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| Power Consumption | 6.4 watts ( max with no PD device connected). |
| :--- | :--- |
|  | 56 watts ( 4 PoE ports full load ). <br> 112 watts ( 8 PoE ports full load). |
| Temperature | Operation: $0^{\circ} \mathrm{C} \sim 40^{\circ} \mathrm{C}$ or $32^{\circ} \mathrm{F} \sim 104{ }^{\circ} \mathrm{F}$. |
|  | Storage Temperature: $-10^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C}$ or $14^{\circ} \mathrm{F} \sim 158{ }^{\circ} \mathrm{F}$. |
| Humidity | Relative Humidity: $5 \%-95 \%$. |
| Dimensions | 190 mm W $\times 140 \mathrm{~mm}$ D x 43 mm H |
| EMI | FCC Class B, CE Mark Class B. |
| Safety | 110 VAC to 240 VAC power adaptor UL listed. |
| RAM buffer | 64 K bytes per device. |
| Filtering Address Table | 1 K entries per device. |
| Packet <br> Filtering/ Forwarding Rate | 10 Mbps Ethernet: $14,880 / \mathrm{pps}$ <br> 10 Mbps Ethernet: $148,800 / \mathrm{pps}$ |
| MAC address Learning | Automatic update. |
| Transmission Method | Store - and - forwarder. |

## Description

-LED Indicator:
The LEDs provides instant status feedback, and helps monitor and troubleshoot when required.


| Power LED | LED on: Power ON / LED off: Power off. |
| :--- | :--- |
| LINK/ACT | LED on: this port is Link and Active. |
|  | LED off: this port is not correct Link or inactive. |
| PoE (1x to <br> $4 x / 8 x)$ | LED on: The PoE power device (PD) is connected and the port is <br> supplying power successfully. |
|  | LED off: no PoE power device (PD) connected. |

## 8-Port 10/100Mbps Ethernet Switch with 4 / 8 PoE port

## Users Guide



## IMPORTANT

This users guide contains information on the limitations regarding product use and function and information on the limitations as to liability of the manufacturer. Read the entire guide carefully.

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## -FCC Warning:

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This device has been tested and found to comply with the regulations for Class B digital equipment. Pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with users guide, may cause harmful interference to radio communications. Operation of this devices in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

## -CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## -UL Warning:

1> Elevated Operating Ambient Temperature- If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater then room ambient.
Therefore, Consideration should be given to installing the equipment in an environment compatible with manufacturer's maximum rated ambient temperature.
2> Reduced Air flow-installation of equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
$3>$ Mechanical Loading- mounting of the equipment in the rack should be such as that a hazardous Conditions is not achieved due to uneven mechanical loading.

## Introduction

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The New 4/8-port 10/100 Ethernet PoE Switch combines a small-high efficiency 4/8-port 10/100Mbps Ethernet switch with a standard 802.3af 4/8-port Power over Ethernet (PoE) capability. The $4 / 8$ port 10/100 Ethernet PoE Switch incorporates an external 48VDC power adaptor. Each of the PoE Ethernet ports can provide 15.4 Watts of power as well as $10 / 100 \mathrm{M}$ data transmission over the Inter- connecting Ethernet interface such as Cat $5 / 5 e / 6$ cables.

The 4/8-port 10/100 Ethernet PoE Switch is a Power Source Equipment (PSE) and fully compatible with Powered Devices (PD) that comply with the IEEE 802.3af PoE standard. The 4/8-port 10/100 Ethernet PoE Switch enables users to attach IEEE802.3af compliant devices such as wireless Access Points (APS), VOIP phone, IP camera, printer and Network Attached Storage (NAS) directly to the 4/8-port 10/100 Ethernet PO $E$ Switch without requiring additional power on the network. The unit was designed with home and small business users in mind and is ideal for installations where AC power is not available or no cost-effective.
No configuration is required and installation is quick and easy. Support for Auto - MDI / MDI-X on all of the ports eliminates the need for crossover connection to another switch or HUB. Auto - Negotiation on each port senses the link speed of a network device ( either 10 or 100) and intelligently adjusts for compatibility and optimal performance.

* 1-Year Limited Warranty for switch and 1-Year Limited Warranty for the power adaptor are available. * This device is designed for indoor use. Do not use outdoors.
* included are the installation manual and the 48VDC power adaptor.

Technical Specification
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| Standard | IEEE 802.3 10BASE-T Ethernet. |
| :--- | :--- |
|  | IEEE 802.3u 100BASE-TX Fast Ethernet. |
|  | IEEE 802.3x Full Duplex Flow Control. |
|  | IEEE 802.3af Power over Ethernet. |
| Protocol | CSMA/CD. |
| Data Transfer Rate | Ethernet: 10Mbps (half-duplex), 20Mbps (full-duplex). |
|  | Fast Ethernet: 100Mbps (half-duplex), 200Mbps (full-duplex). |
| Network Cables | 10BASE-T: 2-pair UTP Cat 3, 4, 5 up to 100 meters. |
|  | 100BASE-Tx: 2-pair UTP Cat 5, 5e up to 100 meters. |
| Number of Ports | $8 \times 10 / 100 M b p s ~ a u t o-M D I X ~ R J-45 ~ p o r t s ~ w i t h ~ 4 / 8 ~ P o E ~ e n a b l e d ~$ <br> ports. |
|  | $8 \times 10 / 100 \mathrm{Mbps}$ auto-MDIX RJ-45 ports. |
| PoE power on RJ-45 | Power +: ping 3 \& ping 6 ; Power -: ping 1 \& ping 2. |
| AC to DC power adaptor | Input: 110V ~ 240VAC, 50Hz ~ 60Hz. |
|  | Output: 48VDC/1.25A (4 PoE port ), 2.5A (8 PoE port). |

## Description

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## -DC Power Jack:

This DC power jack is located in rear panel riaht side of the 4/8-port 10/100 Ethernet PoE Switch .


