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SW-UNM-16FE2GC-16POE

16 Fast Ethernet Ports PoE + 2 Giga Combo

User Manual

Ver 1.0

CONTENTS

Chapter 1 Product Introduction

Congratulations on your purchasing of the PoE Ethernet Switch. Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

1.1 Product Overview

The 16-Port Fast Ethernet + 2G Combo PoE Ethernet Switch provides the seamless network connection. It integrates 100Mbps Fast Ethernet and 10Mbps Ethernet network capabilities. Its PoE ports can automatically detect and supply power with those IEEE 802.3at 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.

1.2 Features

➢ 1-16 port support PoE
➢ Supports PoE power up to 30W for each PoE port
➢ Supports All power up to 300W
➢ Supports PoE IEEE 802.3at compliant Powered Devices
➢ Supports IEEE 802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
➢ 8K entry MAC address table with auto-learning and auto-aging
➢ LED indicators for monitoring power, link, activity and speed
➢ Internal power supply

1.3 Package Contents

➢ One 16-Port Fast Ethernet + 2G Combo PoE Ethernet Switch
➢ Four rubber feet, two mounting ears and eights screws
➢ One AC power cord
➢ One User Manual

Chapter 2 External Component Description

2.1 Front Panel

The front panel of the Switch consists of series of LED indicators, 16 Fast Ethernet RJ-45 ports, 2 Giga Combo RJ-45 ports and 2 SFP ports a shown as below.

Figure 1 - Front Panel

Fast Ethernet RJ-45 ports (1~16):
Designed to connect to the device with a bandwidth of 10Mbps or 100Mbps. Each has a corresponding 10/100Mbps LED.

Giga Ethernet RJ-45 ports (17T, 18T):
Designed to connect to the device with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each has a corresponding 10/100/1000Mbps LED.

SFP ports (17S, 18S):
Designed to install the SFP module. The Switch features two SFP transceiver slots that are shared with two associated RJ45 ports. A SFP port and an associated RJ45 port are referred to as "Combo" port, which means they cannot be used simultaneously, and only SFP port work or only RJ45 port work at the same time. Each has a corresponding Giga Ethernet LED.

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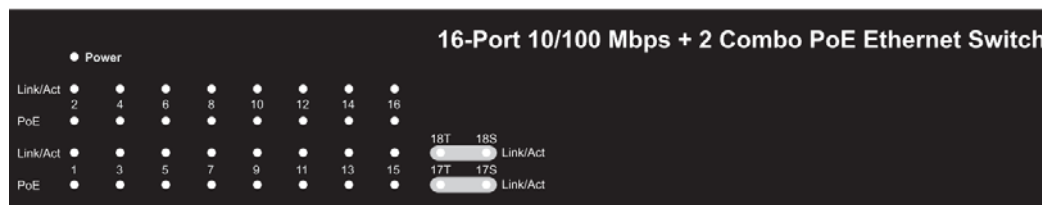

Figure 2 - LED Indicators

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

LED	COLOR	STATUS	STATUS DESCRIPTION
Power	Green	On	Power on
		Off	Power off
Link/Act (1~16)	Green	On	A device is connected to the port
		Off	A device is disconnected to the port
		Flashing	Sending or receiving data
Link/Act (17, 18T/S)	Green	On	A device is connected to the port
		Off	A device is disconnected to the port
		Flashing	Sending or receiving data
PoE	Orange	On	A Powered Device is connected to the port, which supply power successfully.
		Off	No Powered Device connected to the port, or no power is supplied according to the power limits of the port.
		Flashing	The PoE power current may be overloaded.

2.2 Rear Panel

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

Figure 3 - Rear Panel

AC Power Connector: Power is supplied through an external AC power adapter. It supports AC 100~240V, 50~60Hz, 2A max.

Chapter 3 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.

3.1 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.

3.1.1 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.
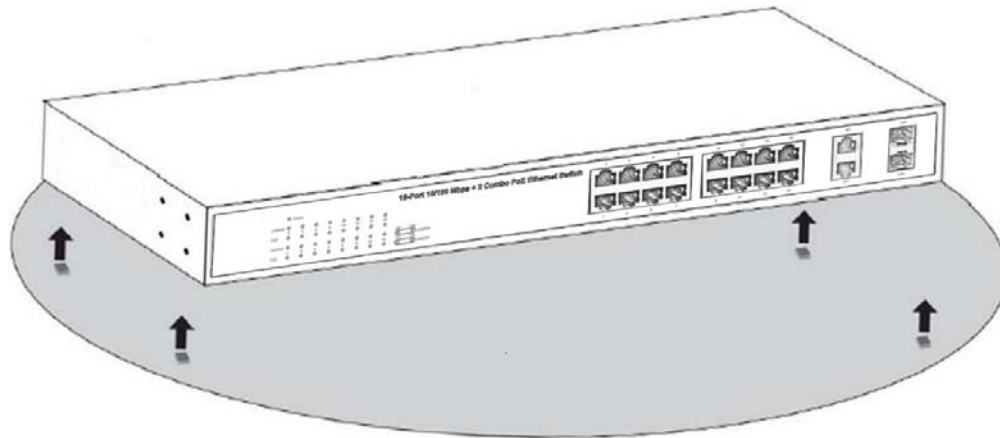

