

Features

- The H2O Degree M54122 water meter is a line powered device that communicates wirelessly on a 2.4 GHz network.
 - The device provides a radio interface to remotely monitor and collect water consumption data from a flow sensor.
 - The device collects and records five registers:
 - Gallons
 - Number of events (event is defined as each time water starts and then stops flowing)
 - Water temperature
 - Heat units (calculated as Therms)
 - Time water was flowing in minutes
- All of the registers except temperature are cumulative or ever increasing registers. Even if the radio cannot transmit data, the water meter continues to record data.
- Meter is compatible with the H2O Degree secure wireless 2.4 GHz mesh network. The meter simultaneously acts as a mesh transceiver for the wireless network, enhancing the mesh network.
 - By using a magnet, the installer can force a radio transmission and receive a LED sequence feedback on radio connectivity in real-time for ease and validation of commissioning.
 - Type of packet data reported:
 - Data Packet Consumption (60 minute interval default.)
 - Health Packet (120 minute interval default.)
 - Non-volatile memory maintains last reading in the event of a power failure.
 - Accuracy +/- 1.5 percent. (Meets AWWA C708 Standards).
 - Operating Temperature 0 to 150 Degrees F.
 - Flow 0.26-7.9 gpm.
 - Approvals:
 - NSF-61-G Certified
 - Meets AWWA C708 Standards
 - MA Board of Plumbers Approved Cert. # P1-0918-94
 - US Complies with FCC CFR Part 15
 - European RADIO EN 300 328:v1.7.1
 - European EMC EN 301 489-17:V2.1.1
 - European SAFETY EN 60950-1:2005 (Ed. 2.0)
 - WRAS Approved
 - NSF 372-2011
 - Certification standard ASME A112.4.7-2002
 - Five year warranty.



Overview

The H2O Degree M54122 wireless water meter monitors and records water consumption for tenant billing and leak detection principally in the multi-family housing industry.

The meter can be used for either new or retrofit projects and is used for POE (Point-Of-Entry) installation.

Point-Of-Entry (POE) - water enters each apartment at one location. Typically there is a shut off valve or two (hot and cold) at that location.

Point-Of-Entry Applications:

- POE 3/4" Shark Bite (PL1000-SB-06)
- POE 3/4" ProPress (PL1000-PX-06)
- POE 3/4" Uponor (PL1000-UP-06)
- POE 3/4" CPVC (PL1000-CPVC-06)

Ordering Information

Model	Description	Model	Description
M54122	Line Powered Water Meter - Point-of-Entry (8 gpm) (requires a hose & flow sensor)	PL1000-SB-06	Point-Of-Entry braided hose assembly (3/4") & flow sensor
PS1003	120 VAC to 4.5 VDC Wall Plug 1 Amp power supply	PL1000-PX-06	Point-Of-Entry PEX 3/4" hose assembly with 6" inlet hose & flow sensor
PS1006	24 VAC to 4.0 VDC Slip-In 250 mA power supply	PL1000-UP-06	Point-Of-Entry Uponor 3/4" hose assembly
PS1008-05	120-240 VAC to 4.5 - 5 VDC power supply	PL1000-CPVC-06	Point-Of-Entry CPVC 3/4" hose assembly & flow sensor

Technical Specifications

Electrical

- Voltage Input 4.5 volts DC
- Current Input 250 mA

Regulatory approvals

- US Complies with FCC CFR Part 15
- European RADIO EN 300 328:v1.7.1
- European EMC EN 301 489-17:V2.1.1
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Radio

- 20 dBm output power
- High sensitivity -106 dBm
- 16 channels (802.15.4 Channel 11 to 26)
- Data rate 250 kilo bytes per second
- 2.4 GHz ISM band

Environmental

- Operating temperature 0 to 70 degree C
- Storage temperature -25 to 80 degrees C

Measurement

- WRAS approved
- NSF/ANSI-61G/NSF 372-2011
- Flow 0.26 – 7.9 gpm
- Accuracy +/- 1.5 percent
- Certification standard ASME A112.4.7-2002

Physical

- (H x W x D) 3.375x 3.500 x 1.563 inch
- Color natural
- Weight / shipping weight < 10 oz. / 1 lbs. Shipping restrictions

Warranty

- Five Years

Point of Entry Installation



Plumbing Connections

- Inlet ¾ inch NPSM
- National Pipe Straight Mechanical
- Outlet ½ inch NPT
- National Pipe Thread taper

Leak Detection Reports

