



# M54122 Water Meter Line Powered

## 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 (POE) Applications

- POE 3/4" Copper or PEX (PL1000)
- 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)

## 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)
  - Time water was flowing in minutes
  - Water temperature
  - Heat units (calculated as Therms)
 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.
- Radio 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.
- Five year warranty.



## Ordering Information

Model	Description
M54122	Water Meter (Requires a Hose & Flow Sensor)
PS1003	120 VAC to 4.5 volt DC Power Supply
PS1006	24 VAC to 4.5 volt DC Power Supply
PS1008	240 VAC to 4.5 volt DC Power Supply

## Model Description

PL1000-SB-06	Point of Entry Braided Hose Assembly (3/4") & Flow Sensor
PL1000-PX-06	Point of Entry PEX 3/4" hose assembly w/ 6" inlet hose and flow sensor
PL1000-UP-06	Point of Entry Uponor 3/4" hose assembly
PL1000-CPVC-06	Point of Entry CPVC 3/4" hose assembly & flow sensor

3/2017

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**(215) 788-8485**  
**info@h2odegree.com**



# M54122 Water Meter

## Line Powered

## Technical Specifications

### Technical Specifications

#### Electrical

Voltage input 4.5 volts DC  
Current input 250 milli amps

#### 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  
European SAFETY EN 60950-1:2005 (Ed. 2.0)

#### 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

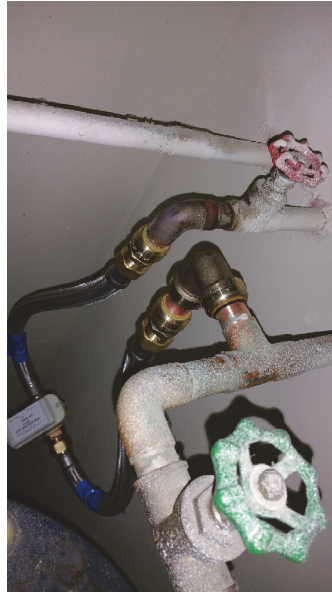
#### Physical

(H x W x D) 3.375x 3.500 x 1.650 inch  
Color natural  
Weight / shipping weight <0.5 lbs.

#### Warranty

Five Years

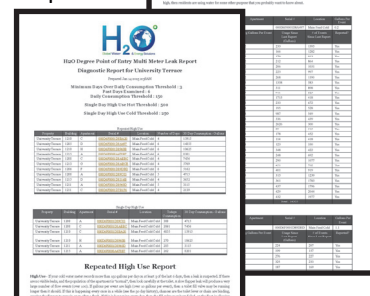
### Point of Entry Installation



#### Plumbing Connections

Inlet 3/4 inch NPSM  
National Pipe Straight  
Mechanical  
Outlet 1/2 inch NPT  
National Pipe Thread taper

### Leak Detection Reports



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