JOOBY EPHIR RMS

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LoRaWAN-enabled radio module for Metrix gas meters

Part number:
JOOBY EPHIR RMS LoRaWAN GMME10 103 EU *
JOOBY EPHIR RMS LoRaWAN GMME10 104 EU **
JOOBY EPHIR RMS LoRaWAN GMME10 107 EU ***

This radio module for Metrix gas meters enables suppliers and management companies to receive accurate and up-to-date data on gas consumption. The device automatically collects meter readings and transmits the data to the server over a LoRaWAN wireless network at a preset interval. Once processed, the data becomes available to the supplier in its accounting system. Moreover, installing Jooby's Ephir RMS doesn't require removal of the meter. The radio module is activated via a mobile app. Backed by an intelligent sensor, the device collects meter readings and detects unauthorized activity, such as magnetic exposure or tampering attempts. Three models are available: Jooby Ephir RMS LoRaWAN GMME10 103 EU equipped with an internal antenna, Jooby Ephir RMS LoRaWAN GMME10 104 EU equipped with an external antenna (antenna cable 0.5 m long), and Jooby Ephir RMS LoRaWAN GMME10 107 EU equipped with an external antenna (antenna cable 3 m long).

- Remote collection of readings from all metering points
- Installation in a matter of minutes, activation with an app
- Warning about removal or magnetic tampering
- The service life of 5 to 15 years without battery replacement*

- Remote configuration of data reporting intervals
- Hourly, daily, monthly, and yearly usage logs
- Body IP rating: IP50
- Warranty period: 5 years

*depends on the data reporting frequency and the amount of interference between the unit and the base station

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	+
Notification of removal	+
Notification of exposure to magnetic field	+
Support ADR (Adaptive Data Rate)	+
Built-in antenna / external antenna gain	max 2.33 dBi / max 5 dBi

General information

Case material	ABS plastic
Overall dimensions, mm	102 x 56 x 37
Weight, g	~ 48
Warranty period of operation, years	5

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

Operation

Working temperature, °C	−30…+85
IP rating	IP50
Battery life, years (data cycling once every 4 hours)	5 - 15
Suitable gas meter model:	Metrix G1.6, Metrix G2.5, Metrix G4, Metrix G6, Metrix G10, Metrix G16
A complete list of meter models compatible with the radio module is available at wiki.jooby.eu	

Battery source

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

*   Radio module with an internal antenna
**   Radio module with an external antenna (antenna cable 0.5 m long)
***   Radio module with an external antenna (antenna cable 3 m long)