Xnbada SLZB-06P7

SMLIGHT SLZB-06P7 User Manual

Brand: Xnbada | Model: SLZB-06P7

1. Product Overview

The SMLIGHT SLZB-06P7 is a versatile smart home adapter designed to manage communication within a Zigbee network. It serves as a central bridge for various smart home ecosystems, including Home Assistant, Zigbee2MQTT, and ZHA. This device eliminates the need for multiple hubs from different brands, offering a unified solution for your smart home connectivity needs.



Figure 1: SMLIGHT SLZB-06P7 All-in-One Smart Home Adapter illustrating its central role in a smart home network.

Key features include its ability to function as a Zigbee coordinator, router, or signal extender, boasting a +20dB amplifier and +5dB antenna for wider signal coverage. It supports multiple connection methods: LAN Ethernet, USB, or Wi-Fi, and can be powered via Power over Ethernet (PoE) or USB, providing flexible deployment options.

2. Included Components

The SMLIGHT SLZB-06P7 package includes the following items:

- 1 x SLZB-06P7 Device
- 1 x Antenna
- 2 x Adhesive Tape
- 1 x Screwdriver
- 2 x Screws
- 1 x Screw Fix Helper & Manual

3. Connectivity and Power Options

The SLZB-06P7 offers flexible connectivity and power solutions to integrate seamlessly into your existing network infrastructure.

3.1 Connection Methods

- **LAN Ethernet:** For stable and high-speed data transfer.
- **USB:** Direct connection to a host device.
- **Wi-Fi:** Wireless connectivity for flexible placement.



Figure 2: Illustrates the various connection methods: USB, PoE Ethernet, and Wi-Fi.

3.2 Power Supply

- **PoE (Power over Ethernet):** Supports active PoE standard IEEE 802.3af, allowing power and data transfer over a single Ethernet cable.
- **USB:** Can be powered directly via a USB connection.



Figure 3: Demonstrates powering the device via USB and PoE connections.

3.3 PoE Connection Diagram

When using PoE, ensure the SLZB-06P7 is connected to a PoE switch or a 48V-52V PoE injector that supports the active IEEE 802.3af standard.

