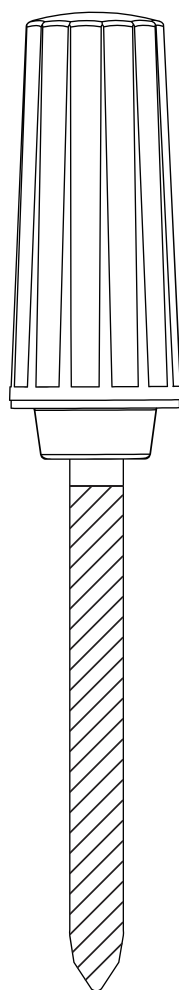


Smart Soil Moisture Sensor

User Manual



THIRD REALITY

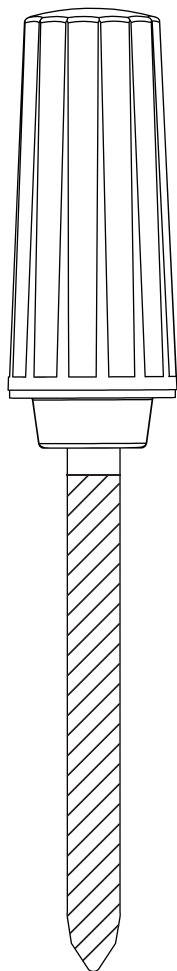
Contents

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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.

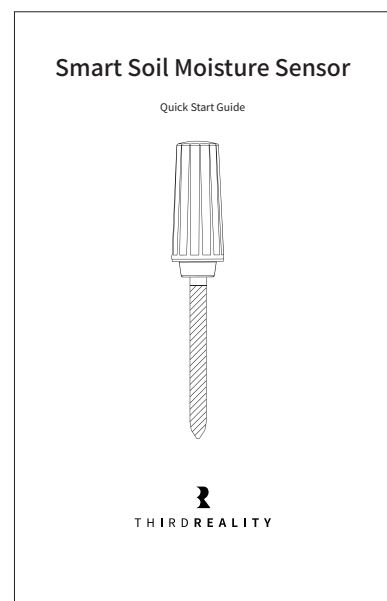
What's in the Box



Smart Soil Moisture Sensor



AA Battery

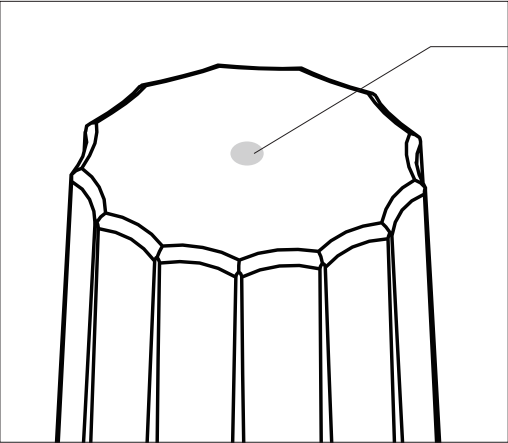


User Guide

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

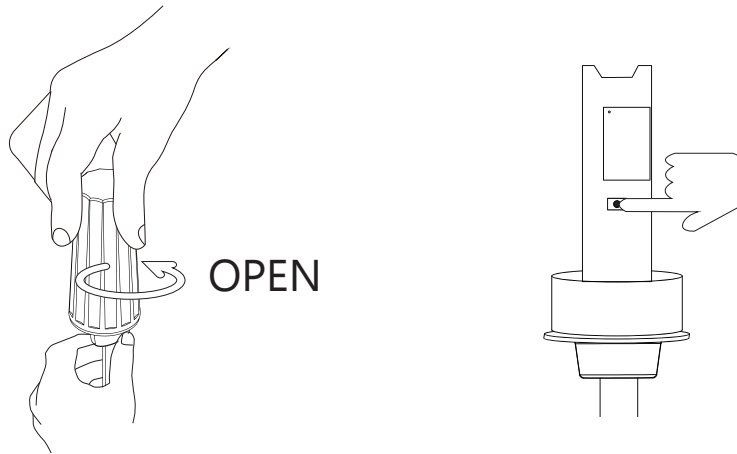


LED Indicator

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.

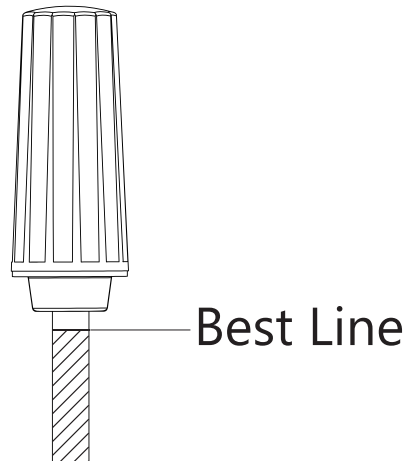


2. Press and hold the reset button for 5 seconds until the LED light turns red, release the reset button and the LED starts blue blinking, indicating it enters Zigbee pairing mode.
3. Follow the instructions of your smart home hub /smart speaker with built-in Zigbee radio to pair the sensor in the corresponding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


Device







Hub 1

0 device connected




Device



80.8

59




Temperature ...

