



ARROW^{WAN2} RADIO MODULE

wMBus and LoRaWAN™ radio module for the ISM 868 MHz band, featuring a built-in inductive pulse sensor.

Compatible with Maddalena meters in the MVM range from DN 15 to DN 40.

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 systems.

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

Direct installation on the meter, including anti-tampering seals. The totalizer and the information on the face are accessible after opening a protection lid.

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

KEY FEATURES

- 868 MHz band
- 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
- Built-in low-power bidirectional inductive sensor (meter interface)
- NFC interface for installation and configuration procedures (Android app)
- Omnidirectional internal antenna
- Total volume, leak detector and face information remain visible even with the radio module installed

SPECIFICATIONS

Built-in radio interface	EN 13757 OMS - wM-Bus T1, C1 LoRaWAN™ 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 distance	Up to 500 m with wM-Bus Up to 15 km with LoRaWAN
Setup	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	Bidirectional inductive sensor
User interfaces	NFC interface (installation and configuration procedure) Standard contactless interface: ISO 15693 (frequency: 13.56 MHz)
Battery duration	Up to 15 years (depending on set configuration)

REGULATORY COMPLIANCE

EN 301 489-3 V2.1.1

EN 301 489-1 V2.2.3

EN 300 220-1 V3.1.1

EN 300 220-2 V3.2.1

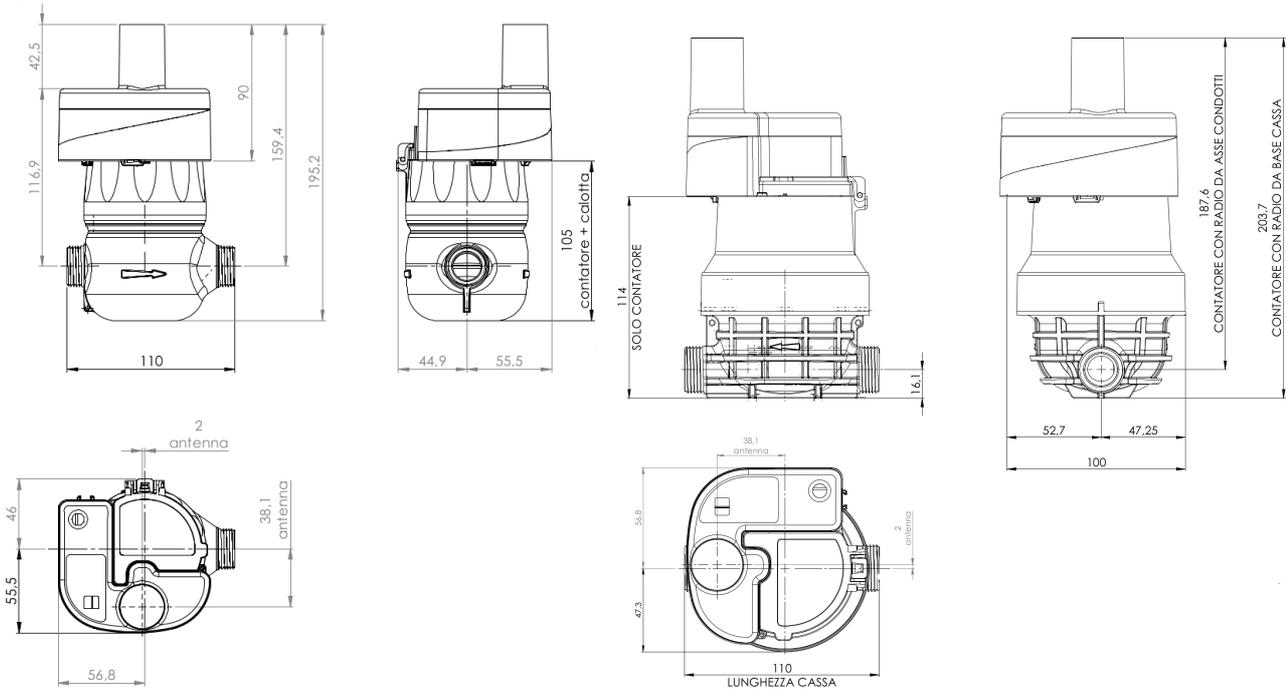
EN 62479:2010

EN IEC 62368-1 :2020+A11 :2020+AC :2020

IEC 62368-1 :2018+COR1 :2020

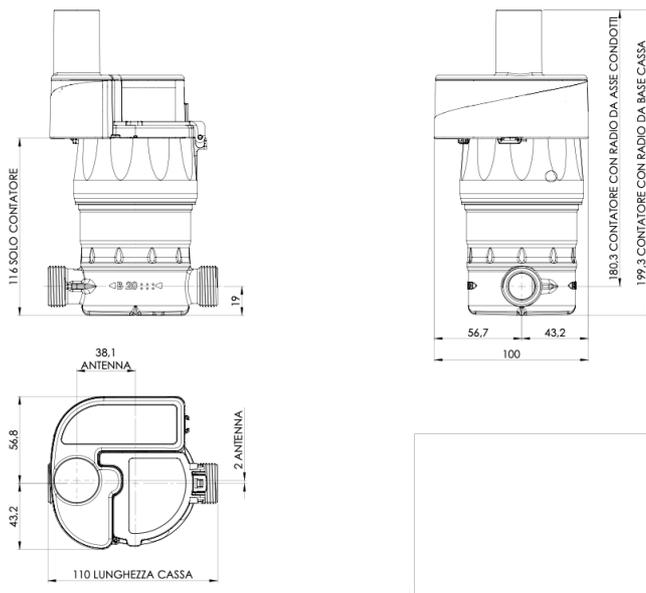
EN 50581

DIMENSIONS (mm)



Dimensions of module on MVM meter

Dimensions of module on MVM PLUS C meter



Dimensions of module on MVM PLUS meter

