## MokerLink 4 PoE + 2 FE

# MokerLink 6 Port PoE Switch (4 PoE+2 FE) Instruction Manual

Model: 4 PoE + 2 FE | Brand: MokerLink

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MokerLink 6 Port PoE Switch (Model 4 PoE + 2 FE). This unmanaged switch is designed to provide both data and power over Ethernet cables to compatible devices, simplifying network deployment. Please read this manual thoroughly before using the device to ensure proper and safe operation.

## 2. PRODUCT OVERVIEW

### 2.1 Key Features

- **6 Ports:** Includes 4 Power over Ethernet (PoE) ports and 2 Fast Ethernet (FE) Uplink ports, all supporting 10/100Mbps speed.
- **High PoE Power:** Maximum support of 78W total output power, with a built-in power supply. Each PoE port provides up to 30W, compliant with IEEE 802.3af/at standards. *Note: Does not support passive 24V PoE.*
- **Unmanaged Plug & Play:** Features Power Detection function to automatically identify and power PoE-compatible devices. Provides data connectivity for non-PoE devices. No configuration required.
- **Extend Function:** When activated, PoE ports can extend data and power transmission up to 250 meters (820 ft) at 10Mbps, with port isolation for enhanced network safety.
- **Durable Design:** Built with a fanless metal housing for quiet operation and effective heat dissipation. Includes LED indicator lights for status monitoring.
- **Versatile Application:** Suitable for IP cameras, Wireless Access Points, IP Phones, and other network devices.

### 2.2 Package Contents

- 1 x MokerLink 6 Port 10/100Mbps PoE+ Switch (4 PoE + 2 FE)
- 1 x AC Power Cable
- 4 x Screws with nuts
- 2 x Hanger (for mounting)
- 1 x User Manual

### 2.3 Front Panel Layout

The front panel of the switch features all network ports and status indicators.
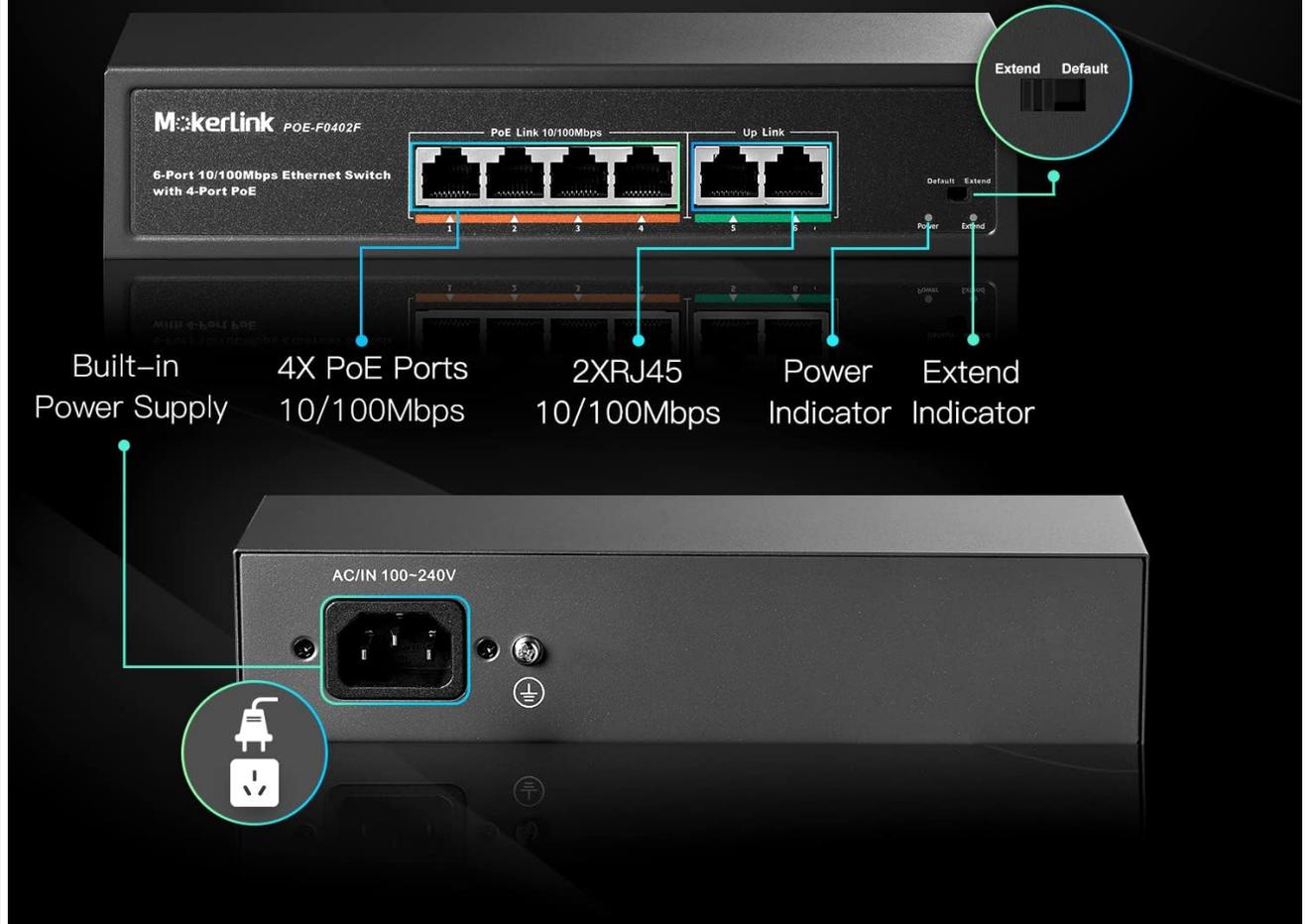
Figure 1: Front Panel of the MokerLink 6 Port PoE Switch. It displays 4 PoE ports (1-4), 2 Uplink ports (5-6), a power indicator, and an Extend/Default mode switch.

