

# REMOTE WATER METER READER

## DATASHEET



## Table of Contents

Table of Contents.....	2
Document Release Information .....	3
1. Description.....	4
2. Technical Specification .....	4
3. Features:.....	4
4. Photos.....	5

## Document Release Information

Persons in Charge		Document Information	
Technical Approval	Petar Ivanov	Version	8.0
Authors	Pavel Glavchev, Georgi Boyanov, Petar Ivanov, Teodor Stanishev, Vasilena Dimitrova	Release Date	Jun 2020

## 1. Description

The Remote Water Meter Reader is designed to easily connect to standard pulse water meters or other 3<sup>rd</sup> party equipment and transmit data wirelessly and autonomously utilizing LoRaWAN network protocol.

The Remote Water Meter Reader is equipped with either 2 or 6 conductor cable with a standard length of 1 meter. A pair of two conductors are required to connect to a water meter with a pulse output. The connection is performed by connecting two conductors of the device's cable to two conductors of the water meter's cable.

## 2. Technical Specification

Parameter	Value
Inputs/Outputs	2 inputs and 2 outputs
Operating Temperature	-20 ~ +80°C
Built-in Sensors	Embedded temperature sensor for ambient temperature sensing (option for external temperature sensor is also available)
LoRaWAN Protocol Version	LoRaWAN 1.0.3
Supported LoRaWAN Regions	LoRaWAN AS923 LoRaWAN US915 LoRaWAN EU868
Power Supply	Industrial 3V Battery Pack (up to 90 000 messages and 5 years of autonomous work)
Protection Level	IP68
LoRa Module Certification	FCC
Dimensions	120 mm x 35 mm x 35 mm

## 3. Features:

- Pulse registration from standard pulse output water meters, regardless of vendor or pulse volume;
- Built-in temperature sensor for ambient temperature tracking and water freeze detection;
- Replaceable industrial battery pack ensuring long device life. Even non-experts (incl. end-users) can easily replace the industrial battery pack by opening the device's top panel, disconnecting the existing industrial battery pack, and connecting the replacement;
- Built-in separate antenna, ensuring long-distance connectivity and high energy-efficiency;
- Remote data reporting interval configuration and reconfiguration ability (water meter data is read constantly);
- 60-month average battery life, under a reporting interval of four data reports per day and a low spread factor;
- Easy and quick installation and connection to a pulse output water meter via specialized waterproof cable connectors;
- Self-destructive VOID warranty labels for demonstrating external interference or an attempt to violate the integrity of the device.

## 4. Photos



Figure 1. Remote Water Meter Reader Visualization



Figure 2. Specialized Waterproof Cable Connector for Connecting the Remote Water Meter Reader to the Pulse Output of the Water Meter



Figure 3. Replaceable Industrial Battery Pack