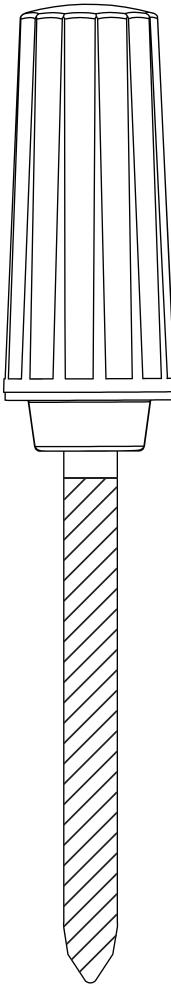


# Smart Soil Moisture Sensor

## User Manual



THIRDREALITY

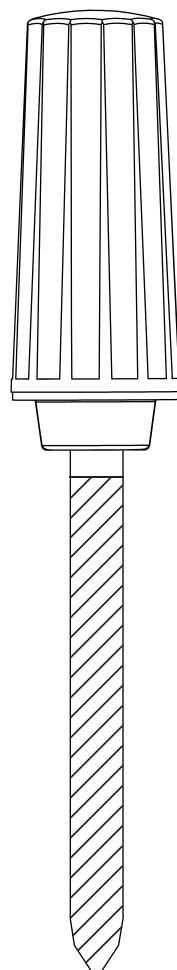
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# Introduction

Smart Soil Moisture Sensor is able to detect the environmental conditions of the soil in real time and transmit the data to your smart system through wireless communication capabilities.

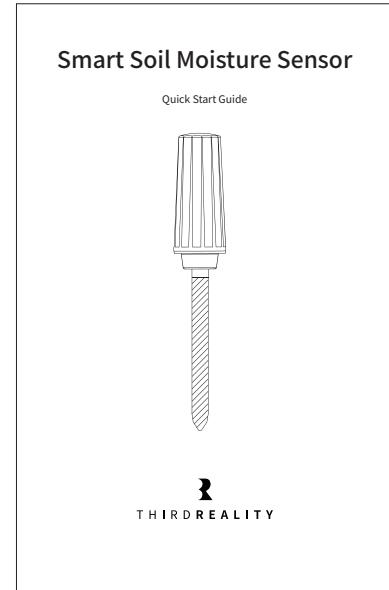
## What's in the Box



Smart Soil Moisture Sensor



AA Battery

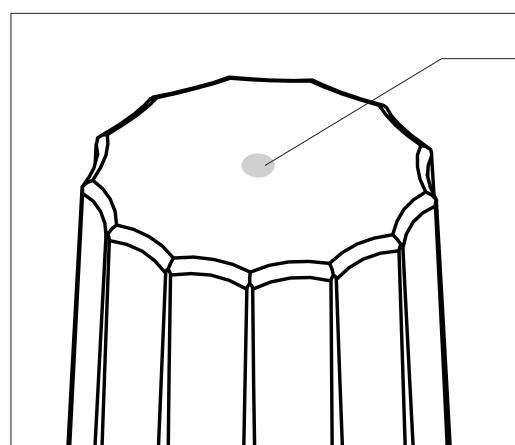


User Guide

# Specifications

Name	Smart Soil Moisture Sensor
Model	3RSM0147Z
Operating Voltage	DC 1.5V
Battery Type	1 x AA Alkaline Battery (included)
Wireless Connectivity	Zigbee 3.0
Working condition	-10°C~50°C(14°F~122°F) RH 0~100%
Temperature Range	-10°C~50°C(14°F~122°F)
Temperature Accuracy	±1.5°C
Humidity Range	0~100%
Humidity Accuracy	±3%

## LED Status

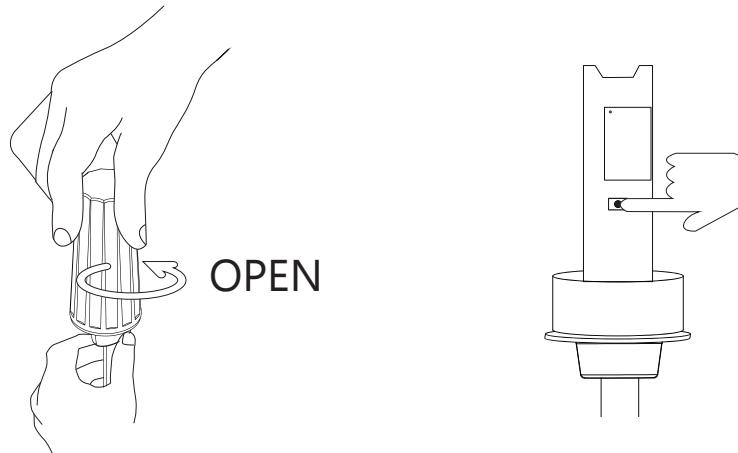


LED Indicator

LED Status	Description
Blue blinking	Pairing mode
Red slow blinking	Offline
Red double blinking	Low battery

# Setup

1. Open the battery cover. Remove the battery insulation tab and install the battery.

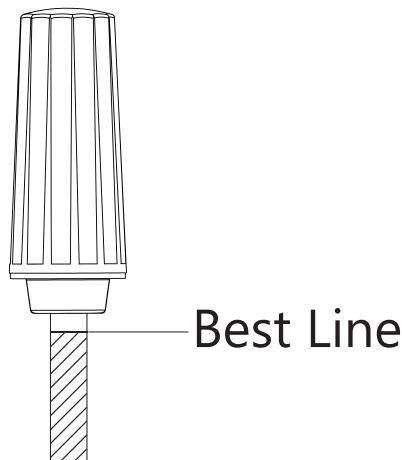


2. Press and hold the reset button for 5 seconds until the LED light turns red, release the reset button and the LED starts blue blinking, indicating it enters Zigbee pairing mode.
3. Follow the instructions of your smart home hub /smart speaker with built-in Zigbee radio to pair the sensor in the corresponding app.

# Installation

Recomand: Use a suitable tool to dig a small hole in the soil and then insert the sensor.

- \* When installing the sensor, make sure the marked best line is flush with the soil surface.



- \* Friction can damage the sensor and affect its accuracy. It is not recommended to insert the sensor directly into hard soil, which may damage the sensor.
- \* Designed to measure soil moisture ONLY.

