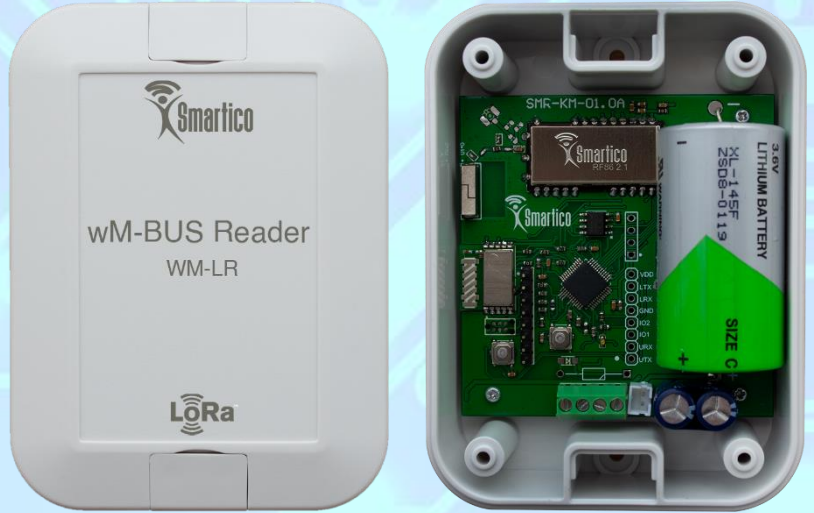


# wM-Bus Reader LoRaWAN

wM-BUS READER FOR THE INTERNET OF THINGS

The device wireless M-BUS reader LoRaWAN "Smartico WM-LR" 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 LoRaWAN networks. Additionally, the device has an input for wired connection to the digital interface of Kamstrup meters as a standard. This input can also be used to count pulses. 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 LoRaWAN	1.0.2 Class A
Frequency plan of LoRaWAN	EU868/US915
Power of transmitter, mW	25/100
Specification WM-Bus	EN13757-4
Amount of connected wireless meters	Up to 4
Archive of events and messages	8000
Connection of external antenna	available
Magnetic sensor	Built-in
Accelerometer	Built-in
Ambient temperature, °C	-30 ...+75
Built-in battery	Li-SOCl2 C
Battery capacity, mAh	9000
Weight, g	165
Dimensions, WxDxH mm	75x100x35
Ingress protection	IP67



## KEY FEATURES:

- Protection from external interference and the transmission of an alarm message to the server.
- Built-in non-volatile memory, archiving, built-in real-time clock.
- Monitoring and transmission of the additional parameters:
  - the presence of an external magnetic field;
  - battery discharge;
  - monitoring the performance of internal sensors;
  - control of impacts and changes in position;
  - control of meters presence.
- Working with several metering devices at the same time.
- Network search and detection of metering devices.
- Flexible configuration of a set of transmitted parameters from metering devices.
- Data transmission in the unlicensed frequency range.
- Exclusion of the human factor when taking data measurements from metering devices.
- Available with an external antenna.
- Small dimensions, easy installation.
- Battery life is more than 10 years.

## FIELDS OF APPLICATION:

- remote reading from metering devices (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;
- support of metering devices of well-known brands (Sensus, Kamstrup).



## ADVANTAGES OF THE SYSTEM BASED ON LoRaWAN:

- Unlimited network scaling;
- Long range communications (up to 15 km with direct visibility);
- Autonomy of the end devices (more than 10 years from the built-in batteries);
- Adaptive data transmission rate and power trim to save battery;
- Interference immunity (the possibility of demodulating a signal with a level of up to 20 dB below noise and interference);
- The use of an unlicensed frequency range that does not require additional costs;
- Two-level data encryption at the gateway and application level;
- The ability to expand and change functionality without significant investments;
- Flexible adjustable functionality reporting and software analytics;
- Export data to any analytical and billing systems.

