WG-Z

ZigBee Gateway

Wireless Zigbee gateway has a built-in highly integrated Wi-Fi module,
a low -power wireless Bluetooth module, and a low-power wireless Zigbee module.
On Tuya Smart Life APP, users can realize functions such as device adding, reset,
third-party control, Bluetooth (single point & Mesh) group control and Zigbee group control,
and match with a variety of Bluetooth or Zigbee 1-5 color constant voltage LED controller,
Bluetooth or Zigbee triac dimmer, Bluetooth or Zigbee 0/1-10V dimmer, Bluetooth or Zigbee
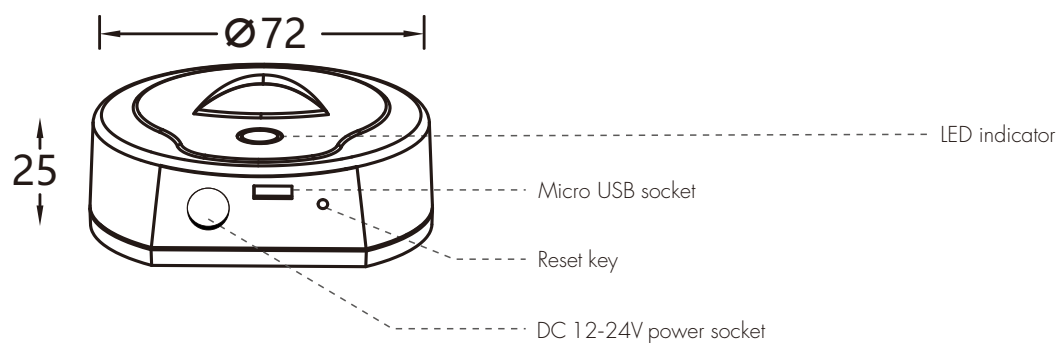dimming LED driver to meet smart home applications.
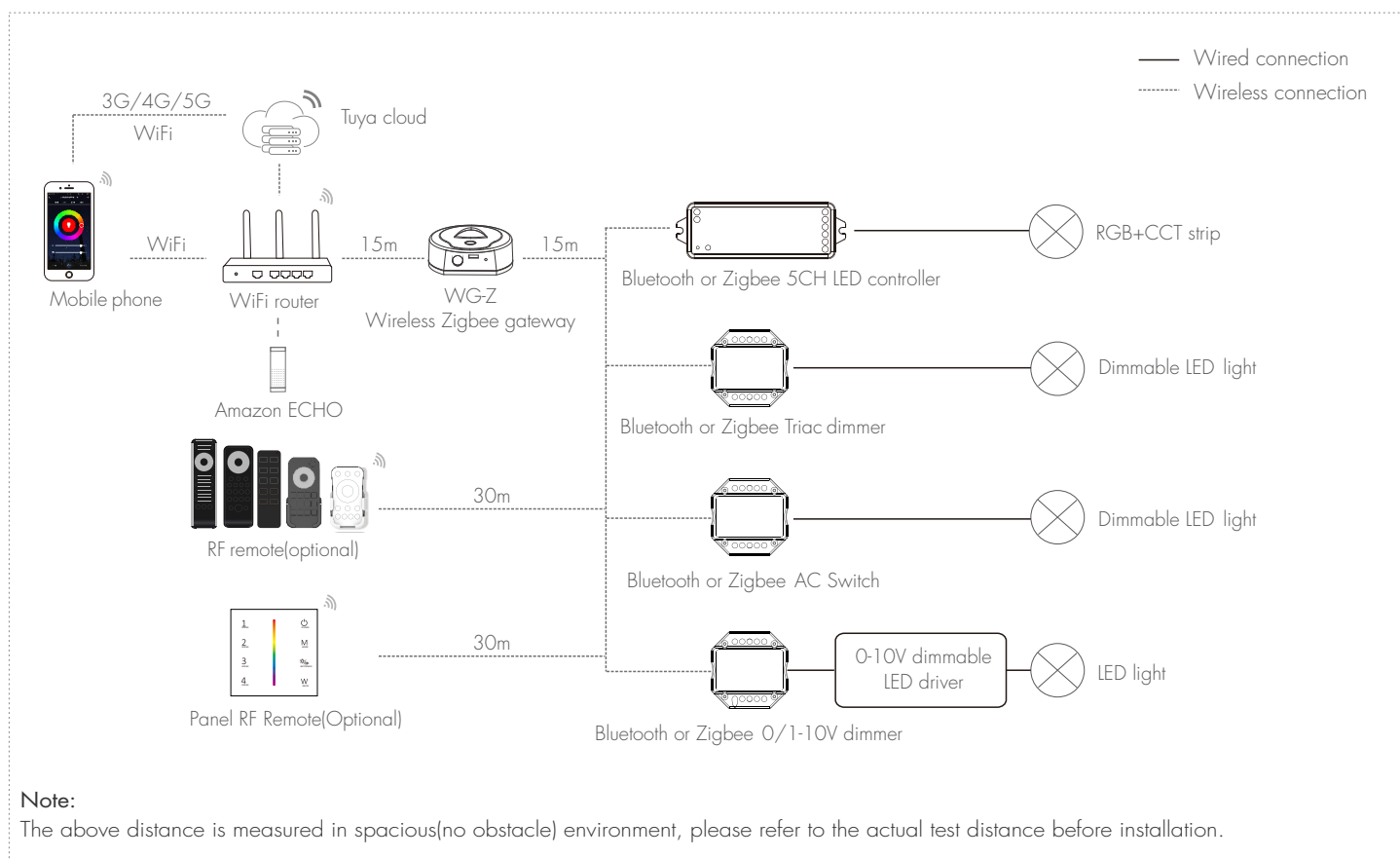
CE RoHS emc RED

