

## Features

- The H2O Degree M5445x is a programmable thermostat that communicates wirelessly to the H2O Degree dashboard for remote control and visualization.
- Device provides an optional radio interface to H2O Degree wireless relay module for control of electric baseboard heaters, hydronic HVAC systems, etc.
- Easy to install and the radio can download the equipment configuration and date/time upon power up.
- Collects room temperature, humidity, heat set-point, heat set-point limit, heat run-time, cool set-point, cool set-point limit and cool run-time.
- Device allows property managers to set individual heat set-point limits and cool set-point limits for each thermostat or globally for all thermostats. In addition, the property manager can set the thermostat from heat mode to cool mode and vice versa.
- Device allows property managers to set units to vacant to conserve energy.
- Night setback available for increased energy savings.
- Thermostat is compatible with the H2O Degree secure wireless 2.4 GHz mesh network. The thermostat simultaneously acts as a mesh transceiver for the wireless network, enhancing the mesh network.
- By using a key press sequence the installer can force a radio transmission and receive a LED sequence feedback on radio connectivity in real time.
- Type 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.
- Thermostat is 7 day programmable.
- Accuracy +/- 1.0 degree F.
- Available as:
  - 1 stage heat/1 stage cool
  - 3 stage heat/2 stage cool (depending on model).
- Temperature control range 45-90 degrees F.
- Adjustable backlit display.
- Two year warranty.



## Overview

The H2O Degree M5445x thermostat is a wireless networked thermostat. This thermostat is simple to install and is a direct replacement for many 24 VAC based thermostats. The M5445x maintains local HVAC control, even if network communication is lost.

The smart thermostat communicates with the H2O Degree Gateway wirelessly then connects to the H2O Degree Server in the cloud. Property managers can view all their thermostats, set-points and temperature readings through the H2O dashboards and make adjustments to all units or individually. The tenants can be given access to their individual thermostat through a web-based portal or mobile application.

### Stages/Measurements

- Heat run-time
- Cool run-time
- Humidity
- Heat set-point
- Temperature
- Cool set-point

## Ordering Information

Model	Description
M54450-HP	9701 Thermostat - no humidity (1 stage Heat and 1 stage Cool)
M54450-HPH	9801 Thermostat - with humidity (1 stage Heat and 1 stage Cool)
M54451-HPH	9825 Thermostat - with humidity (3 stages Heat and 2 stages Cool)
W54450-MIN	Wireless Relay module for 120 VAC
W54450-MIN-208	Wireless Relay module for 208 VAC
W54455-MIN	Wireless Relay module for 120, 208, or 277 VAC - Small Form Factor 3mw Radio

## Technical Specifications

Input voltage 24 volt AC 50/60 Hz (18-30 VAC)  
 Relay rating 24 volts AC at 1 amp max per relay

### Equipment compatibility

Accuracy +/- 1.0 degree F  
 1 Stage Heat/1 Stage Cool or  
 3 Stage Heat/2 Stage Cool (depending on model)  
 Temperature control range 45- 90 degrees F  
 Adjustable backlight

### 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

Button press to test successful radio connection  
 Two LEDs (green and red or fan and heat) to  
 indicate successful radio connection

### Physical

(H x W x D) 5.375 x4.0 x 1.125 inch  
 Color white  
 Weight / shipping weight < 9 oz. / 1 lbs.

### Warranty

Two Years

## Wiring & Installation Information

