

LoRaWAN radio module for various types of meters
types with external sensors for connection

Part number: JOOBY OMNI RM LoRaWAN 4PI 200 EU



A radio module for various types of meters that enables supplier and management companies to get timely and relevant information about the resources their customers use. The device connects to meters using smart sensors and records metering pulses. The defined number of pulses is then transmitted to the server

through the LoRaWAN wireless network and converted into indicators. These are then made available to the supplier in the metering system. The radio module is mounted on a flat surface (e. g. on a wall) close to the meters and installed using the mobile app.



Remote collection of readings
from all metering points



Set up in minutes, activate with a magnet,
install with the mobile app



Pulse input
connection monitoring



Average lifetime
without battery replacement
is 10 years (1 data transfer per day)*



Remote configuration
of data reporting intervals



Hourly, daily, monthly,
and yearly usage logs



Ability to take readings from
four meters simultaneously



Body IP rating: IP54



Warranty period 24 months

*Service life depends on the frequency of data transmission

Technical Specification

LoRaWAN device class	A
Cyclicity 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, months	24

Operation

Working temperature, °C	-30...+85
IP rating	IP54
Indicative operating life without battery replacement, years	10 (assuming one data transfer per day)*

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	30/30
Default pulse duration/pause, ms	100/100
Max frequency of pulse, Hz	16
Default pulse frequency, Hz	5
Pull-up voltage, from/to, V	3,6/4,8
Common conductor voltage polarity	“+”
Pull-up resistance, kOhm	10

*Service life depends on the frequency of data transmission