- **PoE Ports (1-4):** These four ports support Power over Ethernet (PoE+) and data transmission at 10/100Mbps. Connect PoE-compatible devices such as IP cameras or Wireless Access Points here.
- **Uplink Ports (5-6):** These two ports are Fast Ethernet (FE) uplink ports, supporting 10/100Mbps data transmission. Connect these to your router, NVR, or other network devices for data connectivity.
- **Power Indicator:** Illuminates when the switch is powered on.
- **Extend/Default Switch:** Toggles between standard operation (Default) and extended range mode (Extend).

## 2.4 Rear Panel Layout

The rear panel contains the AC power input.

Figure 2: Rear Panel of the MokerLink 6 Port PoE Switch. It features the standard AC power input socket.

## 3. SETUP

### 3.1 Physical Installation

1. **Placement:** Place the switch on a stable, flat surface or mount it to a wall using the provided hangers and screws. Ensure adequate ventilation around the device.
2. **Power Connection:** Connect the supplied AC power cable to the power input on the rear panel of the switch and then to a standard electrical outlet. The Power LED on the front panel should illuminate.
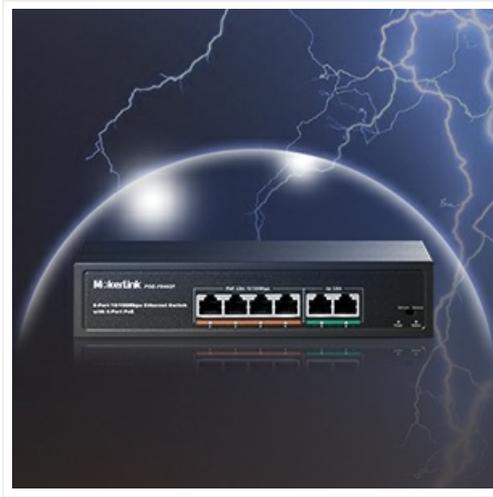
Figure 3: Wall mounting option for the PoE Switch.

## 3.2 Network Connection

1. **Connect PoE Devices:** Use standard Ethernet cables to connect your PoE-compatible devices (e.g., IP cameras, Wireless APs) to ports 1-4. The switch will automatically detect and power these devices.

2. **Connect Non-PoE Devices/Uplink:** Connect your router, NVR, or other non-PoE network devices to the Uplink ports (5-6) using standard Ethernet cables. These ports provide data connectivity only.

Figure 4: Connecting various devices to the PoE switch. IP cameras, Wireless APs, and IP phones connect to PoE ports for data and power. Routers, computers, and NVRs connect to uplink ports for data only.

