

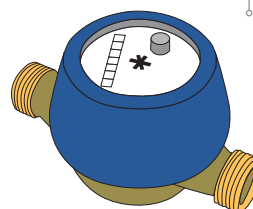
mod.

RFM-LR1

LoRaWAN Radio module
for pre-equipped single jet water meters



Compatible water meters



mod. GSD8-RFM

ENG

Description

RFM-LR1 has been designed to allow wireless remote reading in different types of applications in the residential sector. The radio module thanks to the presence of the optical target into the meter dial allows the reading of the volume consumption without any constraints of access to the site thanks to the Long Range LoRa radio technology and the compliance to the LoRaWAN standard can be intergated into multi-service networks.

- Consumption analysis with reverse flow compensation that provides an always perfect alignment between the counter and the counter clock.
- Fraud control (removal of the radio module, application of external magnetic field, reverse flow, identification of system loss). Magnetic tampering at the counter and removal are recorded and reported to the receiving system via radio transmission. The presence of reverse flow is recorded in an additional register that allows to calculate the amount of water passed in reverse. The loss function can be monitored at the time of reading or by the AMR system if a timely update is desired.
- IP68 protection* allows the use of the module also for meters installed in difficult environments.

Technical features

Radio interface	LoRaWAN @868 MHz ≤ 25 mW, Class A
Network joining methods	OTAA, on request ABP
Frequency of transmission	4 per day
Coverage	Up to 5 Km*
Compatible water meters	GSD8-RFM
Pulse output minimum value (K)	1 liter
Configuration	Via downlink commands from LoRa network
Energy supply	Non-replaceable lithium battery, maximum lifetime 10 years**
Protection class	IP68***
Weight	84 g
Size (l x p x h)	26 x 26 x 13 mm
Working Temperature	+1° ÷ +55°C
Transmitted data	Volume (consumption), total of backward flow, alarms
Alarms	Discharged battery, module removal, magnetic fraud attempt, backward flow, leakage detection

* In optimal signal transmission conditions

** The battery life strongly depends on the working time window, set during the configuration process, and on the environmental conditions

*** IP68: maximum 24 hours of continuous submersion at 1 m depth