

LoRaWAN radio module for the different meter types with external sensors for connection

Part number: JOOBY OMNI RM LoRaWAN 4PI 200 EU



This radio module for different meter types allows suppliers and homeowner associations to quickly receive up-to-date data on consumed supplies. The module connects to metering devices and takes their readings with smart sensors. The data is then transmitted to the server via the LoRaWAN wireless

network, where it is converted into readings available to the supplier in the accounting system. The radio module is mounted on the wall near the meters and installed through a mobile application. The functionality of the device also allows for the notification of suppliers about attempts to interfere with the device's operation.



Remote collection of readings from all metering points



Installation in a matter of minutes, activation with an app



Pulse input connection monitoring



Service life of 5 to 15 years without battery replacement*



Remote configuration of data reporting intervals



Hourly, daily, monthly, and yearly usage logs



Collection of data from four devices simultaneously



Body IP rating: IP54



Warranty period: 5 years

*subject to the data reporting frequency and the amount of interference between the unit and the base station

Technical Specification

LoRaWAN device class	A
Cyclicality of data transmission	Configurable (standard once every 4 hours)
Remote change of data transmission frequency	+
Data storage period in non-volatile memory, (not less than/max) years	10/15
Capacity of events and alarms log, number of events	256
Battery status monitoring	+
Support ADR (Adaptive Data Rate)	+

General information

Case material	ABS plastic
Weight, g	~ 180
Overall dimensions, mm	140 x 70 x 50
Warranty period of operation, years	5

Operation

Working temperature, °C	-30...+85
IP rating	IP54
Battery life, years (data cycling once every 4 hours)	5-15

Radio transmission characteristics

Operating frequency, MHz	EU868
Communication protocol	LoRaWAN
Transmitter power, mW	< 25
Receiver sensitivity, dBm	< -138
Data transfer rate, bits/s	250 - 50 000
Communication range in urban areas, km	Up to 2
Communication range in line of sight conditions, km	Up to 10

Battery source

Battery voltage, V	3,6
Nominal capacity of the battery, AH	2,5

Pulse interface

Pulse inputs quantity	4
Min length/pause of pulse, ms	190/190
Max frequency of pulse, Hz	2,6
Pull-up voltage, from/to, V	3,6/4,8
Common conductor voltage polarity	“+”
Pull-up resistance, kOhm	10