MokerLink 4 Port 1000M

MokerLink 4 Port Gigabit PoE Extender (Model 4 Port 1000M) User Manual

Model: 4 Port 1000M

1. Introduction

This manual provides instructions for the installation, operation, and maintenance of the MokerLink 4 Port Gigabit PoE Extender, Model 4 Port 1000M. This device is designed to extend Power over Ethernet (PoE) and data transmission distances, providing a flexible solution for network deployment.

2. Product Overview

2.1 Key Features

- **4 Gigabit PoE Ports:** Includes 1 PoE In port and 3 PoE Out ports, supporting 10/100/1000Mbps speeds. PoE transmission distance up to 100 meters per segment.
- **IEEE 802.3 af/at Compliance:** All ports support standard PoE, with a maximum input of 30W and a maximum output of 24W, averaging 8W per port. PoE voltage range is 44-57 Vdc. PoE pin configuration: Input 1/2 (+), 3/6 (-), 4/5(+), 7/8(-); Output 1/2 (+), 3/6 (-).
- **Unmanaged Plug & Play:** Features automatic power detection for connected devices, requiring no configuration. Simply connect Ethernet cables.
- **Easy Installation:** Powered by the PoE network, eliminating the need for an additional power adapter. Supports both wall mount and DIN rail mount options for versatile placement.
- **Cascading Capability:** Supports up to 3 levels of cascading, allowing for extended PoE coverage for devices such as PoE access points, IP cameras, and VoIP phones.

2.2 Package Contents

- MokerLink 4 Port Gigabit PoE Extender (Model 4 Port 1000M)

2.3 Product Diagram


ON
OFF
1
2
3
4
PoE OUT
PoE IN

Figure 1: Front view of the MokerLink 4 Port Gigabit PoE Extender, showing the four Ethernet ports and the ON/OFF switch.