connected to Hub 1


30.4°C / 86.8°F

0.0%



Hub 1

1 device connected



Pairing with 3R-Installer

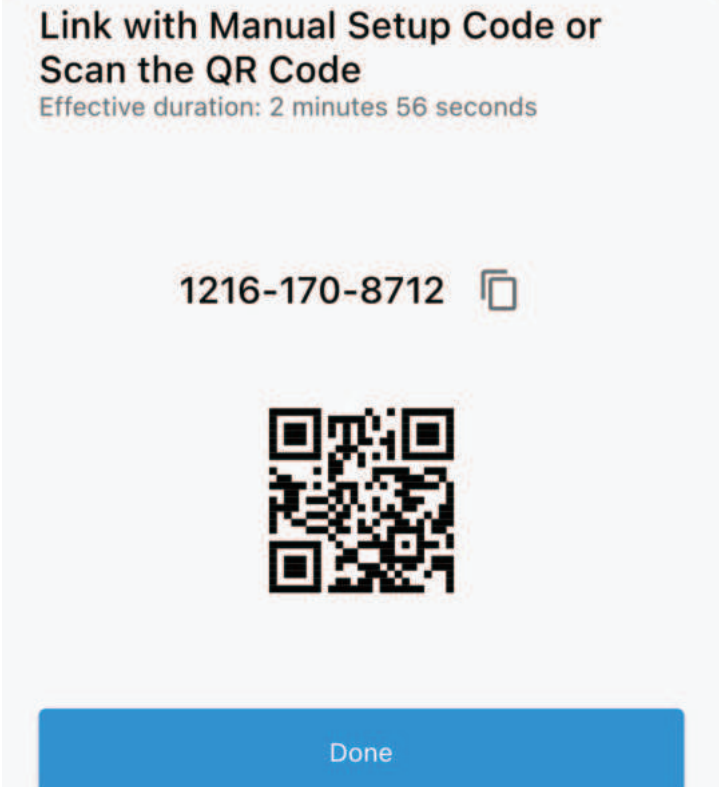
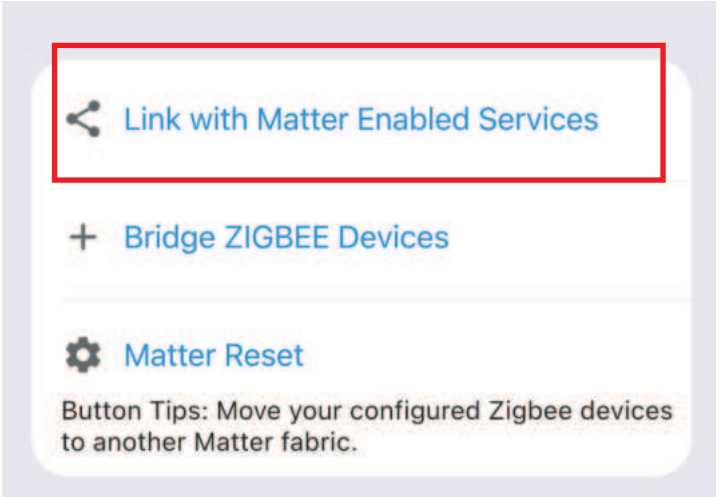
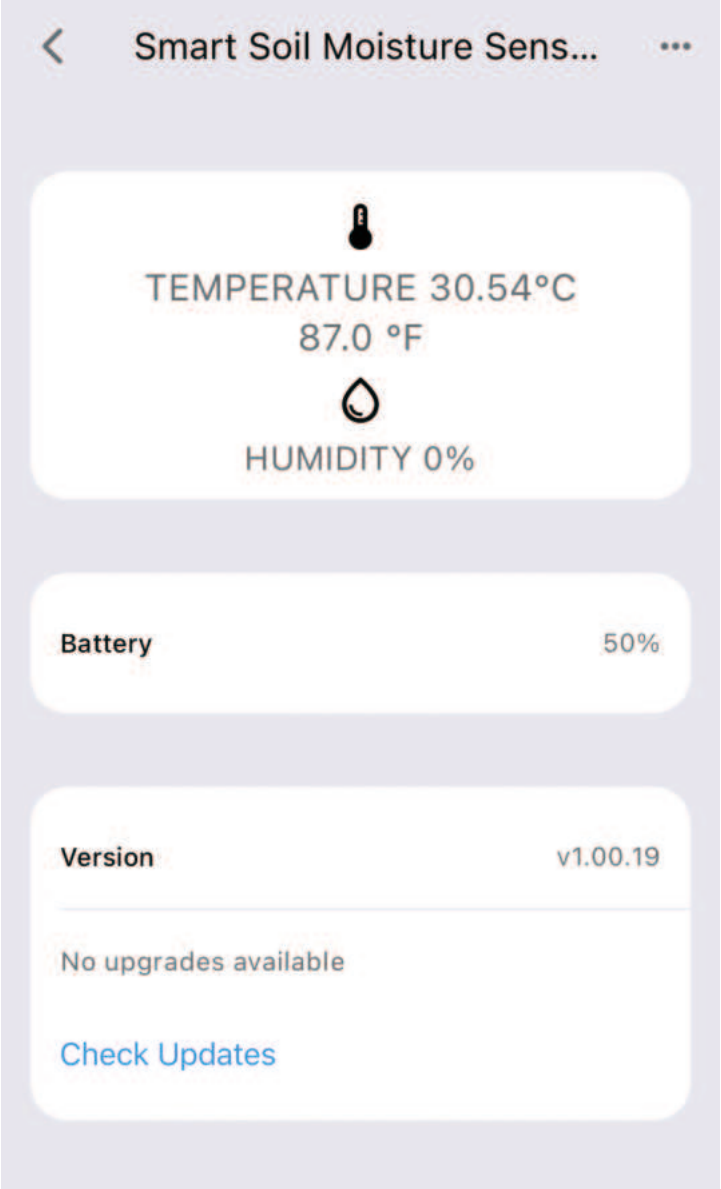
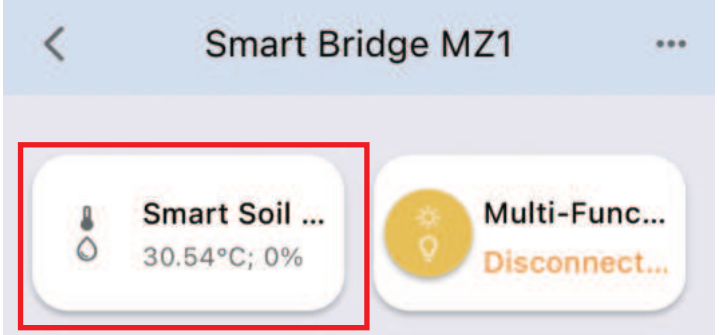
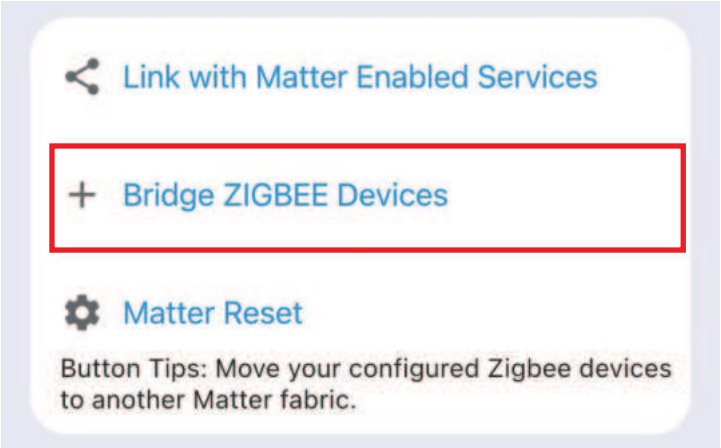
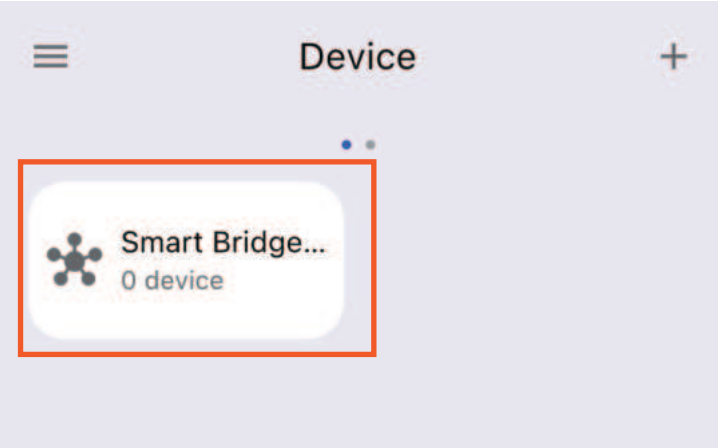
App: 3R-Installer App

