



M54230 Two Channel Pulse Counter

Battery Powered

OVERVIEW

The ION M54230 wireless pulse counter monitors and records dry contact pulses from utility meters to determine energy or water consumption. The device

is designed to support water, gas and electric pulse water and gas 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 w/Pulse Output
- Gas Meter w/Pulse Output

FEATURES

- The ION M54230 is a wireless pulse counter that has 2 dry contact channels.
- 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.
- Types of packet data reported:
 - Consumption packet (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.



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Model	Description
M54230	Two Channel pulse counter radio (battery powered)



M54230 Two Channel Pulse Counter

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
 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)
 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

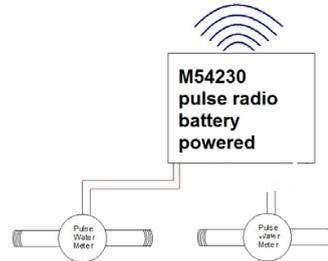
The M54230 battery pulse counter has been tested with 22 AWG stranded wire between the meter and the M54230 pulse counter for up to 100 feet in length. This length of wire proved to be 100% pulse accurate.

Physical

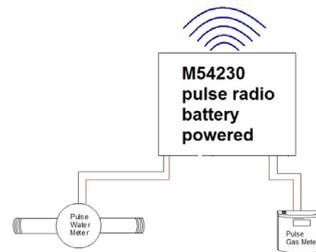
(H x W x D) 5.4 x 3.3 x 1.7 inch
 Color black
 Weight / shipping weight < 9 oz. / 1 lbs.

WIRING & INSTALLATION INSTRUCTIONS

- M54230 Meter—Two Water Meters



- M54230 Meter—One water & one gas meter



- M54230 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

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.

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