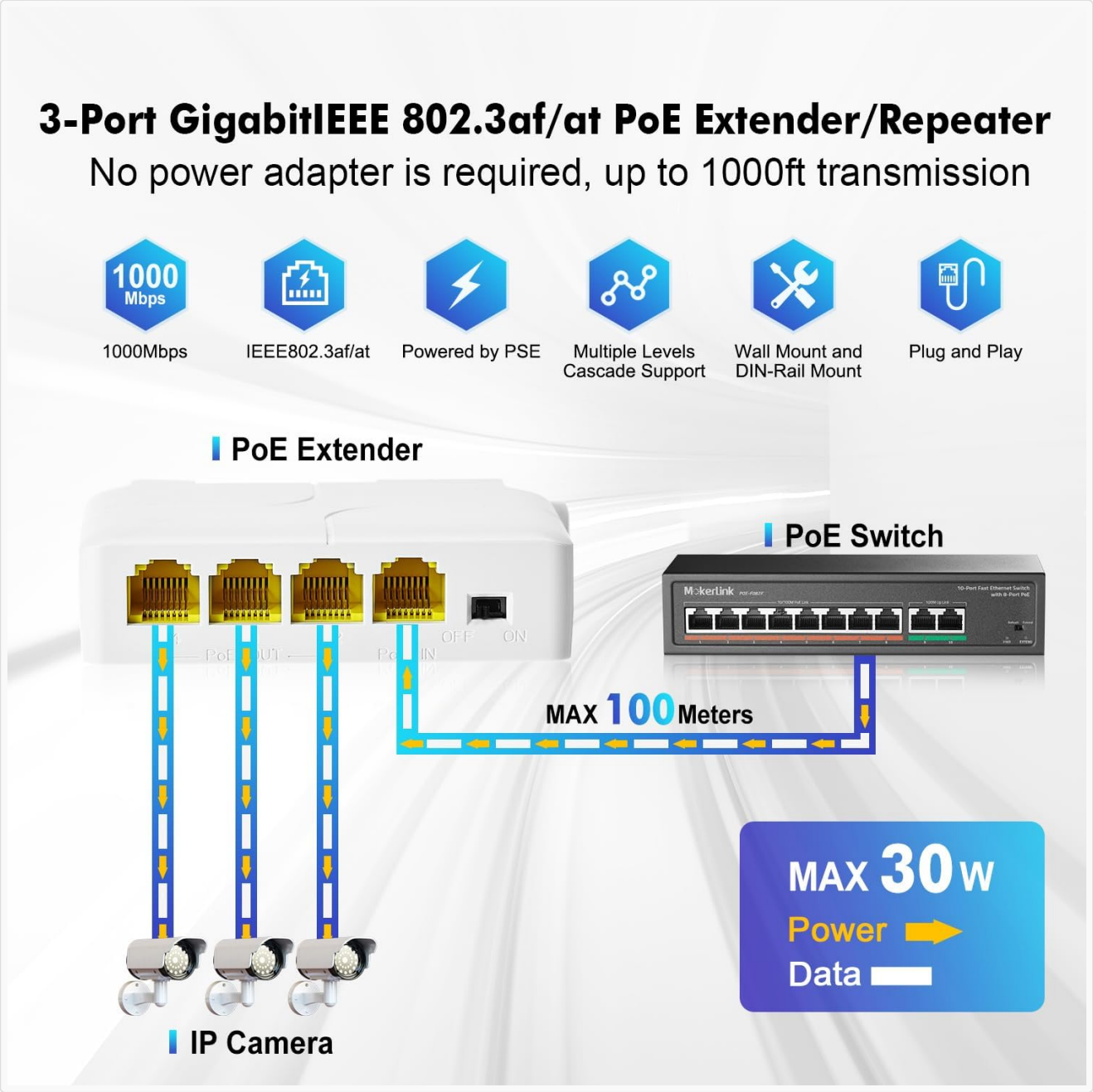


Figure 2: Diagram illustrating the 1 PoE In and 3 PoE Out port configuration, connecting to IP cameras and a PoE switch.

3. Specifications

Attribute	Value
Model Number	4 Port 1000M
Number of Ports	4 (1 PoE In, 3 PoE Out)
Data Transfer Rate	10/100/1000 Mbps (Gigabit)
PoE Standard	IEEE 802.3 af/at
Input Power (Max)	30W

Output Power (Max)	24W (Average 8W per port)
PoE Voltage	44-57 Vdc
PoE Pin Assignment (Input)	1/2 (+), 3/6 (-), 4/5(+), 7/8(-)
PoE Pin Assignment (Output)	1/2 (+), 3/6 (-)
Case Material	Plastic
Dimensions	82mm (L) x 52mm (W) x 23mm (H)
Item Weight	0.08 Kilograms (2.82 ounces)
Operating Temperature	Up to 55 Degrees Celsius
Mounting Options	Wall Mount, DIN Rail Mount

4. Setup and Installation

4.1 Basic Connection

1. Ensure your upstream network device (e.g., PoE switch or PoE injector) provides IEEE 802.3af/at compliant PoE power.
2. Connect an Ethernet cable from your PoE source to the**PoE IN** port on the MokerLink Extender. This port will supply both power and data to the extender.
3. Connect your PoE-powered devices (e.g., IP cameras, wireless access points, VoIP phones) to the**PoE OUT 1, 2, or 3** ports using standard Ethernet cables.
4. The extender is plug-and-play and will automatically detect and power the connected devices. No software configuration is required.

