RADIO SENSOR/ TECHNOLOGY

≋ JANZ

MyWATER

RADIO SENSOR FOR LPWA NETWORKS

MULTIPROTOCOL

LoRaWAN™   **M-Bus wireless ·))**   **NB-IoT**

A plug-and-play telemetry solution that allows two-way communication between the meter and the user/utility to contribute to smart water usage. The value of this insights leads to improved systems efficiences, lower operating costs and, ultimately, improved customer satisfaction.

IoT
INTERNET OF THINGS

LPWA Conectivity
Low Power Wide Area

Walk-By | Drive-By or Fixed Network

Up to 15 years lifetime

NFC
Near Field Communication

FOTA
Firmware Over the Air

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MYWATER offers:

✓ **FOTA (Firmware Over The Air)** - Ability of Firmware updates over the network. No need for field intervention

✓ **LoRa Technology: 96 daily readings** – carrying out an intelligent data management to minimize the number of messages sent.

✓ **wM-Bus Technology** – Messages every 15 secs by default. Configurable.

✓ **RTC (Real Time Clock)** – allows a permanent synchronization of the information to enable rigorous water balances.

✓ **Bi-directional communication** – allowing remote (re)parametrization.

✓ Ability for using the protocols **LoRaWAN** and **wM-Bus individually or simultaneously**.

✓ Radio sensor with **direct coupling** – for JANZ meters up to DN50.

✓ **Readings:** Buffer up to 1 (one) year.

✓ **Communication Interface: NFC (Near Field Communication)** for parametrization and data collection.

✓ **Temperature register**

✓ **Alarms**

FUNCTIONAL CARACTHERISTICS

Dimentions: 128 x 68 x 31 mm

Battery lifetime*: **Standard Profile:** Up to 15 years
Extreme Profile: Up to 8 years

Electric Power: Lithium battery - SOCI 3,6 V

Protection: IP68

Operating Temperature: -10º C to 55ºC

Recommended Warehousing Temperature: 10ºC to 30ºC

Communication technology: LoRaWAN and wM-Bus

Certificates: CE, RED 2014/53/EU, EMC 62311, ETSI 301489, EN 300220 and 62368, RoHS, WEE, LoRaWAN, OMS and NFC in conformity with ISO/IEC 15693.

*2 transmissions a day (LoRa) depending on the profile and external environmental conditions (coverage, temperature, etc)

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TECHNOLOGY

» **Innovation** – MYWATER brings a definitive separation between the reading points and the communication infrastructure. This innovative Telemetry solution developed by JANZ allows the integration of water meters in Smart City projects in an easy and efficient way.

» **Installation – Plug & Play** - easy retrofiting or new installations

» **Scalability** - tailored to the customer in density populated urban areas or rural areas. Featuring LPWA network coverage that allows for clear and accurate communication without the need of creating additional network infratructure.

TECHNICAL DATA

Model	LoRaWAN	wM-Bus
Frequency	868 MHz / 915 MHz	868 MHz
Modulation/Transmission Mode	Bi-direcional	T1/T2 e C1/C2
Protocol	LoRaWAN	Wireless M-Bus
Potency	14 dBm (25mW) @ 868 MHz 22 dBm (158 mW) @ 915 MHz	14 dBm (25 mW)
Message	51 Bytes	Std OMS 57 Bytes Long 151 Bytes
Security	Encryption AES 128 bits, Data Codification, Multichannel emission	

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ADVANCED FEATURES

Volume: Sends meter index, meter serial number, radio serial number, battery status, Deltas (LoRa Tech.), monthly reading (WM-Bus Tech.) on a predefined time schedule.

Datalogging: 1 (one) year of daily readings
1 (one) year of alarms history
1 (one) year of temperature recordings
96 daily deltas

Transmission: Data transmission time configurable

ALARMS

Leak: configurable

Reverse Flow: configurable

Under and Over Consumption: configurable

Blocked Meter: configurable

Magnetic Fraud

Mechanical Fraud

On demand Alarms- optional

Battery Status

Temperature out of Operational range

Occasional Hardware error

Permanent Hardware error

TRANSMISSION and MESSAGES

Standard Profile: 1 transmission each 12 hours

Extreme Profile: 1 transmission each 3 hours

Software Application: Unique interface to all IoT communication protocols

Lifetime: up to 15 years

OPTIONS

External Radio Sensor version – Can be attached to any meter of any brand or model if equipped with pulse output

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