

JOOBY OMNI RM LoRaWAN 4PU 400 EU



Technical specification

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










Part number: Jooby OMNI RM LoRaWAN 4PU 400 EU



A pulse radio module enables utilities and management companies to receive up-to-date consumption data quickly. The device is connected to metering instruments via the appropriate sensor(s) and is activated automatically. Once activated, the radio module starts recording and transmitting counted pulses.

At the configured interval, information on the number of pulses is transmitted to the server over the LoRaWAN wireless network, where the data is converted into readings and becomes available in the metering system to the supplier.

The radio module is either installed on a flat surface near the metering instruments using a cable tie or fastened to a wall with self-tapping screws.

-  Remote collection of readings from all metering points
-  Ability to read readings from four meters simultaneously
-  Installation in just a few minutes (activation is done automatically when an external sensor is connected)
-  Average battery life without replacement — 10 years (1 data transfer per day)*
-  Remote configuration of data reporting intervals
-  Pulse input connection control
-  Hourly, daily, monthly, and yearly usage logs
-  Body IP rating: IP67 (optionally IP68)
-  Warranty period: 24 months

*Service life depends on data transfer frequency

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)	+

Radio transmission characteristics

LoRaWAN regional parameter channel plan/Frequency range, MHz	EU868 / 863 - 873
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

Operation

Working temperature, °C	-30...+85
IP rating	IP67
Estimated operating life without battery replacement, years	10 (based on one data transfer per day)*

General information

Case material	ABS plastic
Overall dimensions*, mm	140 x 70 x 50
Weight, g	~ 275**
Warranty period of operation, months	24

Battery source

Battery voltage, V	3.6
Nominal capacity of the battery, AH	1 x 8.5

Pulse interface

Number of pulse inputs	4
Minimum pulse duration/pause, ms	15/30
Default pulse duration/pause, ms	50/100
Maximum pulse frequency, Hz	20
Default pulse frequency, Hz	5
Tightening voltage from/to, V	3.3/3.6
Common wire voltage polarity	“_”
Pull-up resistance, kOhm	4.3

*Service life depends on data transfer frequency

**Maximum weight indicated