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.



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

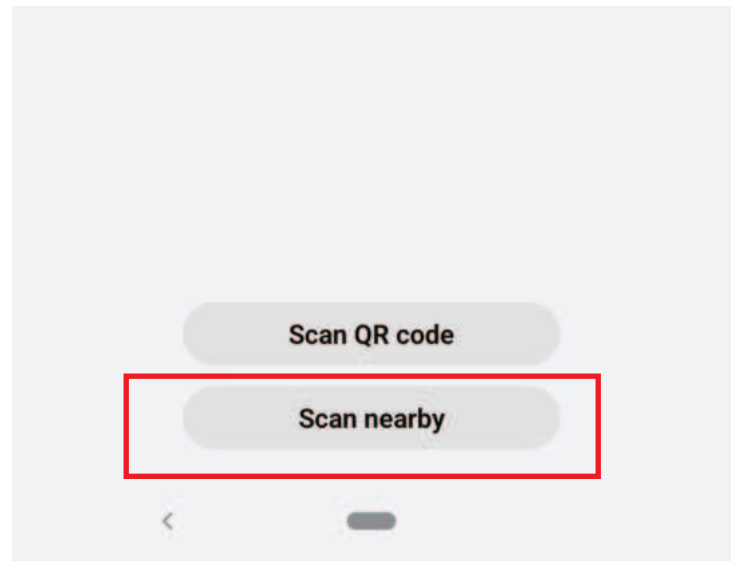
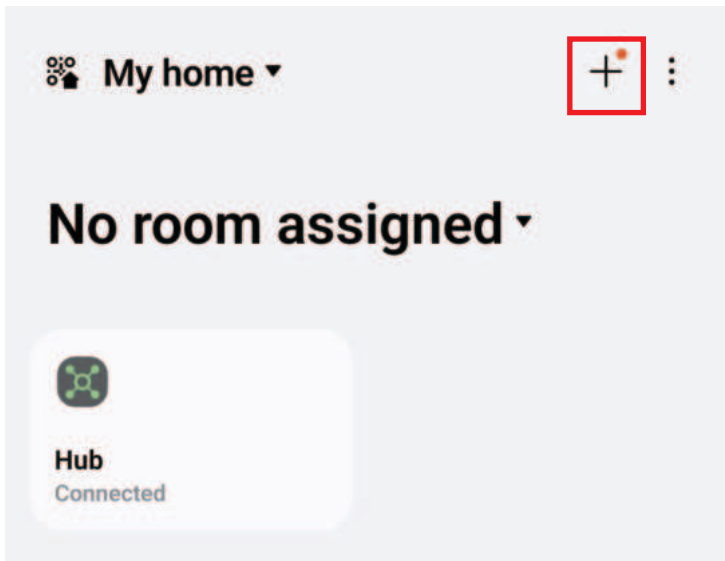
Aeotec Hub

