- load file with meter serial numbers and AES-128 keys (if meters are encrypted)

  or

- start read/search immediately for meters, without loading them from a file

Meters can only be read once or continously - it depends on the user. After all meters are read, there are two main things that can be done with the data:

- Data can be exported in CSV file. User can create custom templates how the data will be exported;

- Data can be also saved in a local, simple database. It is structure based, but later user can make reports and review older readings (and export them again)

For more information please refer to WMR-IoT Software manual or contact with us.

4. Warranty

The warranty of the device is limited to 2 years from the date of sale. If the device shows any defect or malfunctions during that period, the manufacturer is obligated to repair the device in its own service for manufacturer's expense, or, if the repair is impossible, to replace the device with new one. The transportation costs to the manufacturer's service are due to the client. The warranty voids if this manual' instructions are not met, warranty seals are removed or the device was opened by unauthorized by the manufacturer personnel.

Serial number:..... Date of sale:.....

Signature:.....

5. The package contains

- WMR-IoT - 1 pc.
- 868MHz RF antenna
- Instruction manual - 1 pc.

6. Manufacturer

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Wireless m-bus receiver **WMR-IoT** **WM-BUS Series**

Instruction manual

WMR-IoT is a wireless m-bus master or repeater, intended to collect data from various devices, working in modes T or S according to wireless m-bus standard (EN13757-4). WRM-IoT have the following main features and characteristics:

- USB interface for communicating with external device (computer, communication device/controller, etc.)
- power supply from USB port or adapter(5V/100mA)
- quarter-wave antenna with center frequency 868MHz

1. General technical data

RF band	– 868 - 870 MHz, 12 channels
Wireless m-bus modes	- **T1**, T2, S1, S2, T1+C, T2+C, R
interface	- USB 1.1/2.0/3.0 (FTDI drivers, virtual COM port)
Serial port speed	- 19200bps, No parity
power supply	– 5 Vdc/100mA
max. power consumption @ 12Vdc	– < 0.2W
ambient temperature, operating	– -20÷+50 °C
ambient temperature, storage	– -50÷+85 °C
air humidity, operating & storage	– 40÷90 %
dimensions (L/W/H)	– 50/25/15 mm (without antenna)
protection class	- IP20
weight	– 25 g

2. WMR-IoT operation

WMR-IoT starts work immediately after plugged in USB port or other power supply is turned on. Device has embedded FTDI chip, so in order to work correctly user should install proper FTDI drivers. If drivers are installed correctly then user will see WMR-IoT in its Device Manager as serial port (USB-to-232). All other things are made by Gineers software, provided with each WMR-IoT device. Software is capable of chanign device wireless mode, see signal strength, decrypt encrypted meters (of course - if key is provided), export data, save in simple database and so on. This device can also be used as a repeater in some cases. This means that device can be set work permanently as wireless m-bus repeater, re-translating every signal in range. This usually means that device should be powered from other source than USB port. We provide two options:

- power adapter 220Vac/5Vdc, with USB connector
- Gineers adaptive board for WMR-IoT, input power supply 6-30V ac/Vdc, output 5Vdc/100mA

To start reading particular network of wireless devices two main steps that must be done:

- set WMR-IoT in desired wireless m-bus mode through software