pakedgedevice&software inc

SE-8P

8 Port Gigabit Unmanaged Switch with 8 ports PoE or
4 ports PoE+

User Manual - Version 1.0

FCC Certifications

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the 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 the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

CE Mark Warning

This equipment complies with the requirements relating to the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, and the RoHS Directive 2011/65/EU.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:
All trade names and trademarks are the properties of their respective companies.

Unpacking Information

Thank you for purchasing the Pakedge Device & Software SE-8P gigabit switch. Before installation, please verify that your package contains the following items.

1. **One 8-Port Gigabit Ethernet Switch with 8-port PoE+**
2. **One AC power cord**
3. **Rack-mount brackets and screws (included, optional use)**
4. **User Manual**

Introduction

General Description

The SE-8P provides 8*10/100/1000Mbps Gigabit ports with 8-port PoE+, making it an excellent choice for a fast, cost effective and reliable networking infrastructure. The store-and-forward architecture filters errors and forwards packets in a non-blocking environment. Flow control ensures the accuracy of the data transmitted. The PoE+ on the SE-8P supplies power for connected devices that need it. Over current protection and circuit shorting protection are also supported.

The switch was designed for easy installation and maintenance. It supports the Nway auto-negotiation protocol that detects networking speed (10/100/1000 Mbps) and duplex modes (Full/Half) automatically. Auto-MDI/MDI-X function alleviates the need for crossover cables. Also, rich diagnostic LEDs are provided for real-time connection status information.
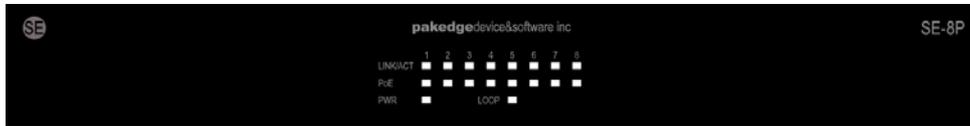
Key Features

- Complies with 10BASE-T specifications of the IEEE802.3 standard
- Complies with 100BASE-TX specifications of the IEEE802.3u standard
- Complies with 1000BASE-T specifications of the IEEE802.3ab standard
- Complies with IEEE 802.3af/at PoE standard
- Supports 31.5W maximum per PoE port
- Supports over current protection and circuit shorting protection
- 8* 10/100/1000Mbps RJ-45 Nway ports
- Supports NWay protocol for speed (10/100/1000Mbps) and duplex mode (Half/Full) auto-detection
- Supports MDI/MDI-X auto crossover
- Supports full and half duplex operation on all ports
- Wire-speed packet filtering and forwarding rate
- Store-and-forward architecture filters fragment & CRC error packets
- Supports 8K MAC address entries in whole system

- 128K bytes buffer memory
- Supports automatic loop detection and isolation
- Supports 9K bytes Jumbo Frames
- Supports extensive LED indicators for network diagnostics
- Internal power adapter
- FCC, CE and LVD

The Front Panel

The front panel consists of LED indicators. For detailed LED definition, please refer to the next paragraph.

LEDs Definition

System LED

LED	Status	Operation
PWR	Steady Blue	The switch is powered on
	Off	The switch is powered off
LOOP	Blinking Red	There is a loop
	Off	There is no loop

Port LEDs

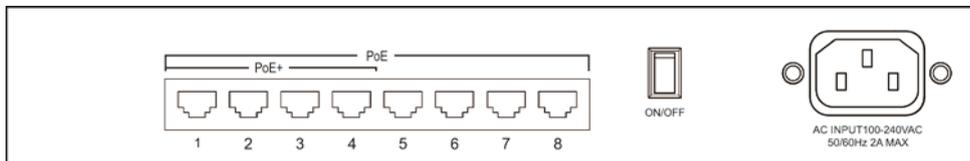| LED	Status	Operation
LINK/ACT	Steady Blue	Valid port connection.
	Blinking Blue	Valid port connection and there is data transmitting/ receiving
	Off	Port disconnected ~~or the port is connected at 10 Mbps or 100 Mbps~~
PoE	Steady Blue	A PoE compliant devices is connected to the port
	Off	No PoE complaint device is connected to the port

Power Receptacle

To be compatible with the varying electric service standards around the world, the switch comes with a power supply which can operate from 100 to 240VAC, 50/60Hz. Please make sure that your outlet standard is within this range.