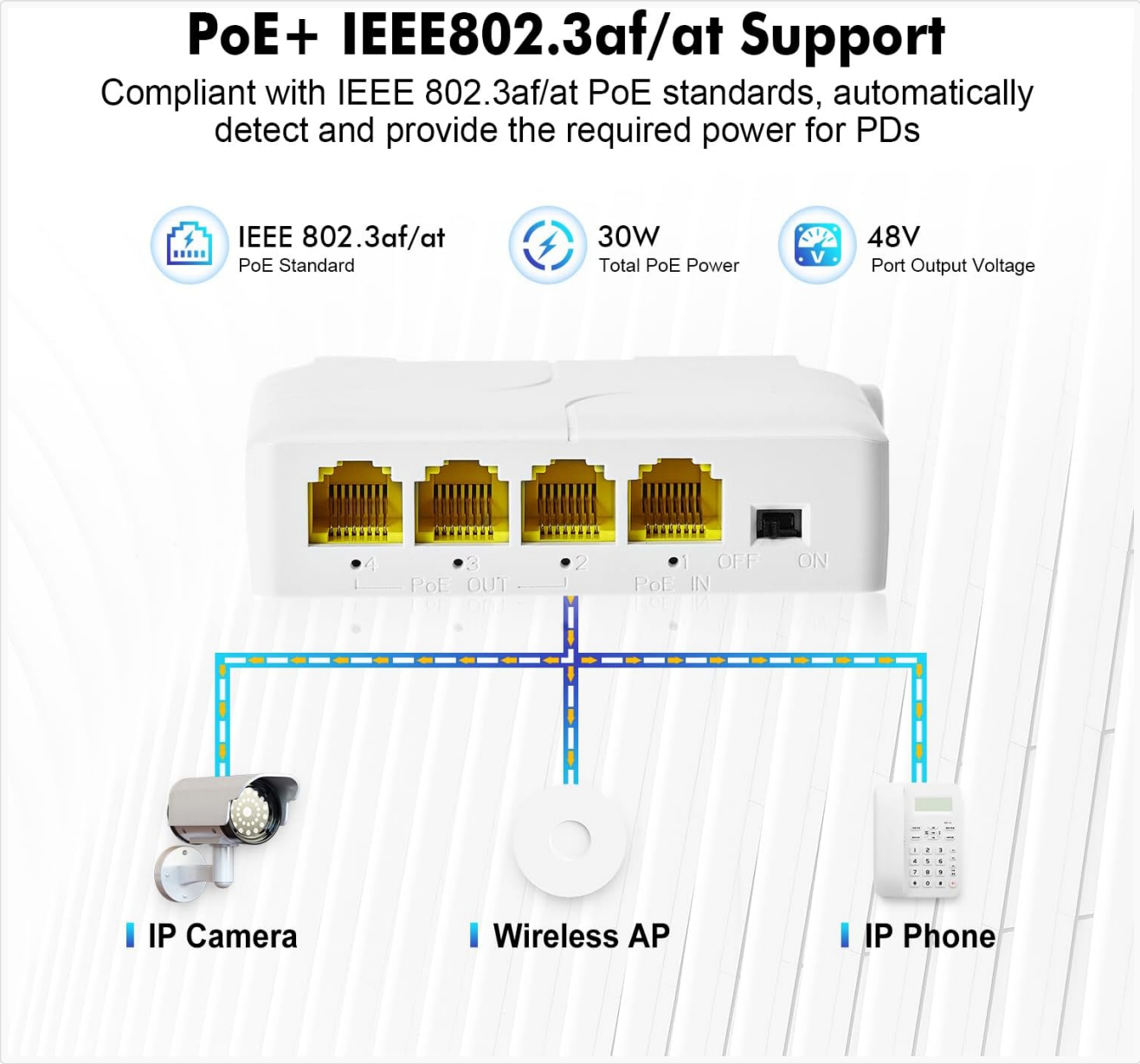


Figure 3: Illustration of PoE+ IEEE 802.3af/at support, showing the extender powering an IP camera, wireless AP, and IP phone.

Figure 4: The extender with Ethernet cables connected, demonstrating its plug-and-play functionality.

4.2 Mounting Options

The MokerLink PoE Extender offers flexible mounting options:

- **Wall Mount:** Use screws to secure the extender to a wall or flat surface.
- **DIN Rail Mount:** Attach the extender to a standard DIN rail for industrial or organized installations.

