User Manual

Zigbee Humidity & Temperature Sensor

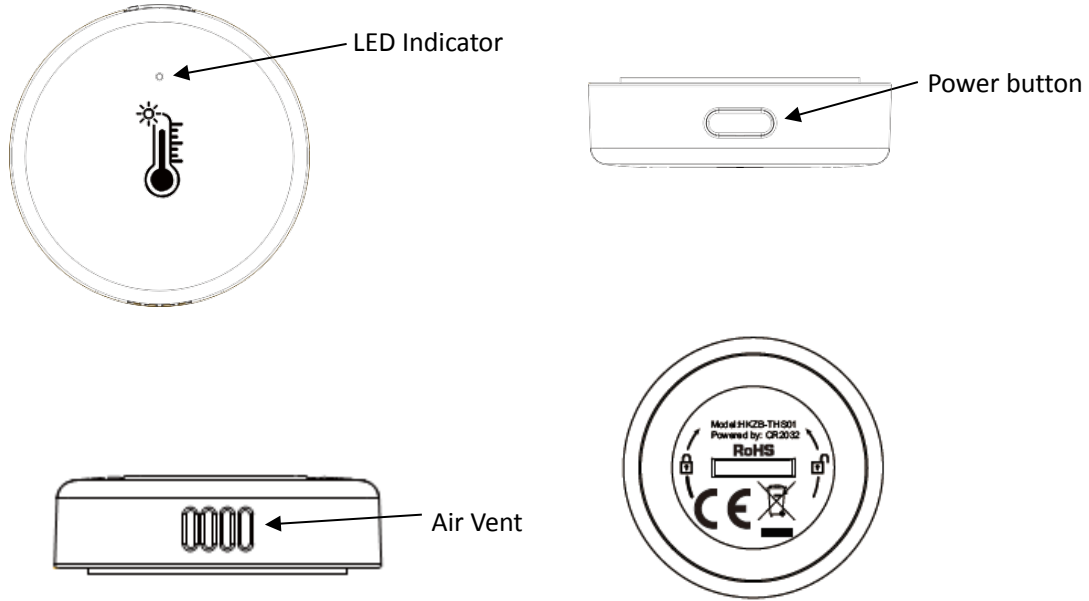# HKZB-THS01

1. PRODUCT OVERVIEW

The zigbee Humidity & Temperature Sensor is based on Zigbee 3.0 2.4G wireless radio frequency technology to achieve intelligent detection. It allows to monitor the ambient temperature and humidity remotely, which all real-time readings can be checked on Android or IOS APP. And it can also jointly control the other smart devices according to the current temperature and humidity values.

2. PRODUCT FEATURES

- Inclusion, activation by one click
- LED lights indicates the status of the device during operation: inclusion, exclusion and activation
- Adopt Zigbee 3.0 protocol, support Zigbee MAC specification
- Powered by 1xCR2032 battery. Ultra-low power consumption, long battery life
- View the real-time ambient temperature and humidity values through the APP at anytime and anywhere

- Low battery alert
- Work as a trigger to activate the other smart devices
- OTA Supported.

3. PRODUCT STRUCTURE

LED Indicator

Power button

Air Vent

Button Activities and LED indicator

In the network	1.Long press the button for 5 seconds, Blue LED blinking, the device enter configuration mode. Network access successful, the LED light turns off; Times out LED goes out. 2.Press the button, LED turns on, release it, LED turns off.
Out of the network	1. Long press the button for 5 seconds, the device will be removed from the network. After removed, the device will enter the network configuration mode (LED flash for 30 seconds). 2. Press the button, LED turns on, release it, LED turns off, sampling and send data.

Note：
1. In the network: The device is set by default and has not been added to the Zigbee Gateway.
2. Out of the network: The device has been added to the Zigbee gateway and is included in the network.
3. The configuration time lasts for 30 seconds. Times out, shall be re-operated.