My home

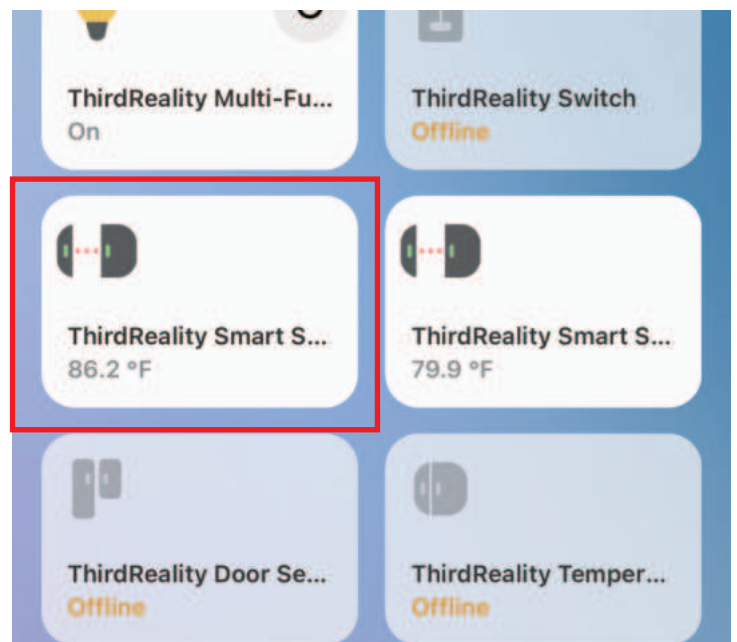
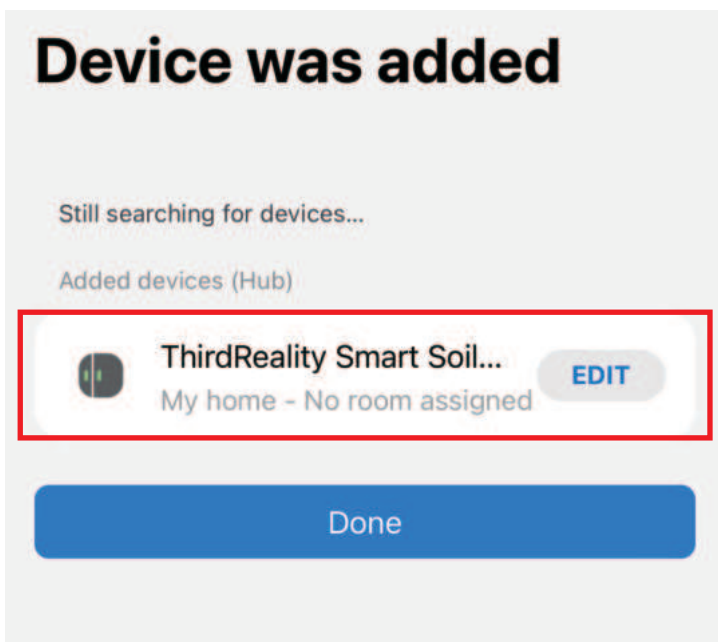
- Name
ThirdReality Humidity Sensor
- Description
ThirdReality Temperature and Humidity sensor drivers
- Permissions
 - zigbee: Enable full access to Zigbee actions

Install

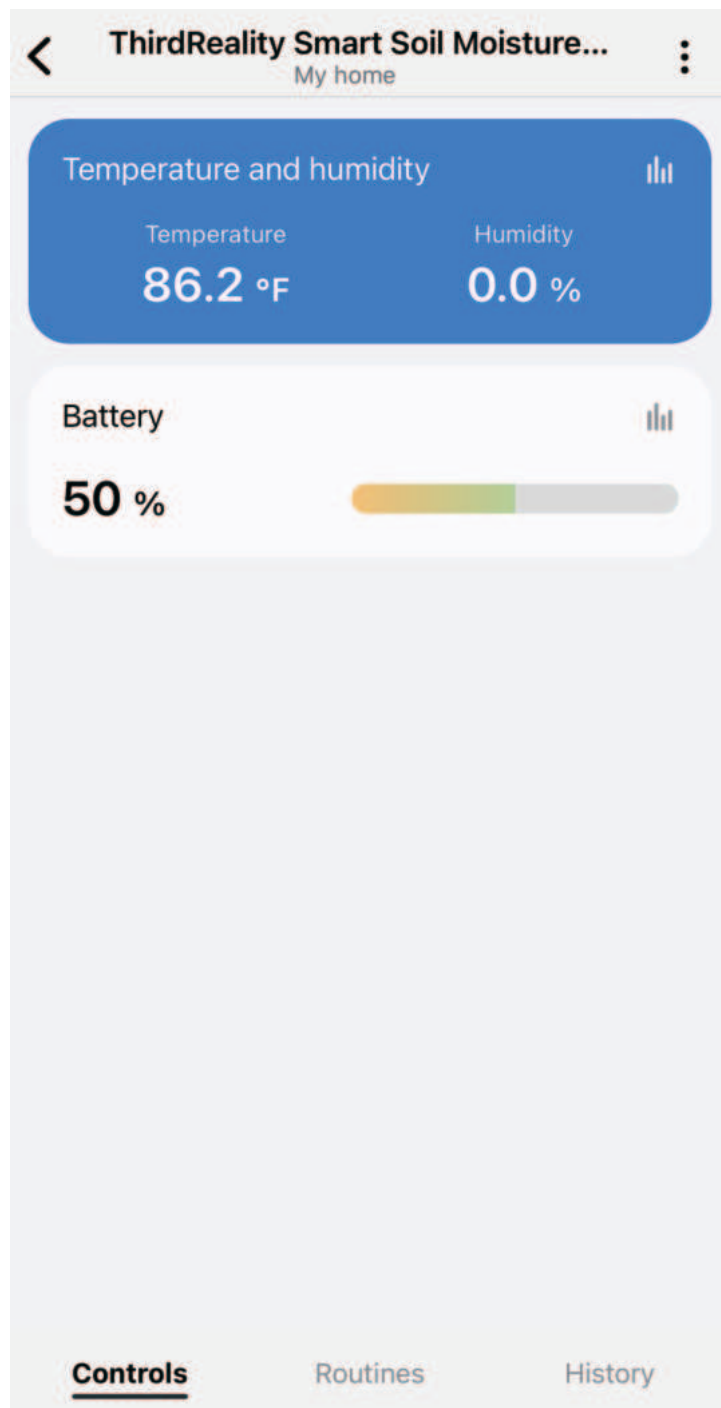
3. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
4. Open your SmartThings App, tap “+” on the up right corner to ”Add device” and then tap “Scan nearby”.