## 4. OPERATING INSTRUCTIONS

The MokerLink 6 Port PoE Switch is a plug-and-play device, requiring no software configuration. Once powered on and connected, it will automatically begin functioning.

### 4.1 LED Indicators

Monitor the status of the switch and connected devices using the front panel LEDs:

- **Power LED:**

  - **On:** The switch is powered on.
  - **Off:** The switch is powered off.

- **Link/Act LEDs (per port):**

  - **On:** A device is connected and a link is established.

- **Blinking:** Data activity is occurring on the port.
- **Off:** No device is connected or no link is established.

- **PoE LEDs (per PoE port):**

  - **On:** Power is being supplied to the connected PoE device.
  - **Off:** No power is being supplied (either not a PoE device or an issue exists).

# 5. EXTEND MODE AND VLAN FUNCTION

## 5.1 Extend Mode

The switch features an 'Extend' mode, controlled by a physical switch on the front panel. This mode is useful for deploying PoE devices over longer distances.
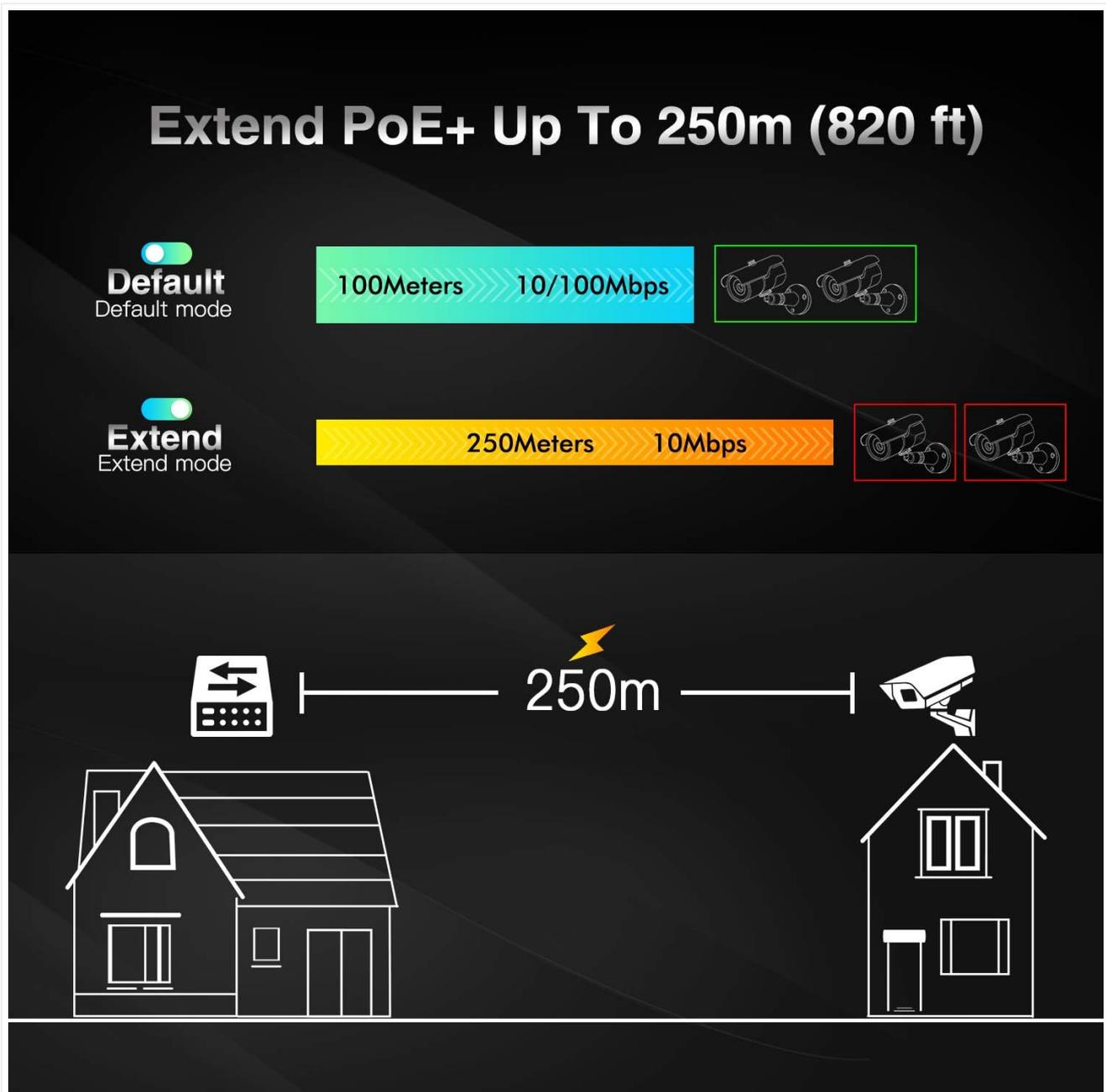


