LINOVISION POE-SW304G-4BT

LINOVISION 4 Ports Full Gigabit PoE++ Switch (Model: POE-SW304G-4BT) - Instruction Manual

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your LINOVISION 4 Ports Full Gigabit PoE++ Switch, model POE-SW304G-4BT. Please read this manual thoroughly before using the product to ensure proper and safe operation. Keep this manual for future reference.

Key Features:

- **BT 90W PoE++:** All 4 ports support BT 90W output, providing sufficient power for all IEEE 802.3af/at/bt PoE devices, including IP cameras, PTZ cameras, APs, VoIP phones, PoE lights, and PoE monitors. Total PoE budget is 96W.
- **Full Gigabit:** Provides 4x 10/100/1000Mbps PoE++ ports, 1x 1000Mbps RJ45 uplink, and 1x Gigabit SFP uplink port.
- **Top Safety:** Standard PoE design ensures proper power delivery to 802.3af/at/bt devices and prevents power to non-PoE devices, avoiding damage.
- **PoE Extend Mode:** Enables 820ft (250m) long-distance PoE transmission at 10Mbps, suitable for IP cameras.
- **Plug and Play:** No configuration required; automatically works with PoE/PoE+/PoE++ devices.
- **Solid Design:** Full metal enclosure with fanless design (7.95" x 5.51" x 1.75"), built-in 96W power.
- **6KV Surge Protection:** Shields against power surges, lightning strikes, and voltage spikes for reliable operation in harsh environments.
- **Important Note on PoE++:** The term "PoE++" may not always correspond to IEEE 802.3bt. Confirm your PD device is IEEE 802.3bt compliant for proper operation.

2. Package Contents

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact your vendor.

- LINOVISION PoE Switch (POE-SW304G-4BT)
- Power Adapter

- User Manual

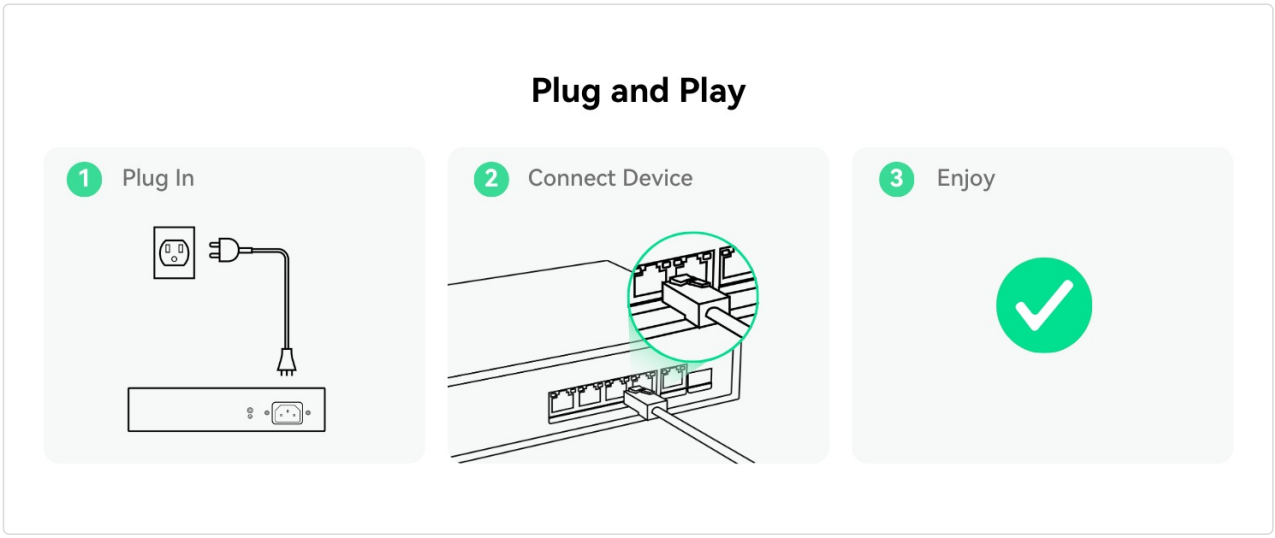

Image: Package contents including the PoE switch, power adapter, and user manual.

