

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

Part number: JOOBY OMNI RM LoRaWAN 4PU 200 EU
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The Jooby OMNI RM radio module is compatible with various meter types, allowing utility suppliers and management companies to access real-time consumption data.

The device connects to the metering equipment using smart sensors and records the pulse counts. The system then transmits this data via the LoRaWAN wireless network to a server, where it is processed into metrics and made accessible to the provider through the admin panel.

Configured using a mobile app, the radio module is positioned on a flat surface, e.g., a wall, in the vicinity of the meter or meters.

The Jooby OMNI RM radio module is designed for compatibility with sensors featuring pulse output, as well as those using a “dry contact” or “open collector” interface. The module can accommodate sensors developed by Jooby, in addition to sensors from other manufacturers.

Using sensors from different manufacturers may require you to configure the radio module to ensure seamless compatibility.



Remote data collection from all meters



Can read from up to four meters simultaneously



Quick installation within minutes, activation via a magnet and configuration through the mobile app



Average lifetime without battery replacement: 10 years (assuming one data transfer per day)*



Setting the data transmission frequency remotely



Monitoring pulse input connections



Logging hourly, daily, monthly, and annual consumption



Housing with an IP54 protection rating



Warranty period: 24 months

*The service life depends on the data transmission frequency

Specification

LoRaWAN device class	A
Data transmission cyclicality	Configurable (default setting: once every 4 hours)
Remote change of the data transmission frequency	+
Data storage period in non-volatile memory (not less than / max), years	10/15
Event and alarm log capacity, number of events	256
Battery status monitoring	+
ADR (Adaptive Data Rate) support	+

General information

Enclosure material	ABS plastic
Overall dimensions, mm	140 x 70 x 50
Weight, g	
JOOBY OMNI RM LoRaWAN 4PU 200 EU	~ 180
JOOBY OMNI RM LoRaWAN 4PU 204 EU	~ 205
JOOBY OMNI RM LoRaWAN 4PU 205 EU	~ 240
Warranty operation period, months	24

Radio transmission specifications

Operating frequency, MHz	EU868
Connection protocol	LoRaWAN
Transmitter capacity, mW	< 25
Receiver sensitivity, dBm	< -138
Data transmission rate, bps	250 – 50,000
Communication range in urban areas, km	Up to 2
Communication range under line-of-sight conditions, km	Up to 10

Operating conditions

Operating temperature, °C	-30...+85
Enclosure protection level	IP54
Average lifetime without battery replacement, years	10 (assuming one data transfer per day)*

Power source

Battery voltage, V	3.6
Rated battery capacity, A-h	
JOOBY OMNI RM LoRaWAN 4PU 200 EU	1 x 2.5
JOOBY OMNI RM LoRaWAN 4PU 204 EU	1 x 8.5
JOOBY OMNI RM LoRaWAN 4PU 205 EU	2 x 8.5

*The service life depends on the data transmission frequency

Pulse interface

Number of pulse inputs	4
Minimum pulse duration/pause, ms	30/30
Default pulse duration/pause, ms	100/100
Maximum pulse frequency, Hz	16
Default pulse frequency, Hz	5
Pull-up voltage, from/to, V	3.3 / 3.6
Voltage polarity of the common wire	“ - ”
Pull-up resistance, kΩ	4.3
Resistance of the external sensor's open key, kΩ	1.0 max
Resistance of the external sensor's closed key, kΩ	10 min
Cable & sensor capacity	1,000 pF