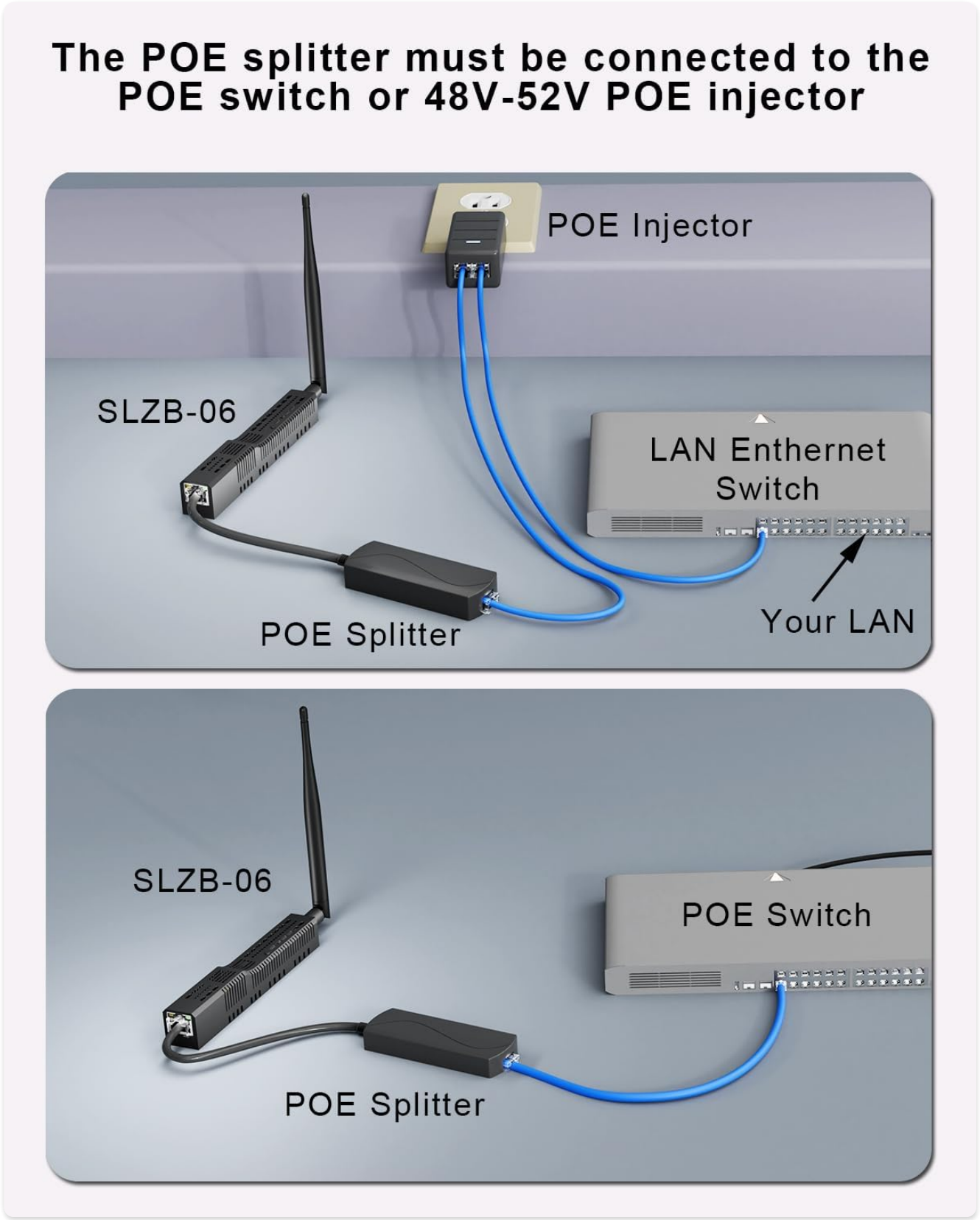


Figure 4: Diagram showing how to connect the SLZB-06P7 using a PoE splitter with either a PoE injector or a PoE switch.

4. Operating Modes and Compatibility

The SLZB-06P7 is built around the powerful CC2652P7 Zigbee chip, featuring a Cortex-M4F 48Mhz processor and 153kB RAM. This robust hardware enables the device to support multiple operating modes and ensures broad compatibility with popular smart home platforms.

4.1 Supported Operating Modes

- **Zigbee Coordinator:** Manages your Zigbee network.
- **Zigbee Router:** Extends the range of your Zigbee network.
- **Matter over Thread:** Supports the Matter protocol over a Thread network.
- **Bluetooth BT Proxy:** Enables Bluetooth connectivity for certain devices.

4.2 Platform Compatibility

The SLZB-06P7 is widely applicable and works seamlessly with:

- Home Assistant
- ZHA (Zigbee Home Automation)
- Zigbee2MQTT

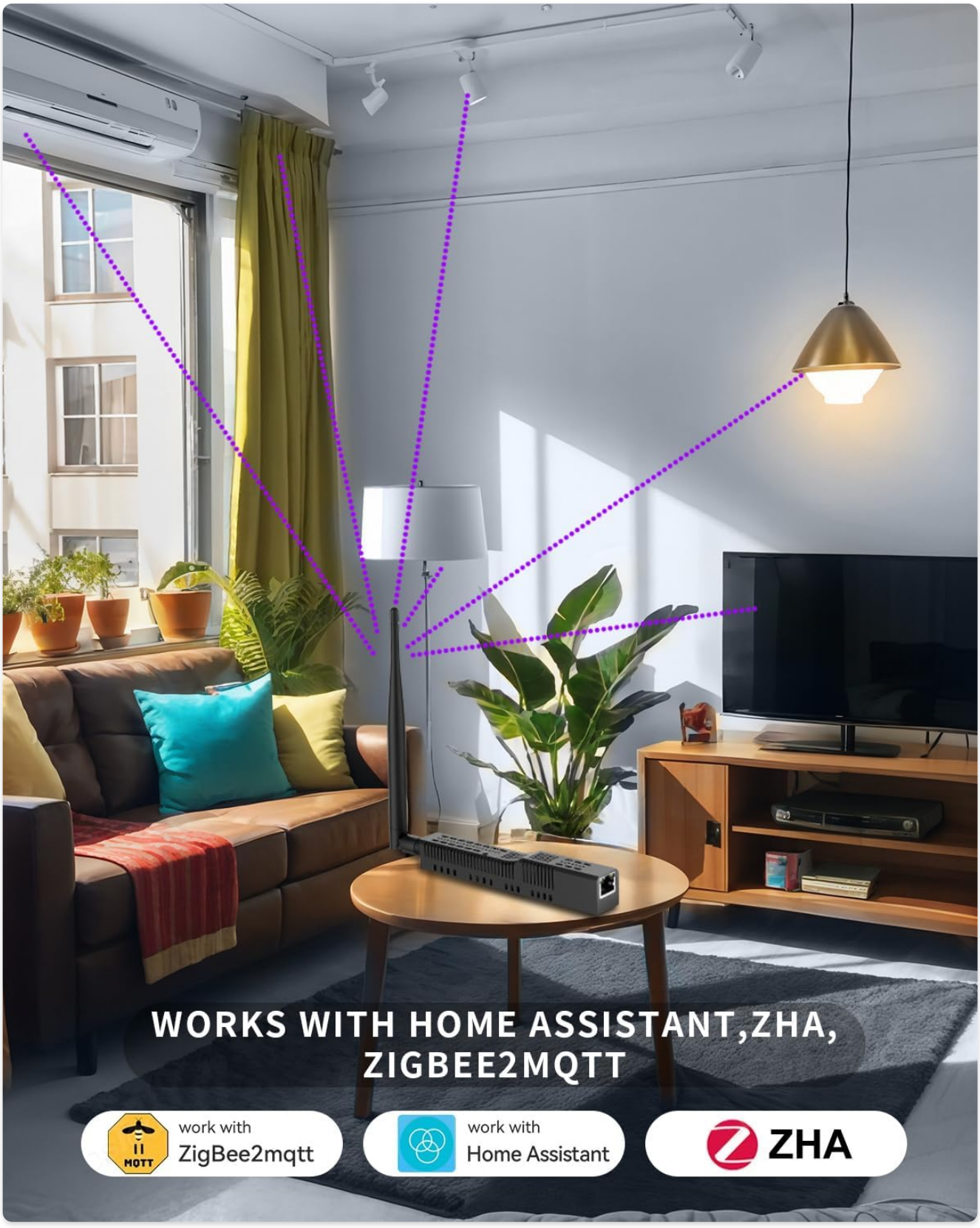


Figure 5: The SLZB-06P7 is compatible with major smart home platforms like Zigbee2MQTT, Home Assistant, and ZHA.

5. Advanced Usage and Network Expansion

The SLZB-06P7 is designed for robust and scalable smart home deployments, offering features that enhance network coverage and management.

5.1 Wider Signal Coverage

With its +20dB amplifier and +5dB antenna, the SLZB-06P7 provides a wider signal coverage range. For even

broader coverage, you can add multiple Zigbee coordinators to a single server, allowing you to cover different rooms or even remote buildings and connect them to the same Home Assistant instance.