# Pairing with ThirdReality

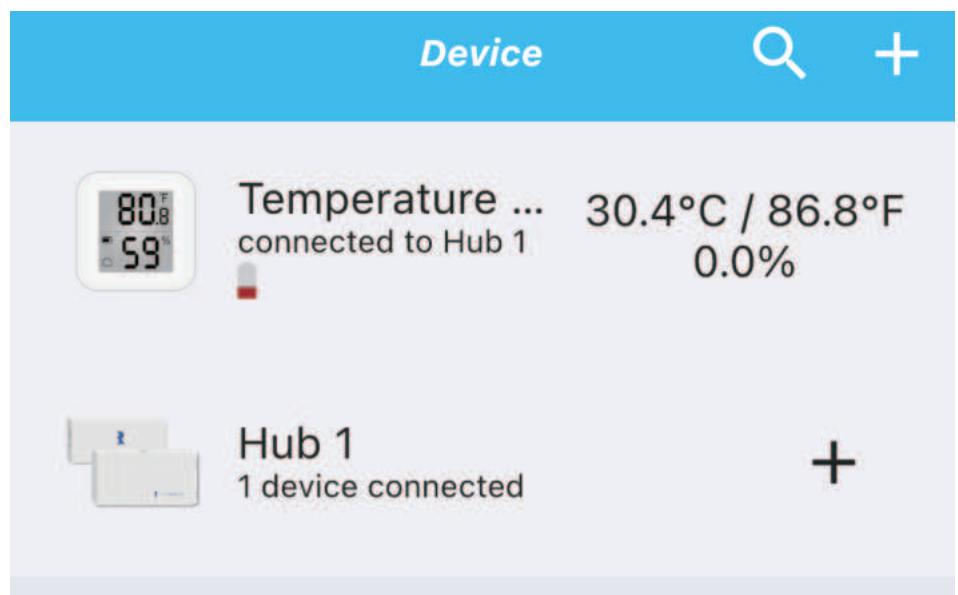
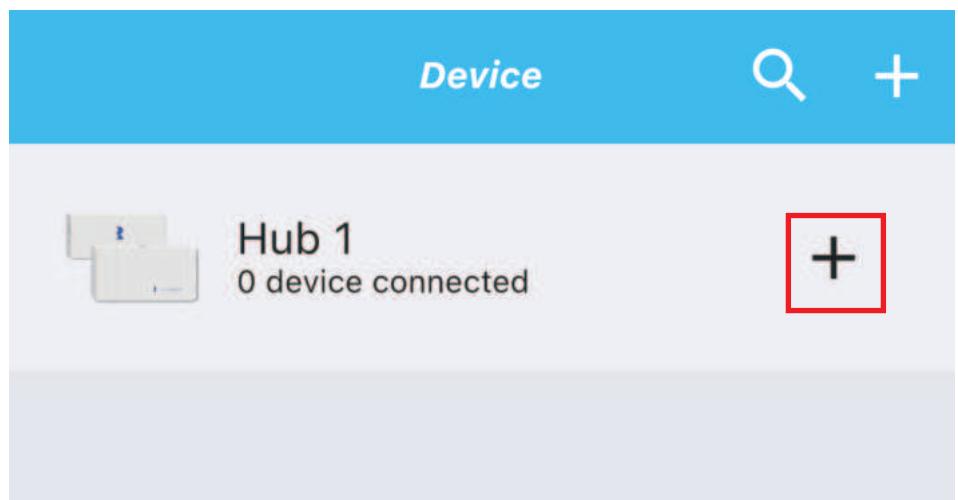
App: Third Reality App

Device: ThirdReality Smart Hub



## Pairing steps:

1. Download and install the Third Reality App, or update it to the latest version.
2. Register and sign in your Third Reality account, and set up the Third Reality smart hub.
3. Open the battery cover, install the battery, press and hold the reset button for 5 seconds and release the hold; The blue blinking LED light indicates the sensor enters Zigbee pairing mode.
4. Tap “+” in the up right in the Third Reality app, tap Quick Pair and follow the on-screen instructions to start the pairing process.
5. The sensor will be discovered within one minute as “Temperature and Humidity Sensor 1”, the temperature and humidity data will be displayed in the device list.
6. Tap the device icon to enter the device page, check more information like the MAC address, battery level, software version and history records etc, tap the sensor name to rename it, and check for software updates.