Figure 5: Comparison of Default and Extend modes for PoE range and speed.

- **Default Mode:** Standard operation, supporting up to 100 meters (328 ft) at 10/100Mbps.
- **Extend Mode:** When the switch is set to 'Extend', the PoE ports (1-4) can transmit data and power up to 250 meters

(820 ft). In this mode, the data speed for these ports is reduced to 10Mbps. This is ideal for long-distance surveillance camera deployments.

## 5.2 Port Isolation (VLAN)

When the 'Extend' mode is active, the PoE ports (1-4) are isolated from each other. This means that devices connected to these ports cannot directly communicate with each other, enhancing network security and preventing broadcast storms. All isolated ports can still communicate with the Uplink ports (5-6).
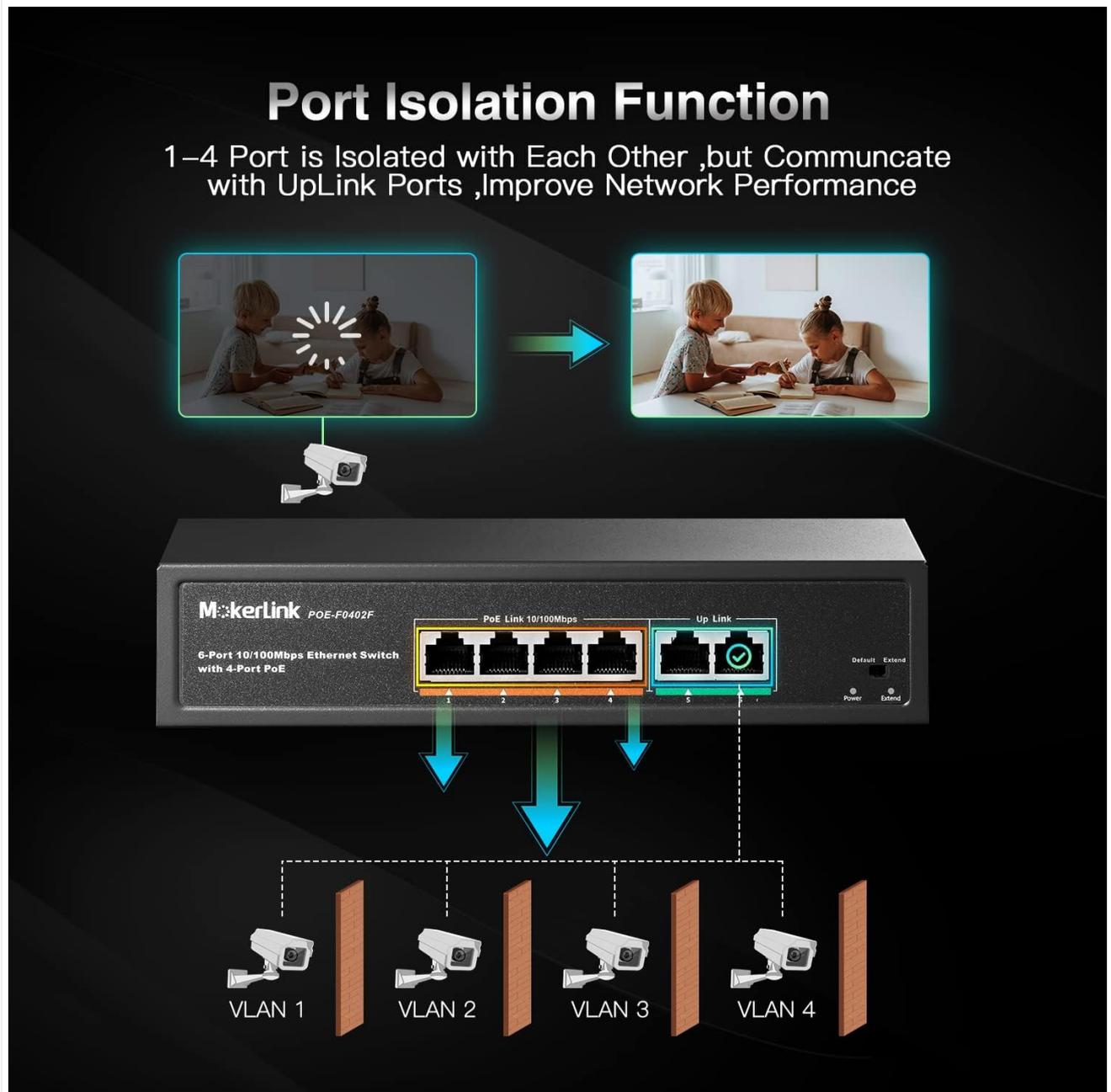


