868MHz W-MBus



Highlights

- 868MHz Wireless M-Bus RF Module
- Up to 1000 m range
- Modes R1 / S1 / S1-m / T1 / R2 / T2 / S2 / C1
- AES128 encryption, OMS mode 5 compliant



With its unrivaled performance (RF sensitivity -117dBm / link budget 131dB), our Wireless M-Bus module enables a **two-way digital link** over a **range of 1000m**.

It embeds a **«FULL» M-Bus stack** and an **applicative firmware**, integrating the **«meter»** and **«other» (gateway) profiles**. **AES 128 encryption**, **compliant to OMS mode 5** is available to provide data security

Interoperable and compatible with other Wireless M-Bus devices, it offers a **total modularity**. Interfacing is performed via GPIO and/or serial interface.

This pre-certified product is compliant with EN13757-4:2005 standard. Operating in 12 channels on the 868/870MHz band, it can be used without a licence and is certifiable according to the European RTTE Directive.

Its ease of integration, even for non RF specialists, thus limites technological risks and **reduces development time and costs**.

This module cover most metering applications requiring short-range Mbus-based communication: meters and concentrators ...

Performances

Range: up to 1000m Power: 25mW

Conducted RF power: 14dBm

Sensitivity: down to -117 dBm (R mode)

Frequencies: 868-870MHz RF data rate: 4.5/32/100 kbps Channelization: 10 mode R, 1 mode S,

1 mode T

Firmware

Embedded protocol: fully certified M-Bus stack completed with applicative firmware Embedded M-Bus modes: R1, R2 / S1, S1-m, S2 / T1, T2 / C1

AES128 encryption, OMS mode5 compliant

Consumption & needs

Operating voltage: 3.3V nominal (2 to 3.6 V)

TX consumption: max 35mA RX consumption: max 22mA Standby consumption: $< 0.6 \mu A$ Sleep consumption: $< 0.2 \mu A$

General information

Dimensions: 26 x 16 x 2mm

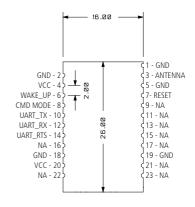
Weight: x3g

Temperature: -40°C /+85°C

Certified EN300-220 V2010, EN 13757-4:2005

SMD mounting

Pin configuration & Dimensions



References

ARF7751CB WMBUS TRX25MW AES/OMS