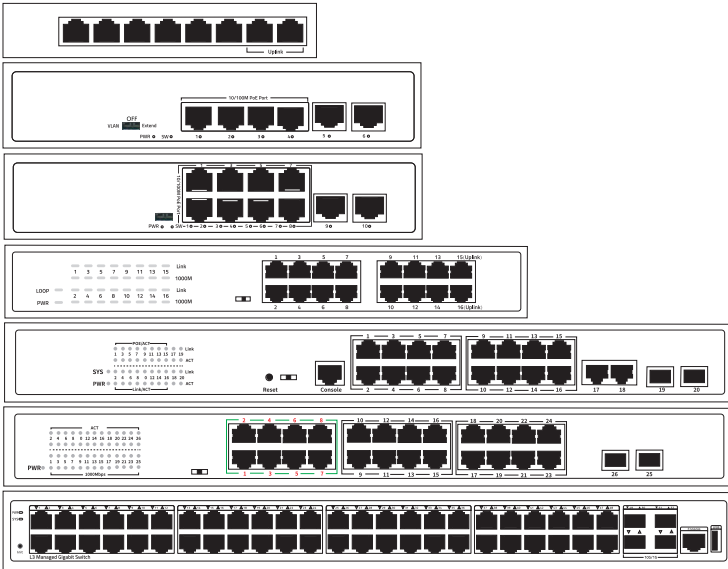# MakerLink

Ethernet Switch

⟩ Quick Start Guide

1. Description

The products described in this manual, including but not limited to the illustrated products, please refer to the actual product purchased. If any changes on product apperance, Please refer to the official product information.
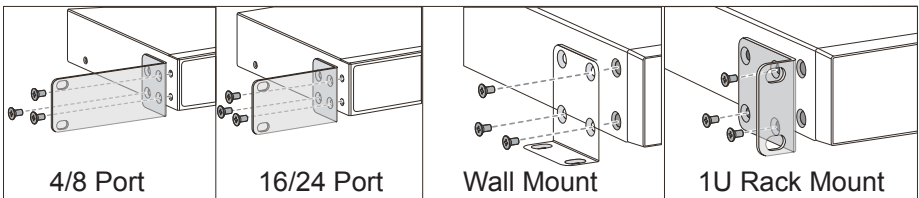
2. Packing List

- Switch(specific model see the product label for more details)
- Power cable(the default is pluggable or a power cable with built-in power module)
- Power adapter(use for some external power products)
- Console cable, configurable disc(use for managed products)
- Brackets, screw(rack type standard, desktop type optional)
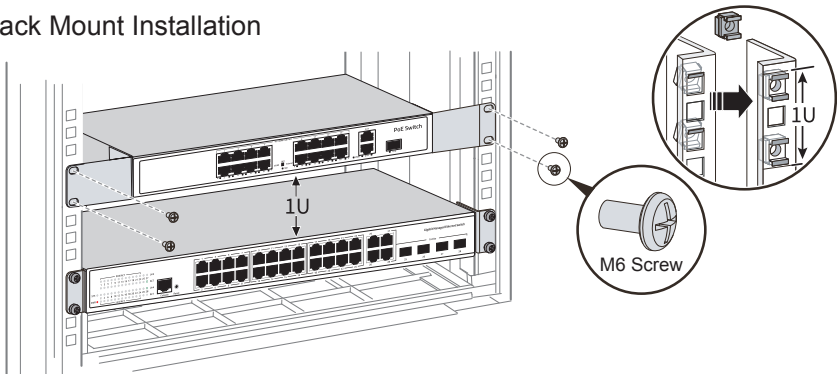- User manual

3. Switch Installation

Switches support a variety of installation methods, desktop, wall mount, rack mount, please install according to the actual environmental requirements.

▲ Mounting Ear Installation

| 4/8 Port | 16/24 Port | Wall Mount | 1U Rack Mount |

▲ Rack Mount Installation

1U

1U

M6 Screw

4. Connecting Equipment

Network Cable
1. When the RJ45 port is on 2.5GE rate, use Cat5E and above network cable.
2. When the RJ45 port is on 5GE rate, a shielded network cable of Cat5E and above specifications is required, the unshielded network cable is not recommended.
3. When the RJ45 port is on 10GE rate, shielded network cable of Cat6A and above specifications is required.

Optical Fiber
1. Optical fibers must be used with the optical modules.
2. Fiber bending radius must not be less than 40mm.

Power Cable
1. Distance between power cable and network cable should be more than 10cm.
2. The AC power please use the local AC power cable.
3. The DC power please pay attention to the positive and negative electrodes.