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.hubitat.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

Devices

hubitat c7

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Apps code

Drivers code

Libraries code

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Logs

Compatible device list

X Clear Search

+ Add device

Disable	Label (Name)	Type	Room	Source	DNI	Status	Last Activity	
<input type="checkbox"/>	1 (Advanced Zigbee CT Bulb)	Advanced Zigbee CT Bulb		System	2EA3 84F0CFD338B00000		8/27/2024 10:40:35	
<input type="checkbox"/>	729ms (Generic Zigbee Motion Sensor (no temp))	Generic Zigbee Motion Sensor (no temp)		System	0439 DE2C238FFFE0A379		7/26/2024 15:44:55	60
<input type="checkbox"/>	Advanced Zigbee CT Bulb	Advanced Zigbee CT Bulb		System	1AED 8400FD33AA000000		8/27/2024 10:40:20	
<input type="checkbox"/>	del (Third Reality Smart Button)	Third Reality Smart Button		System	5A05 DE2C238FFFE0BFA0		8/06/2024 13:42:54	100
<input type="checkbox"/>	Generic Zigbee Switch	Generic Zigbee Switch		System	4F31 DE2C238FFFE00000		8/27/2024 10:12:02	

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Hubitat

Add device

hubitat c7

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Find by device type

Bulbs, dimmers, locks, outlets, switches...

Find by brand

Aeotec, Bosch, Centralite, Sonos, Sengled...

Add device manually

☒ Zigbee

☐ Z-Wave

☐ Matter

☐ Inis V1 Zigbee

☐ Virtual

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Hubitat

Add device

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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

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Hubitat
A Smart Home Ecosystem

Smart Soil Moisture Sensor

hubitat c7

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Drivers code

Libraries code

Bundles

Logs

Status attribute for Devices/Rooms

None

Save Preferences

Device Information

Device name *

Device

Device network id *

99500

Device Label

Smart Soil Moisture Sensor

Type *

Generic Zigbee Temperature/Humidity Sensor

Zigbee ID

A4C138EEDB829E73

Room

No room assigned

Event history size, per event type (1-2000)

11

Hub Mesh enabled

☐

State history size, per attribute (1-2000)

30

Too many events alert threshold, per hour (100-2000)

300

Save Device

Advanced

Device Details

Hubitat
A Smart Home Ecosystem

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

hubitat c7

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Basic Rule

When Smart Soil Moisture Sensor humidity is below 40% ...

Turn on Plant Watering System

When a ...

Humidity Sensor

Choose Humidity Sensors

Smart Soil Moisture Sensor

Senses that

Humidity has fallen below ...

Humidity

40

Do this action:

Turn on

Select switches to turn on *

Plant Watering System

Delete

Add Another Action

Add Wait Until ...