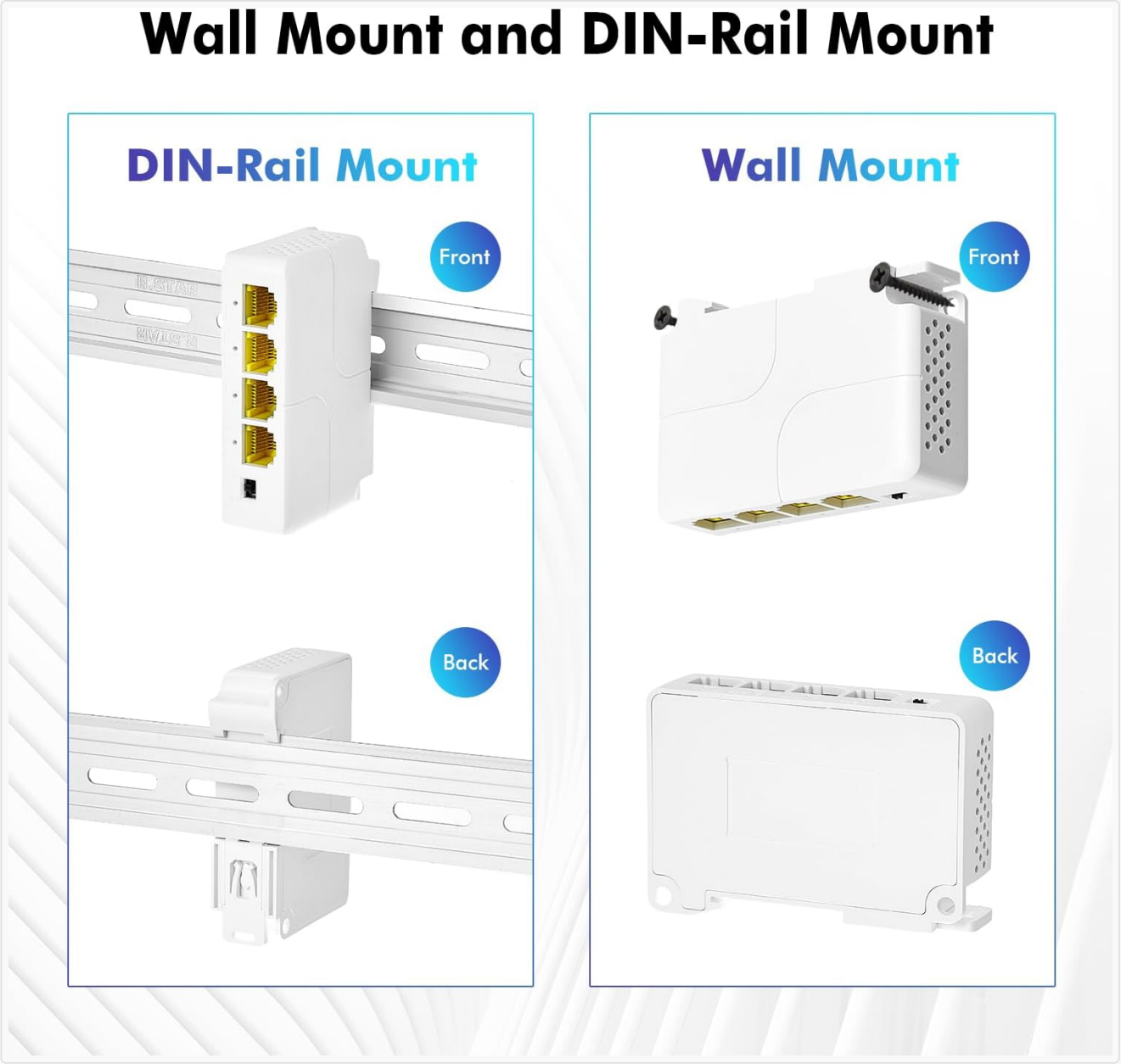


Figure 5: Depiction of the extender mounted on a DIN rail (left) and secured to a wall (right).