4. PRODUCT SPECIFICATIONS

Power Supply:	1xCR2032 Battery （2.4V -3.3V DC）
Working current:	≤6mA （average）

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Standy current:	≤4.5uA
Battery Capacity:	210mAh
Protocol:	Zigbee
Wireless transmitting and receiving frequency	2.400—2.483GHz
Network protocol supported	IEEE802.15.4
Wireless coverage:	Indoor 40m Outdoor 100m
Temperature Measurement	-20～+60°C（-20℃≤Temperature〈10℃ +/- 1.5℃,10℃≤Temperature≤60℃ +/- 0.5℃） -4～+140℉ （-4℉≤Temperature〈50℉ +/- 2.7℉,50℉≤Temperature≤140℉ +/- 0.9℉）
Humidity Examination	0%-99.9%（-20℃≤Temperature〈10℃ +/- 15%, 10℃≤Temperature≤60℃ +/- 10%） 0%-99.9%（-4℉≤Temperature〈50℉ +/- 15%, 50℉≤Temperature≤140℉ +/- 10%）
Operating Temperature：	-20～+60℃（Subject to product operating temperature）
Relative Humidity	0%～99.9%RH(no condensation)
Storage Temp	-20～+60℃
Storage Humidity	＜65%RH

Note:
1. The product is for indoor use only.
2. The battery may not enter the network state when it is low battery or at 2.4V. Please replace the new battery.
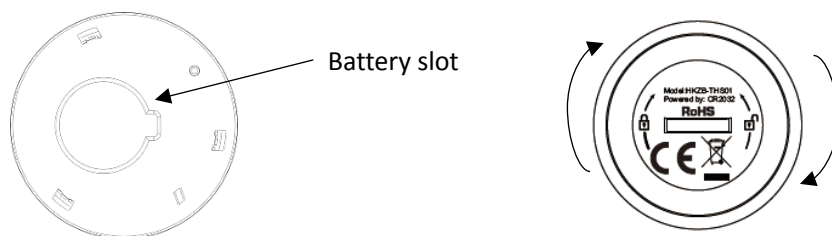
The temperature and humidity sensor shouldn't be in contact with water, do not place in the environment with water!

5. INSTALLATION

（1）Open the back cover by rotating it counterclockwise
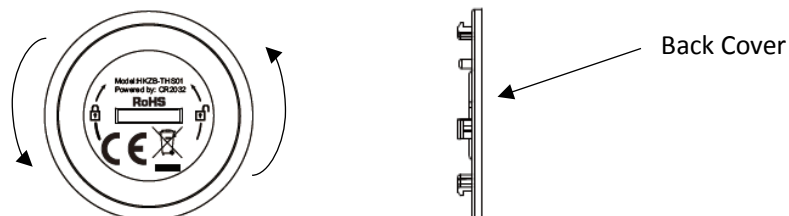
Back Cover

（2）Put the CR2032 battery into the battery slot with battery " + " facing up. Align the back cover clamping position, close the cover by rotating clockwise

Battery slot
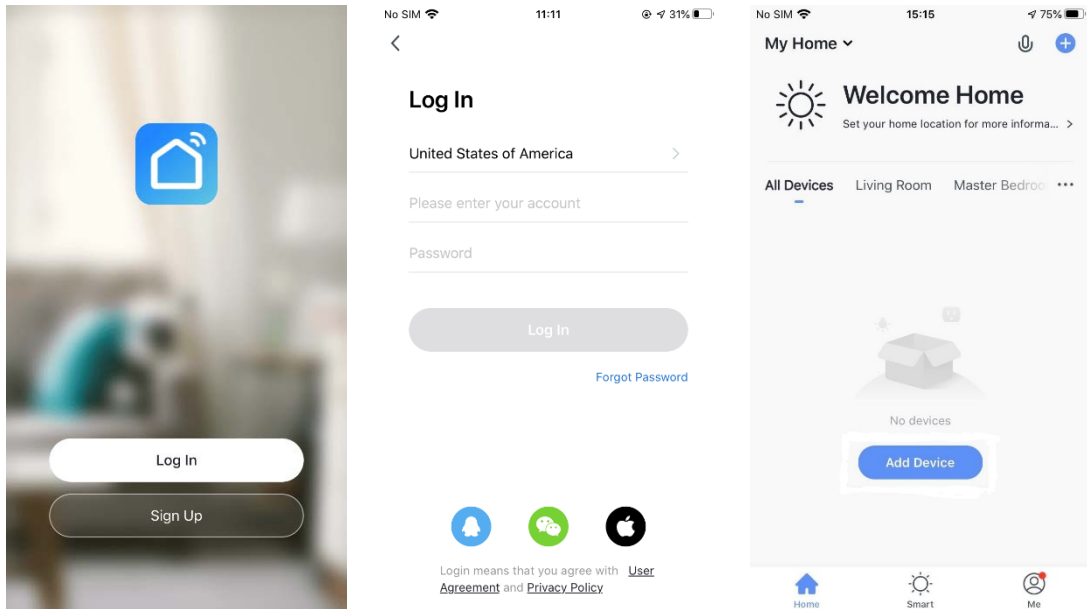
（3）Place the product in the environment to be tested