Figure 4 - Desktop Installation

3.1.2 Rack 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.
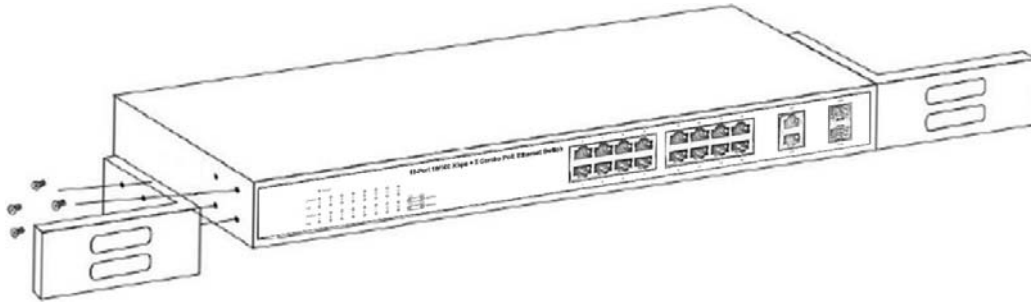

Figure 5 - Bracket Installation

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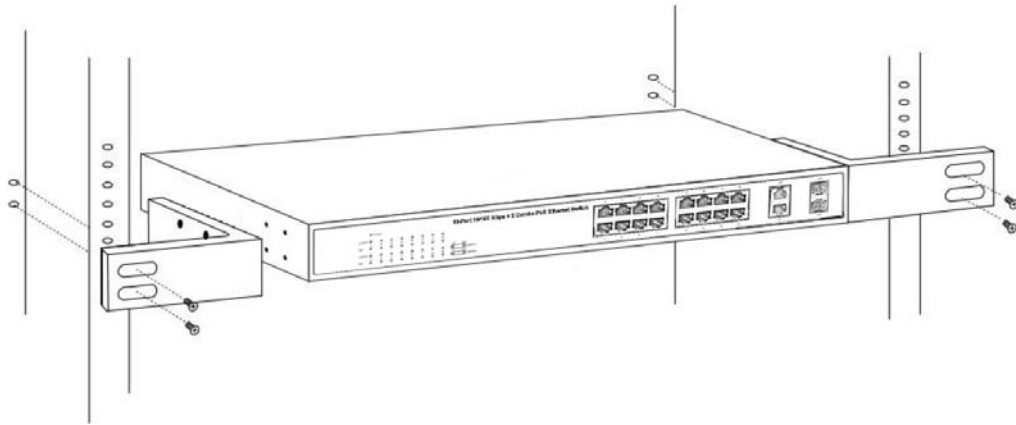

Figure 6 - Rack Installation

3.1.3 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.

3.2 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/Act status indicator lights corresponding ports of the Switch.

3.3 Connect SFP module to the Switch

Connect the SFP port to a SFP module. For the Switch, if an SFP transceiver (purchased separately) is installed in a slot and has a valid link on the port, the associated RJ45 port will disabled and cannot be used.

3.4 Switch connection to the PD

1-16 ports of the Switch have PoE power supply function, the maximum output power up to 30W each port, 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

General		
Standards		IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3az, IEEE802.3at, IEEE802.3af
Network Media (Cable)		10BASE-T: UTP category 5 cable (maximum 100m) 100BASE-TX: UTP category 5,5e cable (maximum 100m) 1000Base-T: UTP category 5, 5e,6 cable (maximum 100m)
Number of Ports		16 Fast Ethernet Auto-Negotiation ports, 2G Combo
LED indicators	Link/Act	Link/Act, Speed
	PoE	PoE
	17,18T/S	Link/Act, Speed
	Other	Power
Transfer Method		Store-and-Forward
Switching Capacity		7.2Gbps
MAC Address Learning		Automatically learning, automatically Update 8K
Frame Filtering and Forward Rate		10Mbps: 14880pps, 100Mbps: 148800pps, 1000Mbps: 1488000pps
Dimensions (L × W × H)		440*208*44 mm
Environment		Operating Temperature: 0□~40□ Storage Temperature: -10□~70□ Operating Humidity: 10%~90% non-condensing Storage humidity: 5%~90% non-condensing
Power Supply		330W

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