

## SONOFF ZBM5-2C-120

# SONOFF Zigbee Smart Light Switch

MODEL: ZBM5-2C-120W (2-GANG)

### 1. Product Overview

The SONOFF ZBM5-2C-120W is a 2-gang Zigbee smart wall switch designed for intelligent control of your home lighting. It offers versatile wiring options, supporting both neutral and no-neutral wire installations. This smart switch integrates seamlessly with SONOFF Zigbee hubs and is compatible with open-source platforms like Home Assistant via Zigbee2MQTT. Enjoy convenient control through the eWeLink app, voice commands with Alexa and Google Home, and advanced automation features.

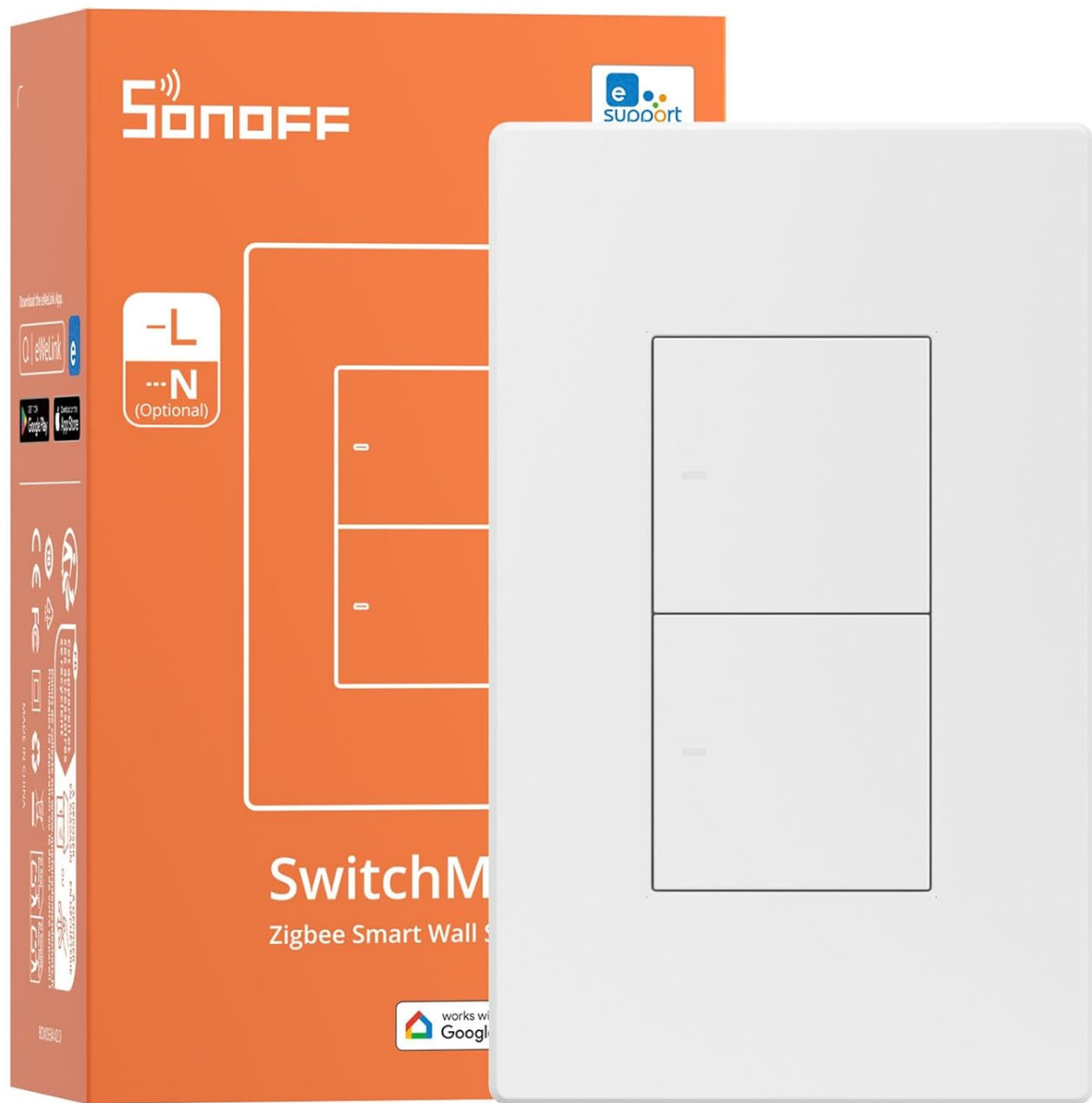


Image 1.1: SONOFF ZBM5-2C-120W 2-Gang Smart Light Switch and its retail packaging.

## 2. Key Features

- **Remote Control:** Control your lights from anywhere using the eWeLink app on your smartphone. A SONOFF Zigbee Gateway is required for this functionality.
- **Neutral Wire Optional:** Designed for flexible installation, this smart light switch can be used in electrical systems with or without a neutral wire.
- **Open-Source Platform Compatibility:** Beyond the eWeLink app, the switch can connect to Home Assistant via Zigbee2MQTT, allowing integration with devices from various manufacturers.
- **Voice Control:** Manage your lights hands-free using voice commands through Amazon Alexa or Google Home smart speakers after binding your voice assistant account to the eWeLink app.
- **Timers and Scene Automation:** Utilize the eWeLink app to set scheduled on/off times for lights or create smart scenes that automate lighting based on other Zigbee sensors or conditions.

- **Detach Relay Function:** This feature allows smart bulbs to remain online and controllable via app or voice even when the physical switch is turned off, preventing them from going offline. (Note: Supports connecting smart lights only in the neutral required mode.)

### 3. Installation and Setup

#### 3.1 Wiring Instructions

The SONOFF ZBM5-2C-120W supports both no-neutral and with-neutral wiring configurations. Always ensure the main power is turned off at the circuit breaker before attempting any electrical wiring.