# Pairing with 3R-Installer

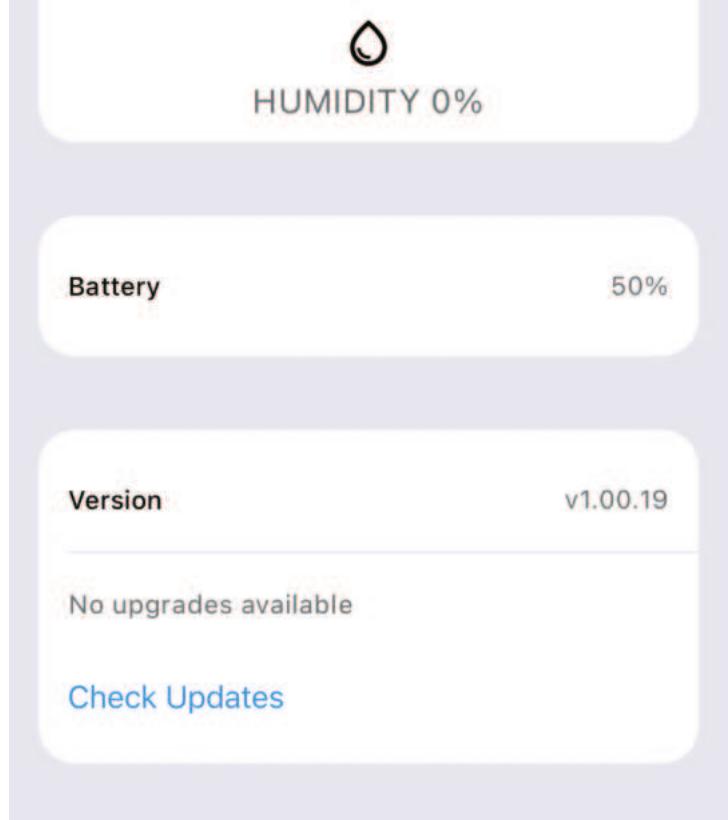
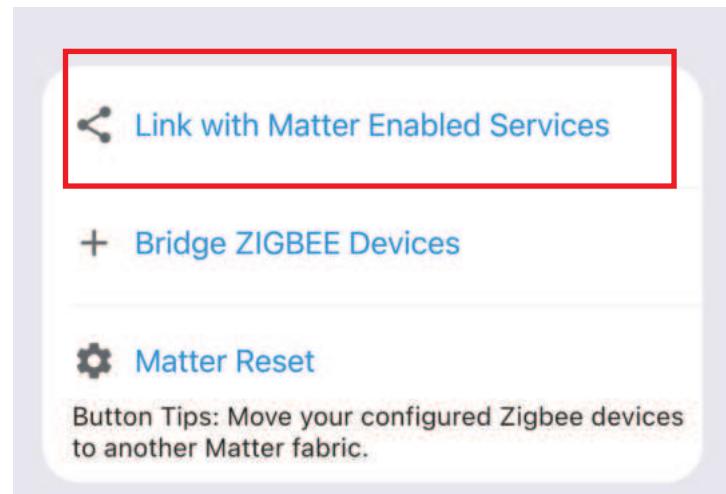
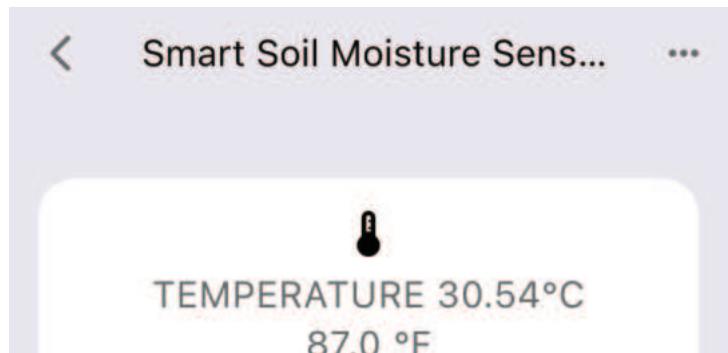
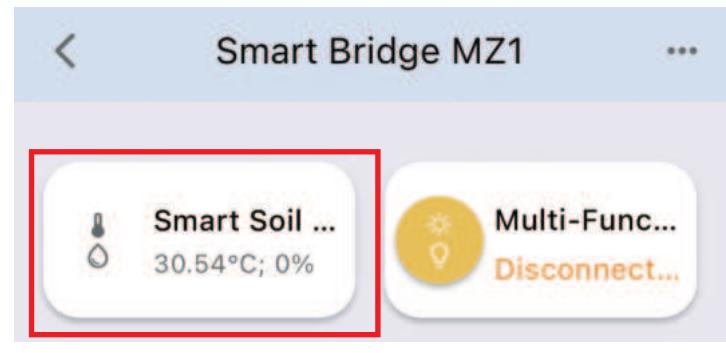
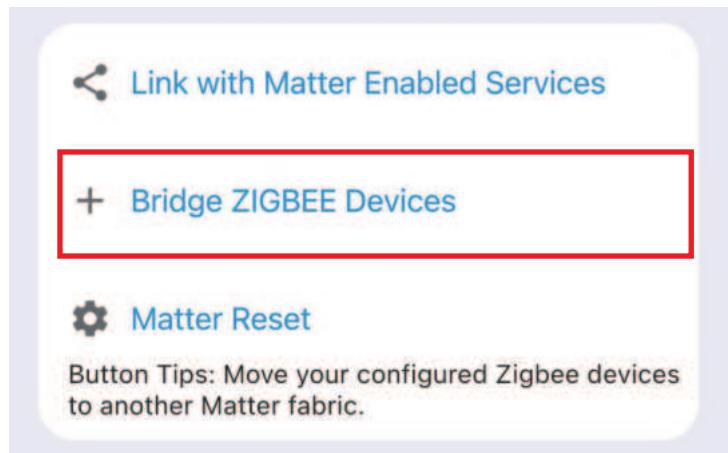
App: 3R-Installer App

Device: Smart Bridge MZ1



## Pairing steps:

1. Set up your smart bridge, make sure both the 3R-Installer App and the smart bridge's firmware are in the latest version.
2. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
3. Tap the smart bridge icon to enter the devices page, tap "+ Bridge ZIGBEE Devices" to start Zigbee pairing, follow the on-screen instructions to add device.
4. Tap Link With Matter Enabled Services, copy the Manual Setup Code or Scan the QR Code within 3 min, then you can add the bridge to other Matter supported ecosystems through multi-admin.



## Link with Manual Setup Code or Scan the QR Code

Effective duration: 2 minutes 56 seconds

1216-170-8712



Done

# Pairing with SmartThings

App: SmartThings App

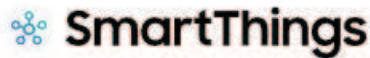
Devices: SmartThings Hub 2nd Gen(2015) and 3rd Gen(2018), Aeotec Smart Home Hub.



## Pairing steps:

1. Before pairing, check for updates to make sure the SmartThings Hub firmware is up to date.
2. Add SmartThings drivers for Third Reality Temperature and Humidity Sensor

- Open this link in your PC browser. Log in your SmartThings Account.  
<https://bestow-regional.api.smartthings.com/invite/adMKr50EXzj9>
- Click "Enroll" -- "Available Drivers" -- "Install" to install the device driver.



## Channel Information

- Name  
Third Reality
- Description  
SmartThings driver for Third Reality devices
- [Terms of Service](#)

## My Hubs

### Aeotec Hub

My home

[Enroll](#)



## Channel Information

- Name  
Third Reality
- Description  
SmartThings driver for Third Reality devices
- [Terms of Service](#)

## My Hubs

### Aeotec Hub

My home

[Unenroll](#)

[Available Drivers](#)



