IWM-TX3

Wireless M-BUS OMS module















ENG

Description

IWM-TX3 has been designed to allow wireless remote reading in different types of applications from the residential sector to the commercial and industrial sectors. The radio module thanks to the presence of the inductive target into the meter dial allows the reading of the volume consumption without any constraints of access to the site in walk-by mode or AMR (automatic meter reading), in respect of the WMBUS standard and complying with the OMS (Open metering system) specification.

- Consumption analysis with reverse flow compensation that provides an always perfect alignment between the totalizer and the meter.
- Fraud control (removal of the radio module, application of external magnetic field, reverse flow, identification of system loss). Magnetic tampering to the meter 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.
- NFC interface allows configuration and commissioning of the device with the use of a simple smartphone app.

Technical features	
Radio interface	W-Mbus EN13757-4 @868 MHz ≤ 25 mW, mode T1
Coverage	500 m*
Compatible water meters	GMDM-I, GMB-RP-I, GMB-I
Pulse output minimum value (K)	1 liter
Configuration	Via radio (with RFM-RX2 and software B Metering), NFC (with Android app)
Energy supply	Non-replaceable lithium battery, maximum lifetime 10 years**
Protection class	IP68***
Weight	124 g
Size (I x p x h)	88 x 75 x 60 mm
Working Temperature	+1°/+55°C
Transmitted data	Volume (consumption), total of backward flow, 12 monthly historical values, battery status, alarms
Alarms	Discharged battery, module removal, magnetic fraud attempt, backward flow, leakage detection
Module programming requirements	Android device (smartphone, tablet, etc.) with an NFC interface and the NFC IWM Config APP freely downloadable from GOOGLE PLAY

^{*} 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