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

15

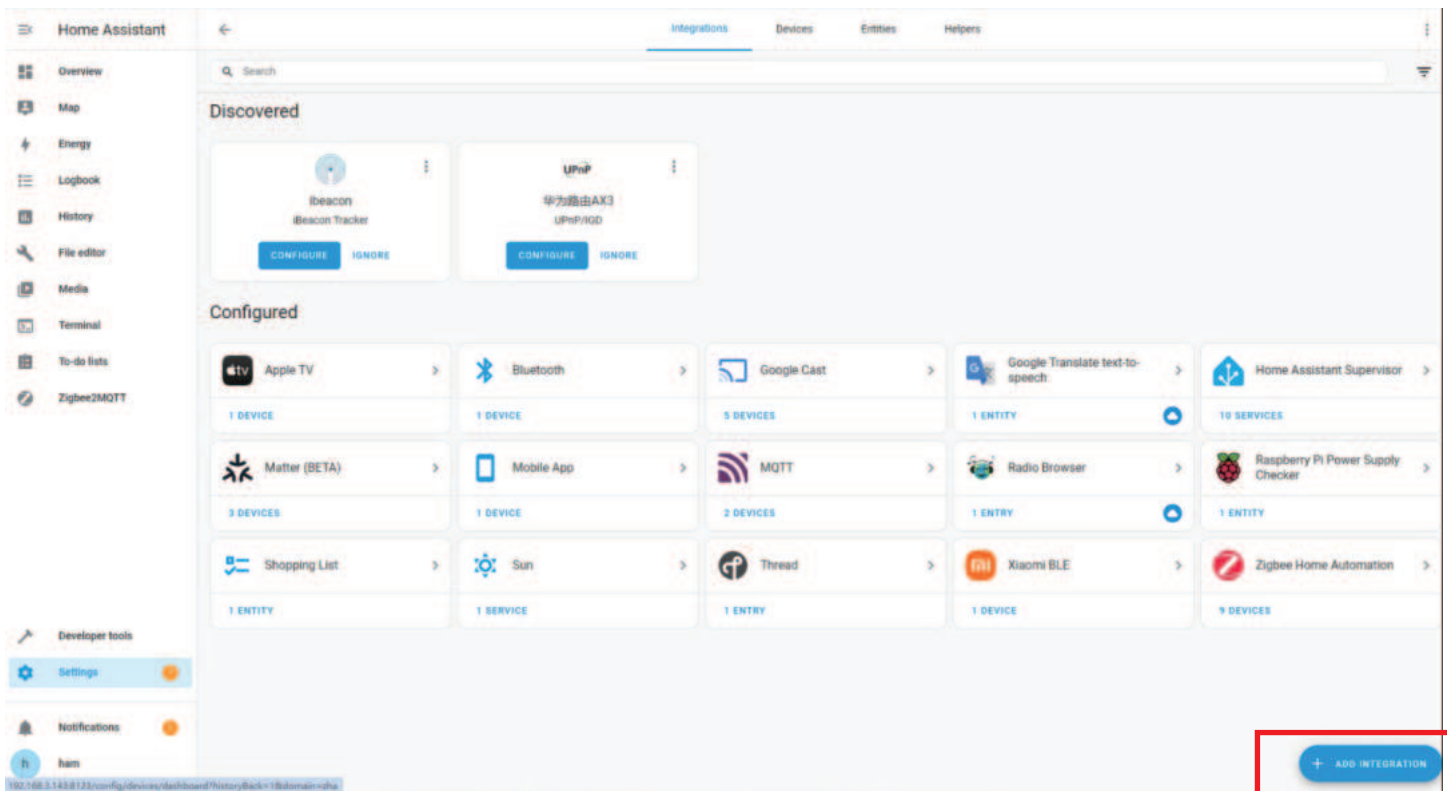
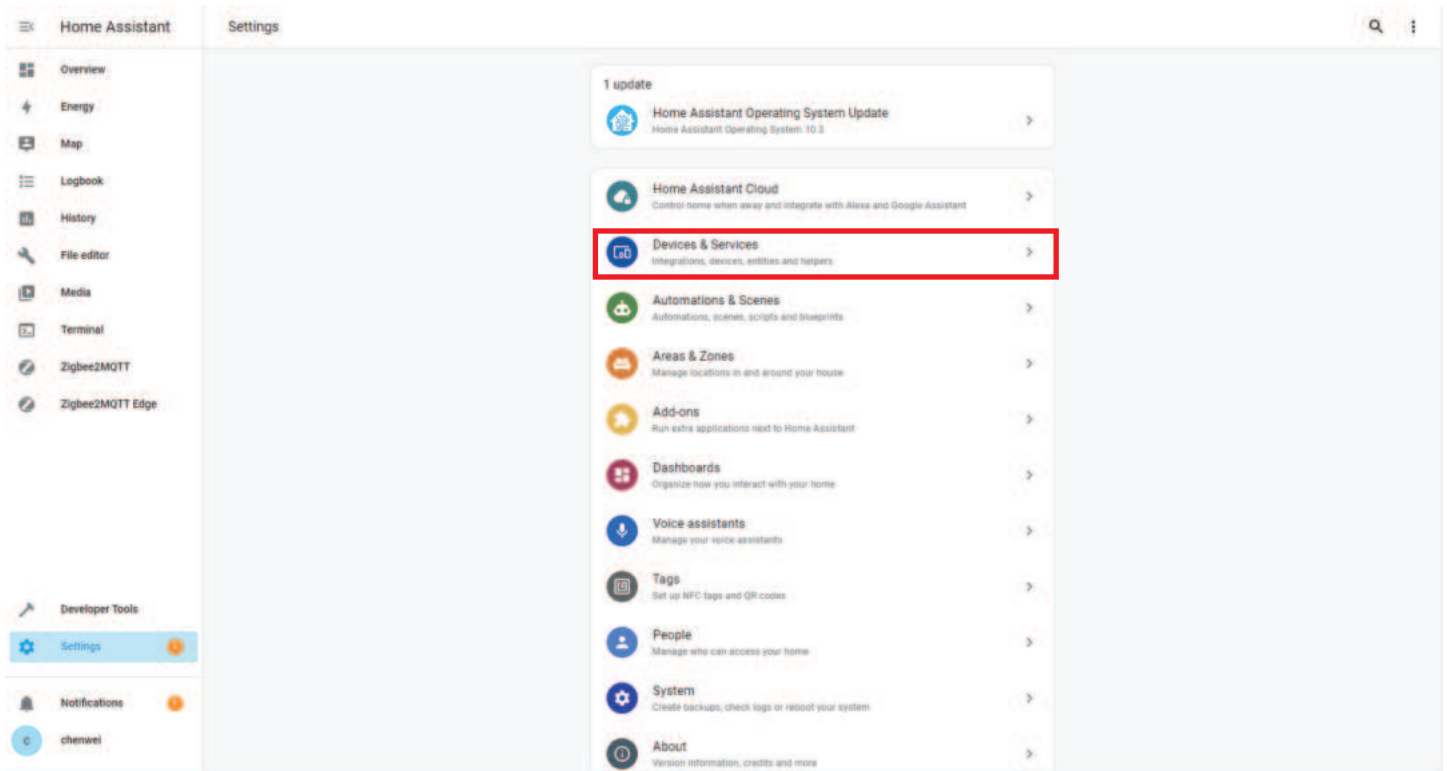
Pairing With Home Assistant