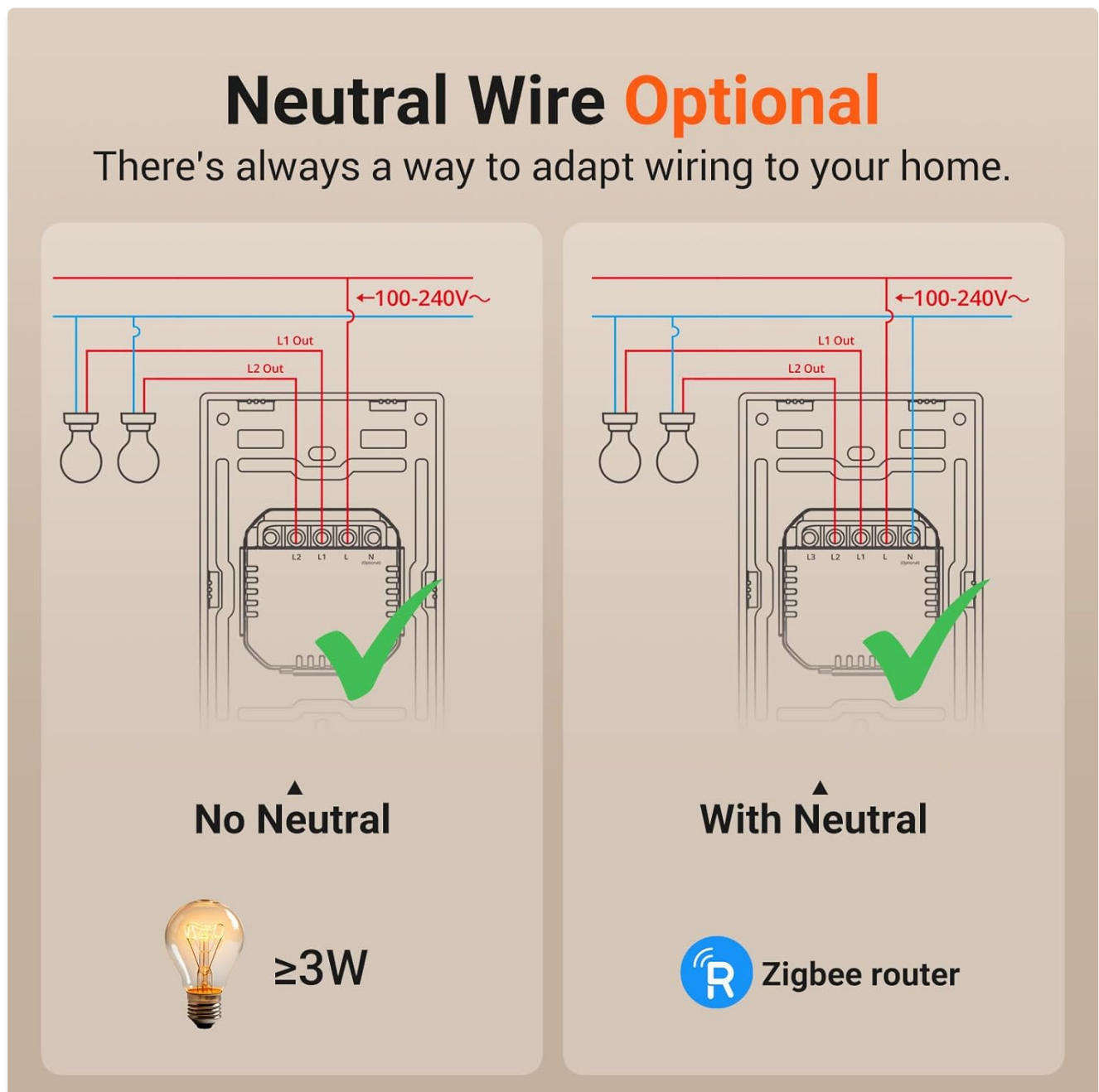


Image 3.1: Wiring diagrams for No Neutral and With Neutral installations. The 'No Neutral' setup requires a minimum load of 3W.

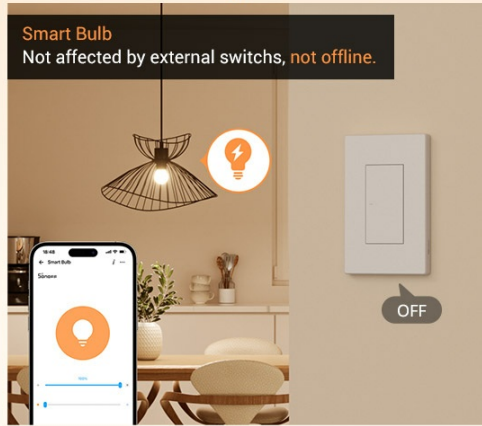
## Detach Relay For Wiring Smart Bulb

With the detach relay enabled, smart lights won't lose power when the wall switch is turned off, allowing them to remain smart at all times.

\*Supports connecting smart lights only in the neutral required mode.

### Enable "Detach Relay"

Smart Bulb  
Not affected by external switches, **not offline**.



### Normal Situation

Smart Bulb  
Offline

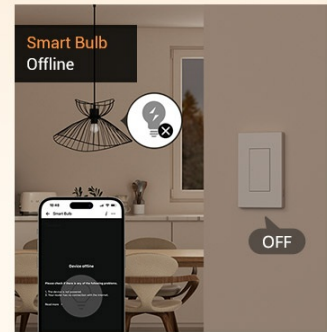


Image 3.2: Detailed wiring connections and terminal descriptions for the smart switch.

### Wiring Steps:

1. Turn off power at the circuit breaker.
2. Remove your existing wall switch.
3. Connect the Live (L) wire to the 'L' terminal on the SONOFF switch.
4. Connect the Live Output (Lout) wires to the corresponding 'Lout1' and 'Lout2' terminals.
5. If using a neutral wire, connect it to the 'N' terminal.
6. Secure the switch into the wall box.
7. Restore power at the circuit breaker.

