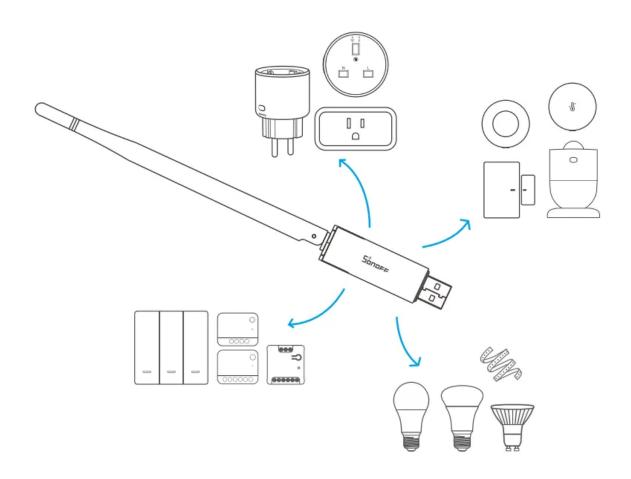
# SONOFF Dongle Plus MG24 (Dongle-PMG24) User Manual

## **Product Information**

### **Product Introduction**

SONOFF Dongle Plus MG24 is a versatile Zigbee USB coordinator powered by the high–performance EFR32MG24 chip, model "Dongle-PMG24". It can be used as a Zigbee gateway in Home Assistant, openHAB, Zigbee2MQTT, or other open–source platforms to control all your Zigbee devices locally.

Additionally, it can easily be flashed with Zigbee Router, OpenThread RCP, or MultiPAN RCP firmware through the SONOFF Dongle Flasher, playing different roles in the smart home.



# **Appearance Display**

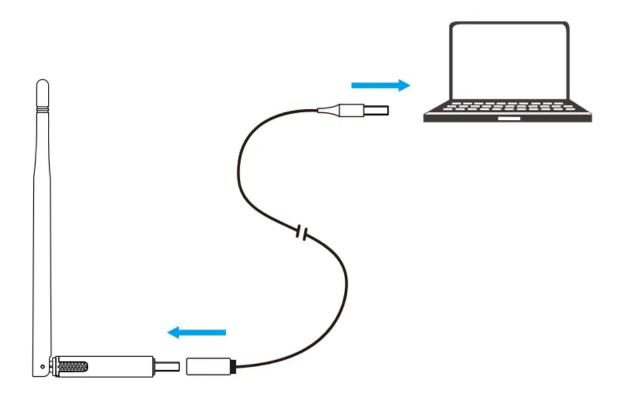


# **Package**

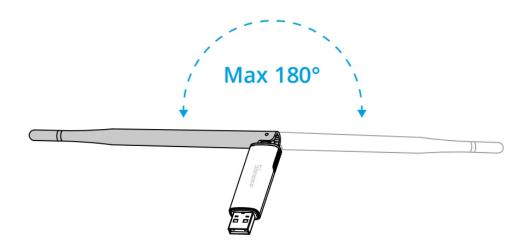
- SONOFF Dongle Plus MG24
- USB cable extension (1m)
- Quick guide
- Packaging box



USB cable extension usage instruction



\*The antenna has a limited rotation range and is recommended to be rotated within 180°. Do not force it if resistance is encountered, as excessive force may damage the antenna.



# Hardware Specification

Model	Dongle-PMG24
Zigbee SoC	EFR32MG24
Input	5V500mA

Casing materials	Aluminum, PC+ABS
Working Temperature	–10 °C to 40 °C
Working Humidity	5%-95%RH
Supported OS	Windows, Ubuntu, Raspberry Pi OS / Raspbian, Docker
Dimensions	18*10.5*214mm

# Compatibility

# Compatible Open-Source Platforms

Open-Source Platform	Supported
Home Assistant	$\overline{ullet}$
Zigbee2MQTT	V
OpenHab	V
ioBroke	V
homeseer	V
Domoticz	V
Jeemom	$\overline{ullet}$

# **Compatible Devices**

In theory, all Zigbee 3.0 devices are supported, including various lights, switches, and sensors from brands such as Philips Hue, IKEA Tradfri, Xiaomi Aqara, Ledvance Smart, Silvercrest,

Schneider Electric, Nous, and SONOFF.

