



OrionM2M

LoRaWAN RADIO MODEM

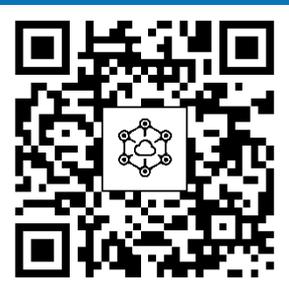
ORIONMETER LA-IP-I2C

Purpose:

- ❖ Remote monitoring and controlling of temperature and relative humidity in housing and communal services, Smart City, Industrial IoT, automated control systems, as well as industrial and household equipment;
- ❖ Wireless data transmission to the LoRaWAN network.



building
connected future



LoRa Alliance Member

ORIONMETER LA-IP-I2C/E



APPLICATION

The radio modem is designed to measure temperature and relative humidity with further transmission of current and accumulated data via radio communication to the LoRaWAN network.

| Main ones | |
|---|------------------------------|
| Temperature measurement range, °C | - 20° ... + 60° |
| Limits of permissible absolute measurement error, °C | ± 0,4 |
| Measurement range rel. humidity, % | 10 – 80 (no condensation) |
| Limits of permissible absolute measurement error, % | ± 4 |
| Radio modem activation | With a magnet |
| Data archiving, days | *62 |
| Power | |
| Built-in battery capacity, mAh | 3650 or **4100 |
| Built-in battery voltage, V | 3,6 |
| Battery chemistry | Li-SOCl2 |
| Service life without battery replacement, years | ≥ 7 |
| Warranty period of operation, months | 36 |
| Guaranteed number of packets sent by the device, at least pcs. | 40 000 |
| * - depends on the archiving interval | |
| ** - it is possible to install a battery of increased capacity 4100 mAh | |

ADVANTAGES

- ❖ Built-in and remote version of the sensor;
- ❖ The radio modem is activated in the network using a magnet;
- ❖ Detection and notification of deviations from the set parameters;
- ❖ **EasyTool** technology allows to perform wireless remotely connected to a radio modem for configuration, software updates, reading the accumulated data via a secure channel;
- ❖ The use of **BatteryCare®** technology allows operating the radio modem for up to 7 years without replacing the power source;
- ❖ The non-volatile memory of the radio modem allows to store data for up to 62 days of the hourly profile with the ability to remotely request readings.

| LoRaWAN | |
|--|---|
| LoRaWAN device class | A |
| Working frequency range, MHz | EU863-870 US902-928 AU915-928 CN779-928 AS923 KR920-923 IN865-867 RU864-870 KZ865-868 |
| LoRaWAN activation method | OTAA |
| LoRa Antenna Type | Internal |
| Receiver sensitivity, dBm | -137 |
| Transmitter power (EIRP), mW | up to 25 |
| Communication range in urban areas, km | up to 5 |
| Communication range in line of sight, km | up to 15 |

| Body | |
|--|-----------------------------|
| Body material | Polycarbonate |
| Dimensions of the radio modem case, mm | 150 x 50 x 30 |
| Weight, g | ≤ 90 |
| Degree of protection | IP43 |
| Mount | Pole braces, DIN rail, wall |