Features

● Plug and play, easy to use.

● Integrated with WiFi, Bluetooth and Zigbee communication mode, achieve remote WiFi control, local Zigbee control and local Bluetooth control(Mesh & Ble).

● WiFi signal, Bluetooth signal and Zigbee signal are stable and reliable, can cover a wide area, preventing interference, and feature lower power consumption.

● To strengthen security, the device adopts industry-advanced encryption to transmit information on the WiFi, Bluetooth and Zigbee terminal.

● Third-party voice control, support Amazon Alexa, Google Assistant, Tmall Genie, Xiaodu voice assistant.

● Supports adding sub-devices without a networkand multiple sub-devices in the network at the same time.

● The same local area network can connect multiple Zigbee gateway via Smart Life APP.

● long press reset key for 5s to clear previous connection, enter configure mode rapidly.

Technical parameters

1. Physical characteristics

Specification	Details
State indicator	Two LED (WiFi+Zigbee/Bluetooth)
Operation key	One key (for resetting)
Input voltage	MicroUSB DC 5V
Input current	<1A
Operation temperature	-10~55℃
Operation humidity	10%-90%RH(noncondensable)
Storage temperature	-20~60℃
Storage humidity	5%-90%RH(noncondensable)
Hardware port	One Micro-USB
Wireless technology	802.11 b/g/n Zigbee 802.15.4 Bluetooth (Single point & Mesh)
Type of antennae	Built in on-board antenna

2. RF characteristics

Specification	WiFi	Zigbee	Bluetooth (Single point & Mesh)
Wireless frequency	2.400~2.4835 GHz	2.400~2.480 GHz	2.400~2.4835 GHz
Transmitting power	21dBm	10dBm(Standard)	7dBm
Signal channels	CH1~CH14	CH11~CH26	CH0~CH39
Transmitting rate	11b:1, 2, 5.5, 11(Mbps) 11g:6, 9, 12, 18, 24, 36,48, 54 (Mbps) 11n:HT20 MCS0~7 11n:HT40 MCS0~7	250Kbps	1Mbps(Bluetooth 4.2) 2Mbps(Bluetooth 5.0)

3. Network performance

Specification	Details
Wireless encryption	AES 128bit Encryption
	WEP/WPA/WPA2/WPA2 PSK (AES) Security mechanism
Network administration	APP remote configuration
	WiFi module firmware upgrade
	Zigbee module firmware upgrade
	Bluetooth module firmware upgrade
The number of connecting sub-devices	Max Node=128

4. State indicator & reset

• Gateway connection indicator status

∗ Indicator blinks blue-purple means the gateway is in the pending connection state.

∗ Indicator keeps on purple means gateway connection successful

• Device Connection Indicator Status

∗ Indicator blinks red-purple means it is searching for a connected device.

∗ Indicator keeps on purple means device connection successful.

• Method for resetting

∗ Press and hold the reset key for 5 seconds, the Tuya smart App shows that the device is cleared.
  At this time, the gateway enters the reboot state, the LED indicator still stays purple.
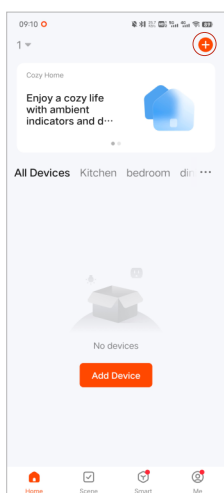 After the reboot is completed, the indicator changes to blinking blue-purple.

Mechanical Structure and Installation

Ø72

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LED indicator

Micro USB socket

Reset key

DC 12-24V power socket

System Wiring

—— Wired connection

······· Wireless connection

3G/4G/5G
WiFi

Tuya cloud

WiFi

Mobile phone

WiFi router

Amazon ECHO

RF remote(optional)

Panel RF Remote(Optional)

15m

15m

WG-Z
Wireless Zigbee gateway

30m

30m

Bluetooth or Zigbee 5CH LED controller

RGB+CCT strip

Bluetooth or Zigbee Triac dimmer

Dimmable LED light

Bluetooth or Zigbee AC Switch

Dimmable LED light

Bluetooth or Zigbee 0/1-10V dimmer

0-10V dimmable
LED driver

LED light

Note:
The above distance is measured in spacious(no obstacle) environment, please refer to the actual test distance before installation.

