is supported.

To achieve acceptable battery lifetimes this repeater is active for 30, 45 or 60 minutes per day. This is sufficient to achieve a day based meter readout scenario. Times for starting the active period can be configured by the customer.

The device supports own alive RF frames for network maintenance issues. Those frames contain a timestamp (Type F) as well as an Operating Time counter for battery lifetime estimation. It supports an installation mode where alive frames will be send once per minute whereas in the active mode the alive frame will be send every 5 minutes.

- Wireless M-BUS according to EN 13757
- S, T or C- Mode adjustable
- Intelligent repeating algorithm
- Channel access through LBT algorithm
- High-precision Real Time Clock (RTC)
- Range up to 2000 m
- Dimensions: 154 x 84 x 56 mm
- Integrated antenna
- Battery lifetime up to 2.5 years, up to 5 years with two battery packs (60 minutes active per day)
- Optional: Multi-hop capability

Up to 20 received wireless M-BUS telegrams can be stored, delayed and repeated simultaneously in active mode.

Setup

The device can be configured through dip switches and a PC-Software together with an USB-to-UART cable.



FEATURES

- Wireless M-BUS (EN 13757)
- Battery-powered

RANGE OF APPLICATION

Cost effective range extension for all Wireless M-BUS networks

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Specifications

Performance RF data rate 16.384 / 66.6 / 100 kbps Up to +14 dBm (@ 50 Ohm) Output power RF sensitivity down to -105 / -101 / -101 dBm (@ 50 Ohm) General Typ. 3.6 V Power supply Power consumption Tx: typ. 53 mA @ 14dB / Rx: 30 mA Low Power: typ. 5 uA Dimensions 154 x 84 x 56 mm **Operating Temperature** 0 to +55 °C Storage Temperature -20 to 55 °C Approx. 400g Weight Antenna Integrated antenna (50 Ohm) **RF** Technology Technology Wireless M-BUS 868 MHz 868.3 to 868.95 MHz Frequency range Modulation 2-(G)FSK Europe EN 300 220, EN 301489, EN 60950, EN 62479

Compliance

Ordering Information

Item No. Description AMB8627-M-RP2 AMB1210

Repeater with one battery pack Battery pack with Velcro fixing

AMBER

WIRELESS

established in 1997, is a German

AMBER wireless GmbH,

electronics company. AMBER specializes in the design and manufacturing of wireless connectivity solutions including compact short range RF modules for rapid implementation of cablefree data links. We have become one of the leading suppliers for low power ISM/SRD products in Europe. AMBER provides highquality and cost-effective wireless modules and devices as well as custom design services.

SERVICES AVAILABLE

- Technical Support
- Custom Design Services
- Software / App Development
- Hardware Support

For more information on any of our products or services please visit our website:

www.amber-wireless.com