6. APP CONFIGURATION

6.1 Scan the QR code below to download the Android and iOS app. Or download the "smart life" APP from the apple store and Google Play store.
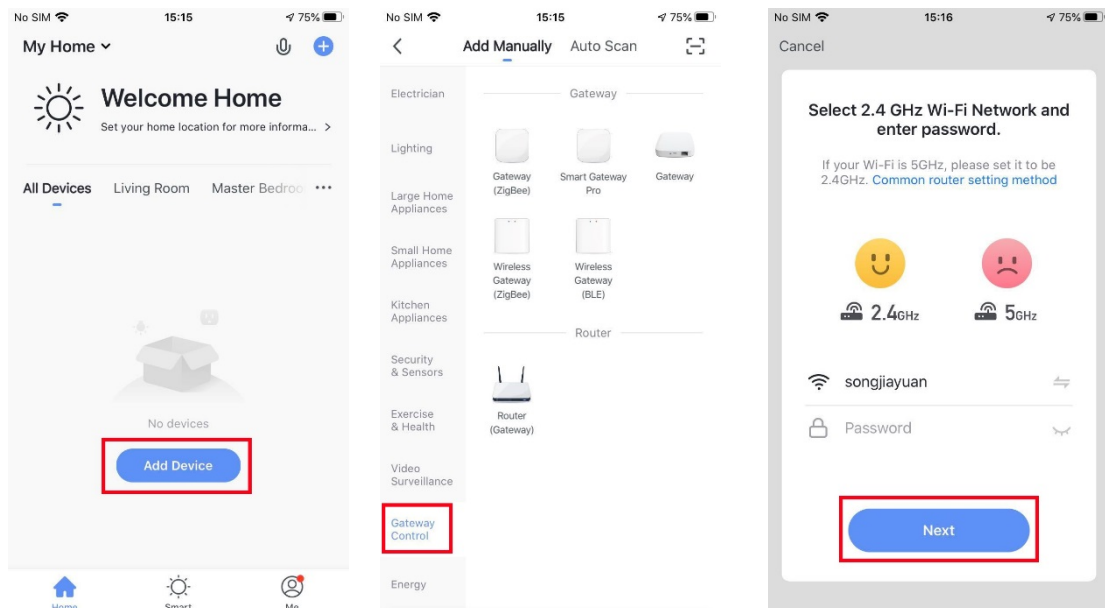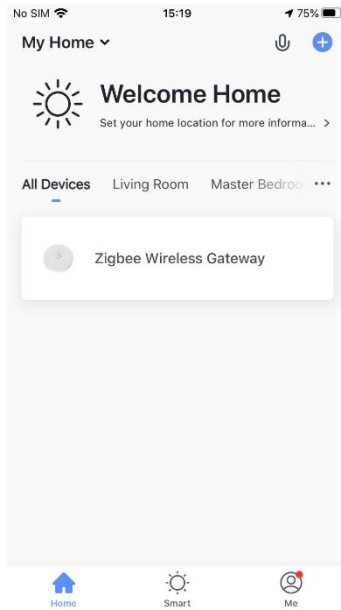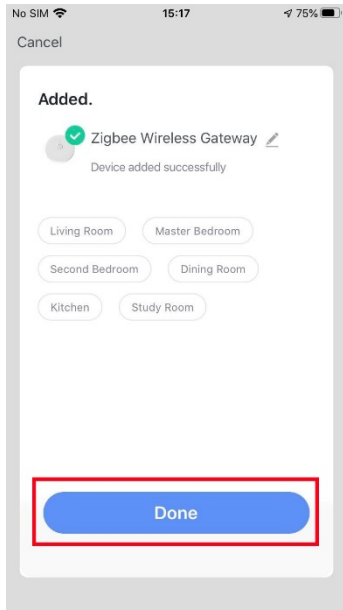
6.2 Start the APP and register an account with your phone or email, and then login APP with your account

