



Quick Installation Guide

8-Port 10/100Mbps Switch with 4-Port PoE

Model# ASW408POE



Ver. 1A

1. Introduction

Power Over Ethernet (PoE) is an evolving technology designed to deliver power and transmit data on an Ethernet cable at the same time. Modeling after the technology used in telecommunication systems which supplies power to telephones, PoE powers network device without the need of AC electrical outlets. By eliminating the power cords and the power infrastructure, the technology greatly simplifies the wiring and deployment matters and brings lots of convenience and benefits in home, office, and industrial environments.

Features

- 8 x 10/100Mbps Auto-negotiation Fast Ethernet RJ 45 with 4-Port PoE function (Port -1 to Port-4)
- Compliant with IEEE802.3af specification
- Support PoE Power Maximum 15.4W per PoE port
- Support PoE Powered Device (PD) classification identify
- Over Current and Short-circuit Protection
- Each port supports auto MDI/MDIX, no need to use cross-over cables or an up-link port
- Flow control fully supported:
 - Half-duplex: backpressure flow control
 - Full-duplex: IEEE802.3x flow control
- Provide non-blocking wire speed reception and transmission
- Embedded 768K bits SDRAM for packet buffering
- 1024-entry look-up table in direct mapping mode
- Embedded 16-entry CAM for hash collision mapping
- Optional maximum packet length 1536/1522 Bytes

Purpose

This Quick Installation Guide tells you how to install your Switch and how to connect it to your Ethernet network.

Terms/Usage

In this manual, the term “Switch” (first letter upper case) refers to your 8-Port 10/100Mbps Switch with 4-Port PoE, and “switch” (first letter lower case) refers to other Ethernet switches.

1.1 Package Contents

- 1 x ASW408POE
- 1 x Switching Power Adapter
- 1 x Quick Installation Guide
- 4 x Rubber foot for shock cushioning

1.2 Panel

1.2.1 Front Panel

The picture below depicts the front panel of the PoE Switch:

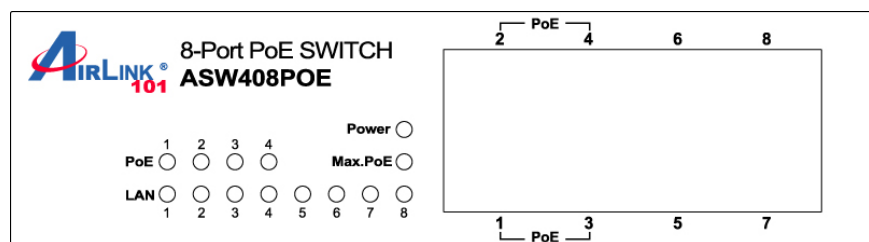


Figure 1-1 Front Panel view of the Switch

• PoE Ports (Port 1~4)

These ports are 802.3af PoE enabled ports, the PoE port will automatically activate when a compatible terminal is identified. The PoE switch will distribute power through the Ethernet ports to the connected PoE device. For devices that are not compatible, the PoE port will not supply the power to this device. This feature allows user's to freely and safely utilize the 802.3af PoE for Power over Lan devices on their network.

• Ethernet Ports (Port 5~8)

These ports support network speeds of either 10Mbps or 100Mbps, and can operate in half and full-duplex transfer modes. These ports also support automatic MDI/MDIX crossover detection, which give the PoE switch “plug and play” capabilities. Just simply connect any network cable between the PoE switch and the device and it will automatically detect the settings of the device and adjust itself

accordingly

• LED Indicators

Comprehensive LED indicators display the status of the switch and the network (see Section 1.2.3).

1.2.2 Rear Panel

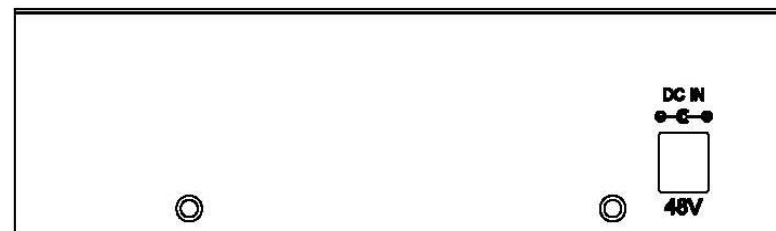


Figure 1-2 Rear Panel view of the Switch

- Power Adapter Connector: DC 48V/0.8A, AC 100~240V, 50~60Hz 1.2A

1.2.3 LED indicators information

The front panel LEDs provide instant status feedback and help monitoring and troubleshooting when needed.