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, then 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

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Integrations

Devices

Entities

Helpers

Filters

Search 10 devices

Group by

Sort by device

Device	Manufacturer	Model	Area	Integration	Battery
„TZE200_lccaseqn TS0601	„TZE200_lccaseqn	TS0601	–	Zigbee Home Automation	–
Silicon Labs EZSP	Silicon Labs	EZSP	–	Zigbee Home Automation	–
Third Reality 3RTH50224Z	Third Reality	3RTH50224Z	–	Zigbee Home Automation	–
Third Reality 3RTH50224Z	Third Reality	3RTH50224Z	–	Zigbee Home Automation	–
Third Reality, Inc 3RDS17BZ	Third Reality, Inc	3RDS17BZ	–	Zigbee Home Automation	–
Third Reality, Inc 3RDS17BZ	Third Reality, Inc	3RDS17BZ	–	Zigbee Home Automation	–
Third Reality, Inc 3RDS17BZ	Third Reality, Inc	3RDS17BZ	–	Zigbee Home Automation	–
Third Reality, Inc 3RSM0147Z	Third Reality, Inc	3RSM0147Z	–	Zigbee Home Automation	50%
Third Reality, Inc 3RTH524BZ	Third Reality, Inc	3RTH524BZ	Living Room	Zigbee Home Automation	100%
Third Reality, Inc 3RV501091Z	Third Reality, Inc	3RV501091Z	–	Zigbee Home Automation	98%

+

ADD DEVICE

Home Assistant

← Third Reality, Inc 3RSM0147Z

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Device info

3RSM0147Z
by Third Reality, Inc

Zigbee info

Zigbee Home Automation

RECONFIGURE

Automations

No automations have been added using this device yet. You can add one by clicking the + button above.

Scenes

No scenes have been added using this device yet. You can add one by clicking the + button above.

Scripts

No scripts have been added using this device yet. You can add one by clicking the + button above.

Sensors

Humidity

0.0%

Temperature

30.7 °C

ADD TO DASHBOARD

Configuration

Firmware

Up-to-date

ADD TO DASHBOARD

Diagnostic

Battery

50%

+2 entities not shown

ADD TO DASHBOARD

Logbook

August 27, 2024

Third reality, Inc 3RSM0147Z Firmware turned off

9:13:02 AM - 12 minutes ago

Third Reality, Inc 3RSM0147Z Firmware became unavailable

9:12:32 AM - 12 minutes ago

Third Reality, Inc 3RSM0147Z Zha Event was fired

9:12:10 AM - 12 minutes ago

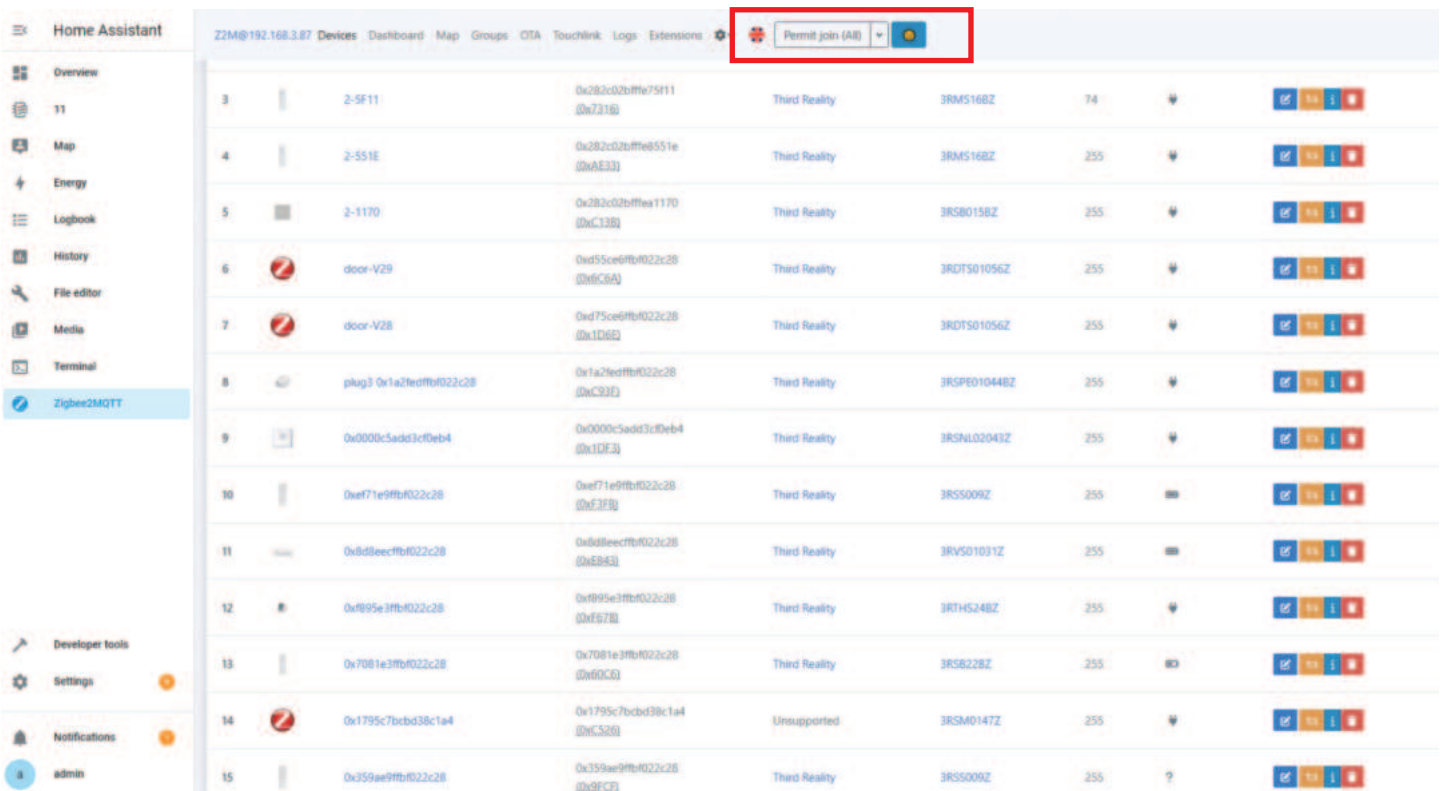
Third Reality, Inc 3RSM0147Z Firmware turned off