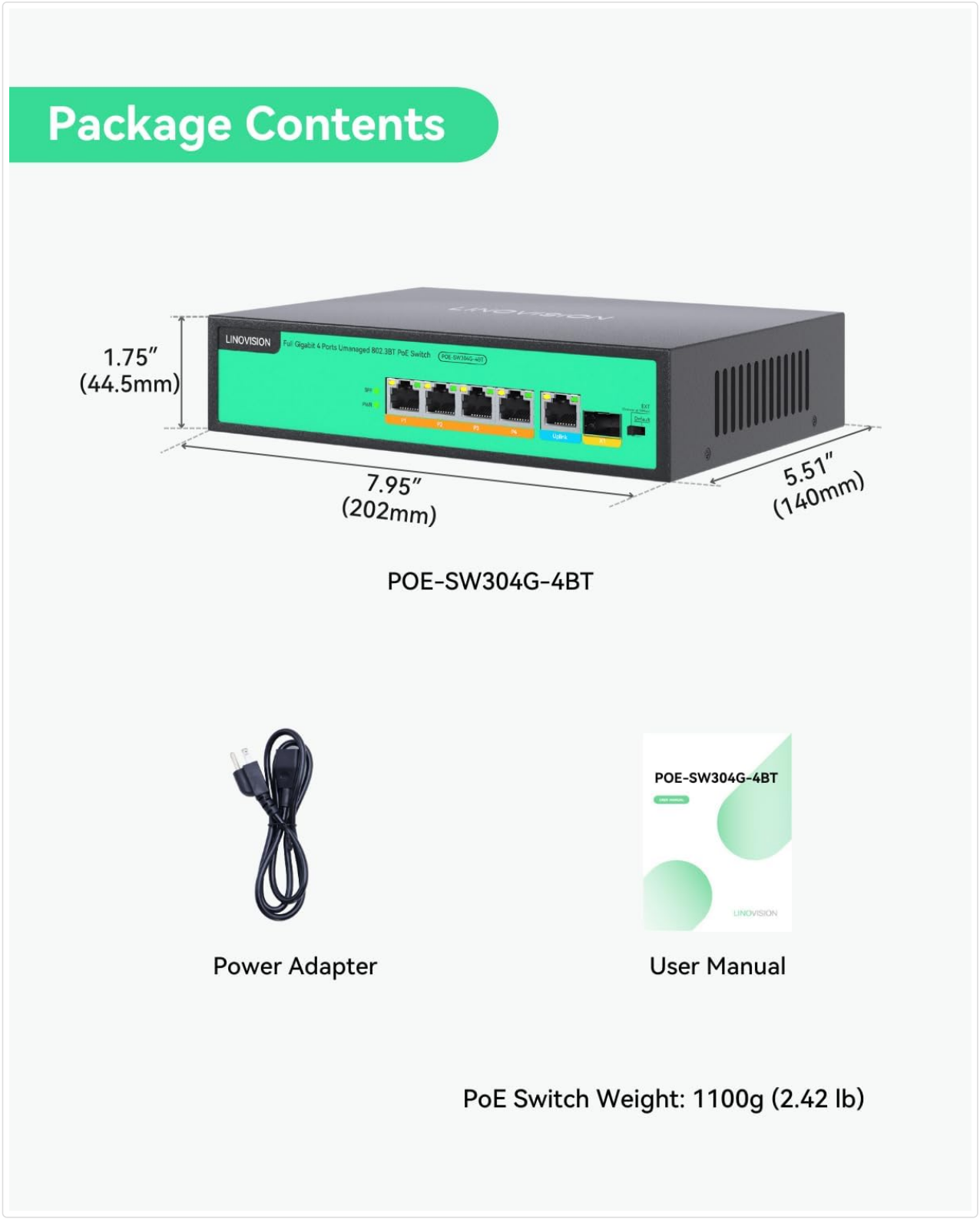

Image: The LINOVISION POE-SW304G-4BT PoE Switch, power adapter, and user manual are shown together.

