



OrionM2M

RADIO MODEM LoRaWAN

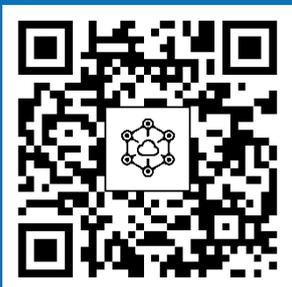
ORIONMETER

PURPOSE:

- Remote data collection in automated control systems, utilities, Smart City, Industrial IoT;
- Monitoring and controlling the status of connected various external devices or sensors in control systems, as well as industrial and household equipment;
- Wireless data transfer to the LoRaWAN network.



building
connected future



LoRa Alliance® Member

APPLICATION | ORIONMETER

Three independent discrete-pulse inputs of the radio modem are used to perform pulse counting of primary converters, such as water, gas, and electricity meters equipped with a pulse output. The radio modem allows you to poll the status of sensors with different types of closing contacts with the ability to instantly respond and send an extraordinary message to the network.

The radio modem uses the RS-485 interface port to poll and collect data from the primary converters. A range of supported proprietary devices from various manufacturers and a universal ModBus driver provide support for a wide range of compatible devices.

The presence of flexible system settings of the radio modem and remote configuration tools allows you to transmit data with current, archived and extraordinary messages with information about the event, guaranteed and without loss over the radio channel to the LoRaWAN network.

SPECIFICATION

Parameters	Value
Case material	Polycarbonate
Number of input discrete channels*	3
Number of RS-485 channels**	1
Working temperature, °C	-20...+60
Battery voltage, W	3,6
Rated battery capacity, mA * h	3650
Chemical composition of the battery	Li-SOCl2
Power supply for external digital interface, W, mA	9; 40
Service life without battery replacement, years	up 7
Performance of the radio modem with built-in power supply, AC 220V ***	Yes
Degree of enclosure protection	IP65
Weight, g	≤112
Overall dimensions, mm	120 x 50 x 30
Warranty period, months	36

FEATURES | ORIONMETER

-  Simplicity and convenience of installation due to the absence of screw connections of the housing, terminal blocks and activation of the radio modem by a magnet;
-  Detection and notification of magnetic influence during operation;
-  **EasyTool** technology allows you to perform secure wireless remote access to the radio modem for business needs: configuration, software updates, reading accumulated data;
-  The use of **BatteryCare®** technology allows you to increase the service life of the power supply;
-  A variant of the radio modem with AC power supply allows you to not depend on the battery capacity limit and to transmit data with a minimum period of sending packets during the entire service life of the device;
-  The radio modem archive allows you to accumulate and store data for up to 62 days of hourly profile with the ability to remotely request data for this period;
-  The ability to poll and read data from four similar external devices via the RS-485 interface, if necessary, with power supply to the device being polled.

RADIO

Parameters	Value
Operating frequency, MHz	EU863-870 US902-928 AU915-928 CN779-928 AS923 KR920-923 IN865-867 RU864-870 KZ865-868
Transmitter power (EIRP), mW	up 25
Receiver susceptibility, dBm	-137
Data transfer rate, kbit / sec	0,3...40
Communication distance in urban areas, km	up 5
Communication distance in line of sight, km	up 15