## Third Reality

### Aeotec Hub

### My home

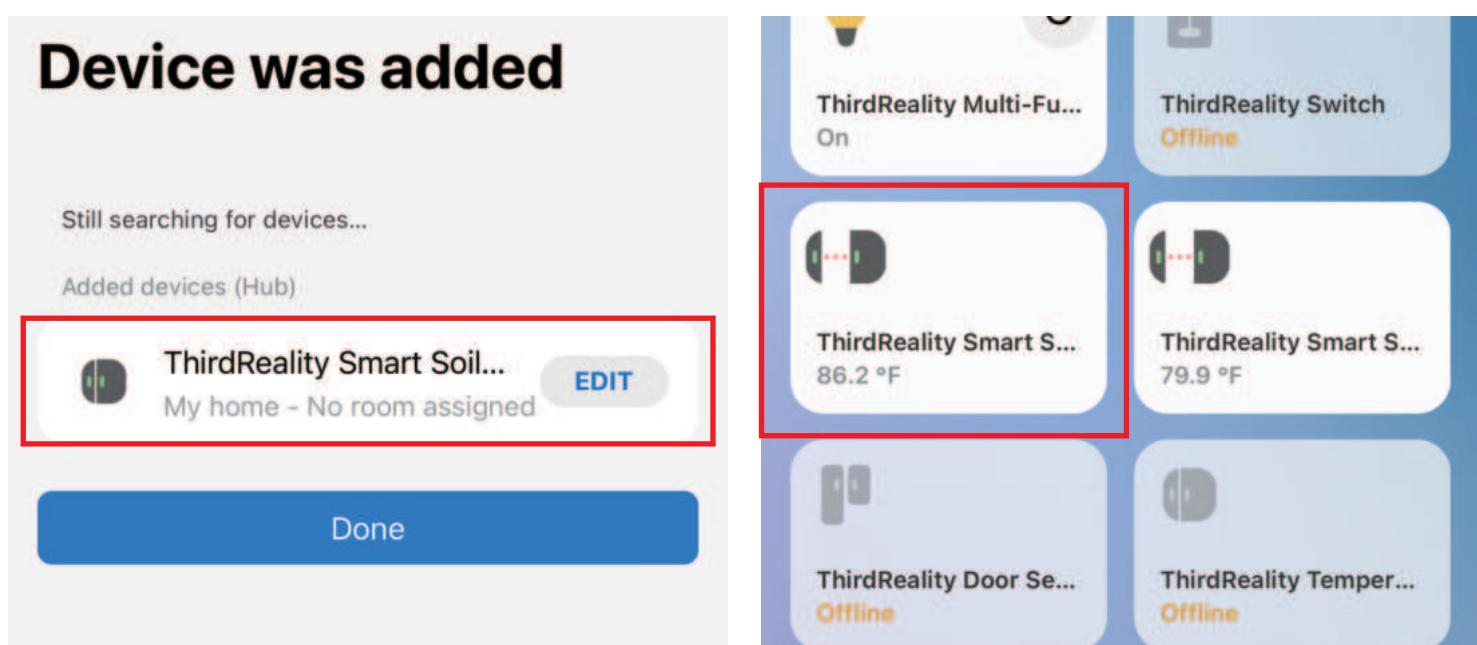
- Name  
ThirdReality Humidity Sensor
- Description  
ThirdReality Temperature and Humidity sensor drivers
- Permissions
  - zigbee: Enable full access to Zigbee actions

[Install](#)

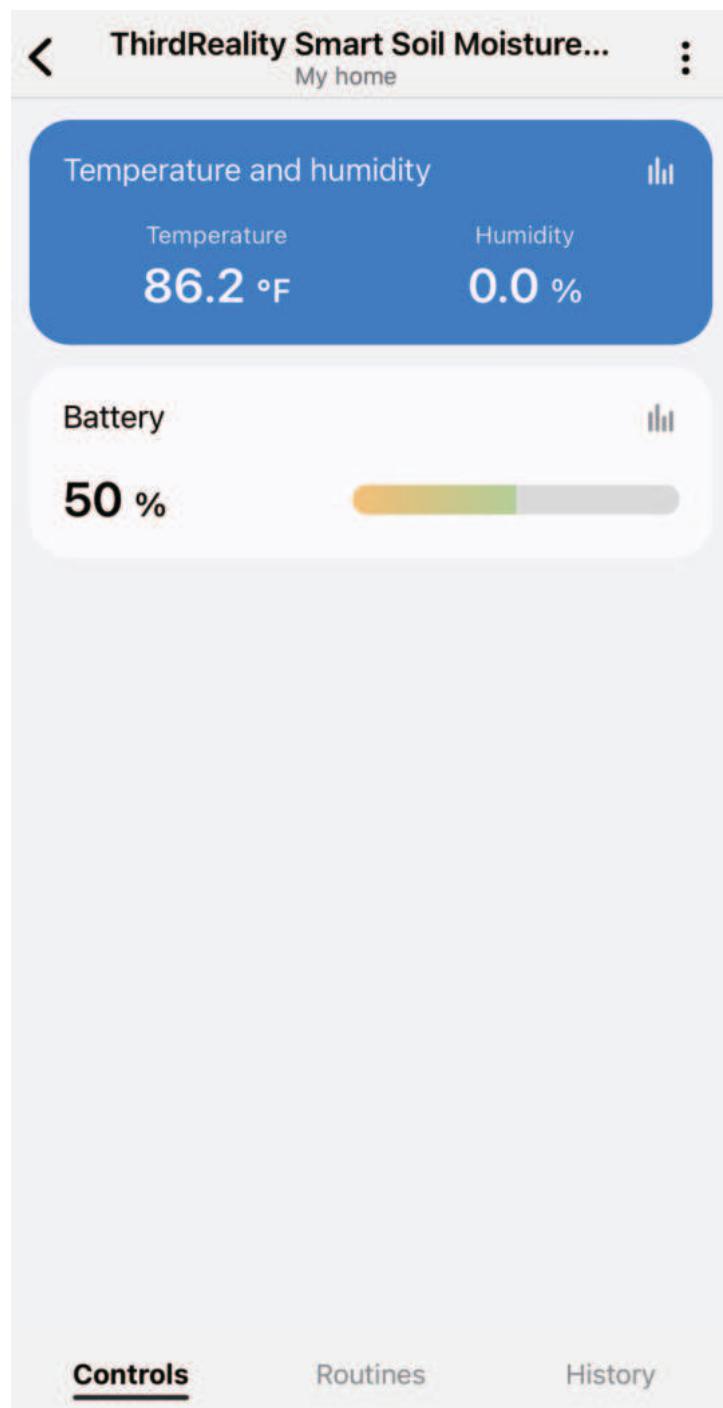
3. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
4. Open your SmartThings App, tap “+” on the up right corner to ”Add device” and then tap “Scan nearby”.



5. The sensor will be added to your SmartThings hub in a few seconds.



6. Create routines to control connected devices.



# Pairing with Hubitat

Website: <http://find.habitat.com/>



## Pairing steps:

1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. Visit your Hubitat Elevation hub device page from your web browser, select the Devices menu item from the sidebar, then select Discover Devices in the upper right.
3. Click Start Zigbee Pairing button after you select a Zigbee device type, the Start Zigbee Pairing button will put the hub in Zigbee pairing mode for 60 seconds.
4. Pairing is completed.
5. Set device type to generic Zigbee Temperature/Humidity sensor, Save Device.
6. Tap Apps, and Create New Basic Rules, select Humidity Sensor - smart soil moisture sensor, turn on your plant watering system when humidity changes.