6.3 Before adding the humidity and temperature sensor, you need to add a Zigbee gateway in the APP. Click "add device", select the device type"Gateway control" to add a gateway

6.4 Add Devices

（1）Click the Zigbee gateway that has been added to the APP, click "Add subdevice"under the gateway list, press and hold the temperature and humidity sensor button for 5 seconds to make the LED indicator blinking quickly, click "LED already blink"in the APP. When the device is searched, the device will be displayed in the APP network interface. Click"Done", the temperature and humidity sensor can be added to the corresponding Zigbee gateway and displayed in the list.
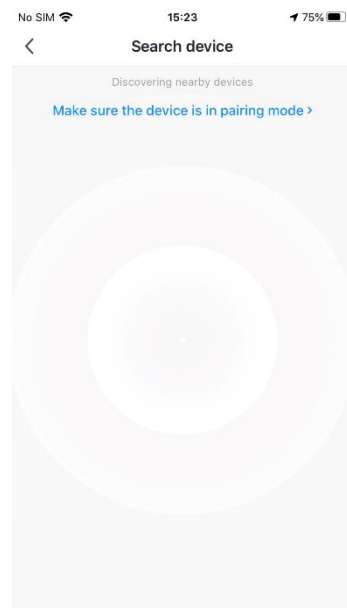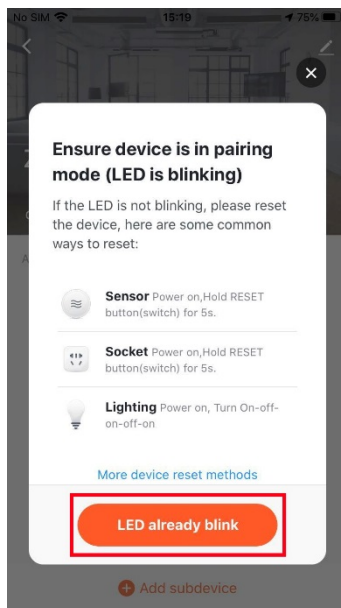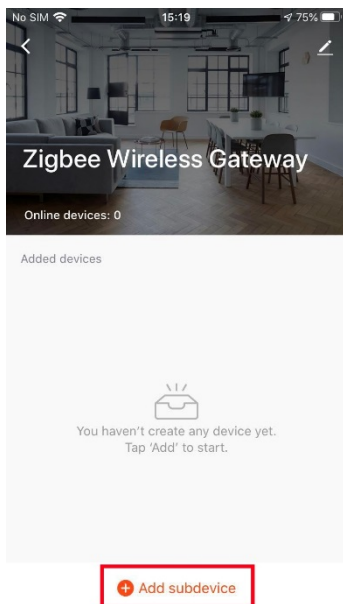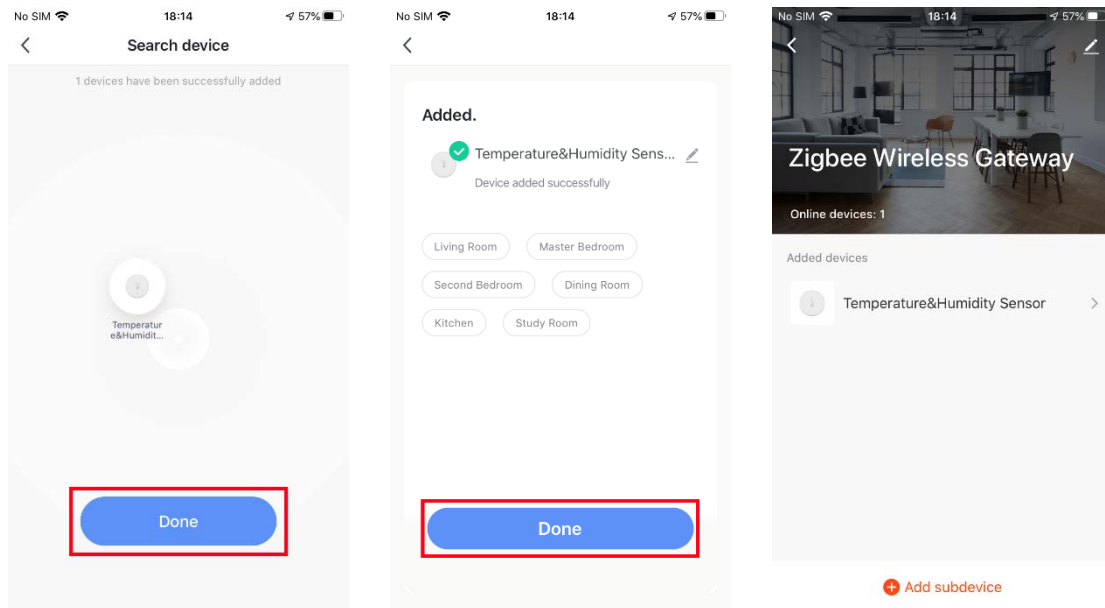
（2）After the device is connected to the network, users can rename or share the device.
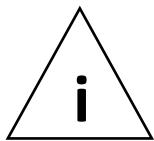