3. Product Overview

Front Panel Interface:

Image: Diagram illustrating the front panel of the PoE switch, highlighting the SFP Indicator, Link/ACT Indicator, PoE Indicator, Gigabit SFP Port, Power Indicator, 4x 90W Gigabit PoE Ports, Gigabit Uplink Port, and Extend Mode switch. Total PoE budget is 96W.

Rear Panel Interface:

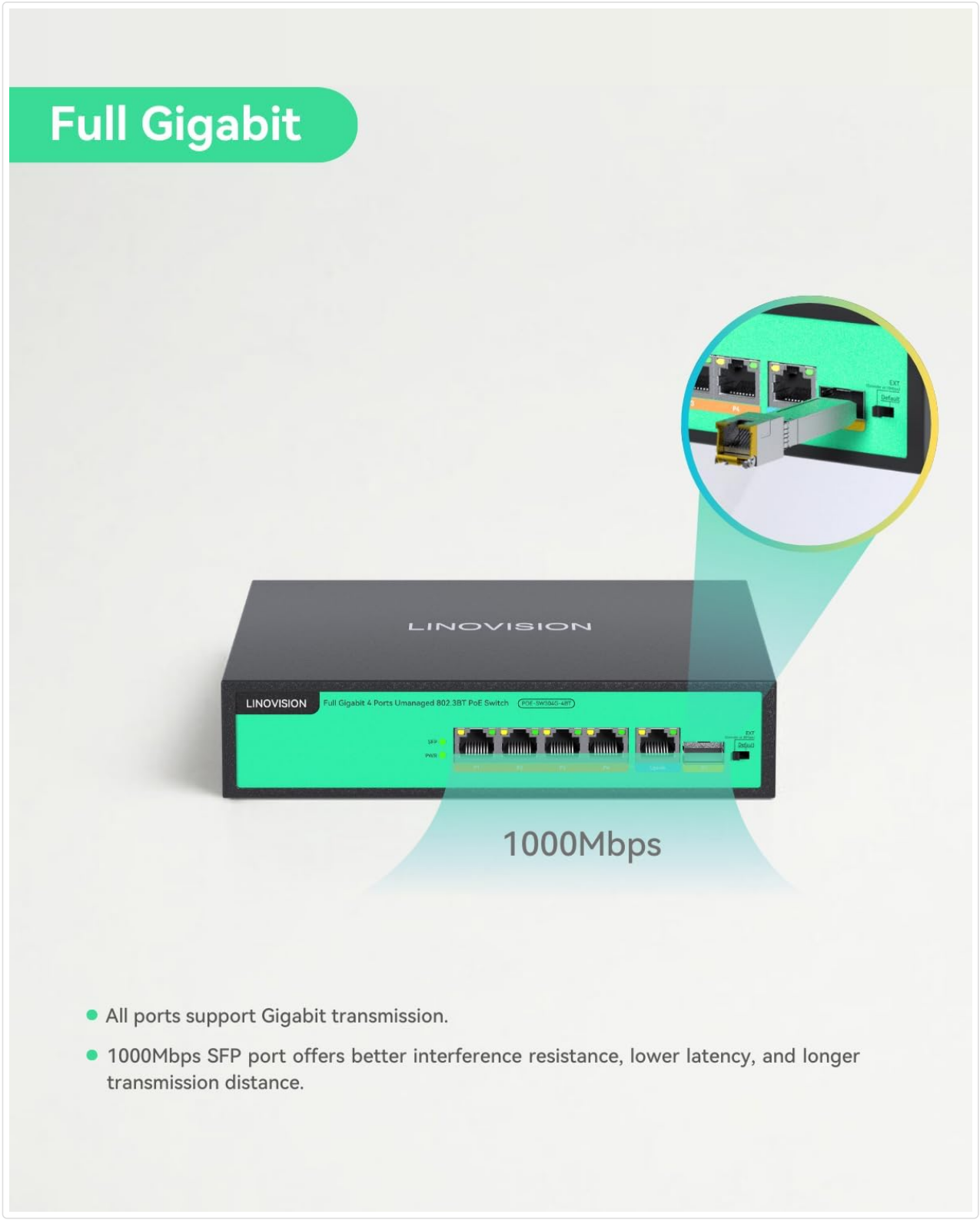