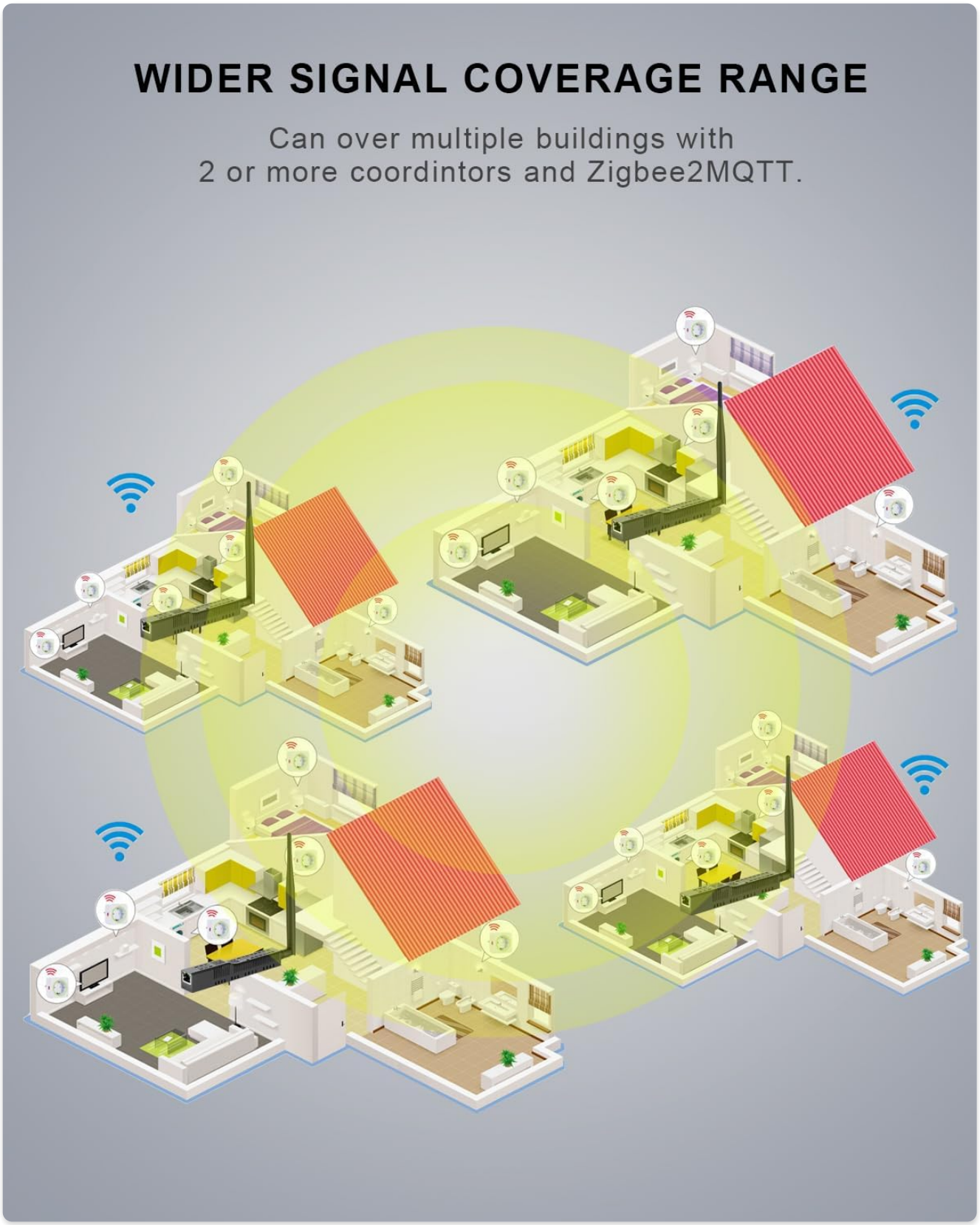


Figure 6: Illustrates how multiple coordinators can extend Zigbee coverage across multiple buildings.

5.2 Stable and Reliable Connection

The SLZB-06P7 is engineered for stable and undisturbed connections to Zigbee devices over long periods, effectively solving common issues of device disconnections experienced with other adapters.

