



L54120+ Battery Powered Water Meter

Features

- The H2O Degree L54120+ water meter is a battery powered device that communicates over a LoRaWAN secure wireless 915 Mhz network.
 - LoRaWAN radio infrastructure provides the longest range in the industry for communication distances, eliminating the need for repeaters, all over a secure open protocol network.
 - The device collects and records six registers:
 - Gallons
 - Time water was flowing in minutes
 - Water temperature (once/day)
 - Battery Voltage
 - Number of events (event is defined as each time water starts and then stops flowing)
- 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.
- 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/validation of commissioning.
 - Type of packet data reported: Data Packet Consumption (60 minute interval default).
 - Non-volatile memory maintains last reading in the event of a power failure.
 - The battery has a five year warranty and can be replaced by the property's maintenance staff.
 - 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
 - NSF 372-2011
 - Certification standard ASME A112.4.7-2002
 - Five year warranty.



Overview

The H2O Degree L54120+ LoRaWAN compatible water meter monitors and records water consumption for tenant billing and leak detection 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 with or without dishwasher

Ordering Information

Model	Description
L54120+	LoRaWAN Enabled Battery Powered Water Meter - Point-of-Entry or Point-of-Use (8 gpm) (requires a hose & flow sensor)
PL1000-SB-06	Point-Of-Entry braided hose assembly (3/4") & flow sensor
PL1002	Toilet supply hose & flow sensor (12")
PL1003	Sink supply hose & flow sensor
PL1004	Shower hose assembly & flow sensor
PL1006	Washing machine hose assembly & flow sensor
PL1007	Tub & shower braided supply line hose (1/2") & flow sensor

Technical Specifications

Electrical

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

Regulatory approvals

- MA Board of Plumbing Approved

Environmental

- Operating temperature 0 to 150 degree F

Measurement

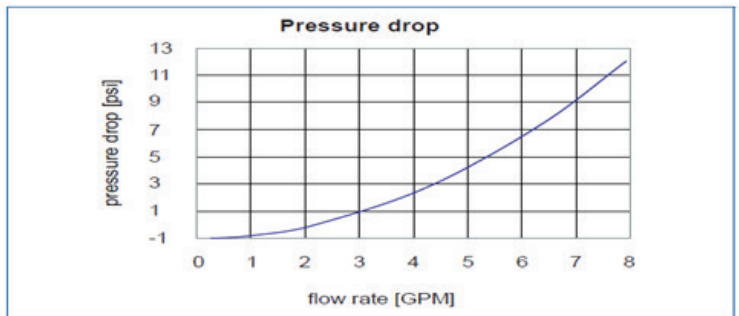
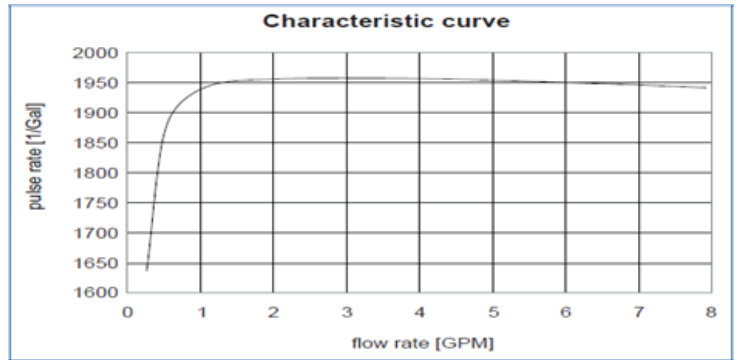
- WRAS approved
- NSF/ANSI-61G/NSF 372-2011
- Flow 0.26 – 7.9 gpm
- Accuracy +/- 1.5 percent

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



M54120+ Battery Powered Water Meter	
Flow Range	0.26 - 7.9 gpm
Accuracy	+/- 1%
Nominal Pressure	145 psi
Max Temperature	150 Degrees F Temporary 158 degrees F
Plumbing Connection	Inlet 3/4" NPSM National Pipe Straight Mechanical Outlet 1/2" NPT National Pipe Thread Taper
Pick Off	Hall Effect Sensor
Output Signal	Square Wave Frequency Signal
Duty Cycle	1:1
K-Factor	2063 Pulses Per Gallon