5. Login Management

Thís content is only applicable to managed type of products, please read this help information for the first application

Web Management
1. Connect the device and PC, to ensure that the device initialization is complete.
2. Configure the IP address of the PC to be in the same network segment as the switch default IP address.
3. Enter "***http://192.168.2.1***" in the address bar of the opened PC browser, then press "enter" to the web management login interface, input the default user name "***admin***" and password "***admin***", and press "enter".

Console Port Management
1. Connect the PC and the switch console port with the console cable.
2. Start the terminal simulation software, create a connection, select a serial port, and set communication parameters in consistent with the default configuration of the switch's console port, as listed below:
   Transmission rate: 115200
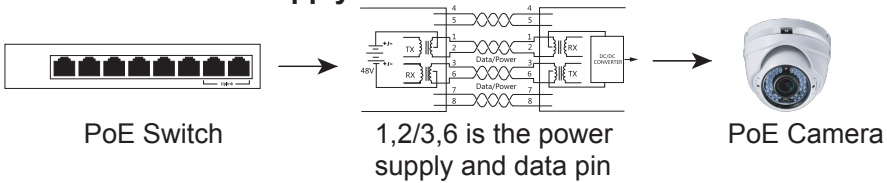   *Dáta bits: 8*
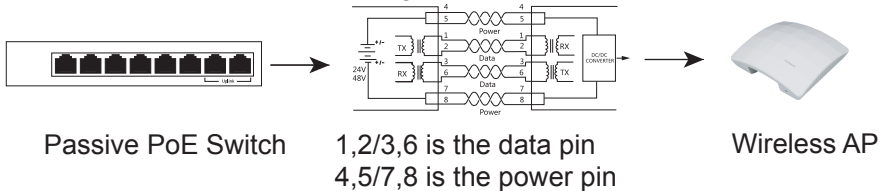   *Parity bit: None*
   Stop bits: 1
   Flow control mode: None

6. PoE Powered Function

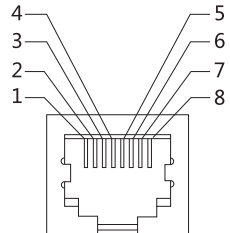※ Thís function is applicable to PoE switches, not applicable to non-PoE switches

▲ **Standard PoE Supply**

PoE Switch   1,2/3,6 is the power   PoE Camera
supply and data pin

▲ **Passive PoE Power Supply**

Passive PoE Switch   1,2/3,6 is the data pin   Wireless AP
4,5/7,8 is the power pin

1. Standard PoE power supply includes: protocol detection, power pin sequence detection, power output, abnormal protection, Link abnormal monitoring.

2. The PoE power supply protocol includes: IEEE802.3af(15.4W), IEEE802.3at(30W), IEEE802.3bt(90W).

3. The standard PoE power pin sequence is 1,2+/3,6-, and the passive PoE power pin sequence is 4,5+/7,8-.

4. The standard PoE switches can automatically detect and supply power to the PDs that meet the standard, non-PoE devices are not powered and only transmit data.

5. Passive PoE switches use mandatory power supply mode, non-PoE powered devices may be burned out, please use with caution.

6. 24V PoE switches have both low-voltage power supply and PD detection technology, which can provide 24V voltage on 4,5/7,8 pin, even if it is connected to non-standard equipment it will not burn out.

7. Indicator Definition

Indicator	Definition	State	Description
PWR	Power Indicator	Light on / Light off	Powered / Abnormal
SYS	System Indicator	Light on / Flash	System Normal / Starting
PoE	PoE Indicator	Light on / Light off	PoE Powered / No Power
1000M	Link Rate	Light on / Light off	Gigabit / 10/100M
100M	Link Rate	Light on / Light off	100M / Link Disconnect
Link/ACT	Link & Data	Light on / Flash	Link is Normal
Mode/SW	Dial Switch	Light on/Flash/Off	VLAN/Extend/Default
Loop	Loop Alarm	Light on	Port Loop

8. States Definition

Function	Definition	State	Description
VLAN	Port Isolation	Light on	Designated port can not communicate with each other
Extend	Link Extension	Flash	Designated port link exteded to 250 meters
Default	Normal Mode	Light off	All ports can communicate with each other
Reset	Reset Button	Flash	Short press restart, long press more than 5s reset cofiguration
AI PoE	PoE Watchdog	/	PDs crashed and restart automatically
MAX	Power Display Indicator	Green Yellow Orange Red	PoE power output ≤ 25% PoE power output ≤ 50% PoE power output ≤ 75% PoE power output ≥ 75%