5. Operating Instructions

The MokerLink PoE Extender is designed for simple operation:

1. Once connected as described in Section 4.1, the device will automatically power on and begin functioning.
2. The extender will automatically detect if a connected device requires PoE power and supply it accordingly.
3. Data transmission will occur at the highest supported speed (10/100/1000Mbps) negotiated with the connected devices.

6. Advanced Features

6.1 Cascading Multiple Extenders

The MokerLink PoE Extender supports cascading up to 3 levels, allowing you to extend the reach of your PoE network significantly. Each extender can extend the PoE and data signal by an additional 100 meters.

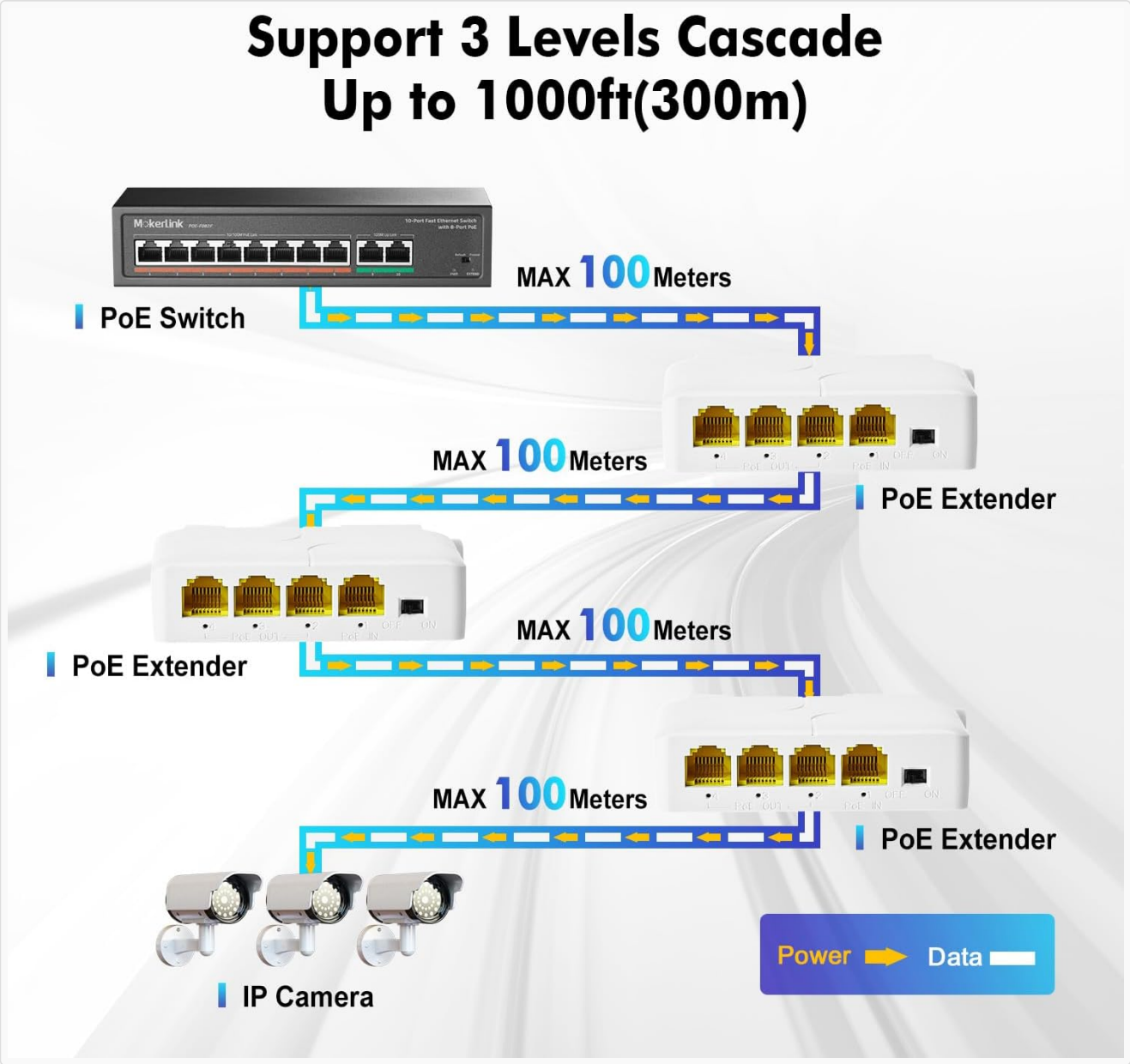


Figure 6: Diagram showing three MokerLink PoE Extenders cascaded to extend network reach up to 300 meters for IP cameras.

6.2 Port-based VLAN Feature

The extender includes a DIP switch for enabling a port-based VLAN feature. When activated, ports 2-4 can be isolated from each other. This helps prevent broadcast storms from IP cameras or other devices on one port from affecting devices on other ports, enhancing network stability.

