mod.

RFM-LR1

V3.4

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.
• IP68 protection allows the useof 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	*max. 4 per day*
Coverage	*Up to 1 Km**
Compatible water meters	*GSD8-RFM*
Pulse output minimum value (K)	*1 liter*
Maximum reading error	*0,5%*
Configuration	*Via downlink from LoRa network*
Energy supply	*Non-replaceable lithium battery, maximum lifetime 10 years***
Protection class	*IP68****
Size (l x p x h) and weight	67 x 67 x 32 mm, 79,5 g
Working Temperature	*from 1°C to +55°C*
Transmitted data	*Volume (consumption), total of backward flow, alarms*
Allarms	*Discharged battery, module removal, magnetic fraud, 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*