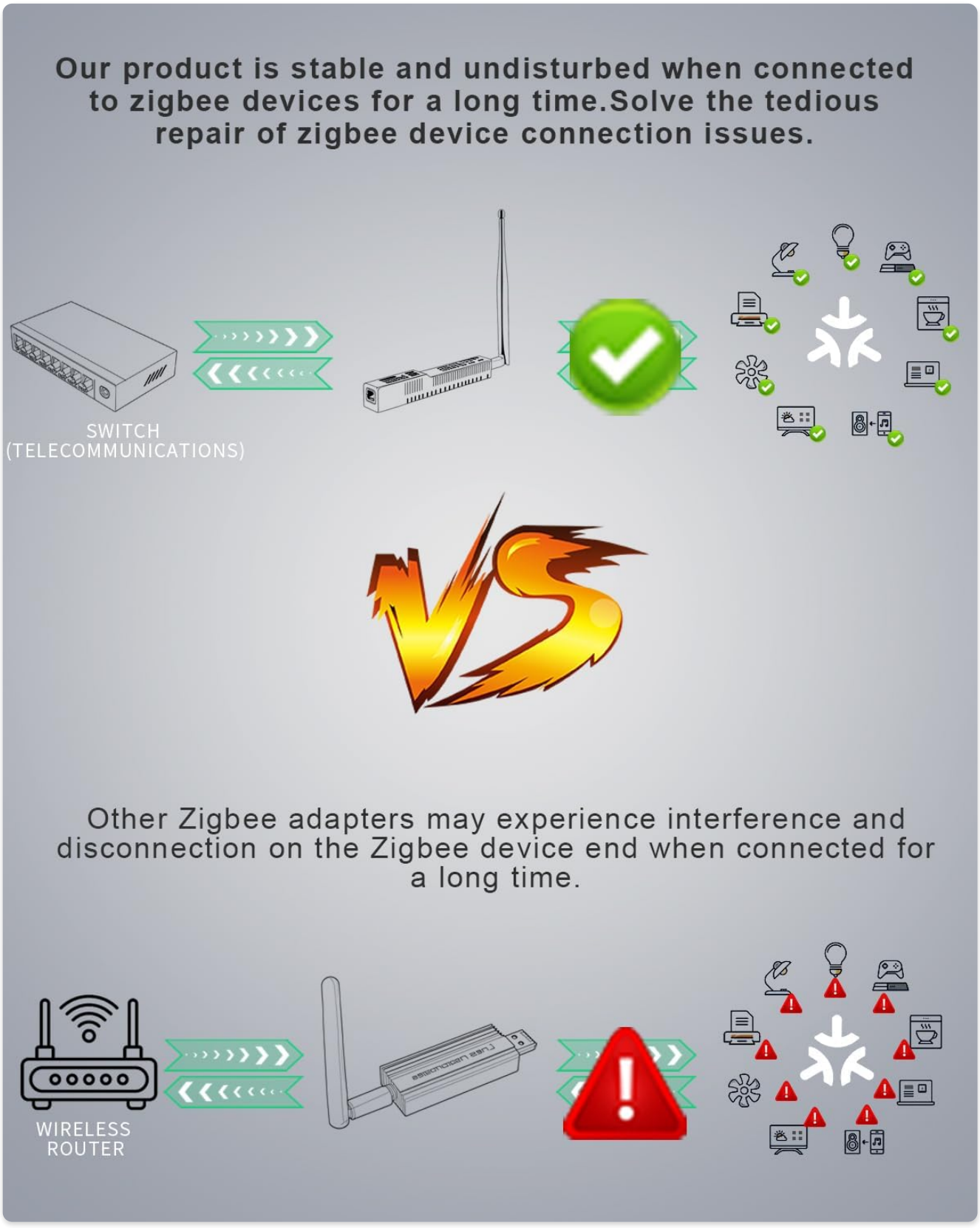


Figure 7: Comparison showing the stable connection of the SLZB-06P7 versus other adapters prone to disconnections.

6. Troubleshooting and FAQ

This section addresses common questions and potential issues you might encounter with your SMLIGHT SLZB-06P7.

Frequently Asked Questions (FAQ)

- **Q1: Do these coordinators work with Zigbee2MQTT and ZHA?**

A1: Yes, all models work with both Zigbee2MQTT and ZHA.

- **Q2: Do I benefit from using SLZB-06p7 based on newer SoC C2652P7?**
  A2: If you do not plan to have more than 200 end Zigbee devices, you do not need to pay more for the CC2652P7 chip. Moreover, CC2652P and CC2652P7 are based on the same processor Cortex M4F 48Mhz; the only difference is RAM.
- **Q3: Can I connect multiple adapters to the same instance of Home Assistant?**
  A3: Yes, you can. You will need to run two or more instances of Zigbee2MQTT. Please check out the product manual for detailed explanation.
- **Q4: Can I use “passive” 24V PoE?**
  A4: The adapter supports active PoE standard IEEE 802.3af. So, only PoE routers and injectors with this standard will work.
- **Q5: Is it possible to use the device in Wi-Fi mode?**
  A5: Yes, it is. You just need to choose the mode to Zigbee-to-Wi-Fi and connect to your Wi-Fi network.
- **Q6: Are there any delays in Zigbee while using via Ethernet?**
  A6: No, actually Ethernet 100Mb is much faster than the baud rate used for USB serial connection (115k).
- **Q7: My Home Assistant server is located in the basement. Can I put SLZB-06 in my living room and connect to it via Ethernet?**
  A7: Yes, basically that is the point for SLZB-06: you can locate your Zigbee Adapter wherever you want and do not stick to the server. Even remote connection to remote buildings works.
- **Q8: How to select mode USB/Ethernet? Any physical switches?**
  A8: The device can be switched between USB or Ethernet either through a web-interface or by button. Just short press – and the work mode changes. Switching by web interface allows changing the work mode distantly.
- **Q9: Can I update firmware distantly, without physical access to the SLZB-06?**
  A9: Yes, you can. Both main chips used in SLZB-06 (CC2652P and ESP32) can be updated distantly from the other global point. That makes the device suitable for installation in rarely-visited locations or installation places.

Video Guide: How to use SLZB-06

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Video 1: A comprehensive guide on setting up and using the SMLIGHT SLZB-06 series, including Matter/Thread integration with Home Assistant.

7. Specifications

Attribute	Value
Brand	Xnbada
Model Name	SLZB-06P7
Connectivity Technology	Ethernet, USB, Wi-Fi
Operating System	Linux
LAN Port Bandwidth	100 Mbps
Package Dimensions	7.52 x 1.73 x 1.18 inches

Item Weight	2.88 ounces
Color	Black
Manufacturer	Xnbada
Date First Available	June 8, 2024

8. Warranty and Support

For warranty information, technical support, or further assistance, please refer to the contact details provided with your product packaging or visit the official Xnbada website. Keep your purchase receipt for warranty claims.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question