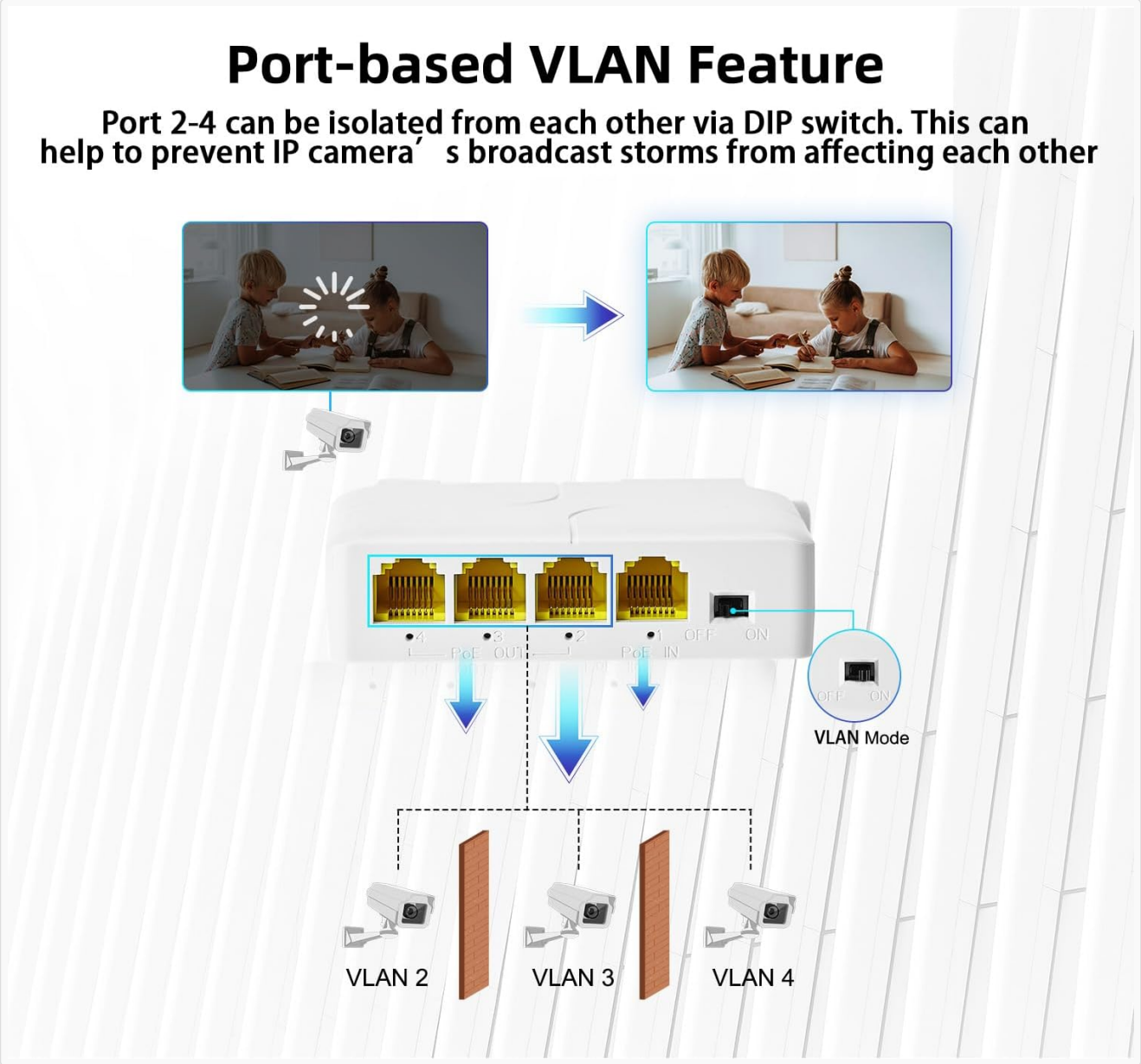


Figure 7: Illustration of the port-based VLAN feature, showing how ports 2-4 can be isolated using the DIP switch.

7. Troubleshooting

- **No Power to Connected Devices:**
  - Ensure the PoE IN port is connected to an active IEEE 802.3af/at compliant PoE source.
  - Verify the PoE source is providing sufficient power for all connected devices. The extender has a maximum output of 24W.
  - Check all Ethernet cable connections for proper seating and integrity.
- **No Data Connection:**
  - Confirm that the upstream network connection is active and functioning.
  - Ensure Ethernet cables are correctly connected to the PoE IN and PoE OUT ports.
  - Test with different Ethernet cables to rule out cable faults.
  - Verify the connected device is operational and its network settings are correct.
- **Slow Network Speed:**
  - Ensure all connected devices and cables support Gigabit Ethernet (1000Mbps) for optimal performance.

- Check for excessive cable lengths. While the extender extends range, total cable length should still adhere to Ethernet standards for reliable performance.

8. Safety Information

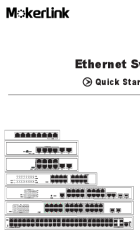
- Do not expose the device to water or excessive humidity.
- Do not open the device casing. Refer all servicing to qualified personnel.
- Ensure proper ventilation to prevent overheating.
- Use only with IEEE 802.3af/at compliant PoE sources.

9. Warranty and Support

For warranty information and technical support, please refer to the MokerLink official website or contact your authorized reseller. Keep your purchase receipt for warranty claims.

