

FORTINET 108E-POE

Fortinet FortiSwitch 108E-POE User Manual

Layer 2 FortiGate Switch Controller Compatible PoE+ Switch

INTRODUCTION

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of the Fortinet FortiSwitch 108E-POE. The FortiSwitch 108E-POE is a Layer 2 Power over Ethernet Plus (PoE+) switch designed for secure access, offering seamless integration with the FortiGate Network Security Platform for centralized management.

Please read this manual thoroughly before operating the device to ensure proper functionality and safety.

Product Overview



Image Description: The image displays the front panel of the Fortinet FortiSwitch 108E-POE. The device is a white, rectangular network switch. On the left, the "FORTINET" logo is visible, along with three LED indicators for Power, Alarm, and PoE Max. Towards the center, there is a console port, followed by eight RJ45 Gigabit Ethernet ports (labeled 1-8), each with its own link/activity LEDs. On the far right, there are two SFP ports (labeled 9 and 10) for fiber optic connections, also with link/activity LEDs. The model name "FortiSwitch 108E-POE" is printed on the right side of the front panel.

1. SETUP

1.1 Package Contents

Verify that your package contains the following items:

- FortiSwitch 108E-POE unit
- Power adapter or power cord
- Rack-mount kit (if applicable)
- Quick Start Guide

1.2 Physical Installation

The FortiSwitch 108E-POE can be placed on a desktop or mounted in a standard 19-inch equipment rack.

Desktop Placement:

- Ensure adequate ventilation around the device.
- Place the switch on a flat, stable surface.
- Avoid placing the switch near heat sources or in direct sunlight.

Rack Mounting:

- Attach the provided rack-mount brackets to the sides of the switch using the included screws.
- Secure the switch into the rack using appropriate rack screws.
- Ensure proper airflow within the rack.

1.3 Connecting Power

1. Connect the power adapter/cord to the power input on the rear panel of the FortiSwitch.
2. Plug the other end of the power cord into a grounded electrical outlet.
3. The Power LED on the front panel should illuminate, indicating the device is receiving power.

1.4 Network Connections

- **RJ45 Ports (1-8):** Connect Ethernet cables from your network devices (computers, IP phones, wireless access points) to these ports. These ports support Power over Ethernet Plus (PoE+) for compatible devices.
- **SFP Ports (9-10):** Insert compatible SFP transceivers into these ports for fiber optic uplink connections to other network devices or the core network.
- **Console Port:** Use a console cable to connect to a management workstation for direct command-line interface (CLI) access for initial configuration or troubleshooting.

1.5 Initial Configuration

The FortiSwitch 108E-POE is designed for integration with a FortiGate firewall. For initial configuration and management, connect the FortiSwitch to a FortiGate device. Refer to the FortiGate documentation and the Fortinet FortiSwitch Administration Guide for detailed instructions on discovering and authorizing the switch, creating VLANs, and configuring PoE settings.

For advanced configurations or standalone mode, access the switch via the console port using a terminal emulator (e.g., PuTTY) with the following settings: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.

2. OPERATING THE FORTISWITCH 108E-POE

2.1 LED Indicators

The front panel LEDs provide status information about the switch and its ports:

- **Power LED:**
 - **Solid Green:** Device is powered on and operating normally.
 - **Off:** Device is powered off or not receiving power.
- **Alarm LED:**
 - **Solid Red:** Indicates a system alarm or fault. Refer to the FortiGate interface or CLI for details.
 - **Off:** No active alarms.
- **PoE Max LED:**
 - **Solid Red:** Total PoE power consumption is at or near the maximum capacity (240 Watts).
 - **Off:** PoE power consumption is within normal limits.
- **Port Link/Activity LEDs (RJ45 & SFP):** Each port has an LED.
 - **Solid Green/Amber:** Link established.
 - **Flashing Green/Amber:** Data activity.
 - **Off:** No link or device connected.

2.2 Connecting Network Devices

Connect your network devices (e.g., computers, servers, IP cameras, wireless access points) to the RJ45 ports using standard Ethernet cables. For devices requiring power over Ethernet, ensure they are PoE+ compatible. The switch will automatically detect and provide power to compliant devices.

For high-speed uplinks or longer distances, use appropriate SFP transceivers and fiber optic cables in the SFP ports.

3. MAINTENANCE

3.1 Cleaning

To maintain optimal performance, periodically clean the exterior of the switch. Use a soft, dry cloth. Do not use liquid or aerosol cleaners directly on the device. Ensure ventilation openings are free from dust and obstructions.

3.2 Firmware Updates

Regularly check for and apply firmware updates to ensure security and access to the latest features. Firmware updates are typically managed through the connected FortiGate device. Refer to the Fortinet support website and documentation for the latest firmware releases and update procedures.

3.3 Environmental Considerations

Ensure the operating environment adheres to the specified temperature and humidity ranges. Excessive heat or moisture can damage the device and void the warranty. Maintain proper ventilation around the switch.

4. TROUBLESHOOTING

4.1 No Power

- Verify the power cord is securely connected to both the switch and a working electrical outlet.

- Check the power outlet with another device to confirm it is functional.
- Ensure the Power LED on the front panel is illuminated.

4.2 No Link on a Port

- Check the Ethernet cable connection at both ends (switch port and connected device).
- Try a different Ethernet cable.
- Ensure the connected device is powered on and functioning correctly.
- Verify the port is enabled and configured correctly via the FortiGate interface or CLI.

4.3 PoE Device Not Receiving Power

- Confirm the connected device is PoE+ (802.3at) or PoE (802.3af) compliant.
- Check the PoE Max LED. If solid red, the switch may be exceeding its total PoE budget (240W). Disconnect non-essential PoE devices or use a separate power source for some devices.
- Verify PoE settings for the port are enabled and configured correctly on the FortiGate.
- Try connecting the PoE device to a different PoE port.

4.4 Alarm LED is Red

- Access the FortiGate interface or the switch's CLI to view detailed alarm messages.
- Common alarms include high temperature, fan failure (if applicable), or power supply issues.

5. SPECIFICATIONS

Feature	Detail
Model	FortiSwitch 108E-POE
Ports	8 x GE RJ45 (PoE+), 2 x GE SFP
Interface Type	PoE, RJ45, SFP
Maximum PoE Power Budget	240 Watts
Layer	Layer 2
Management	FortiGate Switch Controller Compatible
Case Material	Metal
Operating Temperature	Up to 40 Degrees Celsius
Dimensions (Package)	15.5 x 12.5 x 3.5 inches
Item Weight	0.01 ounces (Note: This weight seems unusually low and may refer to shipping weight or a component. Actual device weight is typically higher.)
UPC	609378730184

6. WARRANTY AND SUPPORT

6.1 Product Warranty

Fortinet products are covered by a limited warranty. For specific warranty terms and conditions applicable to your FortiSwitch 108E-POE, please refer to the warranty information provided with your product or visit the official Fortinet website.

6.2 Technical Support

For technical assistance, product documentation, and software downloads, please visit the official Fortinet support portal:

<https://support.fortinet.com>

Ensure you have your product serial number available when contacting support.