# REMOTE WATER METER READER

## DATASHEET

## Document Release Information

| Persons in Charge | | Document Information | |
|---|---|---|---|
| Technical Approval | Petar Ivanov | Version | 8.3 |
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# 1. Description

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

# 2. Technical Specification

| Parameter | Value |
|---|---|
| Hardware Version | 8.1 |
| Inputs/Outputs | 2 digital inputs and 2 digital outputs |
| Operating Temperature | -20 ~ +80°C |
| Built-in Sensors | Embedded temperature sensor for ambient temperature sensing |
| LoRaWAN Protocol Version | LoRaWAN 1.0.3 |
| Supported LoRaWAN Regions | LoRaWAN AS923 |
| | LoRaWAN EU868 |
| | LoRaWAN US915 |
| | LoRaWAN IN865 |
| Power Supply | Industrial battery pack, replaceable (10 years of autonomous work) |
| Protection Level | IP68, for indoor and outdoor mounting |
| LoRa Module Certification | FCC/CE |
| Dimensions | 120 mm x 35 mm x 35 mm |

*Table 1: Remote Water Meter Reader Specification*

# 3. Remote Water Meter Reader Options

| Product Number | Description |
|---|---|
| DWM8110AA | LoRaWAN AU923, 2 conductor cable, 5Y Battery Life |
| DWM8110BA | LoRaWAN AU923, 6 conductor cable, 5Y Battery Life |
| DWM8110CA | LoRaWAN AU923, 2 conductor cable, 10Y Battery Life |
| DWM8110DA | LoRaWAN AU923, 6 conductor cable, 10Y Battery Life |
| DWM8110EA | LoRaWAN AU923, 2 conductor cable, 10Y Battery Life, with connector |
| DWM8110FA | LoRaWAN AU923, 6 conductor cable, 10Y Battery Life, with connector |
| DWM8110AB | LoRaWAN EU868, 2 conductor cable, 5Y Battery Life |
| DWM8110BB | LoRaWAN EU868, 6 conductor cable, 5Y Battery Life |
| DWM8110CB | LoRaWAN EU868, 2 conductor cable, 10Y Battery Life |
| DWM8110DB | LoRaWAN EU868, 6 conductor cable, 10Y Battery Life |
| DWM8110EB | LoRaWAN EU868, 2 conductor cable, 10Y Battery Life, with connector |
| DWM8110FB | LoRaWAN EU868, 6 conductor cable, 10Y Battery Life, with connector |
| DWM8110AC | LoRaWAN US915, 2 conductor cable, 5Y Battery Life |
| DWM8110BC | LoRaWAN US915, 6 conductor cable, 5Y Battery Life |
| DWM8110CC | LoRaWAN US915, 2 conductor cable, 10Y Battery Life |
| DWM8110DC | LoRaWAN US915, 6 conductor cable, 10Y Battery Life |
| DWM8110EC | LoRaWAN US915, 2 conductor cable, 10Y Battery Life, with connector |
| DWM8110FC | LoRaWAN US915, 6 conductor cable, 10Y Battery Life, with connector |
| DWM8110AD | LoRaWAN IN865, 2 conductor cable, 5Y Battery Life |
| DWM8110BD | LoRaWAN IN865, 6 conductor cable, 5Y Battery Life |
| DWM8110CD | LoRaWAN IN865, 2 conductor cable, 10Y Battery Life |
| DWM8110DD | LoRaWAN IN865, 6 conductor cable, 10Y Battery Life |
| DWM8110ED | LoRaWAN IN865, 2 conductor cable, 10Y Battery Life, with connector |

| DWM8110FD | LoRaWAN IN865, 6 conductor cable, 10Y Battery Life, with connector |
| DWM8110AE | LoRaWAN AS923, 2 conductor cable, 5Y Battery Life |
| DWM8110BE | LoRaWAN AS923, 6 conductor cable, 5Y Battery Life |
| DWM8110CE | LoRaWAN AS923, 2 conductor cable, 10Y Battery Life |
| DWM8110DE | LoRaWAN AS923, 6 conductor cable, 10Y Battery Life |
| DWM8110EE | LoRaWAN AS923, 2 conductor cable, 10Y Battery Life, with connector |
| DWM8110FE | LoRaWAN AS923, 6 conductor cable, 10Y Battery Life, with connector |

*Table 2: Remote Water Meter Reader Options*

## 4. Features

- Pulse registration from standard pulse output water meters, regardless of vendor or pulse volume;
- Equipped with either 2 or 6 conductor detachable 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;
- Easy and quick installation and connection to a pulse output water meter via specialized waterproof cable connectors;
- Remotely configurable data reporting interval (water meter data is read constantly);
- Built-in temperature sensor for ambient temperature tracking and water freeze detection;
- Built-in separate internal helix antenna (not printed on the board) to provide long-distance connectivity and lower power consumption;
- Durable IP68 construction, for indoor and outdoor mounting;
- Replaceable industrial battery pack ensuring long device life. It can be replaced directly on the field by opening the device's top panel, disconnecting the existing industrial battery pack, and connecting the replacement. This feature enables the user to protect its investment while not limiting the reporting frequency;
- 10 years of battery life, under a reporting interval of eight data reports per day on SF7 and one data report per day on SF12;
- Self-destructive VOID warranty labels for demonstrating external interference or an attempt to violate the integrity of the device;
- Alarm message if connector is detached;
- Provides effortless multi-platform integration using standard protocols.

## 5. Pack Components



*Figure 1.  Remote Water Meter Reader, with connector*



*Figure 2.  Remote Water Meter Reader*



*Figure 3.  Specialized Waterproof Cable Connectors for Connecting the Remote Water Meter Reader to the Pulse Output of a Water Meter*



*Figure 4.  Replaceable Industrial Battery Pack*

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