Introduction

General Description

Easily boost your networking throughput, the rack-mountable switch provides you 16 * 10/100/1000Mbps Gigabit ports that lead you to a real Gigabit connection. Users are now able to transfer large and high bandwidth-needed files faster and hence get a real efficiency improvement.

The switch offers users with fast and reliable network. The store-and-forward architecture filters errors and forwards packets in a non-blocking environment. Flow control ensures the correctness of data transmitting. The 802.3x and backpressure flow control mechanisms work respectively for full and half duplex modes.

The switch features with easy installation and maintenance. It supports N-Way auto-negotiation protocol, which detects the networking speed (either 10/100/1000 Mbps) and the duplex modes (Full or Half duplex mode) automatically and do an immediately adjustment to advance the capability and performance. Auto-MDI/MDI-X function alleviates the effort to use crossover cables. Users need not to prepare crossover cables for equipment connectivity. Also, rich diagnostic LEDs are provided for users to get real-time information of the connection status that helps to do quick response and correction.

Unpacking Information

Thank you for purchasing this product. Before installation, please verify that your package contains the following items.

- One 16-Port Gigabit Ethernet Switch
- One AC power cord
- Wall mount kit
- Rack mount kit
- Rubber feet
- User's Manual

Key Feature

- 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
- 16 * 10/100/1000Mbps RJ-45 N-Way ports
- Supports N-Way 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
- Supports back-pressure (half duplex) and flow control (IEEE 802.3x)
- Store-and-forward architecture filters fragment & CRC error packets
- Supports 8K bytes MAC address entries in whole system
- 256K bytes buffer memory
- Support up to 9K jumbo frames
- Supports extensive LED indicators for network diagnostics
- Rack mountable

- Support IEEE (802.3az) feature on/off push button for power saving or performance mode
- Support power switch (On / Off)
- Internal power supply
- 100~240VAC/50~60Hz universal input
- FCC, CE Class B, LVD EN60950-1
- RoHS compliant

Front Panel

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

The front panel of the switch is shown as below:
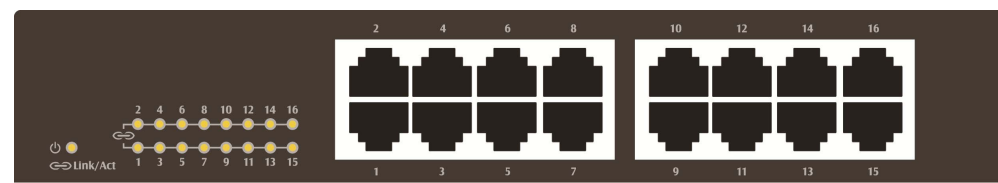
LEDs Definition

The 16 port switches contain one power LED for the device, Link/Act LEDs for each port that shows the activities and information of the ports.

LED	Status	Operation
Power	Steady Green	Switch is ready to work.
	Blinking Green	Switch is under booting.
	Off	Switch is powered off.
Link/ Act	Steady Green	Valid port connection.
	Blinking Green	Valid port connection and there is data transmitting/ receiving.
	Off	Port disconnected.

Rear Panel

The power receptacle and power on/off switch is located on the rear panel of the switch:

Power Receptacle

To be compatible with the electric service standards around the world, the switch is designed to afford the power supply in the range from 100 to 240VAC, 50/60Hz. Please make sure that your outlet standard to be 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, please turn on the back panel power switch to check if the power LED is illuminated for a normal power status.

Installation

This switch can be placed on your desktop directly, or mounted on the wall. The installation is a snap. Users can use all the features of the switch with simply attaching the cables and turning the power on. Before installing the switch, we strongly recommend:

- The switch is placed with appropriate ventilation environment. A minimum 25mm space around the unit is recommended.
- The switch and the relevant components are away from sources of electrical noise such as radios, transmitters and broadband amplifiers.
- The switch is away from environments beyond recommend moisture.

Desktop Installation

You need to attach the provided rubber feet to the bottom of the switch before installing for keeping the switch from slipping. The recommend position has been square-marked.

- Install the switch on a level surface that can support the weight of the unit and the relevant components.
- Plug the switch with the female end of the provided power cord and plug the male end to the power outlet.

Wall-mount Installation

- Screw the two provided screws into the wall 150 mm apart horizontally. Leave a small gap between the head of the screw and the wall. The gap should be big enough for the screw heads to slide into the screw slots and the connection cables to run down the back of the switch.
- Align the holes on the back of the switch with the screws on the wall. Hang the switch on the screws.

Note: Do not mount the product vertically or it will be dangerous. Please attach the product on the wall horizontally! See the image below for reference:

Right direction---- horizontal
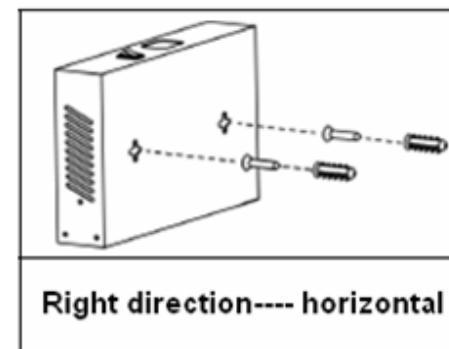
Station Connection

Connect each station to the switch by twisted-pair cable. Plug one RJ-45 connector into a RJ-45 port of the switch, and plug the other RJ-45 connector into the station's network adapter. Power on the switch and then system is ready.

Switches Connection

Network Cables Installation

- 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.
- Category 3, 4, 5, 5e or 6 UTP/STP cable: To make a valid connection and obtain the optimal performance. Appropriate cables corresponding to different transmitting/receiving speed is required. To choose a suitable cable, please refer to the following table.

Media	Speed	Wiring
10/100/1000Mbps	10Mbps	Category 3, 4, 5 UTP/STP
	100Mbps	Category 5 UTP/STP
	1000Mbps	Category 5e, 6 UTP/STP