Use only the supplied AC/DC adaptor. The use of any incompatible adaptor may cause damage to the equipment and void the warranty.

This 4/8-port 10/100 Ethernet PoE Switch does not include a power on switch, plugging its power adaptor into a power outlet will immediately power it on.

## Description

This is back panel of the 4/8-port 10/100 Ethernet PoE Switch. 4/8 RJ-45 ports and one DC power jack.


- Port 1X to 8X:

Standard 10/100Mbps Ethernet port. The Switch supports 10Mbps Ethernet or 100Mbps Fast Ethernet and runs both in half and full duplex mode using two pairs of Category 5 or 5 e cable.

- PoE Port: PoE1X to PoE4X (4-PoE port) : PoE1X to PoE8X (8-PoE port).

All are $10 / 100 \mathrm{Mbps}$ switch ports as well as 802.3 af PoE enabled ports.
All PoE port will automatically activate when a compatible terminal is identified. The 4/8-port 10/100 Ethernet PoE Switch will supply power through the Ethernet port to the connected PoE device (PD). The also supports legacy devices that are not compatible. In this case the PoE port will not supply power to those devices. This feature allows users to freely and safely mix legacy and Power over Ethernet compatible devices on the same network.

These RJ-45 ports are Auto-MDI type port. This switch can auto negotiate to MDII or MDI-X type, so you can connect the RJ-45 cable regardless of whether it is a standard or crossover cable.

## Power over Ethernet (PoE) \& Features

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## -Power Over Ethernet (PoE):

Power over Ethernet (PoE) integrates 48 V power and data onto one single cable, eliminating the need to have AC power available at all equipment locations. Power and Data are integrated onto the same cable, supporting category $5 / 5 \mathrm{e}$ up to 100 Meters. PoE provides power to PoE compatible devices, such as VOIP telephones, wireless LAN access points, and IP security cameras. PoE devices are readily in the market, saving up to $50 \%$ of overall installation cost by eliminating the need to install separate electrical wiring and power outlets.

## -Features:

- $4 / 8 \times 10 / 100 \mathrm{Mbps}$ Auto-negotiation Fast Ethernet RJ-45 ports with 4/8-Port PoE function ( port 1 ~ port 4/8).
- Compliant with IEEE 802.3af specification
- Supports PoE power up to 56W (4-port PoE) / 112W (8-port PoE) for all PoE ports.
- Supports PoE IEEE802.3af compliant Powered Device (PD).
- Each port supports auto MDI/MDIX, so there is no need to use cross-over cables.
- Full/half duplex transfer mode for each port.
- Wire speed reception and transmission.
- Up to 1 K unicast address entities per device. Self-learning, and table aging.
- 64KBytes packet buffer.

Unpacking and Installation

## -Unpacking

Open the shipping cartons of the 4/8-port 10/100 Ethernet PoE Switch and carefully unpack its contents. The cartons should Included following items:

- One 4/8-port 10/100 Ethernet PoE Switch.
- One AC power adaptor.
- User's Guide.

If any item is found missing or damaged, please contact your local reseller for replacement.

## -Installation:

The installation of the 4/8-port 10/100 Ethernet PoE Switch requires the following steps:

- The surface must support at least $2.0 \mathrm{Kg}(4.4 \mathrm{lbs})$ for the switch.
- The power outlet should be within 1.5 meters ( 5 feet) of the switch.
- Visually inspect the DC power jack and make sure that is fully secured to the power adaptor.
- Make sure that there is proper heat dissipation from and adequate ventilation around the switch. Do not place heavy objects on the switch.

Connecting Network Cables
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## -Connecting Network Cables

The 4/8-port 10/100 Ethernet PoE Switch supports 4/8 10/100Mbps Ethernet ports. Port 1 to Port 4 / 8 are PoE enabled ports. Each port incorporates $10 / 100 \mathrm{Mbps}$ support via UTP Cat $5 / 5 \mathrm{e}$ cables. The $4 / 8$ PoE ports will automatically activate when a compatible device is identified. The 4/8-port 10/100 Ethernet PoE Switch will supply power through the Ethernet port to the connected PoE device (PD).

Legacy devices that are not compatible will not be supplied power This feature allows users to freely and safely mix legacy and Power over Ethernet compatible devices on a single network.

This Switch supports 10Mbps Ethernet or 100Mbps Fast Ethernet and runs both in half and full duplex mode using two pairs of Category 5 or 5e cable.

All ports are Auto-MDI type port. The switch can auto negotiate to MDII or MDI-X type, so you can connect RJ-45 cable regardless of whether it is a standard or crossover cable.

