

Radio Module-Sensor for Itron gas meter

Part number: Jooby EPHIR RMS NB-IoT 206 B20 GMIT10-0,4
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The Jooby sensor-equipped radio module for Samgas gas meters is a device that enables utility or management companies to obtain accurate gas consumption data.

JOOBY EPHIR RMS NB-IoT automatically reads the meter using an external sensor. The sensor detects each full rotation of the specified section of the gas meter's indexing mechanism and increments the pulse count by 1.

In accordance with the configured data transmission frequency, the radio module then sends the pulse count to the server over the NB-IoT wireless network using the MQTT protocol. The provider gains access to the data in its software.

The radio module is installed near the meter; the external antenna is connected to the radio module and attached to the meter housing using a built-in magnet (for Jooby EPHIR RMS NB-IoT 208 B20 GMIT10-0,4). The external sensor is mounted directly on the meter and secured appropriately.

The sensors are able to detect and notify the service provider about any attempts at unauthorized interference with the operation of the radio module.

After installation, the Jooby EPHIR RMS NB-IoT radio module is parameterized. This process only takes a few minutes and does not require removing the gas meter.



Remote data collection



Quick installation within minutes



Event and alarm logs



Warranty period 24 months



Ability to set the data transmission frequency remotely



Housing with an IP65 protection rating
Degree of sensor protection — IP68



Average service life without battery replacement —
10 years (1 data transmission per day)*

*Service life depends on the data transmission frequency

Specifications

Data transmission cyclicity	Customizable (by default — once every 24 hours)
Remote change of 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	512
Battery status monitoring	+
ADR (Adaptive Data Rate) support	-
Removal notification	+
Magnetic impact notification	+

Radio transmission characteristics

Communication protocol	LTE Cat NB1/2
Transmitter power, mW	< 209
LTE frequency band	B20: 832 — 862 MHz, 791 — 821 MHz
Downlink/Uplink data rate, kbps	26 / 66
Communication range in urban areas, km	Up to 1
Communication range in line of sight, km	Up to 10
External GNSS antenna gain, max dBi	2

Operation

Operating temperature, °C	-25...+85
Protection level of the housing / sensor	IP65 / IP68
Estimated service life without battery replacement, years	10 (assuming one data transmission per day)*

General information

Housing material	plastic
Overall dimensions of the radio module**, mm	105 x 55 x 79
Weight, g	up to 200
Warranty service life, months	24

Power source

Battery voltage, V	3.6
Rated battery capacity, A*h	8.5

*Service life depends on the data transmission frequency

**Excluding the external sensor