Actual device compatibility depends on the supported device list of each platform.

ZHA: https://www.home-assistant.io/integrations/zha

Zigbee2MQTT: https://www.zigbee2mqtt.io/supported-devices/

ioBroker: https://github.com/Jey-Cee/ioBroker.deconz Domoticz:https://github.com/Smanar/Domoticz-deCONZ

Openhab:https://www.openhab.org/addons/bindings/deconz/

Jeedom: https://compatibility.jeedom.com/index.php?v=d&p=home&protocol=Zigbee

For more information on supported devices, please refer to: https://zigbee.blakadder.com/

This guide is based on Home Assistant. For more details, please visit: Home Assistant - ZHA

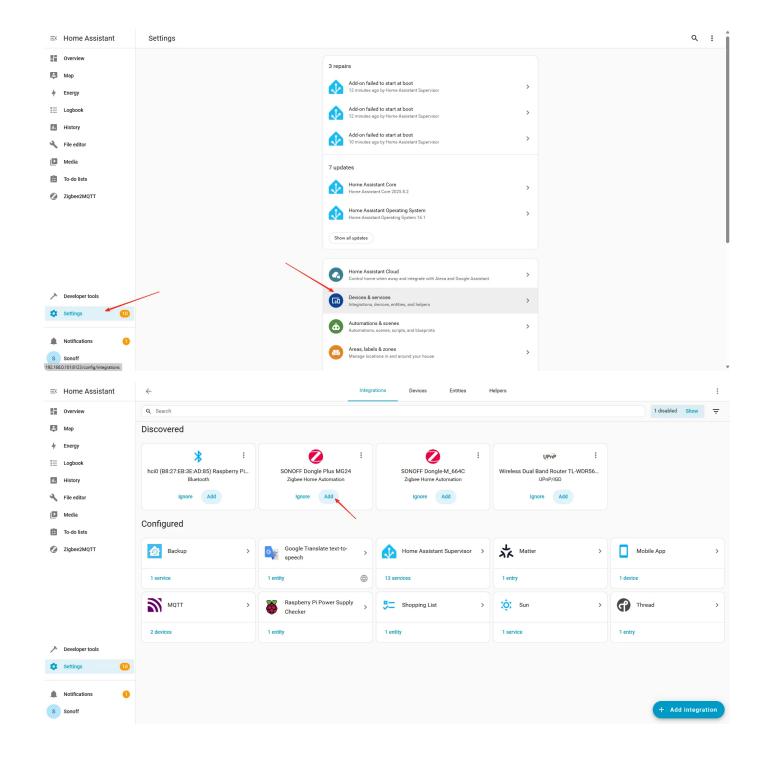
## Connecting to Home Assistant via ZHA

## Preparation

Before getting started, ensure that Home Assistant is installed and the Dongle is connected to the host's USB port. If not yet installed, please follow the Home Assistant Installation Guide.

## **Step 1: Add Integration**

In most cases, once the device is connected to the **operating system**, it will be automatically discovered by Home Assistant. Go to **Settings > Devices & Services**, and click ADD to start the configuration.



# Step 2: Configure the Dongle

After clicking the ADD button, follow the prompts to configure the Dongle. You will need to select a network initialization method:

1. Restore from previous network backup: Used when replacing the Zigbee coordinator. Restores based on the last available network backup.

- 2. Keep existing network settings: Used when the Zigbee coordinator remains the same and ZHA integration is re-added. Generally not recommended.
- 3. Manually upload network backup: Used when manually migrating network data during HA migration.
- 4. Erase and create a new network: Used to create a new Zigbee network by erasing existing network data.

## Step 3: Add a Zigbee Sub-device

Put the Zigbee sub-device into pairing mode. Then go to the **ZHA Integration > Devices** page, click **Add Device**, and the integration will begin scanning and automatically adding the Zigbee sub-device.