Figure 6: Port Isolation (VLAN) in Extend Mode. Devices on ports 1-4 are isolated from each other but can communicate with uplink ports.

## 6. MAINTENANCE

### 6.1 Cleaning

- Ensure the switch is powered off and unplugged before cleaning.
- Use a soft, dry cloth to wipe the exterior of the device.
- Do not use liquid or aerosol cleaners, as they may damage the device.

## 6.2 Environmental Considerations

- Operate the switch within the specified temperature range of -10°C to 55°C (14°F to 131°F).
- Avoid placing the switch in direct sunlight or near heat sources.
- Ensure proper airflow around the device, especially since it is fanless and relies on passive cooling.
- Keep the switch away from moisture and excessive dust.



Figure 7: Fanless design for silent operation.

## 7. TROUBLESHOOTING

If you encounter issues with your MokerLink PoE Switch, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|---|---|---|
| No Power LED indication | Power cable not connected or faulty power source. | Ensure the AC power cable is securely connected to the switch and a working power outlet. Test the outlet with another device. |
| No Link/Act LED for a connected device | Faulty Ethernet cable, incorrect port connection, or device issue. | Verify the Ethernet cable is securely connected at both ends. Try a different cable. Ensure the device is powered on and functioning correctly. |
| PoE device not receiving power (PoE LED off) | Device is not PoE-compatible, cable issue, or power budget exceeded. | Confirm the device is IEEE 802.3af/at compliant. Check the Ethernet cable for damage. Ensure the total power consumption of all PoE devices does not exceed 78W. |
| Slow network speed in Extend mode | This is expected behavior. | In Extend mode, the speed is intentionally reduced to 10Mbps to achieve longer transmission distances. This is not a fault. |
| Devices on PoE ports cannot communicate with each other | Extend mode is active, enabling port isolation. | This is the intended function of port isolation in Extend mode. If direct communication between PoE devices is required, switch the device to Default mode. |

## 8. SPECIFICATIONS

The following table outlines the technical specifications for the MokerLink 6 Port PoE Switch (4 PoE + 2 FE):

| Feature | Specification |
|---|---|
| Model Number | 4 PoE + 2 FE |

| Feature | Specification |
| --- | --- |
| Number of Ports | 6 (4 PoE+, 2 Fast Ethernet Uplink) |
| Data Transfer Rate | 10/100 Mbps |
| PoE Standard | IEEE 802.3af/at |
| Maximum PoE Power | 78 Watts (total) |
| Max Power Per PoE Port | 30 Watts |
| Interface Type | RJ45 |
| Case Material | Metal |
| Fanless Design | Yes |
| Extend Mode Range | Up to 250 meters (820 ft) at 10Mbps |
| Operating Temperature | -10°C to 55°C (14°F to 131°F) |
| Product Dimensions | 7.87 x 4.65 x 1.73 inches |
| Item Weight | 1.89 pounds |
| Input Voltage | AC 100-240V (Built-in Power Supply) |