Image: The rear panel of the PoE switch, showing the ground terminal and the 100-240V AC input port.

4x BT 90W Ports:

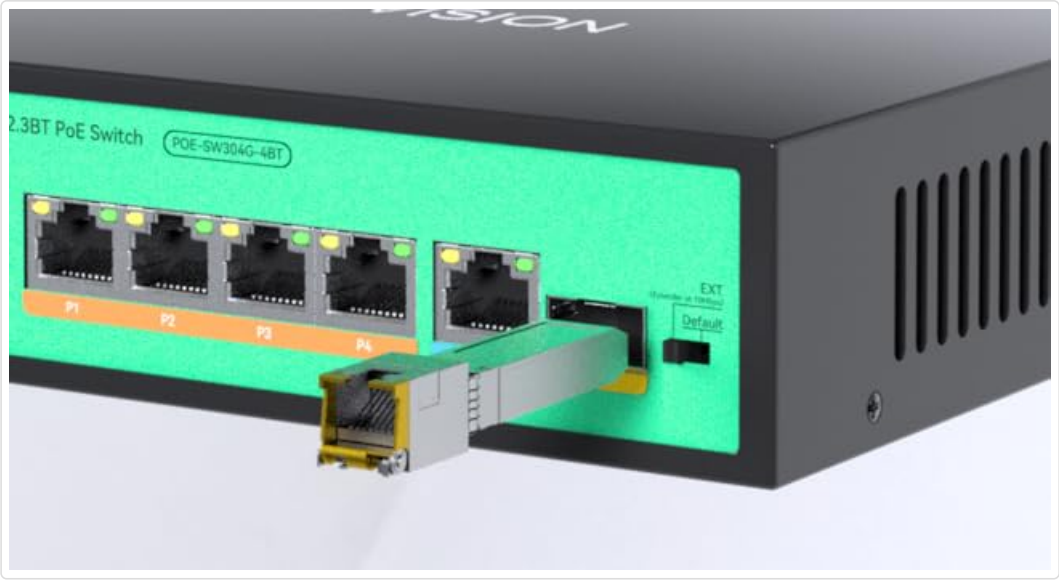

Image: Diagram showing the 4x BT 90W PoE ports providing power and data to PoE, PoE+, PoE++ devices, and data output to non-PoE devices. It highlights compatibility with IEEE 802.3af/at/bt PoE devices.

Full Gigabit Connectivity:

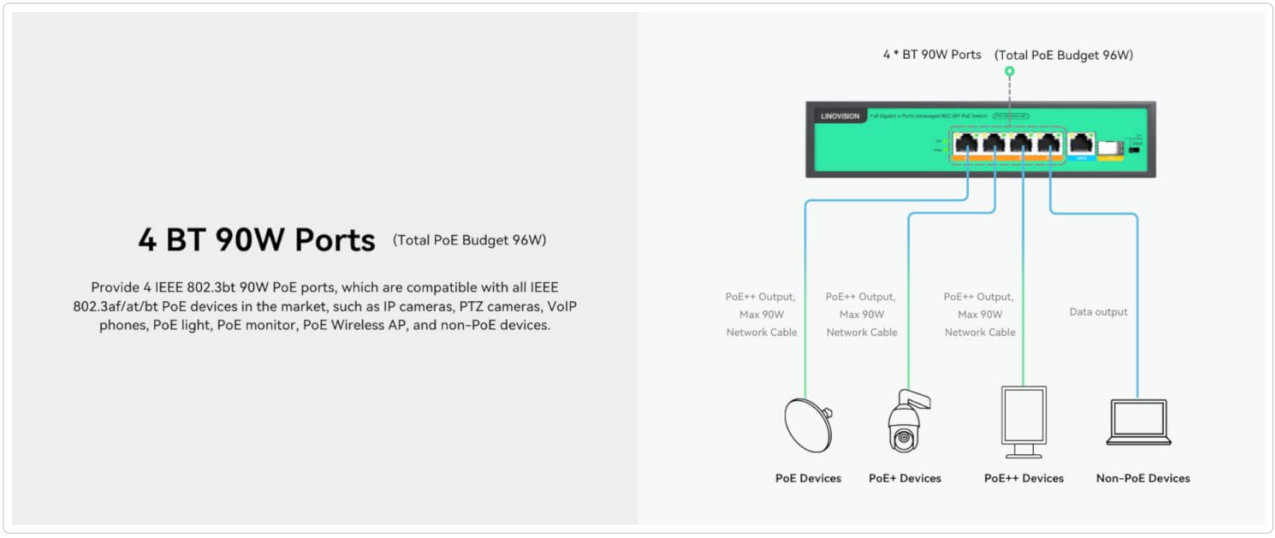

Image: Diagram showing the PoE switch with an arrow indicating 1000Mbps data transfer speed across all ports, emphasizing full Gigabit transmission and the benefits of the SFP port for interference resistance and longer transmission.

4. Setup

Unboxing:

Video: An unboxing video of the LINOVISION 4 Port Full Gigabit 802.3bt PoE++ Switch, showing the contents and initial appearance of the device.

Video: An unboxing video of the LINOVISION 8 Port BT 90W PoE Switch (POE-SW308G-4BT), which shares similar packaging and components with the 4-port model.

Plug and Play Installation:

The LINOVISION PoE Switch is designed for simple plug-and-play operation, requiring no complex configuration.

1. **Connect Power:** Plug the included power adapter into the AC input port on the rear panel of the switch

and then into a power outlet.

2. **Connect Devices:** Connect your PoE-compatible devices (e.g., IP cameras, APs) to the PoE ports (P1-P4) using standard Ethernet cables. The switch will automatically detect and power these devices.
3. **Connect to Network:** Connect the RJ45 uplink port or the SFP uplink port to your router or network backbone.