Hubitat Device Management

Devices

Compatible device list

Clear Search + Add device

Disable	Label (Name)	Type	Room	Source	DNI	Status	Last Activity	Actions
<input type="checkbox"/>	1 (Advanced Zigbee CT Bulb)	Advanced Zigbee CT Bulb		System	2EA3 8400CFD29B800000	OK	8/27/2024 10:40:35	
<input type="checkbox"/>	729ms (Generic Zigbee Motion Sensor (no temp))	Generic Zigbee Motion Sensor (no temp)		System	6439 0E200288FFFFE6379	OK	8/29/2024 19:44:55	
<input type="checkbox"/>	Advanced Zigbee CT Bulb	Advanced Zigbee CT Bulb		System	1AED 8400CFD33AAC0000	OK	8/27/2024 10:40:20	
<input type="checkbox"/>	del (Third Reality Smart Button)	Third Reality Smart Button		System	5A05 0E200288FFFFE38F45	OK	8/06/2024 13:42:54	
<input type="checkbox"/>	Generic Zigbee Switch	Generic Zigbee Switch		System	4F31 0E200288FFFFE900C3	OK	8/27/2024 10:13:00	

Documentation Community Videos FAQ

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Hubitat Device Management

Add device

Find by device type: Bulbs, dimmers, locks, outlets, switches...

Find by brand: Aesotec, Bosch, Centralite, Domot, ecobee...

Add device manually:

Zigbee Z-Wave Matter Iris V1 Zigbee Virtual

Documentation Community Videos FAQ

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Hubitat Device Management

Add device

Home - Zigbee Cancel

Make sure that the device has been **factory reset**. Simply removing it from a previous mesh may not allow it to be joined. A factory reset will ensure it is discoverable.

+ Stop Zigbee pairing Pairing, 90s remaining

Documentation Community Videos FAQ

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Smart Soil Moisture Sensor

Status attribute for Devices/Rooms  
None

Save Preferences

**Device Information**

Device Name \* Device Network ID \*  
Device Label Smart Soil Moisture Sensor  
Zigbee ID A4C138EEDB829E73  
Event history size, per event type (1-2000) 11  
State history size, per attribute (1-2000) 30  
Too many events alert threshold, per hour (100-2000) 300

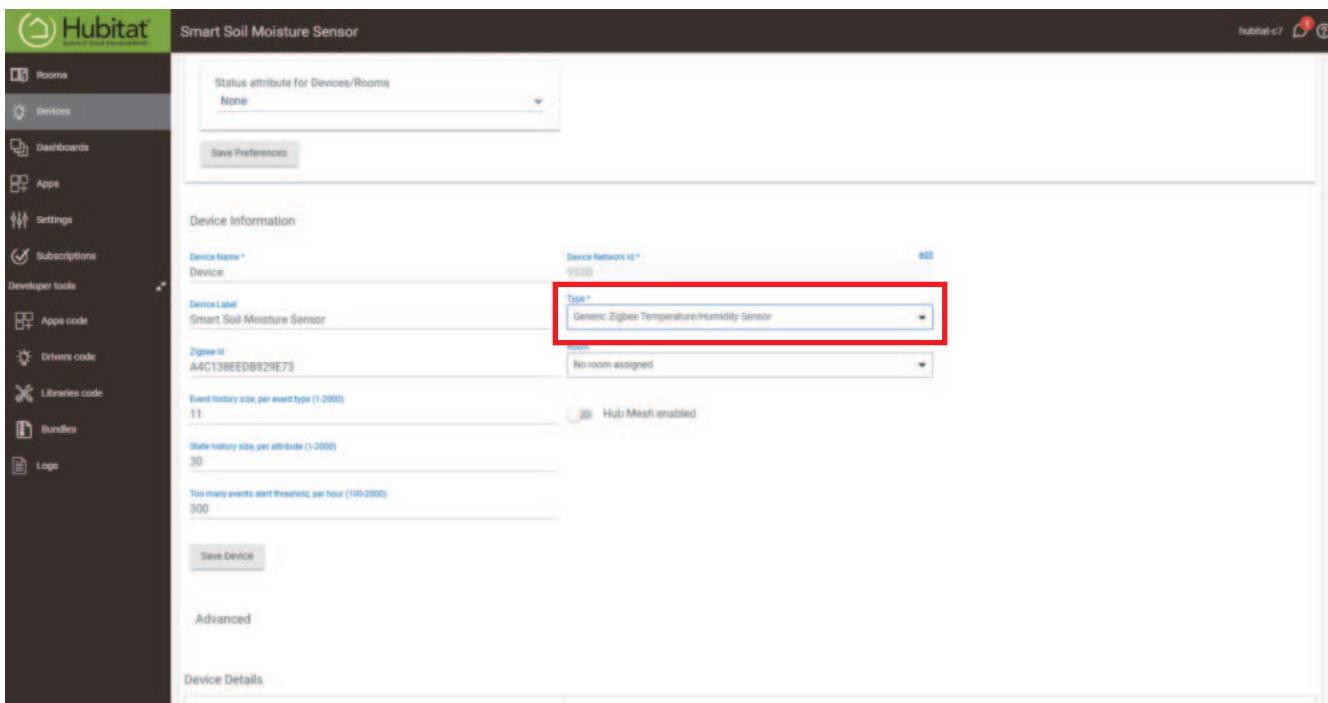
Type \* Generic: Zigbee Temperature/Humidity Sensor  
Room No room assigned

Hub Mesh enabled

Save Device

Advanced

Device Details



When Smart Soil Moisture Sensor humidity is below 40%, turn on Plant Watering System

**Basic Rule**

When Smart Soil Moisture Sensor humidity is below 40% ... Turn on Plant Watering System

When a ... Choose Humidity Sensors Smart Soil Moisture Sensor Senses that Humidity has fallen below ...

