





# **ARROW**<sup>WAN</sup> **MVM 169 MHz**

## WM-BUS ADD-ON RADIO MODULE

Bidirectional radio module operating in the 169 MHz band.

Compatible with Maddalena MVM and MVM PLUS C positive displacement meters in sizes from DN 15 to DN 40.

Wireless M-Bus communication protocol which can use the LoRa<sup>™</sup> modulation (optional).

It guarantees a long range transmission both in urban and suburban areas (depending on the environment).

Battery powered, service life up to 15 years (depending on configuration and number of readings/transmission frames).

Activation and set-up take place via the local NFC interface and relevant Android app.

#### **MAIN FEATURES**

- 169 MHz ISM band
- Bidirectional communication
- Communication via wireless M-Bus interface
- LoRa<sup>™</sup> modulation also available
- Built-in NFC interface for local set-up and activation (Android app)
- Built-in low power, inductive, bidirectional sensor (meter interface)
- Omnidirectional internal antenna
- Service life up to 15 years
- Protection rating IP68
- The volume totalized, the star wheel and the inscriptions remain visible when the radio module is mounted.

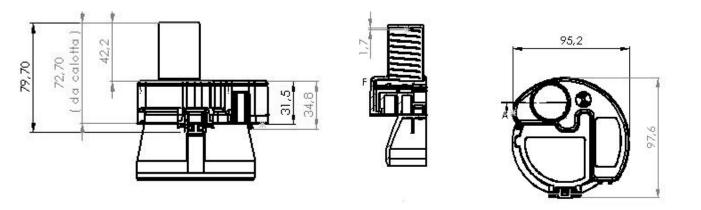
#### **TECHNICAL SPECIFICATIONS**

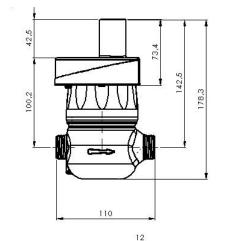
Built-in radio interface	Wireless M-Bus modulation with N2 mode (2400/4800 bps)
	Frequency range: 169.400 MHz to 169.475 MHz
Radio transmission modes	Bidirectional communication
Reception sensitivity	Up to -120 dBm
Transmit power	Up to 25 dBm
LoRa™ modulation	The LoRa™ modulation may be enabled to increase the communication range
	(up to -135 dBm)
Factory settings	1 reading per day and 4 transmission frames (readings of the 3 previous days)
Operating temperature range	-20 °C to +55 °C
Protection rating	IP68
Meter interface	Inductive, bidirectional
User interfaces	NFC interface (installation sequence and set-up)
	Contactless standard interface: ISO 15693 (frequency: 13.56 MHz)
Battery service life	Up to 15 years (depending on configuration)

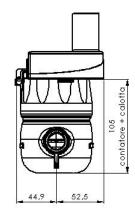
## **CONFORMITY TO STANDARDS**

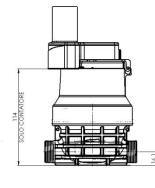
- ISO 4064-2
- EN 301 489-1
- EN 301 489-3
- EN 300 220-1
- EN 300 220-4
- EN 62311
- EN 50581

# **DIMENSIONS (mm)**



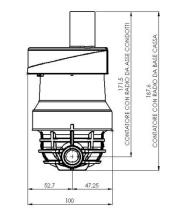


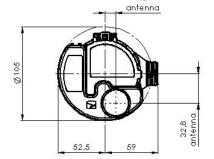




110 LUNGHEZZA CASSA

**MVM PLUS C water emter** 





MVM water meter



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