

Features

- The H2O Degree M54110 is a wireless temperature and humidity sensor. The H2O Degree M54111 is a wireless temperature sensor (no humidity).
- 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.
- 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)
- Voltage input 9-28 volts DC. Current input 45 mA typical, 250 mA maximum.
- Operating temperature 0-70 degrees C.
- Humidity sensor performance:
 - Uses one integrated circuit for temperature & humidity over 12C bus.
 - Range 10% to 90% relative humidity.
 - Accuracy +/- 4% relative humidity at 25 degrees C.
- Temperature sensor performance
 - Uses one integrated circuit for temperature & humidity over 12C bus.
 - Range 5-50 degrees C or 41-122 degrees F
 - Accuracy +/- 0.5% degrees C or less than 1 degree F
 - Response time 5-30 seconds
- Five year warranty.



Overview

The M54111 module monitors, records and transmits the current temperature and the M54110 module monitors, records and transmits the current temperature and humidity information to the H2O Degree wireless mesh network.

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

Ordering Information

Model	Description
M54110	Temp / Humid Sensor
M54111	Temp Sensor- Single Input Only
PS1001	120 VAC to 9 VDC Wall Plug 0.67 amp power supply
PS1007	24 VAC to 12 VDC Slip In 250 ma power supply

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

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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

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 Information