This guide is based on the GitHub project: https://github.com/zigbee2mqtt/hassio-zigbee2mqtt#installation

## Connecting to Home Assistant via Z2M Add-on

## Preparation

Before getting started, ensure that Home Assistant is installed and the Dongle is connected to the host's USB port. If not yet installed, please follow the Home Assistant Installation Guide.

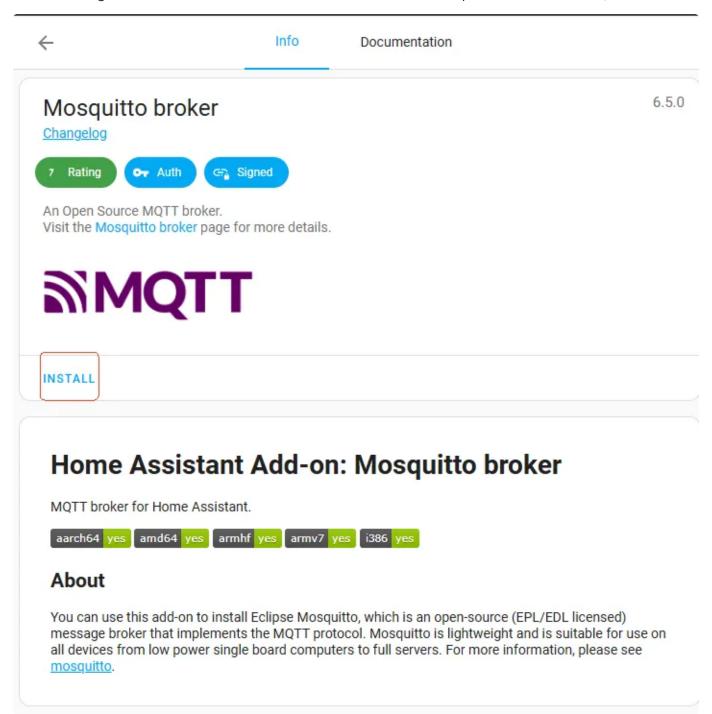
## Step 1: Install Add-ons

When connecting HA through the Zigbee2MQTT Add-on, you need to install two add-ons:

- Mosquitto broker (MQTT Broker)
- Zigbee2MQTT

#### Install MQTT Broker

Go to Settings  $\rightarrow$  Add-ons  $\rightarrow$  Add-on store and install the Mosquitto broker add-on, then start it.