Humidity 40

Do this action: Select switches to turn on \* Plant Watering System

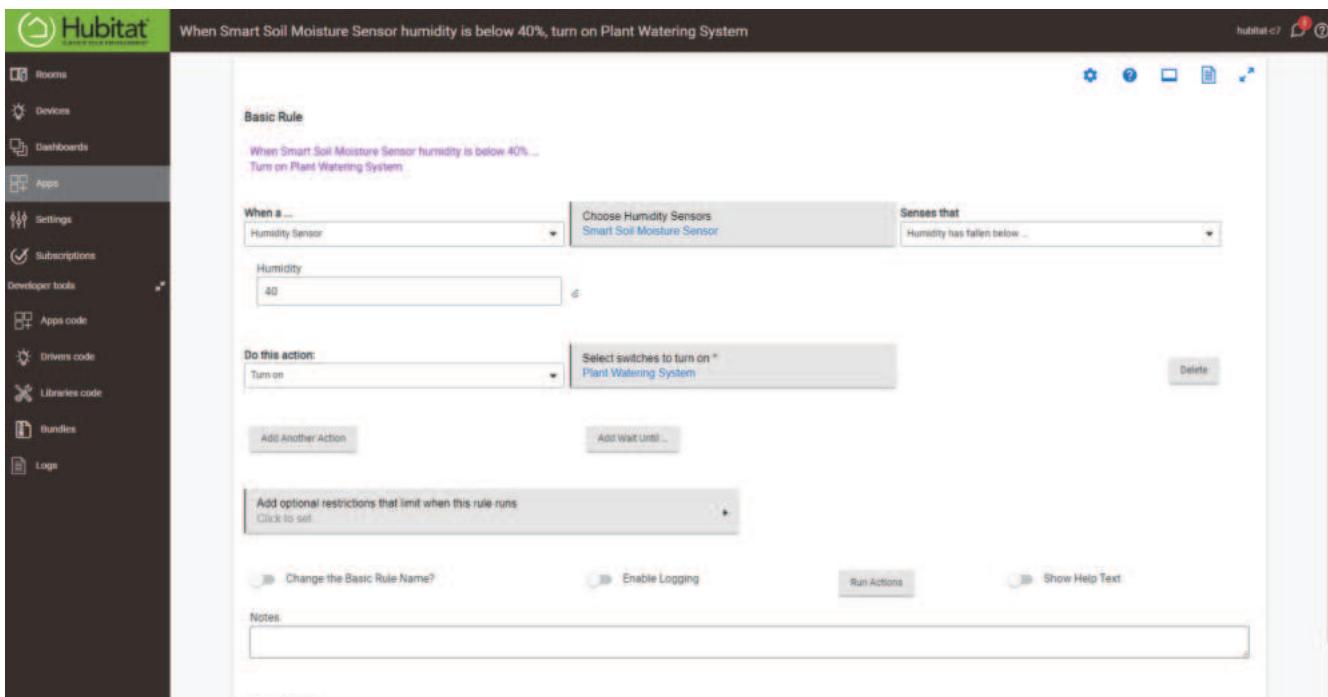
Turn on Add Another Action Add Wait Until ... Delete

Add optional restrictions that limit when this rule runs Click to set

Change the Basic Rule Name? Enable Logging Run Actions Show Help Text

Notes

Version 1.0 (143325)



