WM-2100 Hot or Cold Water Meter

LoRaWAN Enabled 3/4” Single Jet Meter with Electronic Register

Features

- The WM-2100 series Hot or Cold water meter is compatible with H2O Degree LoRaWAN enabled wireless systems.
- Utility grade and sustainable technology (robust & high grade wear resistant materials with brass body): Excellent measuring stability and reliability over meter lifetime and awareness of using a recyclable product.
- NFC Tap and go: Simple commissioning process
- Plug & Play: Easy and fast activation in LoRaWAN (no programming required)
- Performance driven design: Range up to 10 miles (line of sight)
- Integrated monitoring of connectivity and reconnecting mechanism: Robust operation with automatic repair options, e.g. due to gateway failures Singlejet dry-dial meter with magnetic coupling
- Inlet strainer
- Horizontal or vertical installation
- Sealed register for tamper resistance
- Typical battery lifetime up to 10 years
- 18 monthly volume key date values
- NTEP Approval CC 19-019A2
- NSF/ANSI 61-G & 372 certified and marked
- Meets AWWA C712 accuracy standards in horizontal and vertical position
- LoRaWAN transmission in license free 915 MHz frequency band
- Data security via AES-128-bit end-to-end encryption over 2 independent security layers
- ADR (adaptive data rate) support gives higher transmission intervals with consistent battery life.

Overview

The H20 Degree WM-2100 is LoRaWAN enabled single-jet hot or cold water meter and works with the H2O Degree wireless systems. The WM-2100 water meter is designed with an electronic register for multi-family residential and retail/commercial facilities.

Ordering Information

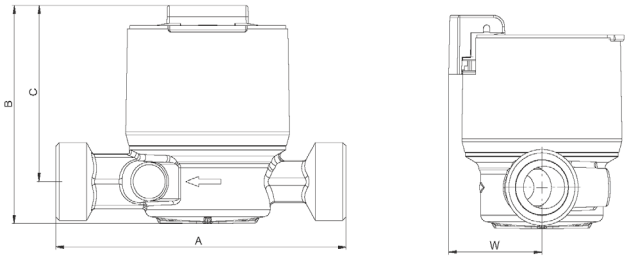
Model	Description
WM2105C	Single jet 3/4” cold water meter with fully integrated LoRaWAN Radio, 5 inch lay length, with couplings
WM2105H	Single jet 3/4” hot water meter with fully integrated LoRaWAN Radio, 5 inch lay length , with couplings
WM2107C	Single jet 3/4” cold water meter with fully integrated LoRaWAN radio, 7.5 inch, with couplings
WM2107H	Single jet 3/4”Hot water meter with fully integrated LoRaWAN radio. 7.5 inch with couplings

Technical Data
- Nominal pipe size: ¾"
- Max. operating pressure: psi 230
- Connection thread on meter: Inch 1" NPSM
- Permanent flow rate gpm: 11
- Max. flow rate gpm: 22
- Min. flow rate gpm: 0.5
- Max. operating temperature °F: 194

Ambient conditions
- Ambient temperature + 41 °F to + 131 °F
- Transport & Storage temperature -4 °F to + 158 °F
- Register protection class IP67

Power supply
- Lithium/Mangan battery (not replaceable) 3 V DC
- Typical battery lifetime (depending on environment and configuration conditions)
- Up to 10 years

Dimensions and Weights
- Length without couplings A Inch 5.12"
- Height B Inch 3.7"
- Height from pipe centre line C Inch 3.0"
- Installation depth from pipe centre line W Inch 1.7"
- Weight without couplings lbs 1.5



Approval
- NTEP cold/hot No. CC 19-019A2
- New York Certificate No. 10766
- FCC ID: 2A4F7-ERH

Certifications
- NSF/ANSI 61-G & 372 D-Hot / incl. cold
- LoRa Alliance Certification (1.0.4 spec.)

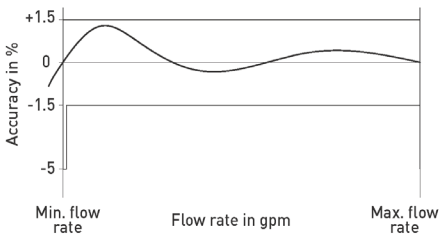
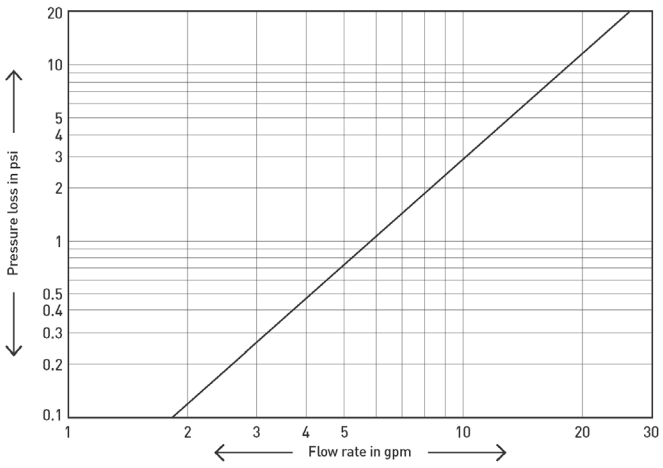
Display
- Volume unit GAL or ft3
- LCD 9 digits
- Volume resolution 0.01 GAL or 0.001 ft3
- Flow rate unit GAL/min or ft3/h
- Test bench mode T
- Low battery Icon
- Alarm Icon

Radio indicator (On/Off) and LoRaWAN connectivity status

LoRaWAN specifications
- Regional parameters (Frequency band) US902-928 MHz ISM Band (902 - 928 MHz)
- Transfer protocol (payload) GWF specific
- Radiated power max. 20 dBm (100 mW)
- Class A
- ADR (Adaptive data rate) Yes
- Activation type OTAA

Information data package
- DevEUI 70B3D538700000AB
- Medium Water
- Meter S/N 23132356
- Absolute meter reading (down to 15 min values) 359.76 GAL
- Remaining battery life Semester
- Alarms Meter alarms, Low Battery,Burst pipe, Potential leak, Backflow, No Usage, Max. flow rate exceeded, Min./Max. temperature

Accuracy chart



Pressure loss chart