### 3.2 App Setup (eWeLink)

To control your smart switch via the eWeLink app, follow these steps:

## Zigbee Hub Compatibility

### ✓ Supported Zigbee Hub



iHost



NSPanel Pro



ZBBridge-U



ZBBridge-P



ZBDongle-E/P



ZBBridge-P



ZBBridge-U



NSPanel Pro



iHost



ZBBridge-P



ZHA



Zigbee2MQTT

	ZBBridge-P	ZBBridge-U	NSPanel Pro	iHost	ZBBridge-P	ZHA	Zigbee2MQTT
On/Off	✓	✓	✓	✓	✓	✓	✓
Smart scene	✓	✓	✓	✓	✓	✓	/
Detach relay	✓	✓	✓	✓	×	×	✓
Power on state	✓	✓	✓	✓	×	✓	✓
OTA	✓	✓	✓	✓	×	✓	✓

### ✗ Unsupported Zigbee Hub



Echo Show 2nd



Echo 4th Gen



Echo Plus 2nd

Image 3.3: Visual guide for eWeLink app setup process.

1. Download the eWeLink App from Google Play Store or Apple App Store.
2. Open the app and register/log in.
3. Ensure your SONOFF Zigbee Hub is powered on and connected to the eWeLink app.
4. In the eWeLink app, tap the '+' icon to add a device.
5. Follow the on-screen instructions to put the switch into pairing mode (usually by pressing and holding a button on the switch until an indicator light flashes).

6. The app will scan for and detect the new Zigbee device.
7. Once detected, name your switch and assign it to a room if desired.

## 4. Operating Instructions

### 4.1 Manual Control

The SONOFF ZBM5-2C-120W can be operated manually by pressing the physical buttons on the switch panel to turn connected lights on or off.

### 4.2 App Control

Once paired with your SONOFF Zigbee Hub and the eWeLink app, you can control the switch remotely:

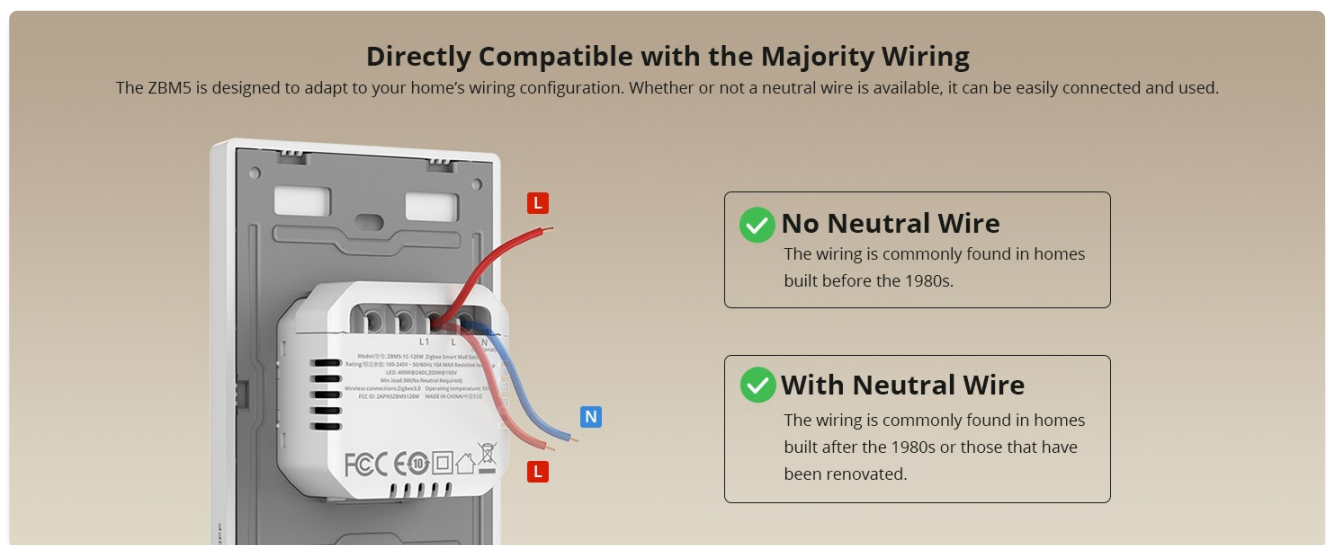


Image 4.1: Remote control of the smart switch via the eWeLink app.

- Open the eWeLink app.
- Navigate to the device list and select your SONOFF Zigbee Smart Light Switch.
- Tap the on/off icons for each gang to control the connected lights.

### 4.3 Voice Control

Integrate your smart switch with Amazon Alexa or Google Home for convenient voice control:



Image 4.2: Voice control with Alexa or Google Home.

- Ensure your eWeLink account is linked to your Alexa or Google Home app.
- Discover devices in your voice assistant app.
- Use commands such as:
  - "Alexa, turn on [Light Name]."
  - "Hey Google, turn off [Light Name]."

## 5. Smart Scenes and Automation

Enhance your smart home experience by setting up automated routines and scenes:

### 5.1 Scheduling Timers

#### A Piece of Open-Source Platform Solution

Easily integrate your device into open-source platforms via Zigbee2MQTT or ZHA, creating a smart home solution that works seamlessly with devices from various manufacturers.



\*Functionality varies when added via Zigbee2MQTT or ZHA.

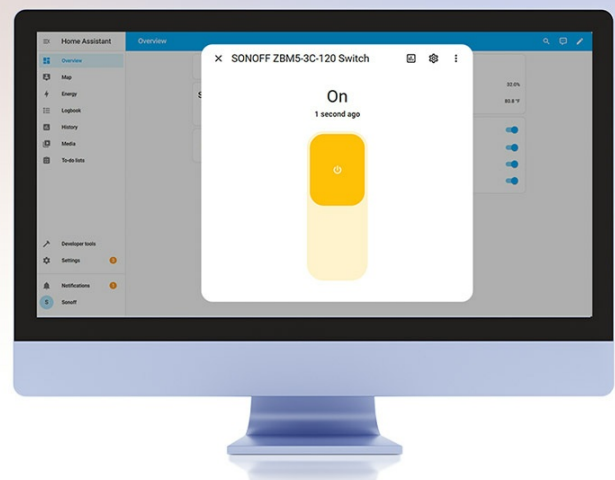


Image 5.1: Scheduling lights to turn off automatically for a healthier routine.

- In the eWeLink app, go to the 'Timer' section for your switch.
- Set specific times for lights to turn on or off daily or on selected days.

### 5.2 Creating Smart Scenes





Image 5.2: Zigbee two-way control setup using a wireless button and the smart switch.

- In the eWeLink app, navigate to 'Scenes'.
- Create custom scenes based on triggers (e.g., another Zigbee sensor, time of day) and actions (e.g., turn on/off lights, activate other devices).
- Example: Lights turn on automatically when a door sensor detects entry.

## 6. Detach Relay Function

The Detach Relay function is particularly useful for smart bulbs. When enabled, the physical switch button will not cut power to the smart bulb, allowing the bulb to remain connected to the network and controllable via app or voice, even when the physical switch is in the 'off' position.

