



# M54110 Temperature/Humidity Sensor Line Powered

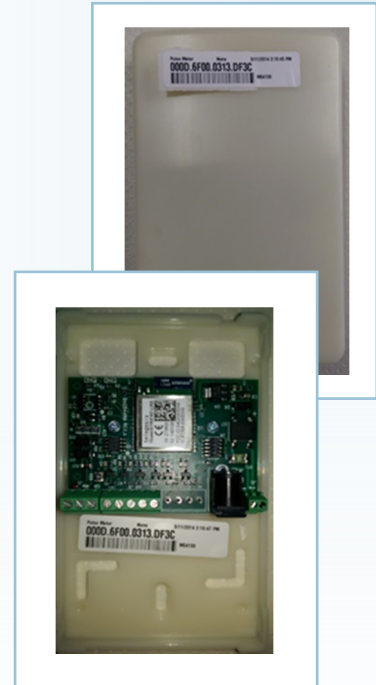
## Overview

The H2O Degree M54110 module monitors, records and transmits the current temperature and humidity information to the H2O Degree wireless mesh network.

The module can be used on either new or retrofit installations where temperature and humidity data monitoring is required.

## Features

- The H2O Degree M54110 is a wireless temperature and humidity sensor.
- The device provides a radio interface to remotely monitor and collect temperature and humidity data.
- The device collects and records current temperature and humidity data and transmits the data via the H2O 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.
- Device software can be updated over the air.
- 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
M54110	Temperature/Humidity Sensor
PS1001	120 VAC to 9 volts DC Power Supply
PS1007	24 VAC to 9 volts DC Power Supply

9/2015

**H2O Degree**  
3580 Progress Drive, Suite L  
Bensalem, PA 19020

[www.h2odegree.com](http://www.h2odegree.com)  
(215) 788-8485  
[info@h2odegree.com](mailto:info@h2odegree.com)



# M54110 Temperature/Humidity Sensor Line Powered Technical Specifications

## Technical Specifications

### Electrical

Voltage input 9 to 28 volts DC  
Current input 45 milli amps typical, 250 milliamps maximum

### 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

### Humidity Sensor Performance

Uses one integrated circuit for temperature & humidity over I2C bus  
Range 10% to 90% Relative humidity  
Accuracy Plus or minus 4% relative humidity at 25 degrees C

### Temperature Sensor Performance

Uses one integrated circuit for temperature & humidity over I2C bus  
Range 5 to 50 Degrees C or 41 to 122 Degrees F  
Accuracy Plus or minus 0.5% degrees C or less than 1 degree F  
Response time 5 to 30 seconds

## Technical Specifications

### Installation Indicators

Hall Cell used with magnet to test successful radio connection  
Two LEDs (green & red) to indicate successful radio connection

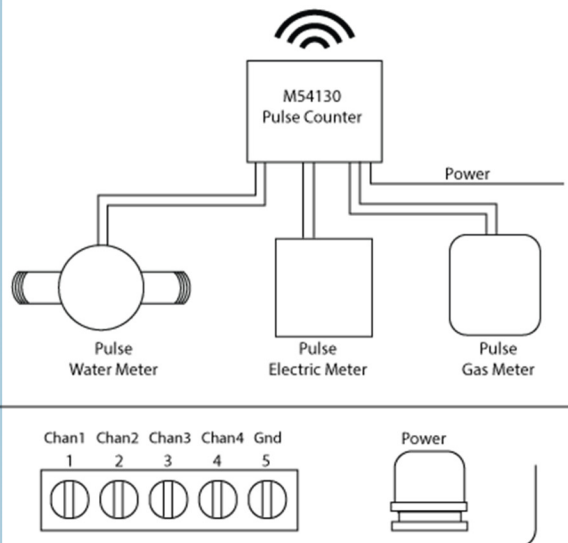
### Physical

(H x W x D) 5.0 x 3.5 x 1.0625 inch  
Color natural  
Weight / shipping weight <9 oz./1 lb.  
Shipping restrictions

### Warranty

Five Years

## Wiring & Installation Instructions



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