REPEATER SWITCH,
3 POE GIGABIT PORTS
ART. IPSWR030A

Please read this manual thoroughly before use and keep it for future reference

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1. Installation

The is 3 ports Gigabit POE (Power over Ethernet) Repeater Ethernet switch, it full compliance with IEEE802.3at standard, with one PD (Power Device) port; two PSE (Power Source Equipment) ports. This switch can work through receiving power from other PoE switch or equipment by PD port, the PSE port can supply power to other PD equipment (the power is less than 30W), it achieve more flexible network applications like this and it don't require external power adapter.

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. The switch 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.

Features

- Supports PoE IEEE802.3at compliant

- Supports PoE IEEE802.3af compliant

- support two Power Source Equipment to supply external devices

- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode

- Support ports Auto MDI/MDIX

- 8K entry MAC address table of the switch with auto-learning and auto-aging

- LED indicators for monitoring PD, PSE, Link / Activity

- No power supply

2. Checklist

Before you start installing your equipment, verify that the package contains the following:

- The Gigabit POE Repeater Switch

- This Users Manual

Please notify your supplier immediately if any of the mentioned items are missing or damaged.

3. Installation

3.1 Installation Method

The site where you install the switch may greatly affect its performance. When installing, please take the following consideration.

- Install the switch in a cool, dry place. See technical specifications for the acceptable temperature and humidity operating ranges.

- Install the switch on a secure, level surface that can support its weight, at least 1Kg.

- Leave at least 10 cm of space at the front and rear of the switch to ensure adequate ventilation.

3.2 Desktop or Shelf Installation

When installing the switch on a shelf on desktop please ensure guidelines are above are following, including level surface and adequate ventilation.

4. Powering ON the Switch

The swtich is powered by your existing POE switch. No additional power supply is required. Simply plug your cable from your POE switch into the PD port of the switch and your switch will power ON and is ready to use.


Front Panel of the switch

5. Powering on the Switch

LED	Status	Description
PD (Orange)	ON	Switch has a connection from PD port to PSE device. Power has been successfully applied.
	OFF	Connection to PSE device is not present, no power has been applied to the switch.
PSE (Orange)	ON	PD device such as IP Phone is connected to the port and drawing power.
	OFF	PD device is not connected, no power is being drawn from the switch.
Link/Act (Green)	ON	A valid link is established.
	Blink	Traffic is present on port.
	OFF	No link established.

6. Network Connection

Front panel of switch

Connect your devices (computer, router, switch, IP Phone, Wireless Access Point, IP Camera etc.) to the ports with a CAT-5/CAT-5e/CAT-6 network cable. Since the switch supports Auto MDI/MDI-X you can use either a straight through or cross-over network cable.
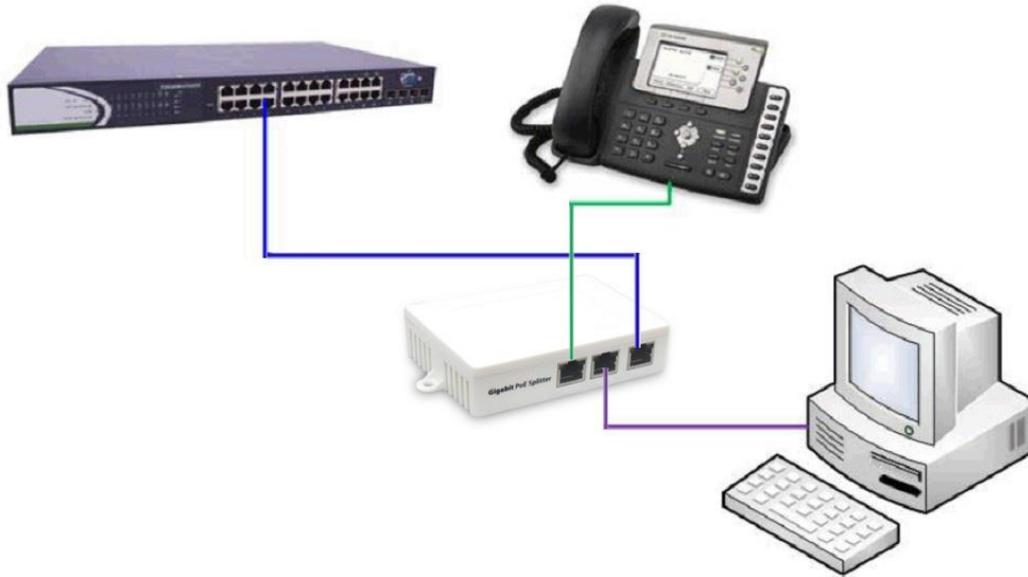
Typical Installation of the switch