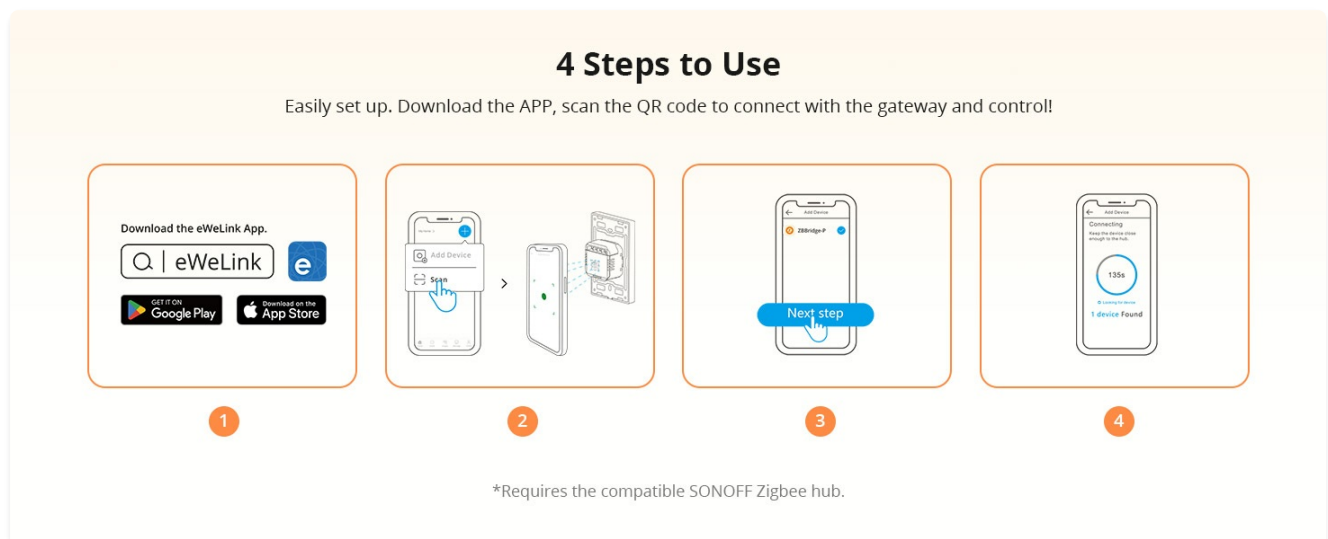


Image 6.1: Detach Relay function ensures smart bulbs remain online and controllable.

### To enable Detach Relay:

- This feature is typically configured within the eWeLink app settings for the specific switch.
- Note: This function is supported only when the switch is wired with a neutral wire.

## 7. Compatibility

### 7.1 Zigbee Hub Compatibility

The SONOFF ZBM5-2C-120W requires a compatible Zigbee hub for full smart functionality. It works with various SONOFF Zigbee hubs and other Zigbee 3.0 compliant gateways.

