ON'connect™ metering

PRODUCT SHEET

Wize Remote Pulse Transmitter

169 MHz Wize transmitter

The Wize Remote Pulse Transmitter manufactured by SUEZ Smart Solutions uses the LPWAN Wize Technology to communicate with the Wize fixed networks.

Since 2008, SUEZ has been loyal to the Wize technology, receiving the best performance rates on the market. Thanks to its in-house developed IoT expertise, SUEZ works directly with transmitter manufacturers to meet the high demands of remote water and energy metering.

Product description

The Wize-RT-Pulse is a 169 MHz VHF transmitter dedicated to perform all the operations related to smart metering, over the WIZE network.

The Wize-RT-Pulse has a local NFC interface allowing configuration, installation, maintenance and software upgrade of the integrated software. The integrated software allows to connect to different pulse emitters: 3or 4 wires, fraud or backflow detection.

The radio transmission is carried out through the WIZE long range fixed network remote reading system.

Components

- A radio transmitter with its antenna to communicate with the gateway
- 2 batteries for autonomous operation
- A radio interface (NFC) for local access (configuration, update, installation, test) compatible with smart meter communication tools;

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Installation

Local access to the WIZE Remote Pulse Transmitter is granted by a mobility device connected to an NFC coupler. This interface allows to configure and start the WIZE Remote Pulse Transmitter and to operate its maintenance on site. The communication through the NFC interface are secured and ciphered.

Wire Ended	Conf 1
Brown	Ground
White	Pulse
Green	Fraud
Yellow	Direction

Technical specifications

Functions

- Pulse acquisition
- Detection of maximum & minimum flow
- Low battery level notification
- Resynchronization of the clock and the radio frequency
- Freezing risk detection
- Backflow detection
- Sending of alerts and priority alarms
- Fraud detection (mechanical, magnetic, tearing)
- Mechanical damages detection

Radio communication

Protocol	Wireless M-Bus
Modulation	GFSK/4GFSK depending on configuration 169
European free frequency (by decree)	MHz
Transmission	6 channels
Band size	12,5 kHz
Bit rate	2400 bps, 4800 bps or 6400 bps depending on the configuration
Radiated power Data	< 27 dBm – typical 18 dBm at 25°C
quantity per day	1, 4, 24 or 96 index per day depending on the configuration

Main configurations

- Metering intervals :15min, 1h, 12h or 1d
- Redundancy factor : 0, 1 or 2
- Radio interface : Channel, modulation

Technical specifications

Alimentation	2 Lithium batteries
Storage and transport temperature	-25°C to +65°C
Operating temperature	-20°C to +55°C
Dimensions	diam 50 x 160 mm
Resistances	Water and dust (IP 68), UV, corrosion, freezing, magnetic fields, vibrations, shocks, overpressure, chemical attack
Lifetime	15 years in the nominal case (depending on the temperature conditions and the configuration)

Certifications

- RoHS : Limitation of noxious substances in electric and electronic devices
- REACH : Registering, evaluation, authorization and restriction of chemical substances
- RED 2014/53/UE: Hertzian devices, telecommunication terminals
- CEM : Electromagnetic compatibility