Related Documents - 4 Port 1000M

	MokerLink POE-G480G 48-Port Gigabit PoE Switch User Manual Comprehensive user manual for the MokerLink POE-G480G, a 48-port Gigabit PoE Ethernet switch. Includes product overview, specifications, installation guides, application examples, and troubleshooting.
	MokerLink 2.5G/10G Series Ethernet Switch User Manual Comprehensive user manual for MokerLink's 2.5G and 10G series Ethernet switches, covering product introduction, installation, connection, login management, and technical specifications.
	MokerLink 48-Port Gigabit Series Switch User Manual User manual for MokerLink's 48-Port Gigabit Series Switches (G482GS, POE-G482GS, POE-G484GSM), detailing product features, specifications, software parameters, and connection guides.

	[MokerLink 2G05110GSM: 5-Port 2.5G & 1-Port 10G SFP+ Web Managed Switch] Detailed specifications and features of the MokerLink 2G05110GSM, a 5-port 2.5G and 1-port 10G SFP+ web managed network switch designed for high-speed, silent operation in enterprise environments.
	[Mokerlink Rainproof PoE Switch Installation and Technical Guide] Comprehensive guide for installing and operating the Mokerlink Rainproof PoE Switch. Includes hardware installation, power connection, and detailed technical specifications for the outdoor Gigabit PoE switch.
	[MokerLink Ethernet Switch Quick Start Guide] A quick start guide for MokerLink Ethernet Switches, covering product description, packing list, installation, connecting equipment, login management, PoE powered function, and indicator/state definitions.