#### Install Zigbee2MQTT

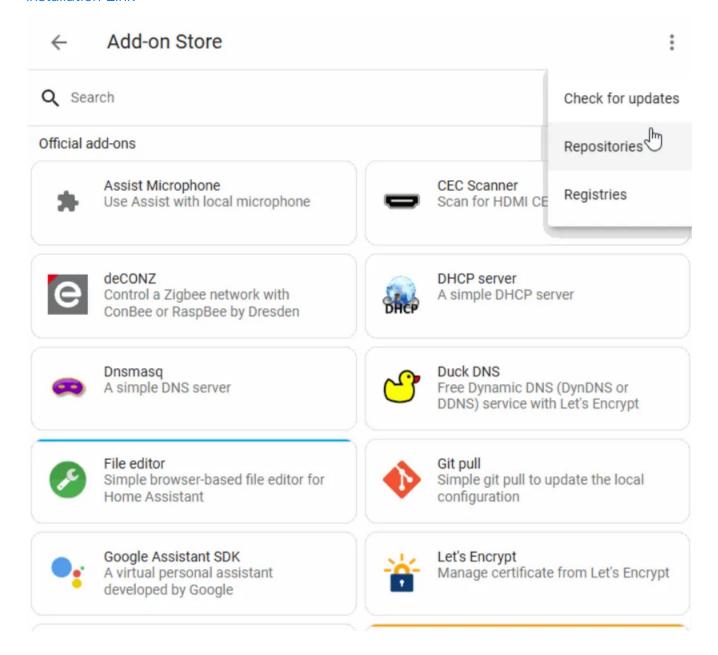
#### 1. Add Repository

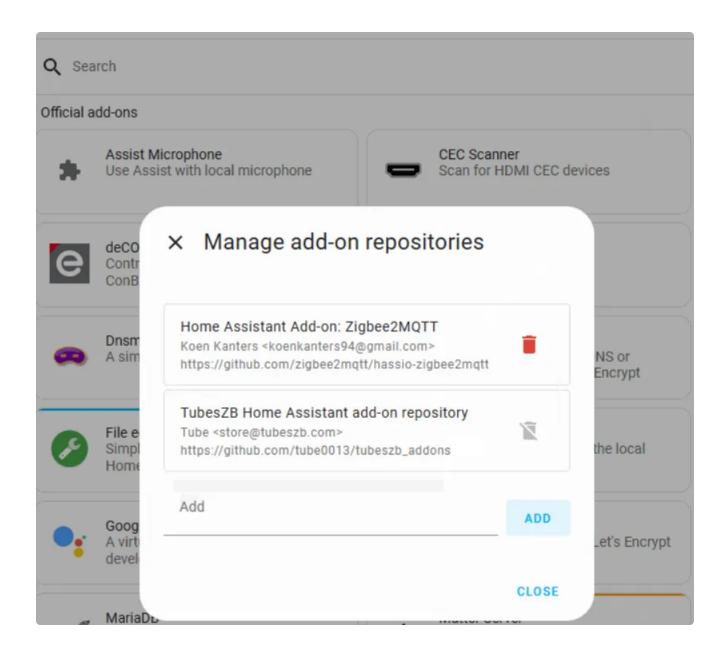
Go back to the Add-on store, click : → Repositories, fill in

https://github.com/zigbee2mqtt/hassio-zigbee2mqtt

and click Add → Close or click the Add repository button below, click Add → Close

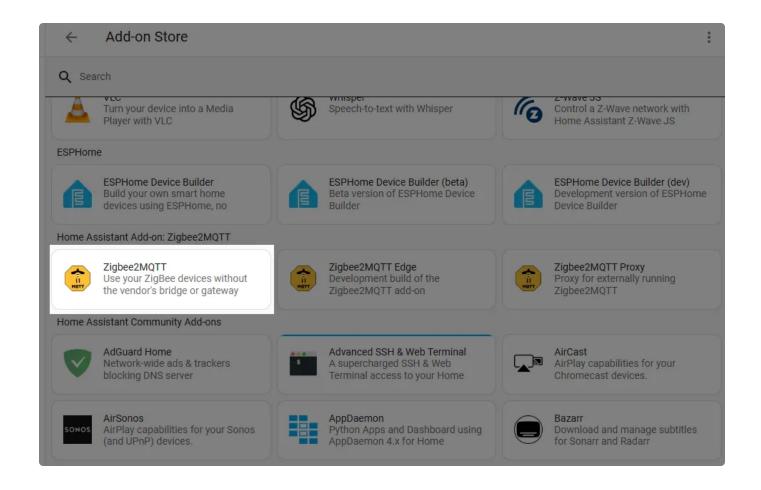
#### Installation Link





#### 2. Install Zigbee2MQTT

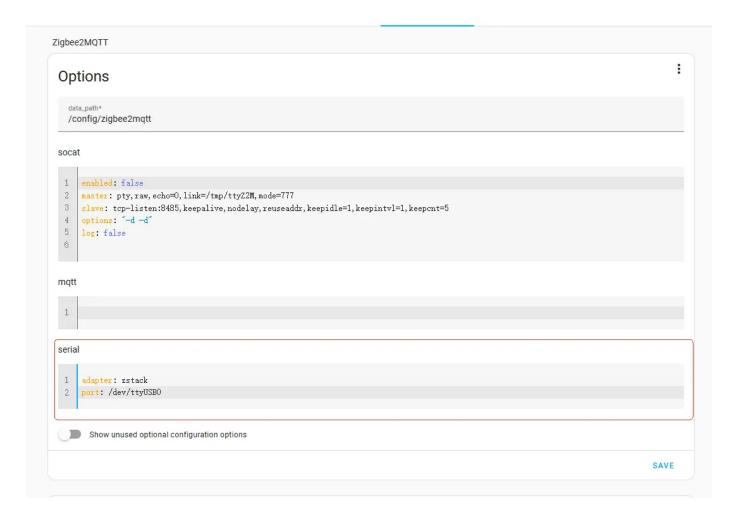
Return to the store list, find Zigbee2MQTT, and proceed with installation.



