

RADIO MODULE WITH DUAL COMMUNICATION CHANNELS

COMPACT MODEL PSI-RLW LoraWAN / Lora e PSI-LO+WB LoraWAN / Wireless MBus OMS for meters IDRF-PI / DDRF-PI / IBRF-PI / DBRF-PI /ISRF-PI/ Super DRY

REMOTE MODEL MR-RLW RLW LoraWAN / Lora e MR-LO+WB LoraWAN / Wireless MBus OMS
For meters with inductive PSI, Reed, Open Collector, Hall etc. sensors, also from third-party manufacturers.

ARCHITECTURE OF TRANSMISSION

- Same radio module available in compact or remote design
- Dual transmission channel LoRaWAN (fixed network) LoRa walk-by/drive-by or LoRaWAN (fixed network) Wireless MBus/OMS (walk-by/drive-by) on the same module with switching via automatic switch.
- Low Power Wide Area Network (LPWAN) wireless technology
- Communication protocol specially designed to operate at low power while preserving the battery life of transmission sensors (over 10 years)
- Free OPEN protocol allowing no operator dependency with bi-directional and multicast communication to all devices
- Strong data security with multi-level encryption



BUILT-IN RADIO MODULE



SEPARATE RADIO MODULE

LoRaWAN and Lora protocol specifications

	LoRaWan Fixed Network	Walk-by/Drive-by LoRa
Network type	Freq. 868 Mhz prot. LoRaWAN	Freq. 868 Mhz prot. LoRa with proprietary protocol
Transmitted data	Sensor ID, hardware status, consumption data, battery level, alarms: battery low, reverse flow, mechanical fraud (removal, cable cut for separate model)	
Data frame customisation		
Edit configuration data	Possible from remote landline or radio terminal	Available via radio terminal
Flessibilità	Automatically switches between the 2 settings according to programming	
Activation	OTAA-ABP	/
Distance of transmission	Up to 14 km in optimal environmental conditions	Up to 1km in open field or 100 linear metres for manhole installation with cast iron manhole cover
Transmission range	1 single reading every day and 2 daily history transmissions	Configurable by day and time of week

Radio module specifications

Metering system	Inductive sensor
Battery life	10 years
Environmental operating conditions	-10 °C ... +55 °C
Radio transmission activation	Via instrument body actuator
Storage temperature	-20 °C ... +60 °C
Degree of protection	IP68 (outdoor installation)
Certification	CE, European Electromagnetic Compatibility Directive

Wireless data	
Network type	Freq. 868 Mhz W-MBus OMS certified
Transmitted data	Sensor data
Edit configuration data	Via radio terminal
Trasmitting distance	Up to 500mt in best working conditions

Wiring connections	
2 digital channels for 2 counters with Reed or Inductive or Hall cable	
2 analogue inputs for 2 sensors (e.g. temperature, level, pressure sensors)	
2 digital outputs for 1 or 2 actuators (e.g. 1 solenoid valve, 2 leds)	