JOOBY EPHIR RMS NB-loT •• jooby

Technical specification

Radio module with sensor for Itron/Samgas/Elster gas meter

Part number: Jooby EPHIR RMS NB-IoT GMIT10 206 B20 Jooby EPHIR RMS NB-IoT GMSG10 206 B20 Jooby EPHIR RMS NB-IoT GMEL10 206 B20



Radio module with Jooby sensor for Itron/Samgas/ Elster gas meters. The device allows suppliers and utility management companies to receive accurate data on gas consumption.

The JOOBY EPHIR RMS NB-IoT automatically takes meter readings by capturing each full revolution of the dial, increasing the number of pulses by 1 with each revolution. Then, according to the data transmission frequency settings, the radio module sends information about the number of pulses to the server over the NB-IoT wireless network using the MQTT protocol. The data is accessed in the supplier's software. The radio module is installed on the meter and connected to it with intelligent external sensors that record the meter readings. The sensors can also detect attempts at unauthorized interference with the radio module and alert the service provider.

Once the EPHIR RMS NB-IoT radio module is installed, it is parameterized. This process only takes a few minutes and does not require removal of the gas meter.



*Service life depends on the data transmission frequency

Specifications

Data transmission cyclicality	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
Built-in antenna gain	max 5.6 dBi

Operation

Operating temperature, °C	-25+55
Protection level of the housing / sensor	IP54 / IP68
Estimated service life without battery replacement, years	10 (assuming one data transmission per day)*

General information

Housing material	plastic
Overall dimensions, mm	33 x 100 x 77
Weight, g (Itron/Samgas/Elster)	~170
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