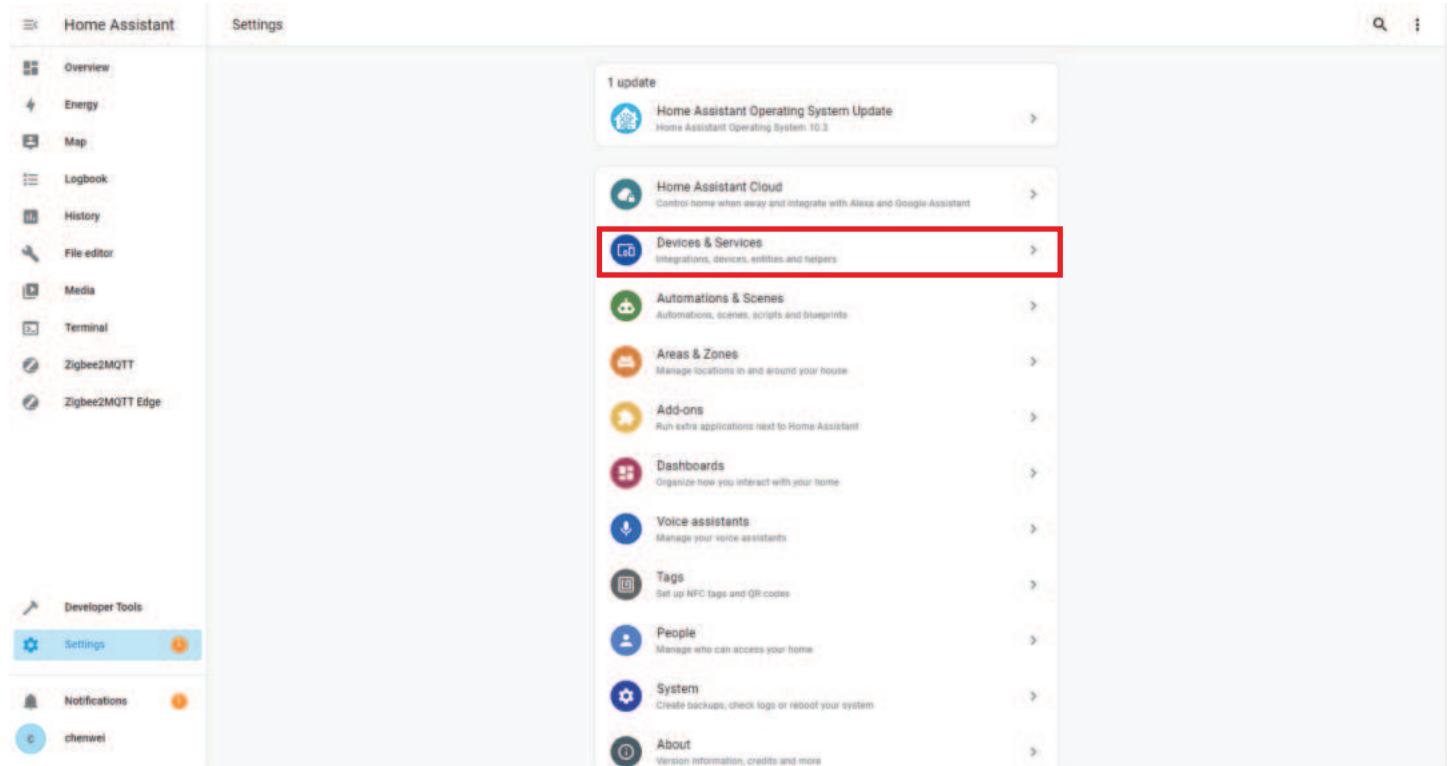
# Pairing With Home Assistant

Device: Zigbee dongle



## Zigbee Home Automation

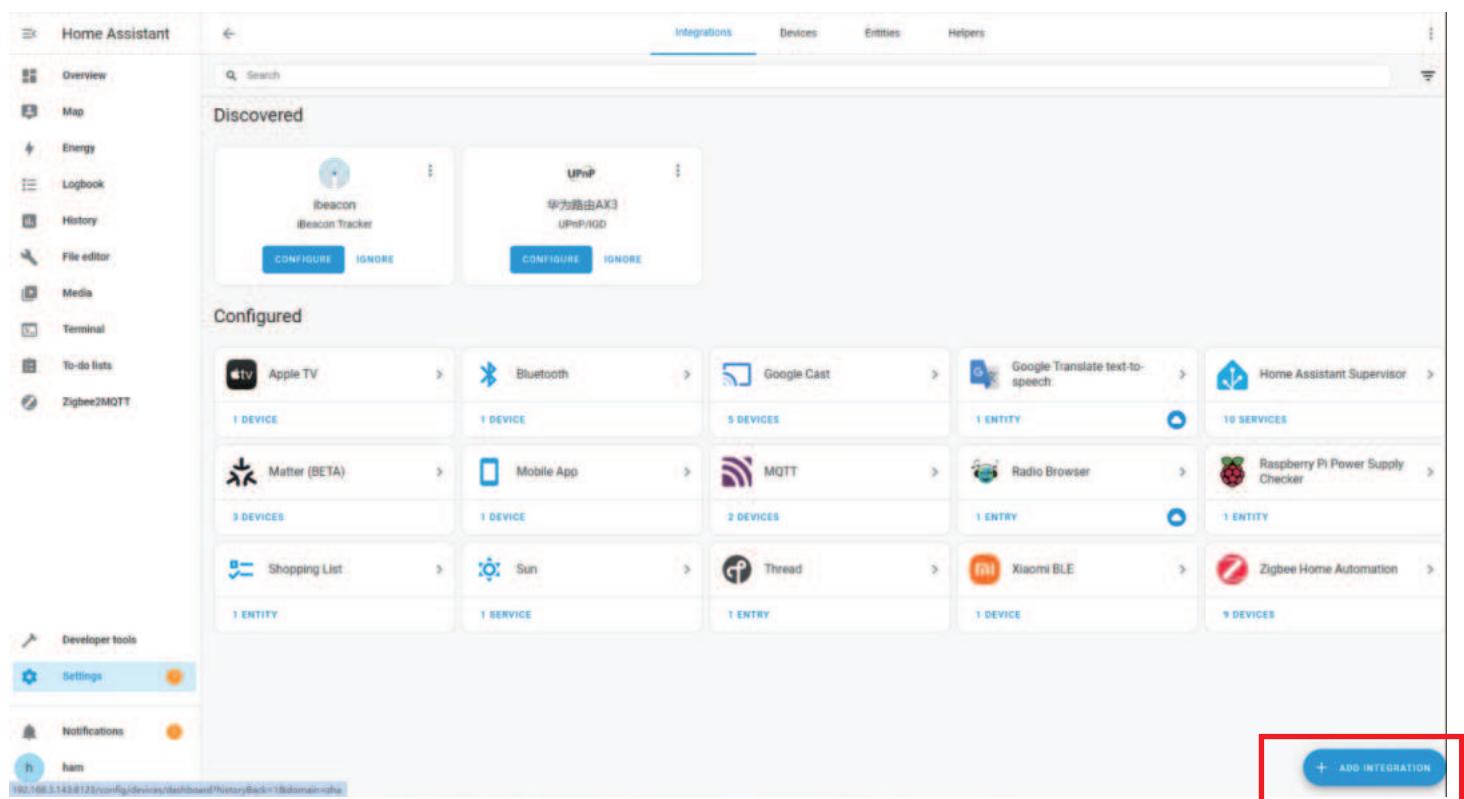
1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. In Zigbee Home Automation, go to “Configuration” page, click “integration”.
3. Then click the “Devices” on the Zigbee item, the click “Add Devices”.
4. Pairing completed.
5. Back to “Devices” page to find the sensor added.
6. Click to enter in the control interface to set the sensor.
7. Click “+” belongs to Automation and add trigger and actions.



Home Assistant Settings

1 update

- Home Assistant Operating System Update
- Home Assistant Cloud
- Devices & Services** (Integrations, devices, entities and helpers)
- Automations & Scenes
- Areas & Zones
- Add-ons
- Dashboards
- Voice assistants
- Tags
- People
- System
- About



Home Assistant Integrations

Discovered

- iBeacon (iBeacon Tracker)
- UPnP (华为路由AX3 UPnP/IGD)

Configured

Category	Integration	Count
Devices	Apple TV	1 DEVICE
Devices	Bluetooth	1 DEVICE
Entities	Google Cast	5 DEVICES
Services	Google Translate text-to-speech	1 ENTITY
Services	Home Assistant Supervisor	10 SERVICES
Devices	Matter (BETA)	3 DEVICES
Devices	Mobile App	1 DEVICE
Devices	MQTT	2 DEVICES
Entities	Radio Browser	1 ENTRY
Entities	Raspberry Pi Power Supply Checker	1 ENTITY
Devices	Shopping List	1 ENTITY
Services	Sun	1 SERVICE
Entities	Thread	1 ENTRY
Devices	Xiaomi BLE	1 DEVICE
Devices	Zigbee Home Automation	9 DEVICES

**ADD INTEGRATION**

Home Assistant		Devices										
Overview	Filters		Search 10 devices		Integrations		Devices		Entities		Helpers	
	Device		Manufacturer		Model		Area		Integration		Battery	
	 _TZE200_jeceansq T50601		 _TZE200_jeceansq		T50601				Zigbee Home Automation			
	 Silicon Labs EZSP		 Silicon Labs		EZSP				Zigbee Home Automation			
	 Third Reality 3RTHS0224Z		 Third Reality		3RTHS0224Z				Zigbee Home Automation			
	 Third Reality 3RTHS0224Z		 Third Reality		3RTHS0224Z				Zigbee Home Automation			
	 Third Reality, Inc 3RDG17BZ		 Third Reality, Inc		3RDG17BZ				Zigbee Home Automation			
	 Third Reality, Inc 3RDG17BZ		 Third Reality, Inc		3RDG17BZ				Zigbee Home Automation			
	 Third Reality, Inc 3RSM0147Z		 Third Reality, Inc		3RSM0147Z				Zigbee Home Automation	50%		
	 Third Reality, Inc 3RTHS24BZ		 Third Reality, Inc		3RTHS24BZ		Living Room		Zigbee Home Automation	100%		
	 Third Reality, Inc 3RVS01031Z		 Third Reality, Inc		3RVS01031Z				Zigbee Home Automation	99%		

Home Assistant		Third Reality, Inc 3RSM0147Z												
Overview	Device info		Sensors				Logbook							
	 3RSM0147Z	by Third Reality, Inc	Sensors				 50%	 zigbee						
	Zigbee info		 Humidity 0.0%											
	 Zigbee Home Automation		 Temperature 30.7 °C											
	<a href="#">RECONFIGURE</a>		<a href="#">ADD TO DASHBOARD</a>											
	Automations		 Configuration Up-to-date											
	Scenes		 Diagnostic											
	Scripts		 Battery 50%											
	No scripts have been added using this device yet. You can add one by clicking the + button above.		<a href="#">ADD TO DASHBOARD</a>											
	No scenes have been added using this device yet. You can add one by clicking the + button above.													
	No scripts have been added using this device yet. You can add one by clicking the + button above.													

