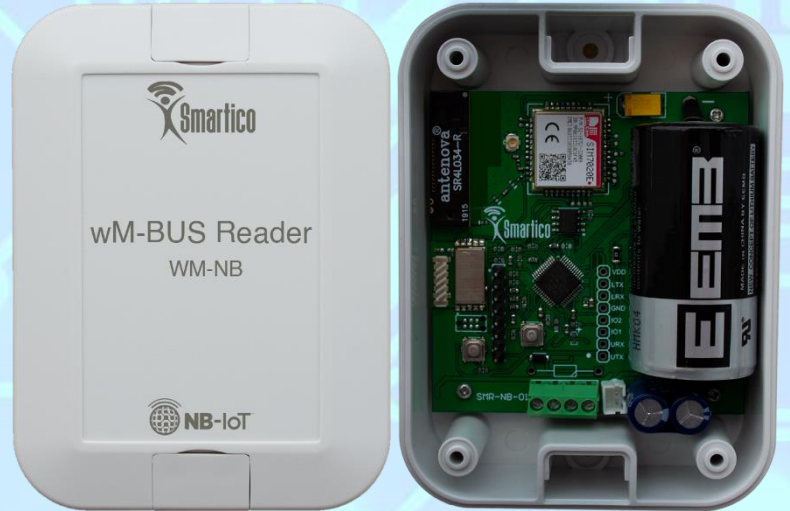


wM-Bus Reader NB-IoT

WIRELESS M-BUS READER FOR THE INTERNET OF THINGS

The device Wireless M-BUS Reader NB-IoT “Smartico WM-NB” is used in various fields of industry, utilities and automation for remote data collection from gas, water, electricity and heat meters with the help of the Wireless M-Bus protocol and data transmission via **Narrow Band** networks. The design of the sensor in a waterproof housing allows external use. The sensor's compact size allows installation in confined spaces, and special adapters provide reliable mounting to a pipe or a flat surface without opening the case.

| Specifications | |
|--|--------------------------|
| Compliance with LTE | Cat NB1 |
| Frequency Bands | B1, B3, B5, B8, B20, B28 |
| WM-Bus specification | EN13757-4 |
| Data encryption | AES-128 CTR |
| Number of flexibly configurable schedules | Up to 4 |
| Number of captured WMBUS packets per session | Up to 90 |
| Connection of external antenna | available |
| Magnetic sensor | Built-in |
| Accelerometer | Built-in |
| Ambient temperature, °C | -30 ...+75°C |
| Built-in battery | Li-SOCI2 Size C |
| Battery capacity, mAh | 6500 |
| Weight, g | 185 |
| Dimensions, WxDxH mm | 75x100x35 |
| Ingress protection | IP67 |



KEY FEATURES:

- Built-in non-volatile memory, archiving, built-in real-time clock.
- Flexible setting of schedules for listening to meters
- Option to filter packets by manufacturer, serial number or data length
- Monitoring and transmission of the following parameters:
 - the presence of an external magnetic field;
 - battery discharge;
 - monitoring the performance of internal sensors;
 - control of impacts and changes in position;
- Data transmission in mobile networks using NB-IoT technology (Cat NB1, Bands: B1, B3, B5, B8, B20, B28). Other bands on request.
- High-level secure protocols support (Binary or JSON, UDP / MQTT / MQTTS).
- Exclusion of the human factor when taking data measurements from metering devices.
- Available with external antennas (hardware option).
- Small dimensions, easy installation.
- Battery life is up to 15 years.

FIELDS OF APPLICATION:

- remote reading from metering devices (meters for water, electricity, gas, heat);
- control of the work process of technological equipment;
- building smart home and smart city systems;
- energy Management Solution;
- consumption metering in apartment buildings;
- supports meters of any vendors.



ADVANTAGES OF THE SYSTEM BASED ON NB-IoT:

- No need to deploy a network, using the resources of mobile operators;
- Sustainable communications in dense urban areas;
- Autonomy of the end devices (more than 5 years from the built-in batteries);
- Transmission of data arrays with confirmation, data integrity control;
- Using TCP / IP stacks for data transfer, including a secure DTLS connection;
- Ability to expand and change the functionality of devices due to update by air (OTA);
- Flexible custom reporting functionality and software analytics;
- Export data to any analytical and billing systems.

