

Features

- The H2O Degree M54230 (without display) and M54232 (with display) is a battery powered wireless pulse counter that has two channels. The M54232 is equipped with an LCD display.
- Device provides a radio interface to remotely collect utility consumption from up to two (2) separate pulse meters (any combination of gas or water meters with dry contact.)
- Device can connect to new or retrofit meters including: (sample list)
 - Water meters with pulse output
 - Badger - Elster (AMCO)
 - Master Meter - Neptune
 - Norgas - SENSUS
 - Gas meters with pulse output
 - Dattus - Itron Metris
 - Norgas
- Channel 1 and 2 can interface to dry contact pulse inputs only.
- Radio is compatible with 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.
- Types of packet data reported:
 - Data Packet (60 minute interval default)
 - Health Packet (120 minute interval default)
- Non-volatile memory maintains last reading in the event of a power failure.
- 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)
- Hourly data.
- Ten year battery life.
- Five year warranty.



Overview

The M54230 (without display) & M54232 (with display) wireless two channel pulse counter monitors and records pulses from utility meters to determine energy consumption. The device is designed to support water, gas and electric pulse meters. The pulse counter device uses a battery powered wireless radio to report consumption. There is a 32 bit unsigned cumulative pulse counter register for each of the two channels. The pulse counter continues to count pulses even if the radio is unable to transmit the data.

Compatibility:

- Water meter with pulse output
- Gas meter with pulse output

Ordering Information

Model	Description
M54230	Battery Powered Dry Contact Pulse Counter - Indoor (2 Channel)
M54232	Battery Powered Dry Contact Pulse Counter w/ Display indoor (2 Channels)

Technical Specifications

Electrical

Battery Voltage: 3.6 Volts

Battery: D Cell Lithium

Regulatory approvals

US Complies with FCC CFR Part 15

European RADIO EN 300 328:v1.7.1

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Radio

20 dBm output power

High sensitivity -106 dBm

16 channels (802.15.4 Channel 11 to 26)

2.4 GHz ISM band

Environmental

Operating temperature 0 to 30 degree C

Storage temperature -25 to 50 degrees C

Installation indicators

Reed switch used with magnet to test successful radio connection Two LEDs (green and red) to indicate successful radio connection

Length of Signal Wires

(The M5423x battery pulse counter has been tested with 22 AWG stranded wire between the meter and the M5423x pulse counter for up to 100 feet in length. This length of wire proved to be 100% pulse accurate.

Physical

(H x W x D) 5.4 x 3.3 x 1.7 inch

Color black

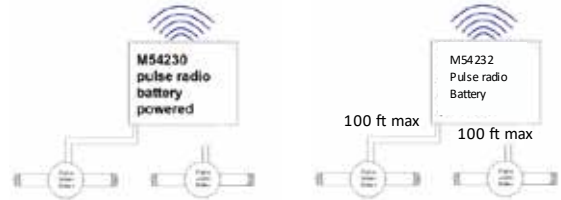
Weight / shipping weight < 9 oz. / 1 lbs.

Warranty

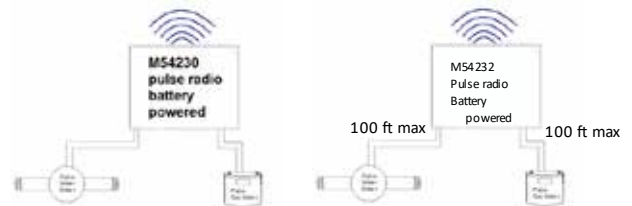
Five Years

Wiring & Installation Information

M5423x Meter—Two Water Meters



M5423x Meter—One water & one gas meter



M5423x signal wiring

(Push connectors with press to release. Not Polarity Sensitive.)



- 1 Channel A Terminal 1 Signal
- 2 Channel A Terminal 2 Ground
- 3 Channel B Terminal 3 Signal
- 4 Channel B Terminal 4 Ground

The push connectors can accommodate 18-22 gauge wire either solid or stranded. If the wire is stranded, the end should be tinned to prevent shorts/wire breaks.