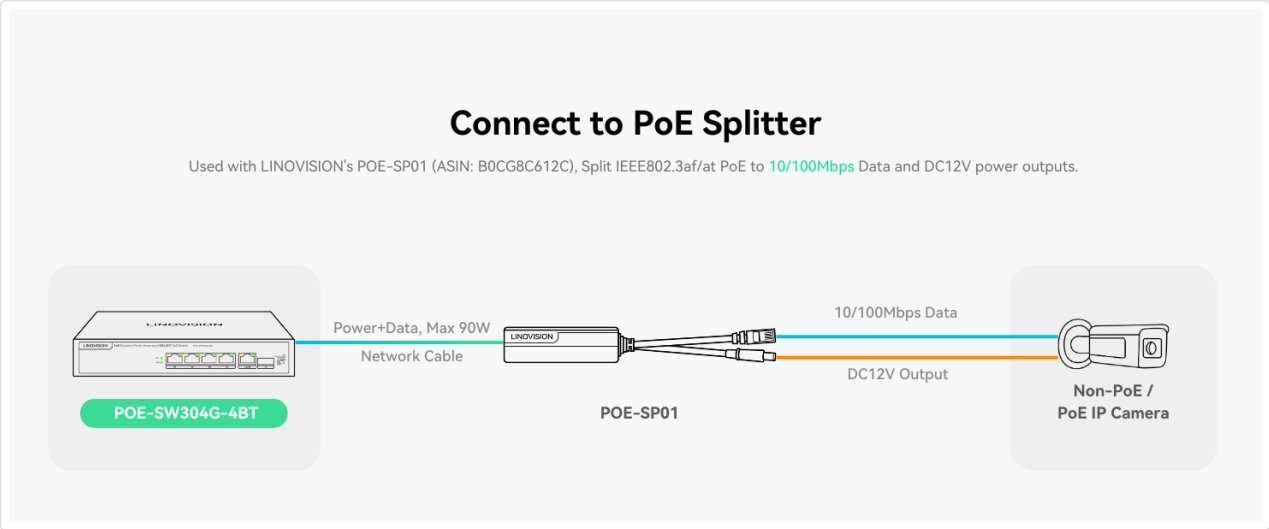

Image: A diagram showing the simple plug-and-play process: plug in the power, connect the device to a PoE port, and the system is ready.

5. Operating Instructions

PoE Extend Mode:

The PoE Extend Mode allows for extended cable distances for PoE devices. To enable this mode, locate the 'EXT/Default' switch on the front panel and set it to 'EXT'.

- **Default Mode:** Standard PoE transmission up to 330ft (100m) at Gigabit speeds.
- **Extend Mode:** Extends PoE + Data transmission up to 820ft (250m) at 10Mbps. This mode is ideal for IP cameras that typically consume less than 10Mbps bandwidth.

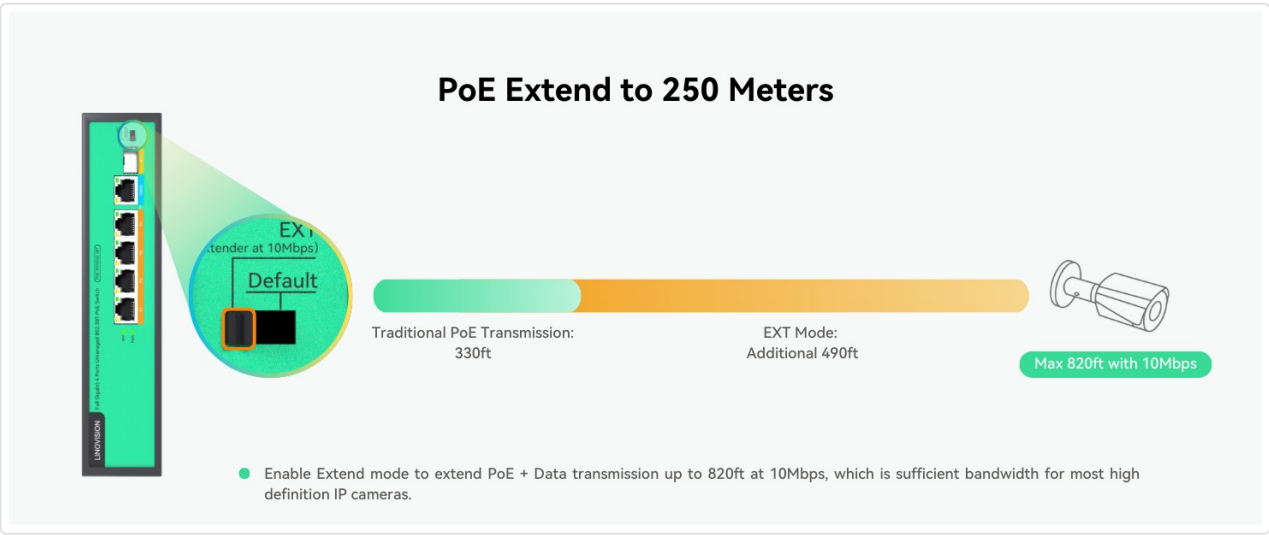

Image: Diagram showing the PoE Extend Mode, allowing for up to 820ft (250m) transmission at 10Mbps, compared to the traditional 330ft (100m).