• Power: Power Indicator

LED	Color	Status		
		Solid	Blinking	Off
Power	Green	The Switch is power-on	N/A	No power

- Max. PoE: Max. PoE Power Indicator

LED	Color	Status	
		Solid	Off
Power	Green	Power output to PoE devices has reached or surpassed the max. power	When the system is using less than 38W

- **PoE 1~4 LEDs**

LED	Color	Status	
		Solid	Off
PoE 1~4	Green	PoE devices connected successfully	PoE port failed, possibly due to: power shortage, over the power current or power adapter out of DC 44 ~ 57V

- **LAN 1~8 LEDs**

LED	Color	Status		
		Solid	Blinking	Off
LAN 1~8	Green	Connected to 100M network	Transmitting/Receiving data on 100M network	Connected to 10M network or no device is connected

1.3 Technical Specifications

Standards

- IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX and IEEE 802.3x Flow Control, IEEE 802.3af (PoE)

Ports

- 8 x 10/100Mbps TX Auto-Negotiation RJ45 Port with 4 PoE ports

Access Method

- CSMA/CD

Transmission Method

- Store and Forward

MAC Address Table

- 1K

Built-in Buffer

- 768K bits

Data Transfer Rate**

- Ethernet: 10/20Mbps – Half/Full-Duplex
- Fast Ethernet: 100/200Mbps – Half/Full Duplex

PoE Budget

- Up to 15.4W max. per PoE port, 30W total

PoE Power on RJ45

- Power + : ping 3 & ping 6
- Power - : ping 1 & ping 2

Power Consumption

- 6.3 watts. (max. no PD device connected)
- 36.3 watts (max. with 30W PoE device connected)

Physical and Environmental

- Power Adapter: 48 DC / 0.8A, 100~240V AC, 50~60Hz 1.2A
- Operation Temperature: 0 °C ~ 50°C
- Storage Temperature: -20°C ~ 70°C
- Humidity: 5% ~ 90% RH, non-condensing

2. Installing the Switch

The site where you place the switch may greatly affect its performance. When installing, take the following into your consideration.

2.1 Installation

The setup of the switch can be performed using the following steps:

- Visually inspect the DC jack and make sure that is fully secured to the power adapter
- Make sure that there is proper heat dissipation and adequate ventilation around the Switch. Do not place heavy objects on the Switch.

2.2 Desktop or Shelf Installation

When installing the Switch on the desktop or shelf, please attach the rubber feet to the Switch. Peel off the protective paper on the pads and attach them on the bottom of the Switch (one at each corner).

Technical Support

E-mail: support@airlink101.com

Web Site: www.airlink101.com

3. Connecting the Switch

This section describes how to connect the Switch to your network.

3.1 Connection

The Switch supports 8 10/100Mbps Ethernet ports and Port 1 ~ Port 4 are PoE Enabled ports. These PoE port will automatically activate when a compatible terminal is identified. The Switch will supply power through the Ethernet port to the connected PoE powered device (PD). For legacy devices that are not compatible, the PoE port will not offer power to this device. This feature allows users to freely and safely mix legacy and PoE devices on their network.

The Switch supports 10Mbps Ethernet or 100Mbps Fast Ethernet and it runs both in half and full duplex mode using two pair of Category 5 cable. These RJ45 ports are Auto-MDI type port. The Switch can auto negotiate the MDI-II or MDI-X type, so you can connect any RJ-45 cable regardless if it is a standard or crossover cable.

*Network conditions and environmental factors as well as network overhead lower actual data throughput rate. Specifications are subject to change without notice. Photo of product may not reflect actual content. Copyright © 2010 AirLink101. All rights reserved. AirLink101, the stylized AirLink101 logo, specific product designations, and all other words and logos that are identified as trademarks and/or service marks are, unless noted otherwise, the trademarks and service marks of AirLink101. All other product or service names are the property of their respective holders. AirLink101 products are protected under numerous U.S. and foreign patents and pending applications, mask work rights, and copyrights.