ALL-SG8016P

16-Port Gigabit Ethernet Unmanaged PoE Switch

USER MANUAL

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Product Introduction

Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

Product Overview

The Switch is 16 ports 10/100/1000Mbps Unmanaged Ethernet PoE Switch. This switch is a design of high integration level, easy to operate, which is suitable forsecurity monitoring and Wi-Fi hotspot layout. The switch provide you with a simple, economic, standard and high performance of network application plan, it is ideal choice to promote the department and working group performance . It provide simple and understood LED indicator light on the front panel, so that you can quickly judge the working state of the switch, and help to diagnose the network failure.

These PoE ports can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PD). In this situation, the electrical power is transmitted along with data in one single cable allowing you to expand your network where there are no power lines or outlets, where you wish to fix devices such as AP, IP Cameras or IP Phones, etc.

Features

- Comply with IEEE802.3i、IEEE802.3u、IEEE802.3ab、IEEE802.3az、IEEE 802.3x standards
- Supports IEEE802.3af、IEEE802.3at standards
- Supports PoE power up to 30W for each PoE port, all power up to 170W
- 8K MAC address table of the switch with auto-learning and auto-aging
- Supports IEEE802.3x flow control for Full-duplex mode and backpressure for Half-duplex mode
- Support packet length 9216 bytes jumbo frame packet forwarding at wire speed
- 16 x 10/100/1000Mbps Auto MDI/MDI-X Ethernet port
- LED indicators for monitoring PoE, Link / Activity

External Component Description

Front Panel

The front panel of the Switch consists of a series of LED indicators, one Mode Switch,16 x 10/100/1000Mbps RJ-45 ports.

Figure 1 - Front Panel

LED indicators:

The LED Indicators will allow you to monitor, diagnose and troubleshoot any potential problem with the Switch, connection or attached devices.

Figure 2 - LED Indicator

The following chart shows the LED indicators of the Switch along with explanation of each indicator.

LED Indicator	Faceplate Marker	Status	Indication
Power Indicator	PWR	Off	Power Off
		Solid green	Power On
10/100/1000 BASE-T adaptive Ethernet port indicators (1-16)	Link/Act/Speed	Off	The port is NOT connected.
		Solid orange	A device is connected to the port at a speed of 10/100Mbps
		Orange flashing	Sending or receiving data at a speed of 10/100Mbps
		Solid green	A device is connected to the port at a speed of 1000Mbps
		Green flashing	Sending or receiving data at a speed of 1000Mbps
PoE status indicators (1-16)	PoE	Off	No PD is connected to the corresponding port, or there is a breakdown.
		Solid yellow	A Powered Device is connected to the port, which supply power successfully.

10/100/1000 Mbps RJ-45 ports (1~16):

Designed to connect to the device with a bandwidth of 10Mbps, 100Mbps, 1000Mbps. Each has a corresponding Link and PoE indicator.

Rear Panel

The rear panel of the Switch contains one Grounding Terminal and AC power connector shown as below.

Figure 3 - Rear Panel

Grounding Terminal:

Located on the left side of the power supply connector, use wire grounding to lightning protection.

AC Power Connector:

Power is supplied through an external AC power adapter. It supports AC 100~240V, 50/60Hz.

Package Contents

Before installing the Switch, make sure that the following the "packing list" listed OK. If any part is lost and damaged, please contact your local agent immediately. In addition, make sure that you have the tools install switches and cables by your hands.

- One 16-Port Gigabit Ethernet Unmanaged PoE Switch.
- One Installation Component
- One AC power cord.
- One User Manual.

Installing and Connecting the Switch

This part describes how to install your PoE Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.

Installation

Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

- Put the Switch on stable place or desktop in case of falling damage.
- Make sure the Switch works in the proper AC input range and matches the voltage labeled on the Switch.
- To keep the Switch free from lightning, do not open the Switch's shell even in power failure.
- Make sure that there is proper heat dissipation from and adequate ventilation around the Switch.
- Make sure the cabinet to enough back up the weight of the Switch and its accessories.

Desktop Installation

Sometimes users are not equipped with the 19-inch standard cabinet. So when installing the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it.

Rack-mountable Installation in 19-inch Cabinet

The Switch can be mounted in an EIA standard-sized, 19-inch rack, which can be placed in a wiring closet with other equipment. To install the Switch, please follow these steps:

A. attach the mounting brackets on the Switch's side panels (one on each side) and secure them with the screws provided.

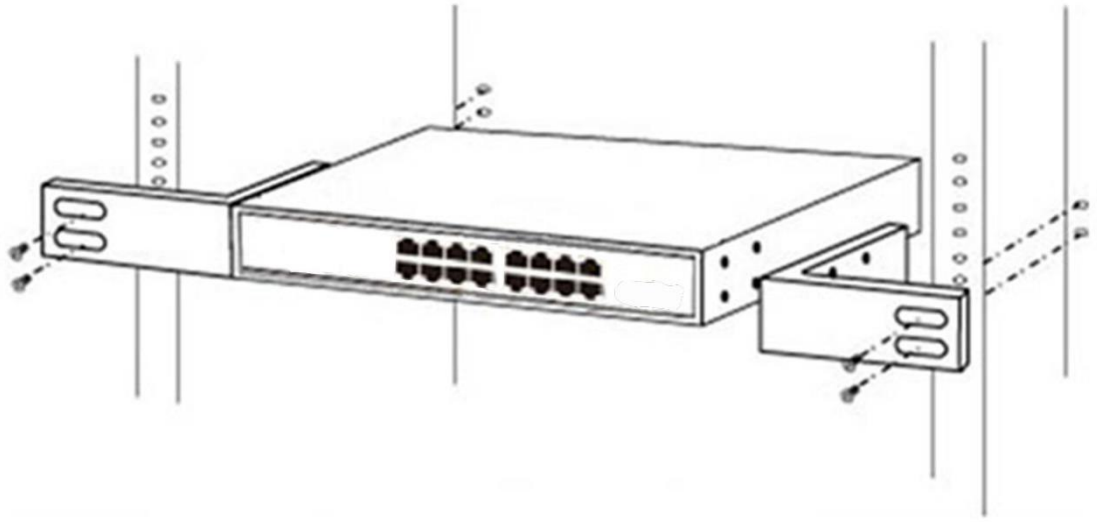

Figure 4 - Bracket Installation

A. Use the screws provided with the equipment rack to mount the Switch on the rack and tighten it.

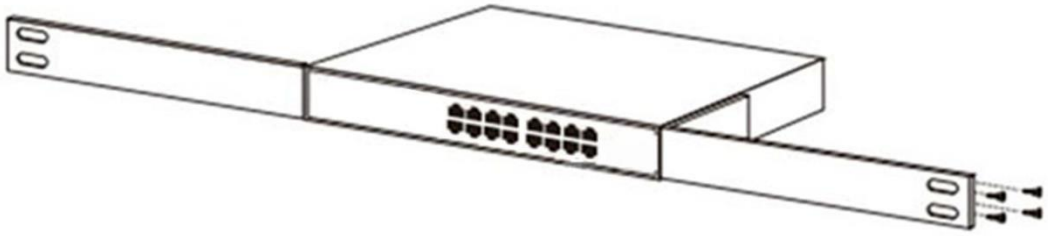

Figure 5 - Rack Installation

Power on the Switch

The Switch is powered on by the AC 100-240V 50/60Hz internal high-performance power supply. Please follow the next tips to connect:

AC Electrical Outlet:

It is recommended to use single-phase three-wire receptacle with neutral outlet or multifunctional computer professional receptacle. Please make sure to connect the metal ground connector to the grounding source on the outlet.

AC Power Cord Connection:

Connect the AC power connector in the back panel of the Switch to external receptacle with the included power cord, and check the power indicator is ON or not. When it is ON, it indicates the power connection is OK.

Connect Computer (NIC) to the Switch

Please insert the NIC into the computer, after installing network card driver, please connect one end of the twisted pair to RJ-45 jack of your computer, the other end will be connected to any RJ-45 port of the Switch, the distance between Switch and

computer is around 100 meters. Once the connection is OK and the devices are power on normally, the LINK status indicator lights corresponding ports of the Switch.

Switch connection to the PD

1-16 ports of the Switch have PoE power supply function, PoE port power maximum support 30W, it can make PD devices, such as internet phone, network camera, wireless access point work. You only need to connect the Switch PoE port directly connected to the PD port by network cable.

Appendix: Technical Specifications

Hardware Specifications	
Standards	IEEE802.3i、IEEE802.3u、IEEE802.3ab、IEEE802.3az、IEEE 802.3x、IEEE 802.3at, IEEE 802.3af
Network Media (Cable)	10BASE-T: UTP category 3,4,5 cable (maximum 100m) 100BASE-Tx: UTP category 5,5e cable (maximum 100m) 1000BASE-T: UTP category 5e,6 cable (maximum 100m) 1000Base-SX: 62.5μm/50μm MMF(2m~550m) 1000Base-LX: 62.5μm/50μm MMF(2m~550m) or 10μm SMF(2m~5000m)
Transfer Method	Store-and-Forward
Switching Capacity	32Gbps
Packet Forwarding Rate	23.81Mbps
Packet Buffer	2Mbits
MAC Address Table	8K
Jumbo Frame	9216Byte
Number of Ports	16 x 10/100/1000Mbps RJ45 Ports (Auto Negotiation/Auto MDI/MDIX)
PoE Ports(RJ45)	16* PoE ports compliant with 802.3at/af
Power Pin Assignment	1/2(+), 3/6(-)
PoE Budget	170W
Power Consumption	Maximum(PoE on):W (220V/50Hz)

LED indicators	**Per Port**	10M/100M Link/ACT: Orange 1000M Link/ACT: Green PoE: Yellow
	Per Device	Power: Green
Power Supply		AC 100-240V/50-60Hz 400W internal power
Dimensions (W x D x H)		440*208*44 mm
Environment		Operating Temperature: 0℃~45℃ Storage Temperature: -40℃~70℃ Operating Humidity: 10%~90% RH non-condensing Storage Humidity: 5%~90% RH non-condensing

ALLNET GmbH Computersysteme declares that the device **ALL-SG8016P** is in compliance with the essential requirements and other relevant provisions of Directive 2014/30/EU. The Declaration of conformity can be found under this link: http://ce.allnet.de

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Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- Do not open the device. Opening or removing the device cover can expose you to dangerous high voltage points or other risks. Only qualified service personnel can service the device. Please contact your vendor for further information.
- Do not use your device during a thunderstorm. There may be a risk of electric shock brought about by lightning.
- Do not expose your device to dust or corrosive liquids.
- Do not use this product near water sources.
- Make sure to connect the cables to the correct ports.
- Do not obstruct the ventilation slots on the device.