⚠️	**Note** 1. Make sure the Zigbee Gateway and smartphone are on the same network when adding devices (2.4g only) 2. Ensure that the Zigbee gateway is compatible with the added temperature and humidity sensor

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7. DATA　ACQUISITION

（1）Click the button to activate the device and it samples and sends data

（2）Report temperature and humidity value every 30 minutes

（3）Temperature and humidity data will be collected every 5 minutes. If the temperature difference is greater than 0.6℃ or the humidity difference is greater than 6%, relevant data will be separately reported.

（4）Offline：No data collection

（5）Out of network：Battery power will not be collected or reported, and the device will be fully dormant

（6）First addition to the network, it will report full battery about 5s later. And then the real battery status will be reported again about 5 minutes later. Finally, the battery status will be reported every 4h.

（7）The battery level of the product will be measured when it is powered on and when it is woke up.When the power is below the configuration value (2.4V), low battery alert will be sent;

If the battery level is greater than 50% of the current power, the battery will be considered to have been replaced, and a power report will be sent.
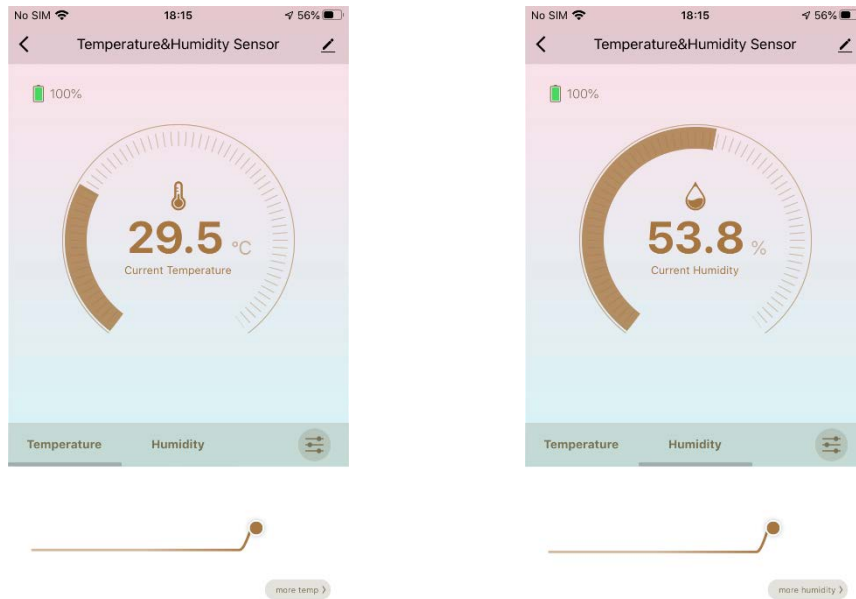
8. EXCLUSION