# Step 2: Configure Zigbee2MQTT

Open the **Zigbee2MQTT** add–on  $\rightarrow$  **Configuration** page.

You need to configure the device's adapter type and serial port path under serial.



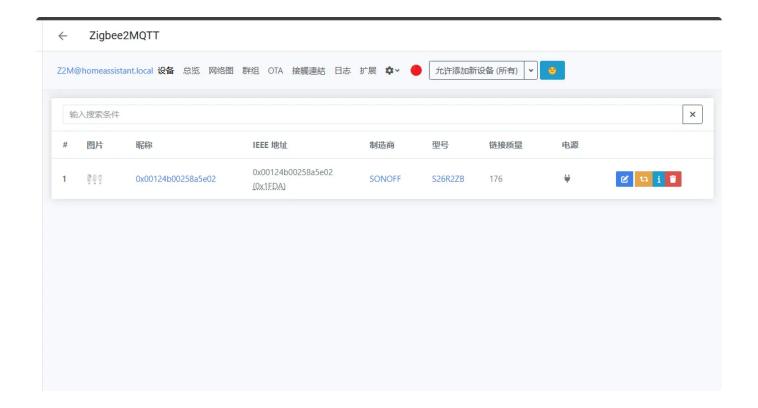
#### The following format:

```
1 adapter: Adapter Type
2 port: Dongle Serial Port Path
```

#### **Example Configuration for Dongle:**

```
1 adapter: ember
2 port: /dev/ttyUSB0
```

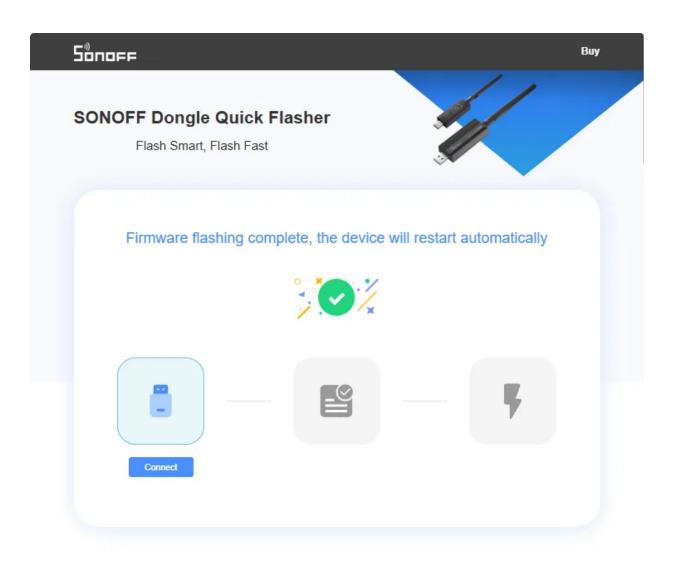
After completing the configuration, start the **Zigbee2MQTT** add-on. Wait for about two minutes, then you can click to enter the **Web UI Console** to add and manage devices.



# How to Flash Firmware

It is recommended to use the SONOFF Dongle Flasher for firmware upgrades or flashing.

https://dongle.sonoff.tech/sonoff-dongle-flasher/



# **Supported Firmware**

Firmware Type	Supported
Zigbee NCP	$\overline{\mathbf{v}}$
Zigbee Router	$\overline{\mathbf{v}}$
OpenThread RCP	$\overline{\mathbf{v}}$
MultiPAN RCP	$\overline{\mathbf{v}}$
Custom Firmware	▼

#### !Note:

1. After flashing the official Router firmware, the device will automatically reboot and enter

pairing mode.

- 2. If you intend to use the Dongle as a signal repeater, you need to add it to the Zigbee network in ZHA or Zigbee2MQTT, following the same process as adding any other Zigbee end device.
- 3. To remove the device from the current network, press and hold the Reset button for more than 8 seconds, then release it. The device will re-enter pairing mode.