# Zigbee2MQTT

1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. Permit join to start Zigbee pairing in Zigbee2MQTT.
3. Pairing completed, the sensor will be displayed in the device list  
Go to Settings page, create automation.

Z2M@192.168.3.87							
	Devices	Dashboard	Map	Groups	OTA	TouchLink	Logs
Overview							
1	2-5F11	0x28c02bfff7511 (0x7316)	Third Reality	3RMS16BZ	255	?	    
2	2-551E	0x28c02bfff8551e (0xAE33)	Third Reality	3RMS16BZ	255	?	    
3	2-1170	0x28c02bfff1170 (0xC13B)	Third Reality	3RSB015BZ	255	?	    
4	door-V29	0xd55ce6ff0022c28 (0x6f6CA)	Third Reality	3RDT501056Z	255	?	    
5	door-V28	0xd75ce6ff0022c28 (0x1D6E)	Third Reality	3RDT501056Z	255	?	    
6	plug3 0x1a2fedff0f022c28	0x1a2fedff0022c28 (0xC931)	Third Reality	3RSPE01044BZ	255	?	    
7	0x0000c5add3cf0eb4	0x0000c5add3cf0eb4 (0x1D73)	Third Reality	3RSNL02043Z	255	?	    
8	0xe71e9ffb0322c28	0xe71e9ffb0022c28 (0xF3FB)	Third Reality	3RSS009Z	255	?	    
9	0x8d8eeccff0022c28	0x8d8eeccff0022c28 (0x5B43)	Third Reality	3RVS01031Z	255	?	    
10	0xf95e3ffb022c28	0xf95e3ffb0022c28 (0xF67B)	Third Reality	3RTH524BZ	255	?	    
11	0x7081e3ffb022c28	0x7081e3ffb0022c28 (0x60C6)	Third Reality	3R56228Z	255	?	    
12	0x1795c7bcb38c1a4	0x1795c7bcb38c1a4 (0x5C20)	Unsupported	3RSM0147Z	255	?	    
13	0x359ae9ffb022c28	0x359ae9ffb0022c28 (0x9FC5)	Third Reality	3RSS009Z	255	?	    
14	0x359ae9ffb022c28	0x359ae9ffb0022c28 (0x9FC5)	Third Reality	3RSS009Z	255	?	    
15	0x1795c7bcb38c1a4	0x1795c7bcb38c1a4 (0x5C20)	Unsupported	3RSM0147Z	255	?	    

Home Assistant		Z2M@192.168.3.87 Devices											
		Devices	Dashboard	Map	Groups	OTA	Touchlink	Logs	Extensions	⚙️	✖️	Disable join (All 03:37)	✖️
☰	Overview												
☰	11												
☰	Map												
⚡	Energy												
☰	Logbook												
☰	History												
🔍	File editor												
🔊	Media												
💻	Terminal												
🌐	Zigbee2MQTT												
☰	Developer tools												
⚙️	Settings												
🔔	Notifications												
👤	admin												
4	2-551E	0x082c02bfff0e0551e-0x1e33	Third Reality	3RMS16BZ	255	?				✖️	✖️	✖️	✖️
5	2-1170	0x082c02bfff0e1170-0x1c30	Third Reality	3RSB015BZ	255	?				✖️	✖️	✖️	✖️
6	door-V29	0xd55ce6ffbf022c28-0x6c6a	Third Reality	3RDT01056Z	255	?				✖️	✖️	✖️	✖️
7	door-V28	0xd75ce6ffbf022c28-0x1d6e	Third Reality	3RDT01056Z	255	?				✖️	✖️	✖️	✖️
8	plug3 0x1a2fedffbf022c28	0x1a2fedffbf022c28-0x93f	Third Reality	3RSPE01044BZ	255	?				✖️	✖️	✖️	✖️
9	0x00005add3cf0eb4	0x00005add3cf0eb4-0x1df3	Third Reality	3RSNL02043Z	255	?				✖️	✖️	✖️	✖️
10	0x0f71e9ffbf022c28	0x0f71e9ffbf022c28-0x1f3f	Third Reality	3RSS009Z	255	?				✖️	✖️	✖️	✖️
11	0x8d8beecfb022c28	0x8d8beecfb022c28-0x61b3	Third Reality	3RV501031Z	255	?				✖️	✖️	✖️	✖️
12	0xf895e3ffbf022c28	0xf895e3ffbf022c28-0x6f78	Third Reality	3RTHS24BZ	255	?				✖️	✖️	✖️	✖️
13	0x7081e3ffbf022c28	0x7081e3ffbf022c28-0x60c6	Third Reality	3RSB22BZ	255	?				✖️	✖️	✖️	✖️
14	0x1795c7bcd38c1a4	0x1795c7bcd38c1a4-0xc526	Unsupported	3RSM0147Z	255	?				✖️	✖️	✖️	✖️
15	0x359ae9ffbf022c28	0x359ae9ffbf022c28-0x5e0e	Third Reality	3RSS009Z	255	?				✖️	✖️	✖️	✖️
16	0x739e82dbee38c1a4	0x739e82dbee38c1a4-0x5e78	Unsupported	3RSM0147Z	N/A	?				✖️	✖️	✖️	✖️

Home Assistant		Z2M@192.168.3.87 Devices											
		Devices	Dashboard	Map	Groups	OTA	Touchlink	Logs	Extensions	⚙️	✖️	Disable join (All 03:27)	✖️
☰	Overview												
☰	11												
☰	Map												
⚡	Energy												
☰	Logbook												
☰	History												
🔍	File editor												
🔊	Media												
💻	Terminal												
🌐	Zigbee2MQTT												
☰	Developer tools												
⚙️	Settings												
🔔	Notifications												
👤	admin												
0x739e82dbee38c1a4	0x739e82dbee38c1a4												
	About												
	Exposes												
	Bind												
	Reporting												
	Settings												
	Settings (specific)												
	State												
	Clusters												
	Scene												
	Dev console												
	Battery												
	Remaining battery in %												
	50 %												
	Temperature												
	Measured temperature value												
	30.72 °C												
	Humidity												
	Measured relative humidity												
	0 %												
	Linkquality												
	Link quality (signal strength)												
	140												

# FCC Regulatory Conformance

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help important announcement.

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

## RF Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## Limited Warranty

For limited warranty, please visit [www.3reality.com/devicesupport](http://www.3reality.com/devicesupport).

For customer support, please contact us at [info@3reality.com](mailto:info@3reality.com) or visit [www.3reality.com](http://www.3reality.com).

For help and troubleshooting related to Amazon Alexa, visit the Alexa app.