Product description

The RFM-C3 gateway collects data sent by wireless and wired B Meters M-Bus devices (if connected to an MB-Master) and retransmits them via GPRS network or using the Ethernet/LAN/Wi-Fi network. Telegram reading can be scheduled with time and day slots. The collected data can be sent in .txt and/or .csv format hourly / daily / weekly / monthly via SMTP E-Mail or directly in an FTP / SFTP folder using the GPRS network or, alternatively, an Internet connection via the ETHERNET / LAN / Wi-Fi network. The device is configured using a PC connected via a network cable (RJ-45 connector) to the Ethernet port of the RFM-C3 concentrator.

Technical data

- > Operating temperature: -10°C to +55°C
- > Power supply: 4.5 5.5 VDC, 2.5A
- > Radio Interface: wM-Bus EN14757-4 @867/868/921MHz
- > GPRS Interface: QuadBand 850/900/1800/1900 MHz
- > Ethernet interface: 100 Mb/s
- > Configuration: via PC and integrated WEB Application
- > Internal memory: up to 1000 telegrams

- > Protection level: IP20
- > wM-Bus signal coverage: up to 300 meters*
- > Dimensions: gateway (h x w x d): 250 x 155 x 55 mm (with antennas), power supply (h x w x d): 105 x 85 x 55 mm
- Weight: gateway 270g (IP52), power supply 170g
- > Antenna Extension: 1m SMA-F/SMA-M
- * Under optimal propagation conditions

Package contents

> Gateway RFM-C3 > External AC/DC power supply > 2 x Antenna SMA > Antenna extension > Antenna extension Bracket > Installation guide

Installation

- > Connect the supplied power supply without connecting it to the mains, to do so, remove the four closing screws located at the vertices of the cover and gently lift it; Pass the two wires, marked + and -, through the grommet on the side of the USB ports. Connect the two wires to the power terminal block in front of the grommet, paying attention to polarity. If you are using data transmission via GPRS, insert the data SIM card into the SIM card slot and then close the cover.
- > On the top of the device connect the SMA antenna to the appropriate GPRS connector and extension antenna to wM-Bus connector. The installation of this extension should be carried out trying to extend the length of the cable as much as possible (1 meter) without creating sharp bends on the cable. The bracket included with the extension cord can be installed on a pole or wall.
- **Q** Note: if the pole is made of metal material, it is strongly recommended to use a rubber insulator between the pole and the bracket to avoid interference.
- > Installation is provided on the wall, by fixing with screws. It is recommended that the gateway be secured in an upright position and away from metal masses or any potential radio shielding and at a sufficient height to prevent easy tampering.
- > Once the connections are completed, it is possible to proceed to power the concentrator and proceed with commissioning.
- > For use with the MB-Master, connect the USB/RS232 serial converter provided in the MB-MASTER package to one of the USB sockets on the RFM-C3 concentrator.

Commissioning

> Check that the device's green LED lights up (boot mode). To configure the device, it is necessary to connect it to a PC via an RJ-45 ETHERNET cable and access the appropriate integrated web application. For complete setup instructions, please refer to the user manual. Once the setup process is finished, unplug the RJ-45 cable.

Safety Precautions

- > Handle the device with care, do not crush, do not expose to electrostatic charges that could irreparably damage the device, do not place near heat sources (such as radiators, air conditioners, convectors, etc.).
- > The device does not contain any hazardous material, in accordance with the European Directive 2011/65/EU (RoHS) as amended. At the end of the device's life cycle, it is necessary to dispose of the product as specified in the WEEE Directive for EU countries, or in any case always in compliance with local laws and regulations. Do not burn, do not subject to high temperatures.
- > The RFM-C3 operates reliably under the environmental conditions specified in this manual. Any unauthorized intervention and/or changes in use and operation may cause malfunctions or damage to the product.

Declaration of Conformity

Hereby, B METERS declares that this RFM-C3 is in compliance with the essential requirements and other relevant provisions set forth in Directive 2014/53/EU. The full statement can be downloaded from the official website <u>www.bmeters.com</u>.

Product Support & Warranty

For technical assistance, please contact your supplier or the B METERS after-sales service ticket@bmeters.com.



For a detailed guide and more information please refer to the product's user manual .



For the product warranty and further safety precautions refer to the general terms and conditions available on our website.