



M54120 Water Meter

Battery Powered

Overview

The H2O Degree M54120 wireless water meter monitors and records water consumption for tenant billing and leak detections principally in the multi-family housing industry.

The meter not only monitors usage in gallons, it also records the number of events, (such as every time a toilet flushes), duration of events in gallons and time along with temperature. This provides highly accurate leak detection for the entire apartment down to individual appliances such as toilets and showers. H2O Degree can provide a daily automated leak detection report to its clients.

Point of Entry-(POE)-water enters each apartment at one location. Typically before the hot water heater in the utility closet. One meter per apartment.

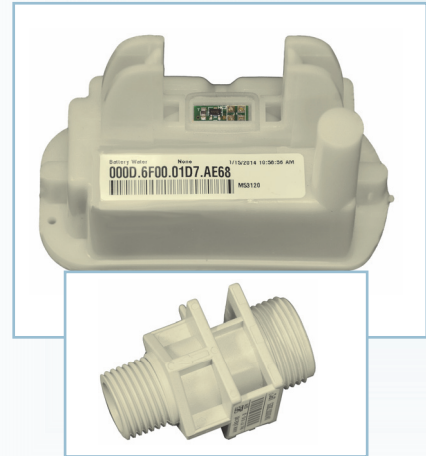
Point of Use-(POU)-riser pipe configuration, multiple points entering the apartment, feeding each toilet, sink, shower, etc. Multiple meters per apartment.

Applications

- Main Feed Hot or Cold Water
- Toilets Clothes Washer
- Shower
- Sink w or w/o dishwasher

Features

- The H2O Degree M54120 water meter is a battery 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.
- 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 (960 minute interval default.)
- Non-volatile memory maintains last reading in the event of a power failure.
- Five year warranty.



Ordering Information

Model Description

M54120 Water Meter (Requires a Hose & Flow Sensor)

Model Description

PL1000-SB-06 Point of Entry Braided Hose Assembly (3/4") & Flow Sensor
 PL1002 Toilet Supply Hose & Flow Sensor (12 inch)
 PL1003 Sink Supply Hose & Flow Sensor
 PL1004 Shower Hose Assembly & Flow Sensor
 PL1007 Tub & Shower Braided Supply Line Hose (1/2") & Flow Sensor

3/2017

H2O Degree

3580 Progress Drive, Suite L
 Bensalem, PA 19020

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



M54120 Water Meter

Battery Powered

Technical Specifications

Technical Specifications

Electrical

DC lithium battery, minimum 5 year life
(19,000 milli-amp hours)

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

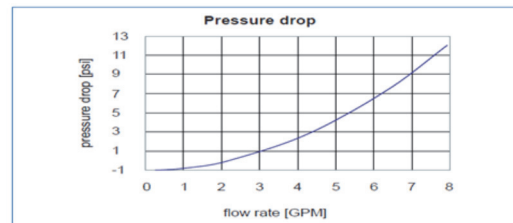
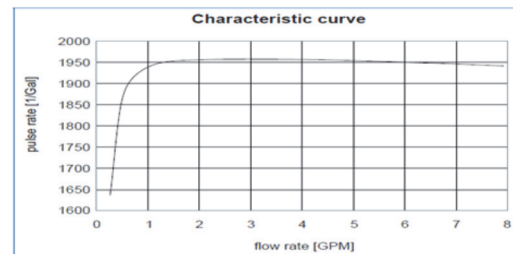
(H x W x D) 3.375x 3.500 x 1.563 inch
Color natural
Weight / shipping weight < 10 oz. / 1 lbs. Shipping restrictions

Warranty

Five Years

Technical Specifications

Flow Range	0.26 ... 7.9 gpm
Accuracy	+/-1%
Nominal pressure	145 psi
Max temperature	158 degree F
	Temporary 203 degree F
Plumbing connection	Inlet ¼ inch NPSM National Pipe Straight Mechanical Outlet ½ inch NPT National Pipe Thread taper
Pick off	Hall effect sensor
Output signal	Square wave frequency signal
Duty cycle	1:1
K-factor	1950 pulses per gallon



Ordering Information

Model Description

M54120 Water Meter (Requires a Hose & Flow Sensor)

Model Description

PL1000-SB-06 Point of Entry Braided Hose Assembly (3/4") & Flow Sensor
PL1002 Toilet Supply Hose & Flow Sensor (12 inch)
PL1003 Sink Supply Hose & Flow Sensor
PL1004 Shower Hose Assembly & Flow Sensor
PL1007 Tub & Shower Braided Supply Line Hose (1/2") & Flow Sensor

3/2017

H2O Degree

3580 Progress Drive, Suite L
Bensalem, PA 19020

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