## 9. SAFETY INFORMATION

- Do not open the device casing. There are no user-serviceable parts inside.
- Keep the device away from water, fire, humidity, or hot environments.
- Use only the power adapter provided with the device.
- Ensure proper grounding for electrical safety.
- Avoid placing heavy objects on the switch.
- Disconnect power during electrical storms or when unused for long periods.
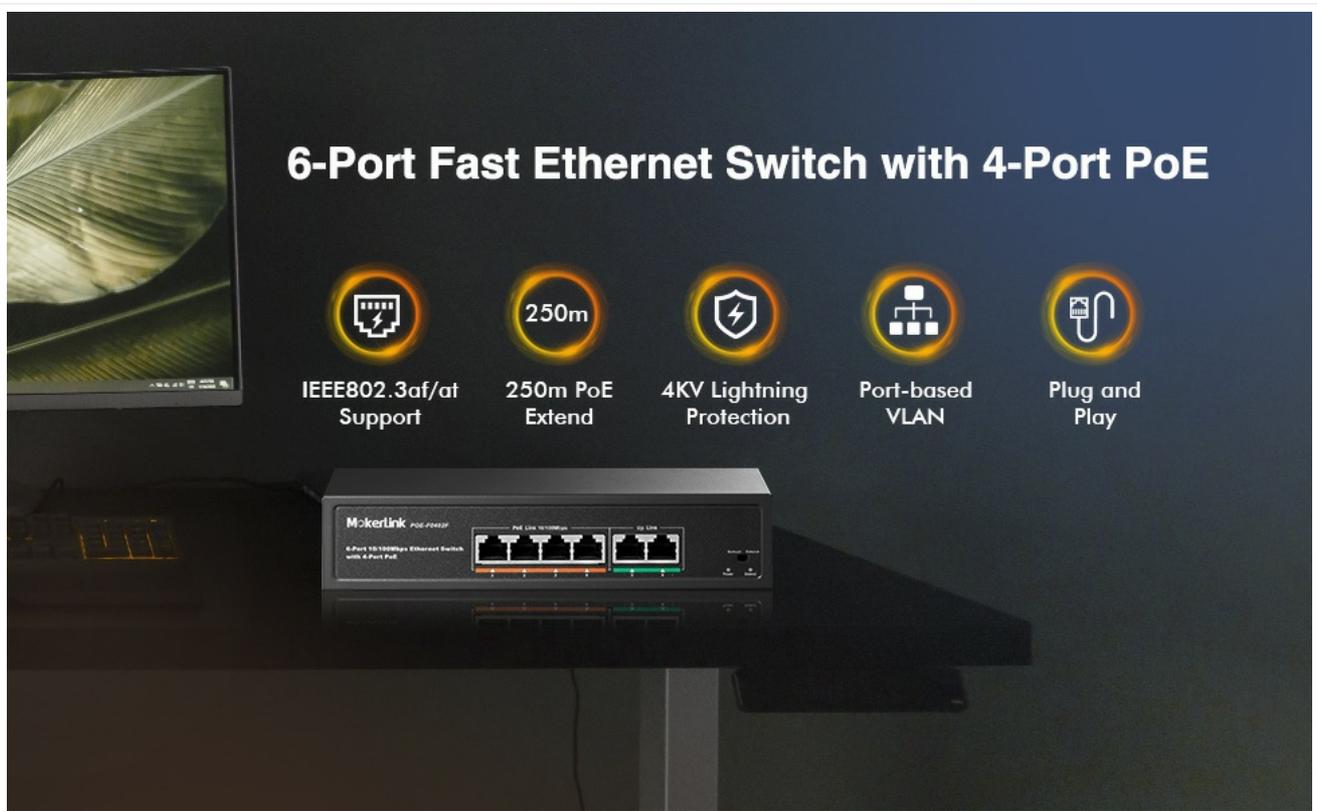
Figure 8: MokerLink PoE Switch with key features.

## 10. WARRANTY AND SUPPORT

### 10.1 Warranty Information

This MokerLink product is typically covered by a standard return policy, which allows for returns or replacements within 30 days of purchase. Please refer to your purchase platform's specific return policy for detailed terms and conditions.

### 10.2 Technical Support

For technical assistance or further inquiries regarding your MokerLink 6 Port PoE Switch, please contact MokerLink customer support through their official channels or the retailer from whom the product was purchased. Contact information can usually be found on the MokerLink official website or within your product packaging.