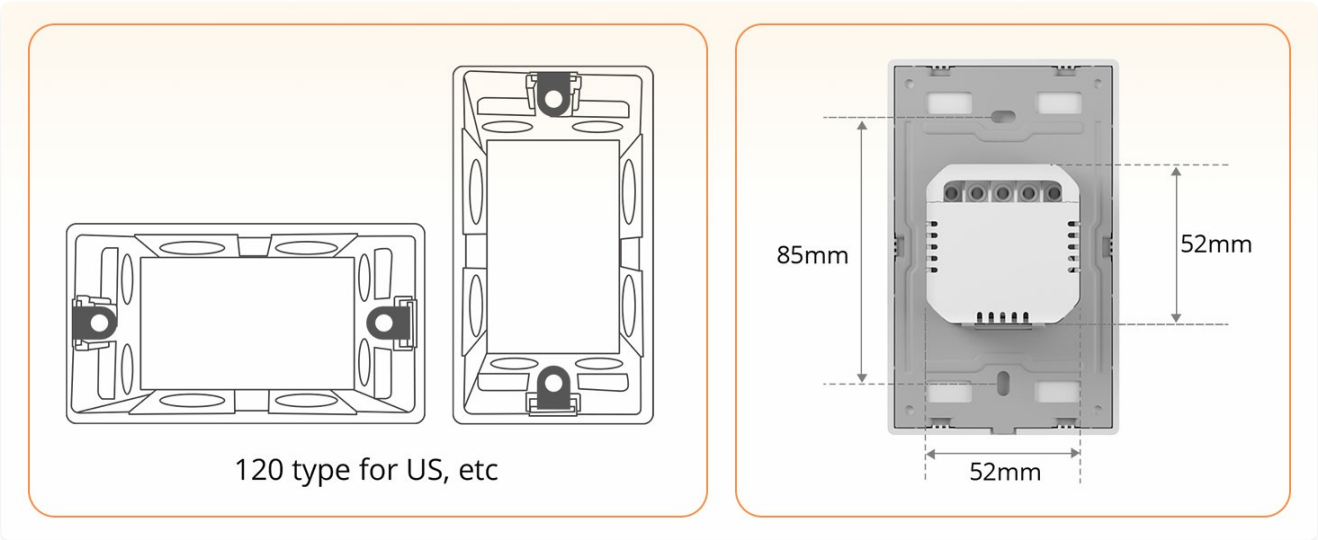


Image 7.1: Zigbee Hub Compatibility chart, including supported and unsupported hubs.

### 7.2 Open-Source Platform Integration

For advanced users, the switch can be integrated into open-source home automation platforms:

**(N) No Neutral**

**(N) With Neutral**

Terminals		Wires	
N (Optional)	Neutral Wire	N (Optional)	Neutral Wire
L	Live Wire	L	Live Wire (100-240 V)
L out1	Live Output Terminal_1(100~240V)		
L out2	Live Output Terminal_2(100~240V)		
L out3	Live Output Terminal_3(100~240V)		

Wiring method	(N) No Neutral Required	(N) Neutral Required
Zigbee role	Zigbee end-device	Zigbee router
Min. load	3W	No minimum power requirement
Use smart lights as a load	Not supported	Supported

Image 7.2: Integration with Home Assistant via Zigbee2MQTT or ZHA.

- **Home Assistant:** The switch can be added to Home Assistant via Zigbee2MQTT or ZHA for seamless integration with a wider range of smart devices.
- Functionality may vary when added via these platforms compared to the eWeLink app.



8. Specifications



**Model**  
ZBM5-1C-120W/ZBM5-2C-120W/ZBM5-3C-120W

**Rating**  
1C: 100-240V~ 50/60Hz 10A Max Resistive load ⚡ μ  
2C: 100-240V~ 50/60Hz 10A/gang, Total 10A Max Resistive load ⚡ μ  
3C: 100-240V~ 50/60Hz 10A/gang, Total 10A Max Resistive load ⚡ μ

**LED**  
1C: 400W@240V, 200W@100V  
2C: 400W@240V/gang, 200W@100V/gang, Total 400W@240V, 200W@100V  
3C: 400W@240V/gang, 200W@100V/gang, Total 400W@240V, 200W@100V

**Min.load**  
3W(No Neutral Required)

**Wireless connection**  
Zigbee

**Color**  
White

**Casing material**  
PC+CRS

**Number of gangs**  
1-gang/2-gang/3-gang

**Dimension**  
120x74x39.4mm

**Operating temperature**  
-10°C~40°C

Image 8.1: Technical specifications for the SONOFF ZBM5-2C-120W.

Attribute	Value
Model Number	ZBM5-2C-120
Product Dimensions	4.72 x 2.91 x 1.55 inches
Weight	5.51 Pounds
Operation Mode	ON-OFF
Current Rating	10 Amps
Operating Voltage	120 Volts
Contact Type	Normally Closed
Connector Type	Crimp
Terminal	Screw
Circuit Type	1-way
Actuator Type	Push Button
Min. Load (No Neutral Required)	3W
Wireless Connection	Zigbee
Color	White
Casing Material	PC+CRS
Number of Gangs	2-gang
Operating Temperature	-10°C ~ 40°C