Gateway Operation

● Download and open APP
In the App store or Google play, search for "Smart Life "
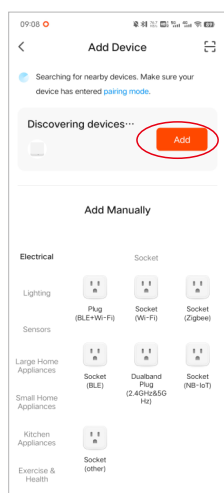or scan the QR code on the manual to download and then install the smart APP.
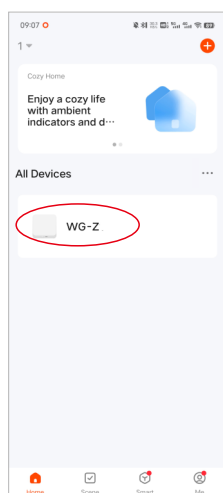
● Tuya APP cloud control
1. Power on the gateway.
2. Make sure that the gateway's blue-purple LED indicator is blinking (If the indicator is in other status, long press reset key to reboot the gateway).
3. Open the WiFi, at this time, mobile phone and gateway are in the same local area network.
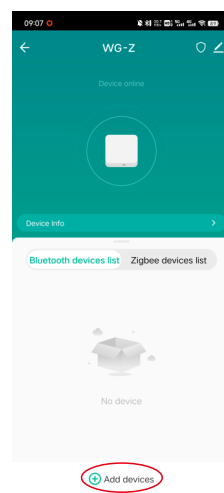4. Open Smart Life APP, follow the steps below to add gateway and device connections.
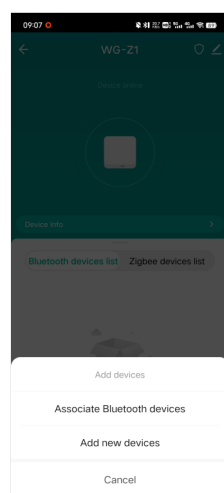

Step1：
Click"+",
prepare for adding devices.

Step2：
Click"Add",
start connecting the gateway.

Step3：
After the connection is complete,
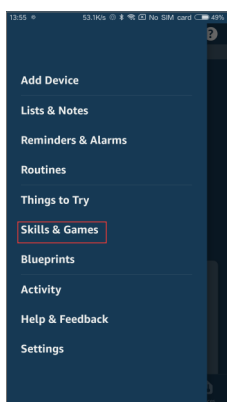Click "Gateway" icon on home page,
enter operation interface of Gateway

Step4：
Click "Add device".
Associate Bluetooth devices:
Associate with a local Bluetooth device.
Add new devices:
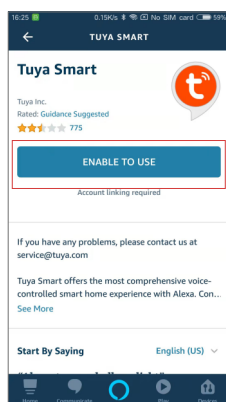Search and add new devices(Bluetooth or ZigBee).

● Voice control(Amazon ECHO)
1. Power on the gateway.
2. Open the WiFi, bluetooth and location of your phone.
3. Make sure that the gateway's blue-purple LED indicator is blinking (If the indicator is in other status, long press reset key to reboot the gateway).
4. Open Smart Life APP, tap"+" in the upper right corner, add Zigbee gateway manually (select for "Gateway Control", then click Wireless Gateway (Zigbee)).
5. After add gateway successfully, click "Gateway" on home page, then add other sub-devices according to prompts.
6. Make sure Amazon ECHO is powered on.
7. Connect Amazon ECHO to Internet via Amazon Alexa APP.
8. Tap "Skills&Games" in the Alexa app menu.
9. Then search for "Smart Life" or "Tuya Smart", tap "Enable" to enable the Skill.
10. Enter the Smart Life App account and password, then tap "Link Now" to link your Smart Life account to enable the Skill.
11. After link Smart Life account successful, you can control sub-devices connected with our gateway via voice commands.

Tap "Skills&Games"

Tap "Enable" to enable the Skill

Enter the Smart Life
APP account and password

Notice for applications

1. If gateway cannot connect with WiFi, check if your phone is connected to WiFi and whether open bluetooth and location of your phone;
   If there is no problem in your mobile phone, please long press reset key for 5s, until indicator flash rapidly for several times.
2. When the gateway is be used, it must be connected into socket all the time.
3. In order to have stable connection, we recommend that install gateway in the central area of all sub-devices and stay 2-6 meters away from WiFi router;
   the distance between gateway and sub-devices are no more than 20 meters and there be no more than two walls between them.
4. Try to avoid mental blocks and load-bearing walls between gateway and router, gateway and sub-devices; If there are thicker solid walls or
   high-power electrical appliances (for instance, refrigerator, air conditioner, electric heater and so on)between gateway and sub-devices,
   the communication distance will decreases to only 3-5 meters.
5. The phone must connect with WiFi firstly, then connect sub-devices to gateway by Tuya APP.
6. The maximum number of sub-devices connecting with the same gateway is 128.