9:12:28 AM - 13 minutes ago

Third reality, Inc 3RSM0147Z Firmware became unavailable

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.



The screenshot shows the Zigbee2MQTT web interface. On the left is a sidebar with navigation links: Overview, 11, Map, Energy, Logbook, History, File editor, Media, Terminal, and Zigbee2MQTT (highlighted). Below these are Developer tools, Settings, Notifications, and a user profile for 'admin'. The main area displays a table of connected devices. At the top of this area, there is a 'Permit join (All)' button with a red box around it. The table lists 15 devices with columns for ID, Name, MAC, Manufacturer, Model, Version, and a status icon.

ID	Name	MAC	Manufacturer	Model	Version	Status
3	2-5F11	0x282c02bffe79f11 (0x7318)	Third Reality	3RMS16BZ	74	✓
4	2-551E	0x282c02bffe8551e (0xAE33)	Third Reality	3RMS16BZ	255	✓
5	2-1170	0x282c02bffe1170 (0xC13B)	Third Reality	3RSM15BZ	255	✓
6	door-V29	0xd55ce9fbf022c28 (0x6C6A)	Third Reality	3RDS01056Z	255	✓
7	door-V28	0xd75ce9fbf022c28 (0x1D62)	Third Reality	3RDS01056Z	255	✓
8	plug3 0x1a2fedfbf022c28	0x1a2fedfbf022c28 (0xC33F)	Third Reality	3RSP01044BZ	255	✓
9	0x0000c5add3cf0eb4	0x0000c5add3cf0eb4 (0x1DF3)	Third Reality	3RSL02043Z	255	✓
10	0xef71e9fbf022c28	0xef71e9fbf022c28 (0xF3F3)	Third Reality	3RSS009Z	255	✓
11	0x8dbecfbf022c28	0x8dbecfbf022c28 (0xEB43)	Third Reality	3RV501031Z	255	✓
12	0xf895e3fbf022c28	0xf895e3fbf022c28 (0xF67B)	Third Reality	3RTH524BZ	255	✓
13	0x7081e3fbf022c28	0x7081e3fbf022c28 (0x60C3)	Third Reality	3RS622BZ	255	✓
14	0x1795c7bcd38c1a4	0x1795c7bcd38c1a4 (0xC526)	Unsupported	3RSM0147Z	255	✓
15	0x359ae9fbf022c28	0x359ae9fbf022c28 (0x8FC3)	Third Reality	3RSS009Z	255	?

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Z2M@192.168.3.87

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Disable join (All) 03:37

4		2-551E	0x282c02bffe8551e (0x6AE3)	Third Reality	3RMS168Z	255					
5		2-1170	0x282c02bffe91170 (0x6138)	Third Reality	3RSB0158Z	255					
6		door-V29	0x755ce6ffb022c28 (0x6C6A)	Third Reality	3RDT501056Z	255					
7		door-V28	0x755ce6ffb022c28 (0x1D6E)	Third Reality	3RDT501056Z	255					
8		plug3 0x1a2fedffb022c28	0x1a2fedffb022c28 (0x639F)	Third Reality	3RSP010448Z	255					
9		0x000c5add3cf0eb4	0x000c5add3cf0eb4 (0x1D6E)	Third Reality	3RSNL02043Z	255					
10		Over71e9ffb022c28	0x71e9ffb022c28 (0x63F0)	Third Reality	3RSS009Z	255					
11		0x8d8eeffb022c28	0x8d8eeffb022c28 (0x6841)	Third Reality	3RV501031Z	255					
12		0x895e3ffb022c28	0x895e3ffb022c28 (0x6678)	Third Reality	3RTHS248Z	255					
13		0x7081e3ffb022c28	0x7081e3ffb022c28 (0x60C5)	Third Reality	3RSB228Z	255					
14		0x1795c7bcb38c1a4	0x1795c7bcb38c1a4 (0x6526)	Unsupported	3RSM0147Z	255					
15		0x359ae9ffb022c28	0x359ae9ffb022c28 (0x6FCF)	Third Reality	3RSS009Z	255					
16		0x739e82dbec38c1a4	0x739e82dbec38c1a4 (0x6E78)	Unsupported	3RSM0147Z	N/A					

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Disable join (All) 03:37

0x739e82dbec38c1a4

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 dBm

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.

For customer support, please contact us at info@3reality.com or visit www.3reality.com.

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