PoE Safety Features:

The switch incorporates a standard PoE design with a 4-step power-up process to ensure safety for connected devices:

1. **PD Detection:** Detects if a connected device is PoE-compatible.
2. **PoE Power Classification Negotiation:** Negotiates the required power class with the device.
3. **Start Up:** Initiates power delivery.
4. **Power ON:** Supplies the appropriate power to IEEE 802.3af/at/bt devices.

This process prevents overloading and ensures that power is not supplied to non-PoE devices, protecting them from potential damage.

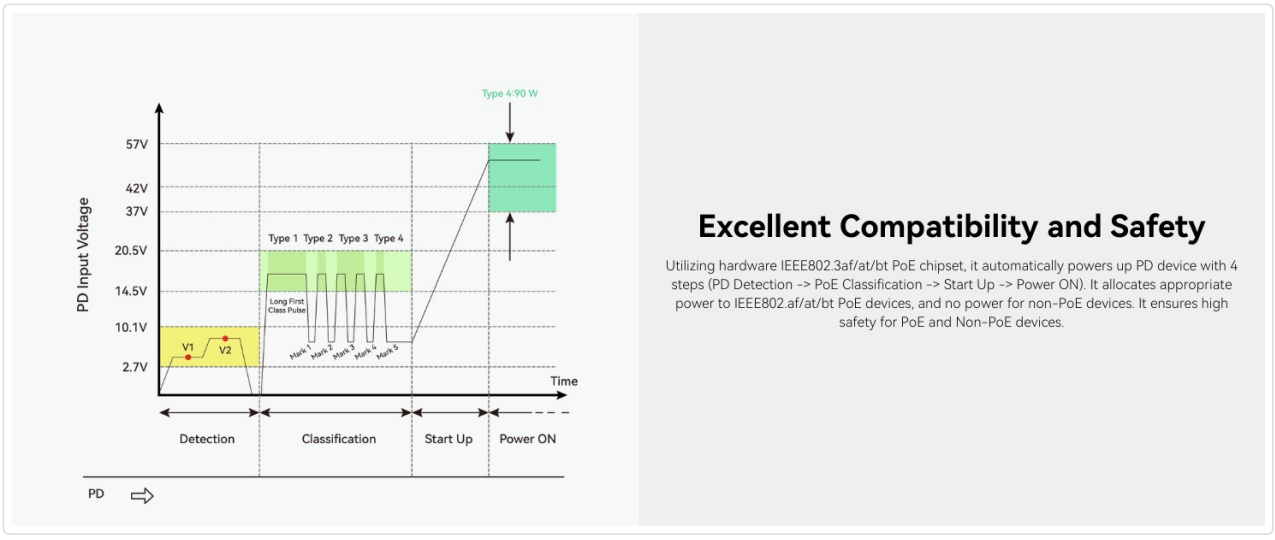

Image: A graph showing the 4-step PoE power-up process (Detection, Classification, Start Up, Power ON) ensuring excellent compatibility and safety for PoE and non-PoE devices.

6. Maintenance

The LINOVISION PoE Switch is designed for durability and minimal maintenance.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid or aerosol cleaners.
- **Ventilation:** Ensure the device is placed in a well-ventilated area. Although it features a fanless design, adequate airflow helps maintain optimal operating temperature.
- **Environmental Conditions:** Operate the switch within the specified temperature range of -4°F to 131°F (-20°C to 55°C). The full metal enclosure and 6KV surge protection enhance its resilience in various environments.

