

# JOOBY EPHIR RMS

Technical specification

• • jooby

LoRaWAN-enabled radio module with sensors for Elster gas meters

Part number: JOOBY EPHIR RMS LoRaWAN GMEL10 111 EU



This radio module for Elster gas meters enables suppliers and management companies to receive accurate data on gas consumption as fast as possible. The device automatically collects meter readings and transmits the data to the server over a LoRaWAN wireless network at a preset interval. Once gathered, the data becomes

available in the supplier's system. The radio module is easily mounted onto the meter body and activated via the mobile app.

Backed by an intelligent sensor, the device collects meter readings and reacts to unauthorized activity, such as magnetic exposure or tampering attempts.

-  Remote collection of readings from all metering points
-  Installation in a matter of minutes, activation with an app
-  Warning about removal or magnetic tampering
-  Service life of 10 years without battery replacement\*

-  Remote configuration of data reporting intervals
-  Hourly, daily usage logs
-  Body IP rating: IP68
-  Warranty period: 24 months

\* 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 hourly consumption log, months                            | 6  |
| Capacity of daily consumption log, years                              | up to 2                                    |
| 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)                                      | +  |

## General information

|                                     |              |
|-------------------------------------|--------------|
| Case material                       | ABS plastic  |
| Overall dimensions, mm              | 81 x 90 x 28 |
| Weight, g                           | ~42          |
| Warranty period of operation, years | 2            |

## Battery source

|                                     |      |
|-------------------------------------|------|
| Battery voltage, V                  | 3.6  |
| Nominal capacity of the battery, AH | 3.65 |

## 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  | IP68  |
| Battery life (without replacement), years  | 10  |
| Suitable gas meter model   | Elster BK-G1.6, Elster BK-G2.5, Elster BK-G4,<br>Elster BK-G6, Elster BK-G10, Elster BK-G16,<br>Elster BK-G25 |
| *A complete list of meter models compatible with the radio module is available at <a href="http://wiki.jooby.eu">wiki.jooby.eu</a> |   |
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