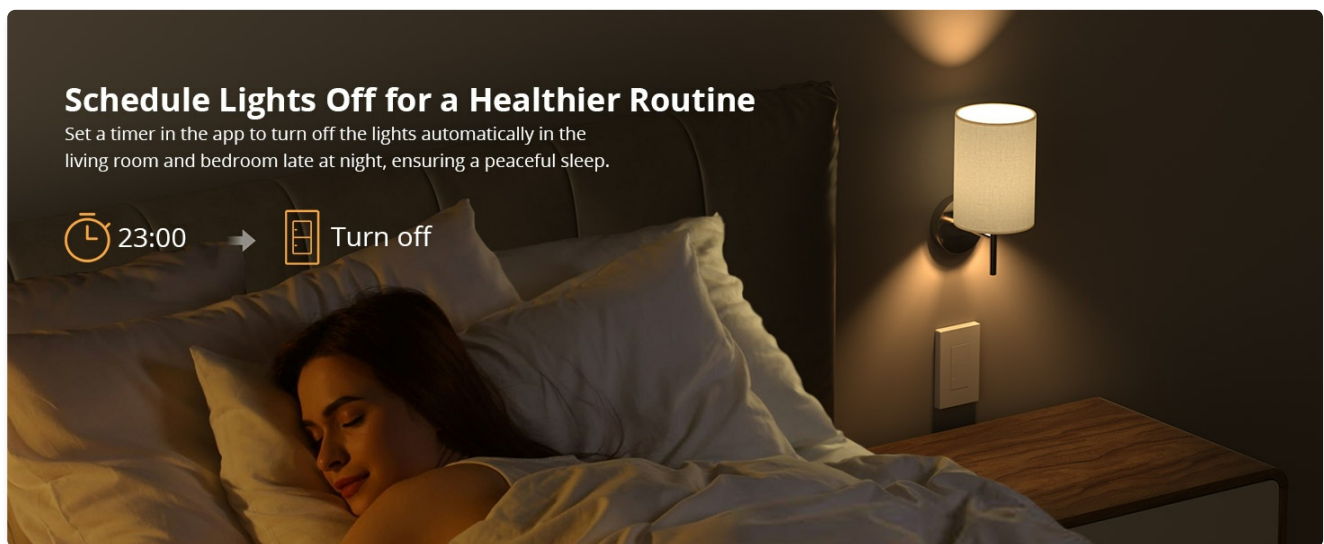


Image 8.2: Physical dimensions of the SONOFF ZBM5-2C-120W switch.

## 9. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the surface of the switch. Do not use abrasive cleaners or solvents.
- **Firmware Updates:** Regularly check the eWeLink app for available firmware updates to ensure optimal performance and security.
- **Network Stability:** Ensure your Zigbee network is stable and your SONOFF Zigbee Hub is within an optimal range of the switch for reliable operation.

## 10. Troubleshooting

- **Switch is unresponsive:**
  - Check if the main power supply to the switch is on.
  - Verify that the switch is properly wired.
  - Ensure the SONOFF Zigbee Hub is online and functioning correctly.
  - Try re-pairing the switch with the Zigbee hub.
- **Cannot connect to eWeLink app:**
  - Confirm your phone has a stable internet connection.
  - Ensure the Zigbee hub is connected to the internet.
  - Reset the switch to factory settings (refer to product documentation for specific reset procedure) and attempt pairing again.
- **Voice control not working:**
  - Check if your eWeLink account is correctly linked to Alexa/Google Home.
  - Ensure the device is discovered in your voice assistant app.
  - Verify the device name used in voice commands matches the name in the app.

- Ensure the connected load meets the minimum 3W requirement for no-neutral installations.
- Consider adding a bypass capacitor if flickering persists with low-wattage LED lights.

- Some Zigbee devices may require a manual button press or power cycle to reconnect to the network after a power interruption.
- Ensure your Zigbee hub has stable power and connectivity.

For warranty information and technical support, please refer to the official SONOFF website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

- Visit the [SONOFF Store on Amazon](#) for product information and updates.
- Check the eWeLink app for in-app support and FAQs.

## Related Documents

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