



User Manual

POEFE24T 24 Port Fast Ethernet PoE Switch



Version 1.1
October 2010

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Caution

Electronic Circuit devices are sensitive to static electricity. Dry weather conditions or walking across a carpeted floor may cause you to acquire a static electric charge.

To protect your switch, always:

- Touch the metal chassis of your computer to ground the static electrical charge before you handle the switch.
- Pick up the switch by holding it on the left and right edges only.

Electronic Emission Notices

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

European Community (CE) Electromagnetic Compatibility Directive

This equipment has been tested and found to comply with the protection requirements of European Emission Standard EN55022/EN60555-2 and the Generic European Immunity Standard EN50082-1.

EMC:	EN55022(1988)/CISPR-22(1985)	class A
	EN60555-2(1995)	class A
	EN60555-3	
	IEC1000-4-2(1995)	4K V CD, 8KV, AD
	IEC1000-4-3(1995)	3V/m
	IEC1000-4-4(1995)	1KV – (power line), 0.5KV – (signal line)

Australian C-Tick Compliance.

This equipment is compliant with the required Australian C-Tick standards

1. Introduction

The POEFE24T is an unmanaged low cost Fast Ethernet Power Over Ethernet switch. The switch consists of 24x 10/100Mbps PoE ports. All ports are auto sensing, auto MDI/X ports allowing easy connectivity to your existing switching infrastructure and your PD PoE devices, such as IP Phones, Wireless Access Points and IP Video Cameras. All ports support up to 15.4W of power, with the switch supporting 7.7W per port at full load. The POEFE24T supports up to 185W in total.

The POEFE24T is the ideal solution for adding low cost PoE capability to your newly deployed IP PBX and IP Phone infrastructure.

Features

- ⇒ Supports PoE power up to 15.4W for each PoE port
- ⇒ Supports PoE power up to 185W for all PoE ports
- ⇒ Supports PoE IEEE802.3af compliant PDs
- ⇒ Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-duplex Mode
- ⇒ 8K MAC address with auto-learning and auto-aging
- ⇒ LED indicators for monitoring power, link, activity and speed
- ⇒ Internal universal power supply

2. Checklist

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

The POEFE24T – Fast Ethernet POE Switch
Rack Mount kit with appropriate mounting screws
Power Cable
This Users Manual CD-ROM

Please notify your supplier immediately if any of the aforementioned 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 into 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 5Kg.
- Before connecting the Power Cord please ensure the appropriate voltage switch is set, this switch can be found at the back of the POEFE24T.
- Leave at least 10cm 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.

3.3 Rack Installation

The POEFE24T is a rack mountable switch and can be installed in an EIA-19 based equipment rack. First install the provided rack mount brackets onto each side of the switch using the screws provided. Using the screws provided with your rack mount the switch into your equipment rack.

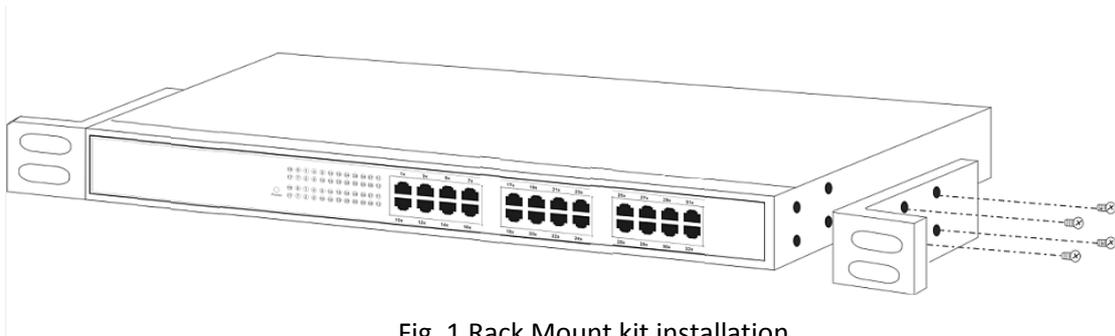


Fig. 1 Rack Mount kit installation

4. Powering on the Switch

Before powering on the switch please ensure that the voltage range switch at the rear of the switch is set to the appropriate voltage range for your country. Voltage switch can be set to 100V or 220V AC.



