

## RadioEVO module 868 MHz, wireless M-Bus



Compact radio module with built-in bidirectional inductive sensor, designed for Maddalena CD SD PLUS EVO and VTZ water meters. RadioEVO is also compatible with other models or meters from other brands that are suitable for use with the Modularis system.

It is designed for reading remotely via radio the consumption data and alarms, ensuring ease and efficiency. It is ready for use and the factory settings enable both mobile (walk-by) and fixed (AMR) reading. The factory settings can be changed later via radio with the configuration kit (optional).

- Bidirectional inductive sensor
- Direct mount, no cables needed, automatic activation of data transmission via radio
- **868 MHz, with open data protocol wM-Bus (EN 13757), OMS**
- Data transmitted: current volume, volume on the billing dates, meter's serial number, alarms.
- **Mobile (walk-by) or fixed (AMR) reading**
- **Battery lifetime 11 years + 1, replaceable**
- Protection rating: IP67
- Compact size

### DESCRIPTION

Based on the inductive principle, which ensures insensitivity to magnetic interference fields, the module's internal sensor detects the revolutions of the meter's pointer, calculates the volume (both directions) and manages the alarms.

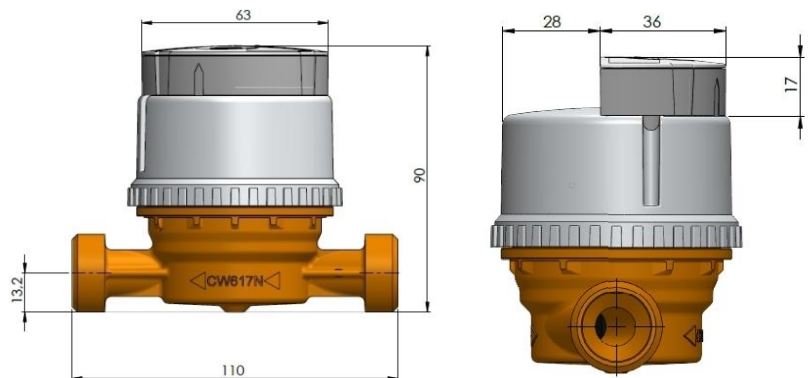
**The alarms managed are: overflow (threshold configurable, must be activated), backflow (threshold set, configurable), leak, meter blocked or non-used (days threshold set, configurable), magnetic and mechanical tampering (removal).**

RadioEVO complies with the wM-Bus data communication protocol regulated at European level by the Standard EN 13757. This ensures large interoperability between different reading systems from other brands available on the market.

### CD SD EVO PLUS with RadioEVO



### DIMENSIONS



### TECHNICAL SPECIFICATIONS

SENSOR		Inductive, dual spool (bidirectional)
COMPATIBLE METERS		Maddalena S.p.A.: CD SD PLUS EVO, VTZ Qundis GmbH: WFX30, WMx10 Wehrle GmbH: ETK-EAX, ETW-EAX, MTK-OZX, MTW-OZX Deltamess GmbH: Koax 2" Wasser-Geräte GmbH: Unimeter
SENSOR ACCURACY		1 litre
ALARMS		Tampering, magnetic fraud, backflow, suspected leak, meter blocked, maximum flow rate, meter inverted
CONFIGURATION		Via radio
POWER SUPPLY		Lithium-ion battery (replaceable), 11 years + 1 year storage
APPROVALS		CE in accordance with the European standards EMC: EN 61000-4-2, EN 61000-4-3, ETSI EN 301 489-1 v1.9.2, ETSI EN 301 489-3 v1.6.1, ETSI 300 220 ISO 4064 Ancillary device 6.3 (with CD SD PLUS EVO)
RADIO	STANDARD	Wireless M-Bus, OMS*
	MODES	T1*, C1
	FREQUENCY	868 Mhz
	TRANSMISSION DISTANCE	500 m in line of sight
	REFERENCE STANDARDS	EN 13757
	DATA TRANSMITTED	Short frame*: current volume, volume on the billing dates, meter's serial number, alarms Long frame: same as the short frame with the values of the previous 12 months
ENVIRONMENTAL CONDITIONS		Storage temperature: -20 °C ÷ +60 °C Operating temperature: -10 °C ÷ +55 °C
PROTECTION RATING		IP67

\*Factory settings

### DATA COLLECTION DEVICES AND SOFTWARE

Maddalena offers a full range of mobile (walk-by) and fixed (AMR) radio transceivers. They are both compatible with Maddalena water meters with wM-Bus interface and also with water meters from other brands compliant with the Standard EN 13757.

The main devices for mobile reading are described below.

#### ✓ **USB (868 MHz) RADIO TRANSCEIVER**

It allows reading via radio of wM-Bus devices and modification of the factory settings of RadioEVO.  
Low in price and easy to use.



#### ✓ **ARROW COLLECT (868 MHz)**

Powerful and fast wM-Bus radio receiver with built-in rechargeable battery, storage for data collection and Bluetooth communication interface.



#### ✓ **ARROW MOBILE**

Mobile reading software for OS Windows for use with Maddalena mobile radio receivers.  
Available for download at [www.maddalena.it](http://www.maddalena.it).