ARROW^WAN 2

SEPARATE RADIO MODULE ARROW^WAN2

Separate wMBus and LoRaWAN™ radio module for the ISM 868 MHz band for water meters equipped with pulse sensor. Compatible with all Maddalena meters from DN 15 to DN 200.

Data communication protocol compliant with the OMS wMBus (EN 13757) and LoRaWAN™ standards.

The multiprotocol radio guarantees a high level of interoperability with a range of mobile and fixed reading systems, including third-party ones.

Battery powered, with a battery life of up to 15 years (depending on the type of configuration and the number of readings/transmissions).

Activation and configuration are carried out locally using the NFC interface and a dedicated Android app.

MAIN FEATURES

- ISM Band 868 MHz
- Communication protocol compliant with the OMS wMBus and LoRaWAN™ standards.
- wMBus protocol in T1, C1 communication mode
- LoRaWAN™ protocol with two-way communication
- Dual or single mode operation available
- Low-power pulse meter interface
- Omnidirectional internal antenna
- Three different installation options: wall-mounted, on vertical pipe, on horizontal pipe

TECHNICAL SPECIFICATIONS

Built-in radio interface	EN 13757 OMS - wM-Bus T1, C1 LoRaWAN^TM v. 1.03 class A - LoRa SF7-12, BW125-500, CR=4/5
Operation frequency band	863 to 870MHz
Reception sensitivity	Up to -136 dBm (maximum)
Transmission power	Up to 14 dBm (25 mW)
Transmission range	Up to 500 m with wM-Bus Up to 15 km with LoRaWAN
Configuration	Factory default or customer-specific, configurable
Data	Reading indexes (depending on configuration)
Alarms	Excess consumption, no consumption, reversed meter, return flow, leak, low battery, magnetic fraud, mechanical fraud
Operating temperature range	-10 °C to +55 °C
Protection rating	IP68
Meter interface	4 wire: earth, pulses, flow direction, fraud Types of meters supported: open drain transistor, reed switch or any other open/close switch Maximum pulse frequency: 12.5 Hz nominal Minimum pulse width: >40 ms nominal Cable length: 1.5 m nominal
User interfaces	NFC interface (installation and configuration procedure) Standard contactless interface: ISO 15693 (frequency: 13.56 MHz)

REGULATORY COMPLIANCE

EN 301 489-3 V2.1.1	EN 62479:2010
EN 301 489-1 V2.2.3	EN IEC 62368-1 :2020+A11 :2020+AC :2020
EN 300 220-1 V3.1.1	IEC 62368-1 :2018+COR1 :2020
EN 300 220-2 V3.2.1	EN 50581

Dimensions (mm)

maddalena®

METERING EXPERTISE