Heiman

Smart Temperature and Humidity Sensor

SKU: HEIEHS1HT

Quickstart

This is a **Multilevel Sensor** for **Europe**. To run this device please insert fresh **1 * CR2450 3.0V** batteries. Please make sure the internal battery is fully charged. -Press the Network button 3 times within 1.5s. The green LED is Blinking 3 times within 1 second.
-If Inclusion Process is successful, Green LED will turn off.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

Smart Temperature and Humidity Sensor is designed to detect the temperature and humidity in house, and reports the abnormal conditions to users‘ mobile phone, Users could also check the real-time temperature and humidity via mobile phone, The sensor adopts Z-Wave wireless communication protocol with high sensitivity.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state.** Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default

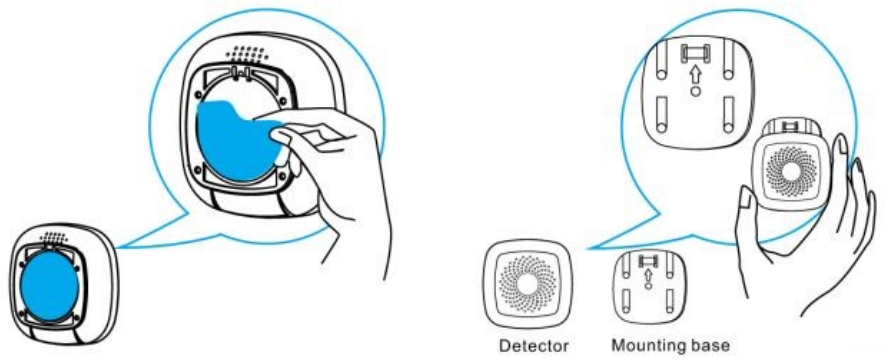
This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

- Long press Network Button while installing batteries in the product

Safety Warning for Batteries

The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging level or different brands.

Installation



Tear off the gummed film, stick the equipment in the required area.

Note that the mounting base shall be up as the direction of arrow shown in the graph. Finally, hang the detector into the mounting base.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

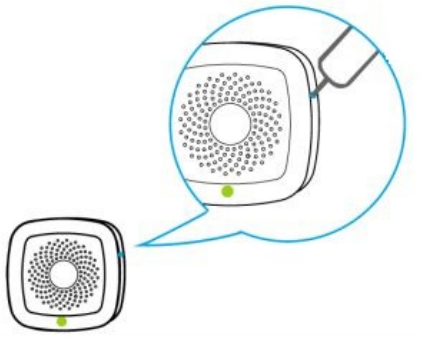
Inclusion

-Press the Network Button 3 times within 1.5s. The green LED is Blinking 3 times within 1 second.
-If inclusion process is successful, green LED will turn off.

Exclusion

- Press the Network Button 3 times within 1.5s
- If Exclusion Process is successful, the green LED is blinking 6 times, then turn off

Product Usage



Battery Report

- Battery Report is transmitted when power on the device.
- Battery Report is transmitted once a day.
- Battery Report is transmitted when the battery power falls less than 10%

Battery Voltage	Battery Level
2.4V ~ 3.0V	10~ 100 (%)
Under 2.4V	0xFF

Communication to a Sleeping device (Wakeup)

This device is battery operated and turned into deep sleep state most of the time to save battery life time. Communication with the device is limited. In order to communicate with the device, a static controller **C** is needed in the network. This controller will maintain a mailbox for the battery operated devices and store commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time is significantly decreased.

This device will wakeup regularly and announce the wakeup state by sending out a so called Wakeup Notification. The controller can then empty the mailbox. Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses of the device. To wakeup the device please perform the following action: Wake up Notification is transmitted every 24 hours by default.
Wake up Notification is transmitted after Notification Report is Transmitted.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.

5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association - one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group Number	Maximum Nodes	Description
1	1	Lifeline
2	5	Multilevel Sensor reports status of the temperature via Lifeline. When the sensor detects status of the temperature, the device will be triggered.
3	5	Multilevel Sensor reports status of the humidity via Lifeline. When the sensor detects status of the humidity , the device will be triggered.

Technical Data

Dimensions	0.0550000x0.0550000x0.0150000 mm
Weight	25 gr
Hardware Platform	ZM5202
EAN	6971348970079
IP Class	IP 20
Voltage	3V DC
Battery Type	1 * CR2450 3.0V
Device Type	Multilevel Sensor
Network Operation	Reporting Sleeping Slave
Z-Wave Version	6.51.09
Certification ID	ZC10-17055578
Z-Wave Product Id	0x0260.0x8007.0x1000
Communications Protocol	Z-Wave Serial API
Supported Notification Types	Weather Alarm
IP (Ingress Protection) Rated	ok
Firmware Updatable	Not Updatable
Controller Supports Multiple Networks	ok
Communications Connections	Ethernet (Wireless/WiFi)
Sensors	Air TemperatureHumidity
Color	White

Supported Command Classes

- Association Grp Info
- Association V2
- Battery
- Device Reset Locally
- Manufacturer Specific V2
- Powerlevel
- Sensor Multilevel V10
- Version V2
- Wake Up V2
- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways,Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and a controlled device.
- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.