Fig. 2 Power Switch

Note:

Please double check and ensure power voltage is correctly configured, if set incorrectly damage to the switch is possible.

5. LED Description

LED	Colour	Function
Power	On	Appropriate power is supplied
	Off	Power is not available
LINK	On	A valid link is established
	Blink	Traffic is present on port
	Off	No link established
POE	On	PD PoE device has successfully connected to the port.
	Off	No POE device connected

6. Network Connection



Fig. 3 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.

7. Technical Specifications

Model	POEFE24T
Standards	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX
Number of Ports	24 x 10/100Mbps Auto-Negotiation ports
Network Media	10BASE-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m) 100BASE-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100Ω STP (maximum 100m)
Transfer Method	Store-and-Forward
Switching Capacity	4.8G
MAC Address Table	8K
Frame Filtering and Forward Rate	10Mbps: 14880pps 100Mbps: 148800pps
POE	Up to 15.4W per port 7.7W per port at full load
POE Pins	POE delivered on pins 4, 5, 7 and 8
LED indicators	Link per port Power POE per port
Dimensions (W × D × H)	441 x 208 x 44 (mm)
Environment	Operating Temperature: 0°C - 40°C Storage Temperature: -40°C - 70°C Operating Humidity: 10%~90% non-condensing Storage humidity: 5%~90% non-condensing
Certification	C-Tick, CE, FCC, RoHS

Appendix A. RJ-45 Connections



Fig. 4 RJ-45 Connectors, switch and cable views

<i>RJ-45 Connector pin out</i>		
Pin no.	MDI-I signal	MDI-X signal
1	TX+	RX+
2	TX-	RX-
3	RX+	TX+
4	not used	not used
5	not used	not used
6	RX-	TX-
7	not used	not used
8	not used	not used

Below is a diagram of a typical straight through and cross-over cable connection:

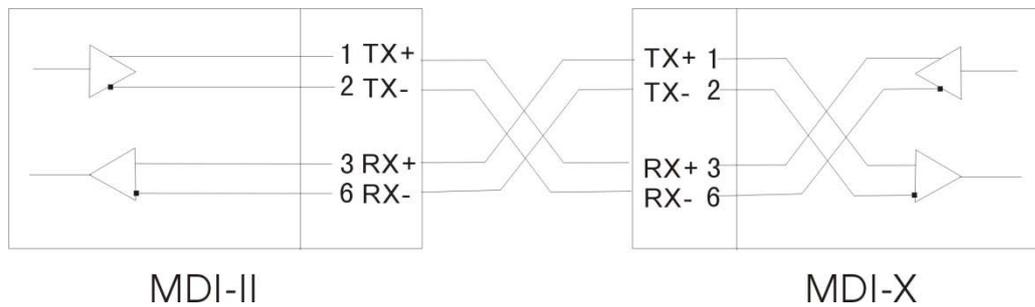


Fig. 5 Straight Through Cable connection

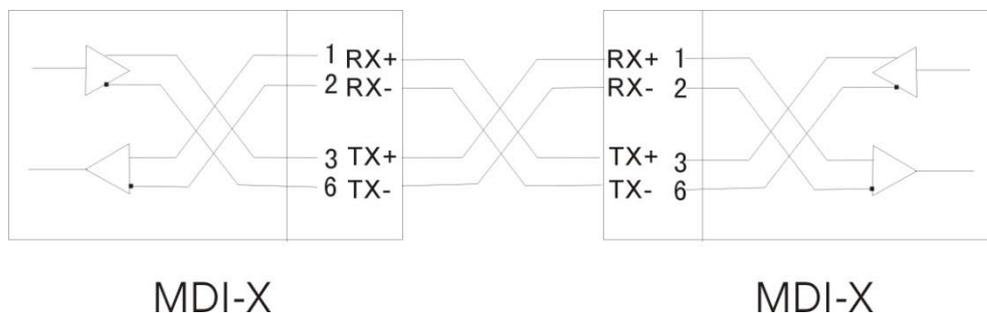


Fig. 6 Cross-Over Cable connection