Remove the temperature and humidity sensor from the APP:
1) Login the APP and click the device
2) Click the icon in the upper right corner of the device and click "Remove Device"
3) Click "Disconnect" and click "confirm" in the pop-up box;
4) After the device is successfully removed, the device will be disappeared from the APP interface and enter configuration mode
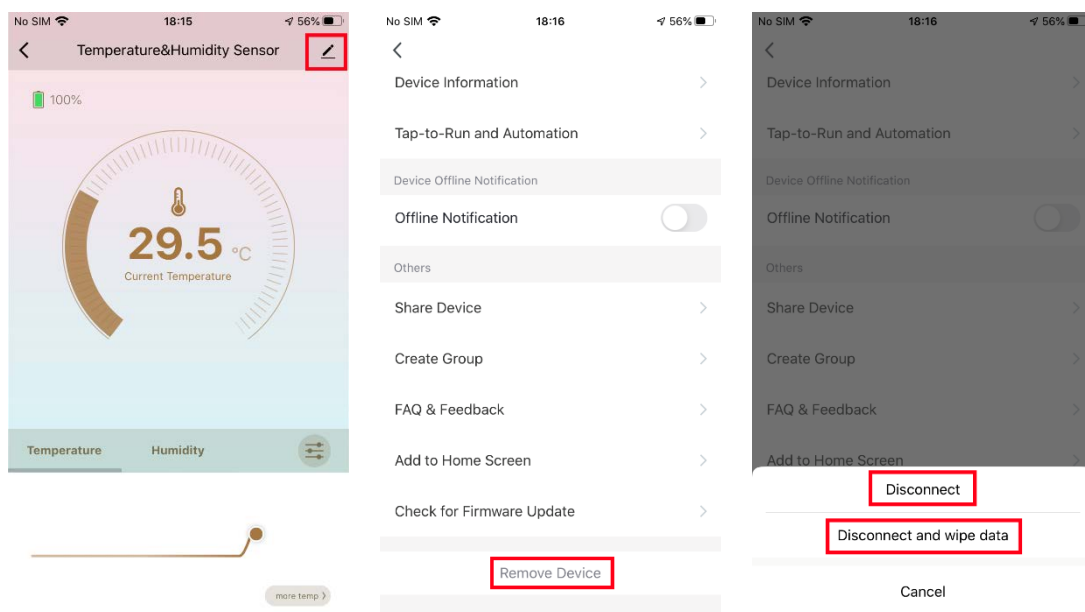
9. RESET DEVICE

Reset the humidity & temperature sensor from the network:
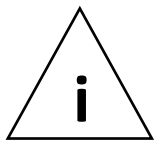1) Login the APP and click the device
2) Click the icon in the upper right corner of the device and click "Remove Device"
3) Click "Disconnect and wipe data" and click "confirm" in the pop-up box;
4) After the device is successfully reset, the device will be disappeared from the APP interface and enter configuration mode

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Note:
"Disconnect and wipe Data" will clear the memory of the temperature and humidity sensor, it means delete all information about the wireless network and configuration.

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10. FCC NOTICE (for USA)

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
(2) This device must accept any interference received, including interference that may cause undesired operation.

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

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.

RF Warning statement:

The device has been evaluated to meet general RF exposure statement.

The device can be used in portable exposure condition without restriction.