

# Ultrasonic Water Meter UWM

SKU: UWM

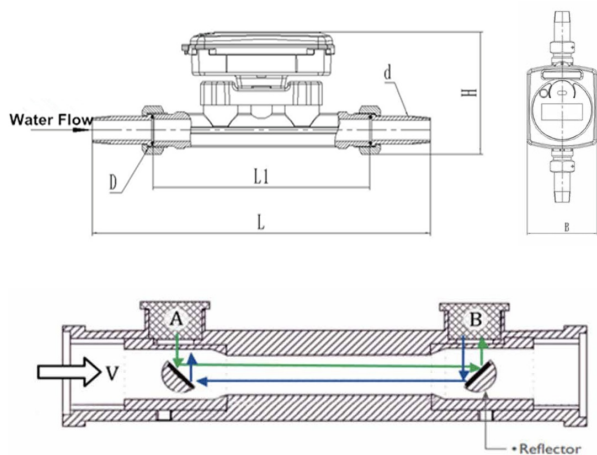
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## Introduction

UWM Ultrasonic water meter is a new type of water meter that detects the time difference caused by the change of velocity when the ultrasonic beam propagates in the opposite direction of the water, and analyzes and processes the flow rate of water to further calculate the flow of water..



## Dimension Drawings



## Features

- 1 No mechanical movable parts, impurities in water can't be affected, long service life.
- 1 Wide measurement range. Very small flow can be measured.
- 1 Various alarm functions: Battery voltage can alarm, empty tubes, or pipes that are not full of water, transducer fault alarm, and more.
- 1 Low-power design and the use of high-energy batteries can work for 8 years and more.
- 1 The communication interface is LoRaWAN or RS485 ModbusRTU.

## Dimensions

| Nominal Diameter | Length L | Length L1 | Width B | Height H1 | Connecting Thread |         |
|------------------|----------|-----------|---------|-----------|-------------------|---------|
|                  |          |           |         |           | d                 | D       |
|                  |          |           |         |           | mm                |         |
| 15               | 258      | 165       | 95      | 95        | R1/2B             | G3/4B   |
| 20               | 299      | 195       | 95      | 100       | R3/4              | G1B     |
| 25               | 345      | 225       | 95      | 108       | R1                | G1 1/4B |
| 32               | 305      | 180       | 95      | 120       | R1 1/4            | G1 1/2B |
| 40               | 330      | 200       | 95      | 125       | R1 1/2            | G2B     |

## Specification

| Item                              | Unit                   | Details |       |       |      |       |
|-----------------------------------|------------------------|---------|-------|-------|------|-------|
| Nominal diameter                  | mm                     | 15      | 20    | 25    | 32   | 40    |
| Q3/Q1                             | R200                   |         |       |       |      |       |
| Overload flow(Q4)                 | m³/h                   | 3.125   | 5     | 7.875 | 12.5 | 20    |
| Nominal flow(Q3)                  | m³/h                   | 2.5     | 4     | 6.3   | 10   | 16    |
| Transitional flow(Q2)             | m³/h                   | 0.02    | 0.032 | 0.05  | 0.08 | 0.128 |
| Minimum flow(Q1)                  | m³/h                   | 0.013   | 0.02  | 0.032 | 0.05 | 0.08  |
| Accuracy class                    | Class 2                |         |       |       |      |       |
| Battery life                      | 8years                 |         |       |       |      |       |
| Temperature class                 | T30/T50                |         |       |       |      |       |
| Pressure class                    | ≤0.063Mpa              |         |       |       |      |       |
| Pressure loss class               | ΔP63                   |         |       |       |      |       |
| Flow profile sensitivity class    | U10/D5                 |         |       |       |      |       |
| Environmental class               | Class B,M1             |         |       |       |      |       |
| Electromagnetic environment class | E1                     |         |       |       |      |       |
| Working pressure                  | 1.6Mpa                 |         |       |       |      |       |
| Max flow indication               | 999999.9m3             |         |       |       |      |       |
| Installation position             | Horizontal or Vertical |         |       |       |      |       |

## LoRaWAN Specification

|                        |  |
|------------------------|--|
| Data rate              | 250bps .. 5470bps  |
| Antenna                | Internal Antenna 2.67 dbi  |
| Battery                | 02 x AA size 1.5VDC, battery not included  |
| RF Frequency and Power | 860..930Mhz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915 |
| Protocol               | LoRaWAN class A  |
| Data sending modes     | interval time, alarm occurred and manually triggering by magnetic key                                |
| RF Module complies to  | ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)                    |
| Working temperature    | 1oC..+65oC   |
| Housing                | Polycarbonate plastic, IP68  |

## Ordering codes

| Item code   | Descriptions  |
|---|---|
| UWM-15-LRW-8-01   | Ultrasonic Water Meter DN15 with LoRaWAN connectivity, IP68, 860-870 Mhz for EU868, IN865, RU864        |
| UWM-15-LRW-9-01   | Ultrasonic Water Meter DN15 with LoRaWAN connectivity, IP68, 900-930 Mhz for KR920, AS923, AU915, US915 |
| <i>* Replace 15 by 20, 25, 32, 40 for different sizes</i> |   |

⚠ Link for full datasheet:

⚠ Link for manual:



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