To power on the switch, plug the female end of the power cord firmly into the receptacle of the switch and the other end into an electric service outlet. After the power cord installation, toggle the ON/OFF switch into the ON position and please check if the power LED is illuminated to ensure normal operations.

Rear Panel

Installation

This switch can be placed on your desktop directly, or mounted in a rack. The installation is simple. Users can utilize all the features of the switch just by attaching the appropriate cables and turning the power on.

Before installing the switch, we strongly recommend:
1. The switch is placed in a well ventilated environment. A minimum of 25mm (1 inch) space around the unit is recommended.
2. The switch and the relevant components are away from electrical noise sources such as radios, transmitters and broadband amplifiers
3. The switch is not placed in a high humidity or moist environment.

Desktop Installation

1. Attach the provided rubber feet to the bottom of the switch to keep the switch from slipping. The recommend position is square-marked.
2. Install the switch on a level surface that can support the weight of the unit and the relevant components.
3. Plug the switch with the female end of the provided power cord and plug the male end into the power outlet.

Rack-mount Installation

Rack mounting facilitates an orderly installation when a series of networking devices are installed. The switch is supplied with rack mounting brackets and screws

Procedures to Rack-Mount the Switch:

1. Disconnect all the cables from the switch before continuing.
2. Place the unit on a hard, flat surface with the front facing you.
3. Place a mounting bracket over the mounting holes on one side of the unit.
4. Insert the screws and fully tighten with a suitable screwdriver.
5. Repeat the two previous steps for the other side of the unit.
6. Insert the unit into the rack and secure with suitable screws.
7. Reconnect all the cables.

Network Cables Installation

1. **Crossover or straight-through cable**: All the ports on the switch support Auto-MDI/MDI-X functionality. Both straight-through or crossover cables can be used to connect the switch with PCs as well as other devices like switches, hubs or router.
2. **Category 3, 4, 5 or 5e UTP/STP cable**: To make a valid connection and obtain the optimal performance use the appropriate cables corresponding to different transmitting/receiving speed. To choose a suitable cable, please refer to the following table.

Media	Speed	Wiring
10/100/1000Mbps copper	10Mbps	Category 3,4,5 UTP/STP
	100Mbps	Category 5 UTP/STP
	1000Mbps	Category 5,5e UTP/STP

Port Operation

The auto-negotiation feature allows ports running at one of the following operation modes:

Media	Speed	Duplex Mode
10/100/1000Mbps(copper)	10Mbps	Full Duplex
		Half Duplex
	100Mbps	Full Duplex
		Half Duplex
1000Mbps Fiber (Mini GBIC required)	1000Mbps	Full Duplex

Product Specifications

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3x full-duplex flow control IEEE802.3ab 1000BASE-T IEEE 802.3af/at PoE standard (DTE power via MDI)
Interface	8*10/100/1000 Mbps auto MDI/MDI-X RJ-45 switching ports Supports 136W Max; Full load: 31.5W(at) x 4 Ports 15.4W(af) x 8 Ports
Cable Connections	RJ-45 (10BASE-T): Category 3,4,5 UTP/STP RJ-45 (100BASE-TX): Category 5 UTP/STP RJ-45 (1000BASE-T): Category 5,5e or enhanced UTP/STP
Transmission Mode	10/100Mbps Full-duplex, Half-duplex 1000Mbps Full-duplex
LED indications	1 * power LED 8 * Link/ACT LEDS 8 * PoE LEDS 1 * loop LED
Memory	8K MAC entries 9216 bytes jumbo packet length 128K bytes Buffer Memory
Emission	FCC & CE
Safety	LVD
Operating Temperature	0^0 ~ 40^0C (32^0 ~ 104^0F)
Operating Humidity	10% - 90%(non-condensing)
Power Supply	Internal power supply 100-240V/47-63 Hz universal input
Dimensions & Weight	12.68 x 7.31 x 1.75 4.3 lbs.

Technical Support

Please visit our website for up-to-date support information:

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