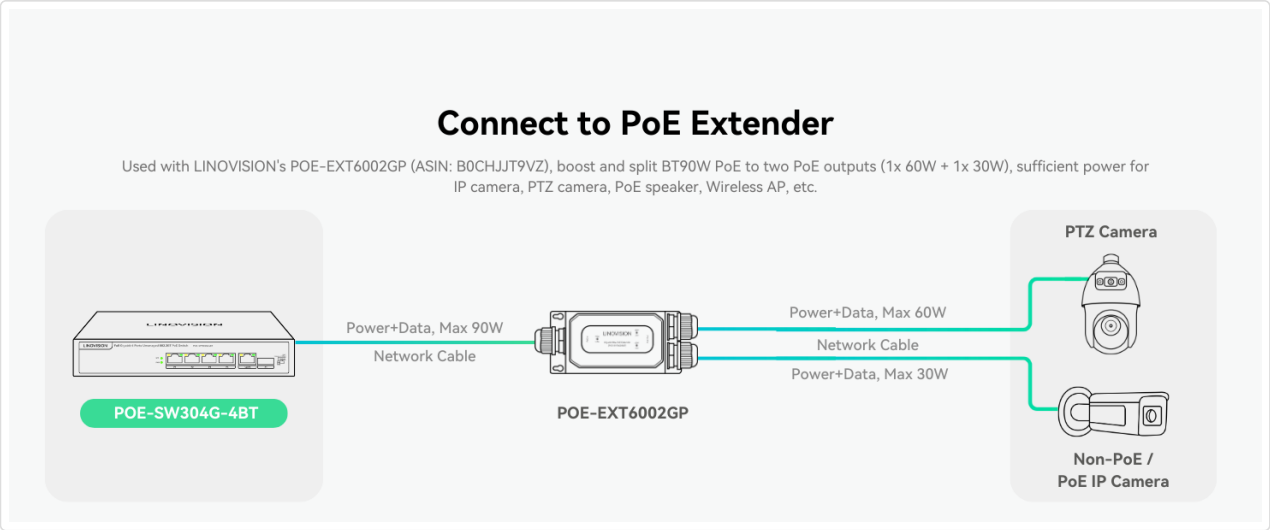

Image: Visual representation of the switch's solid design features, including wide temperature range support (-4°F to 131°F), fanless operation, IP40 full metal enclosure, and 6KV surge protection.

7. Troubleshooting

If you encounter issues with your LINOVISION PoE Switch, refer to the following common troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the switch and a working power outlet. Check the power indicator LED on the front panel.
- **No Link/Activity:** Verify that Ethernet cables are properly connected to both the switch and the connected device. Check the Link/ACT indicator LED for activity. Try a different cable or port.
- **PoE Device Not Powering On:**
  - Confirm the connected device is PoE-compatible (IEEE 802.3af/at/bt).
  - Check the PoE indicator LED for the specific port.
  - Ensure the total PoE budget of 96W is not exceeded by all connected devices.
  - If using a PoE++ device, confirm it is IEEE 802.3bt compliant, as some 'PoE++' devices may not fully adhere to this standard.
- **Slow Network Speed in Extend Mode:** This is expected behavior. In PoE Extend Mode, the bandwidth is reduced to 10Mbps to achieve longer transmission distances (up to 820ft). If higher speeds are needed, ensure the cable length is within 330ft (100m) and the Extend Mode is disabled.

If the problem persists after following these steps, please contact LINOVISION technical support for further assistance.

8. Specifications

Attribute	Value
Model Number	POE-SW304G-4BT
Product Dimensions	7.95"L x 5.51"W x 1.75"H (202mm x 140mm x 44.5mm)
Item Weight	2.16 pounds (1100g)
Voltage	48 Volts

Case Material	Metal
Upper Temperature Rating	131 Degrees Fahrenheit (55°C)
Interface Type	RJ45, SFP
Data Transfer Rate	1000 Mbps (Gigabit)
Number of Ports	6 (4 PoE++, 1 RJ45 Uplink, 1 SFP Uplink)
PoE Standard	IEEE 802.3af/at/bt
Total PoE Budget	96W
Max PoE Power per Port	90W (BT)
Surge Protection	6KV

9. Warranty and Support

LINOVISION products come with a standard warranty. For specific warranty terms and conditions, please refer to the warranty card included in your package or visit the official LINOVISION website. For technical support, troubleshooting assistance, or any product-related inquiries, please contact LINOVISION customer service or visit their support portal.

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