RFM-TXE

Pulse to wM-Bus 868 MHz converter module



The **RFM-TXE** module is a device that allows to convert the incoming input pulses into a Wireless M-Bus signal. It is equipped with two inputs, so it is possible to simultaneously connect up to two pulse emitter devices.

The device must be configured by using the B METERING configuration software. This allows to set the working time, all the other working options and it allows to create devices lists. Please refer to the configuration software manual for a detailed description of the configuration features and options available.

The module can be connected to any water, heat, electricity or gas meter equipped with pulse output.

Package Content

- RFM-TXE module
- Anti-tampering seal
- Quick installation user guide

Technical data

- Working temperature: From +1°C to +55 °C
- Power supply voltage: Lithium battery 3.6V Li-SOCI₂ 3,8 Ah*
- Maximum battery duration: maximum 10 years**
- Radio interface: wM-BUS EN14757-4 @868MHz [<10mW]
- Configuration: by using B METERING software and RFM-RX2 receiver
- Protection level: IP65
- Transmission capacity: up to 300 meters***
- Dimensions: 70mm x 139mm H=35mm
- Weight: 100g

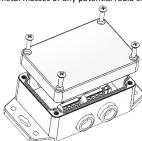
* Batteries are replaceable, spare batteries are supplied by B METERS, DO NOT REPLEACE the battery with wrong types. Disconnecting all the battery from the board will cause the configuration lost, it will need to reconfigure the device.

** The battery life strongly depends on the working time window, set during the configuration process, and on the environmental conditions. Estimation of the battery life is given by the configuration software.

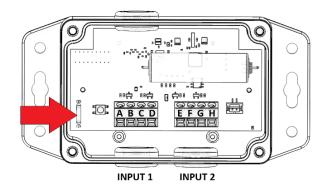
*** Under optimal propagation conditions, the radio range depends on physical conditions (building constructions, climatic conditions, ...) where propagation of the radio signal can therefore vary.

Installation

The module should be mounted on the wall, with screws. It is recommended to fix the **RFM-TXE** in away from metal masses or any potential radio shielding.



To open the device, remove the four screws on the edges of the cover and lift it carefully.



Connections

Plug the cables of pulse output devices passing through the two rubber cable-glands available, marked as Input 1 and Input 2 in the picture above.

Input 1: Connect the wires of the pulse output to the A and B terminals as shown in the picture. C and D terminals are dedicated for the pulse devices with anti-fraud output.

Input 2: Connect the wires of the pulse output to the E and F terminals as indicated in the picture. G and H terminals are dedicated for the pulse devices with anti-fraud output.

Contacts type

Counting contacts: A (+), B (-) for meter n.1 and E, F for meter 2: it is necessary to connect a pulse output device with a normally open (N.O.) contact, which closes when a pulse occurs.

Anti-fraud contacts: C, D for meter n.1 e G, H for meter n.2: it is necessary to connect a device with, normally closed (N.C.) anti-fraud contact, connecting the ground voltage level to the C terminal (meter N°1) and G terminal (meter N°2).

When the ground signal on these terminals is lost (the contact has opened, the fraud alarm will be triggered. Check the document TXE Typical connections of the pulse output devices for more information.

Configure the radio module by using the RFM-RX2 receiver and the B METERING Software. To complete the configuration process, pass a magnet over the reed switch shown by the arrow in the picture above (or press the button next to it).

By holding the switch closed for a short period (1 second) you will start the configuration of the input 1 (terminals A,B,C,D) and by holding the switch closed for a long period (3 seconds), you will activate the configuration of input 2 (terminals E,F,G,H).

During the configuration process the led will start to blink, which means that the configuration has been successful. For the complete configuration instructions, please refer to the software manual.

When the configuration is completed, close the box with the screws.

To avoid any potential tampering of the module, you can place the anti-tampering seal (supplied together with the module) between the base of the box and the cover.

Safety

 During the installation process, handle the device with care, don't crush, don't bent, don't exposure to electrostatic discharges which could damage permanently the device, do not install close to heat sources (radiators, conditioners, convectors etc..).



- The device doesn't contain hazardous materials in accordance with European directives 2011/65/EU (RoHS) and subsequent changes. The device requires specific disposal at the end of its lifetime. Recycling is mandatory or recommende following the Directive RAEE inside European Union region, or anyway dispose in accordance with local laws and regulations. Do not burn or undergo high temperatures.
- The RFM-TXE works reliably in the environmental conditions specified in this manual. Any unauthorized intervention and/or modification may cause malfunctions or total damaging of the product.

Warranty

The warranty period is set at 24 (twenty-four) months from the date of the shipping of the material. Warranty is against defects in materials or workmanship when the product is properly used and maintained in normal efficiency. This Warranty is valid and enforceable in the country where the product was purchased. In the event that the product has been purchased in a country of the European Union, the warranty is still valid in all countries of the Community.

To obtain warranty service, it is requested to comply with the following clauses:

- Products must be delivered for repair at the expense of the customer.
- The product warranty will be subject to the exhibition of a tax document (receipt, receipt or bill of sale), which attests to the date of purchase of the product.
- The repair will not affect the original date of expiration of the warranty and will not involve the renewal or extension thereof.
- If at the time of the repair, the product has not any defect, it will be charged the costs of the technical analysis.
- 5. The warranty is void if the failure was due to: impacts, falls, misuse or abuse of the product, use of non-original batteries, accidents, product alteration, replacement/detachment of seals and/or product tampering. The same also does not cover damage caused during transport if packages used are unsuitable.
- 6. The warranty is not covering the battery of the product.
- The warranty does not cover the inability to use the product, other costs incidental or consequential damages or other expenses incurred by the purchaser.
- The warranty doesn't cover damage to the product caused by usage in any other way than described in this manual.

Support on the products

If the product needs to be sent to the technical assistance, contact your dealer or contact the BMETERS After sales service at ticket@bmeters.com.

Declaration of Conformity

Hereby, B METERS, declares that the **RFM-TXE** device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The complete declaration can be downloaded from the official website www.bmeters.com.

Contact Info