

# HSM200 User Guide

Online manual for the HSM200 Z-Wave Multi-sensor



## Overview

HSM200 is a Z-Wave multi-sensor that reports motion, temperature and light level using wireless Z-Wave commands. The product includes electrical prongs and is designed to plug into, and be powered by a standard US 120V wall outlet. HSM200 also includes an RGB LED that may be controlled by Z-Wave commands. This feature allows users to change the color of the LED to reflect the status of things in their home. The unit has been designed, tested and certified for use in the United States and Canada.

## Installation

HSM200 is designed to plug directly into a 120V US outlet or it may be attached to an extension cord.

## Configuration

### Z-Wave Inclusion or Exclusion

1. Put your Z-Wave controller into inclusion (or exclusion) mode. Consult your controller's manual if you're unsure how to do this.
2. Press the small button on the side of the HSM200 to initiate inclusion (or exclusion).

The LED will blink blue rapidly indicating HSM200 attempting to join a Z-Wave network. Once HSM200 been added to the Z-Wave network, the LED will stop blinking blue and instead will blink white each time it detects motion. HSM200 will remain in this mode for 5 minutes. Once the 5 minutes has expired, HSM200 will enter normal operating mode and the LED will remain off. Pressing the push button will restart the 5 minute motion detector test mode.

### Factory Reset

To be used only in the event that the network primary controller is lost or otherwise inoperable.

1. Press and hold the pairing button for 60 seconds.

The LED will blink blue and then shift to yellow and continue to blink rapidly. Once the LED turns off, HSM200 is reset to factory defaults and will blink cyan indicating it is ready to be added to a Z-Wave network. All configuration parameters will be reset to their default values.

### Association

This product supports Group 1 and Group 2 Associations with up to five Z-Wave devices per group. Group 1 supports Lifeline Communication, Group 2 supports Basic Set, refer to your controller manual for instructions on setting up these features.

## Operation

HSM200 will send these Z-Wave commands

- **Motion is sensed**
  - sends report to the hub
  - sends on, off or dim command to associated Z-Wave devices (like bulbs or switches)
- **Motion is no longer sensed**
  - sends report to the hub
  - sends off to associated Z-Wave devices (like bulbs or switches)
- **Temperature report**
  - sends report to the hub
- **Luminance report**
  - sends report to the hub

HSM200 will receive these Z-Wave commands from the hub

- **Color command**
  - turns RGB LED on to a specific color

## HomeSeer Compatibility

Your new HomeSeer sensor is Z-Wave certified and is ready to be used with a wide variety of home automation hubs and controllers. All features are fully supported by HomeSeer systems but some **Advanced Features** (see below) may not be fully supported by other controllers. If you're using another brand of controller, be sure to check with that company to determine compatibility.

### Advanced Features

Your new HomeSeer sensor includes advanced features that may be accessed with HomeSeer and other systems.

#### Temperature Reporting

HSM200 reports a temperature value to the hub. By default, this report happens every 60 minutes but the report interval may be adjusted from 1-255 minutes using Z-Wave parameters (see below).

#### Luminance Reporting

HSM200 reports a luminance (light level) value to the hub. By default this report happens every 60 minutes but the report interval may be adjusted from 1-255 minutes using Z-Wave parameters (see below).

#### RGB LED Indicator

The color of HSM200's LED indicator may be controlled with Z-Wave COLOR CONTROL CLASS commands from the hub.

## Non-HomeSeer Compatibility

Most non-HomeSeer hubs will recognize HSM200 as a BINARY sensor with ON (for motion) and OFF (for no motion) status. Temperature and Luminance reports may or may not be detected. If the hub does not support the Z-Wave COLOR CONTROL command class, it won't be able to change the RGB LED indicator. Be sure to check with your non-HomeSeer hub manufacturer for more information about compatibility.

### Attention SmartThings users

A special **device handler** is required to enable your hub to use the advanced features of this switch. Information about installing this may be found at: <https://docs.homeseer.com/display/HSPRODKB/SmartThings>

## Z-Wave SmartStart

SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code\* with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity. **\*QR Code is located on the back of the HSM200 unit.**

## Interoperability

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

## Z-Wave Parameters

Use the parameters below to adjust HSM200 configuration settings:

Parameter	Description	Bytes	Value	Default
1	Sets the time (in minutes) between when an ON command is sent and an OFF command is sent	1	Possible values: 0-127 1-127 = ON and OFF commands are sent 0 = ON commands are sent but OFF commands are never sent	10
2	Sets a the specific dim level that's sent to all GROUP 2 association nodes when motion is sensed	1	Possible values: 0*, 1-99, -1 0 = Sends OFF command (not recommended) 1-99 = Sends a DIM command -1 = Sends an ON command	-1
3	Sets the Luminance report interval (in minutes)	1	Possible values: 1-255	60

4	Sets the Temperature report interval (in minutes)	1	Possible values: 1-255	60
5	Sets the temperature offset  Use this parameter to calibrate the temperature sensor if the default value is not accurate relative to other thermometers.	1	Possible values: (-128) to (+127) The value is in tenths of degrees Fahrenheit. The temperature reading can be adjusted by -12.8F to +12.7F. A value of 1 will adjust the temperature reading by +0.1F. A value of -5 will adjust the temperature by -0.5F. A value of 123 will adjust the temperature by +12.3F.	factory default

## Specifications

<b>Power</b>	120VAC / 60 Hz, 1W
<b>Z-Wave Frequency</b>	908 / 916 MHz (US/CAN)
<b>Z-Wave Range</b>	300 feet minimum line of sight
<b>Z-Wave Data Rate</b>	9.6Kbps, 40Kbps, 100Kbps
<b>Operating Temp Range</b>	-20°C to 80°C
<b>Motion Sensor Range</b>	12ft
<b>Motion Sensor Coverage</b>	90°
<b>Temperature Accuracy</b>	+/-2.0C (-20C to 80C)
<b>Temperature Resolution</b>	0.1C
<b>Light Sensor Range</b>	0-10,000 LUX
<b>Dimensions</b>	3.25"H x 1.9"W x 1.9"D
<b>Certifications</b>	ETL (US, Canada), FCC/IC, Z-Wave Plus

## Warranty

HomeSeer warrants to the original purchaser that this product, for the warranty period, will be free from material defects and workmanship. This warranty is subject to proper installation and operation of the product. HomeSeer's sole obligation, under this warranty, is to repair, replace or correct any defect that was present at the time of delivery. This warranty does not extend to consequential or incidental damage to other products that may be used with this product. Warranty claims must be submitted in writing directly to HomeSeer by emailing [returns@homeseer.com](mailto:returns@homeseer.com). Warranty period: Limited 1 year from date of purchase

## FCC statements:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

This product employs or practices certain features and/or methods of the following U.S. Patents: U.S. Patent Nos.6,891,838, 6,914,893 and 7,103,511.