- Connect the switch from the PD port to your Gigabit POE Switch.

- Connect your IP device at the PSE port on the switch.

- Connect your Computer or other IP device to the PSE2 port on the switch.

7. Technical Specifications

Standards		IEEE802.3af, IEEE802.3x, IEEE802.3ab, IEEE802.3az
Network cables		10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) 100BASE-T: UTP category 5, 5e cable (maximum 100m) 1000BASE-T: UTP category 5e, 6 cable (maximum 100m)
Number of Ports		3 x 10/100/1000 Mbps Auto-Negotiation ports
LED indicators	10/100/1000M	Link/Act
	other	PD, PSE
Transfer method		Store-and-Forward
Switching Capacity		6Gb/s
MAC Address Learning		Automatically learning, automatically Update, 8K

Frame Filtering and Forward Rate	148800pps
Environment	Operating Temperature: 0℃~40℃
	Storage Temperature: -40℃~70℃
	Operating Humidity: 10%~90% non-condensing
	Storage humidity: 5%~90% non-condensing

Appendix: The standard RJ-45 Introduction

Please note cable-making methods, because cable which does not meet the standards of the sequence data will make the data transmission speed slow, unstable and even be blocked.

The following chart represents that the standard RJ-45 jack connector and pin definition:


Standard RJ-45 jack / connector

RJ-45 connector pin definitions	
Pin number	**Signal**
1	TX1 + (PoE Power+)
2	TX1 - (PoE Power+)
3	RX1 + (PoE Power-)
4	TX2 +
5	TX2 --
6	RX1 - (PoE Power-)
7	RX2 +
8	RX2 -

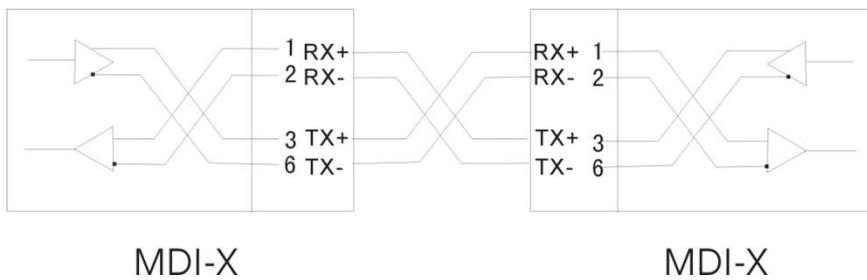## The standard cable, RJ-45 pin assignment

The following shows straight cable and crossover cable standard connection.

Please use straight cable to connect switch/hub or other devices:

Straight cable for the switch (uplink MDI-II port) to switch/hub or other devices connection
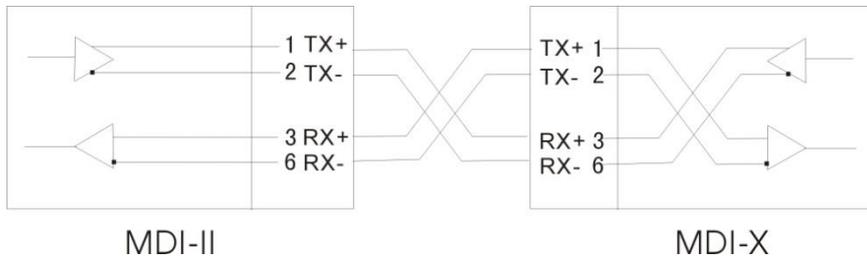
Cross over cable for switch (MDI-X port) to switch/hub or other network devices (MDI-X port) connection.