## 24-Port

# Gigabit Ethernet Switches 

## User's Manual

## FCC Certifications

This Equipment has been tested and found to comply with the limits for a Class A 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 electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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## Key Features

- Complies with 10M BASE-T specifications of the IEEE 802.3 standard
- Complies with 100M BASE-TX specifications of the IEEE 802.3 u standard
- Complies with 1000M BASE-T specifications of the IEEE 802.3ab standard
- Supports full and half duplex for $10 / 100 \mathrm{Mbps}$, and full duplex for 1000Mbps
- Provides 512K Bytes buffer memory
- Wire-speed packet filtering and forwarding rate
- Provides 8K MAC address Table
- Store-and-forward architecture filters fragment \& CRC error packets
- Supports IEEE 802.3az energy efficient ethernet
- Supports auto MDI/MDI-X crossover detecting and auto correction
- RoHS compliant


## Front Panel

Please refer to the following description for the front panel:


## Ethernet Ports:

This Switch includes 24 Gigabit Ethernet ports.

## LED Definition:

LED Status Operation

| Power | Steady Green | Power is on |
| :--- | :--- | :--- |
|  | Off | Power is off |
| Link/Act | Steady Green | The port is connected |
|  | Blinking Green | The port is transmitting/receiving data. |
|  | Off | No connection |

## Rear Panel

## Power Connector:

Plug in the female connector of the provided power cord into this connector, and the male into a power outlet. Supported input voltages range from $100-240 \mathrm{~V} \mathrm{AC}$, and $50-60 \mathrm{~Hz}$. The rear panel is shown as below:


## Installation

Before you install the switch, please check the following items in the package :

- One 24-port Gigabit Ethernet Switch
- One Power cord
- One user manual
- Four rubber feet
- Rack-mount brackets and screws (optional)

In the following there are two ways for your installation. You can select one that suits you.

## Desktop Installation

1. Install the switch on a level surface that can support the weight of the unit \& the relevant components, and attach the rubber feet to the bottom. The rubber feet cushion the switch and helps protect the case from scratches.
2. Plug the switch to electrical source with the provided power cord.

## Rack-Mount Installation

Rack mounting facilitate to an orderly installation when series of network devices being installed.

1. Disconnect all the cables from the switch.
2. Place the unit the right way up on a hard, flat surface with the front facing you.
3. Locate a mounting bracket over the mounting holes on one side of the unit.
4. Insert the screws and fully tighten with a suitable screw driver.
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.

Concerning about the installation environment, we strongly recommend:

1. The switch is placed with appropriate ventilation environment. A minimum 25 mm space around the unit is recommended.
2. The switch and the relevant components are away from sources of electrical
noise such as radios, transmitters and broadband amplifiers.
3. Avoid from environments beyond recommend moisture.
4. The socket-outlet shall be installed near the equipment and shall be easily accessible.

## 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

In making a switch interconnection, you could use any port to connect another switch with straight or crossover cable. As all the ports support auto MDI / MDI-X function, using a straight cable to make a switch-to-switch connection is allowed.

For cable selection, see the following table :

| Network Speed | Cable Type | Max. Length |
| :--- | :--- | :--- |
| 10 Mbps | Cat. 3, 4,5 UTP/STP | 100 meters |
| 100 Mbps | Cat. 5 UTP/STP | 100 meters |
| 1000 Mbps | Category5, 5e or enhanced <br> UTP/STP | 100 meters |

Network Application


## Specification

$\left.\left.\begin{array}{|l|l|}\hline \text { Standard } & \begin{array}{l}\text { IEEE 802.3 10 BASE-T, IEEE 802.3u, 100 BASE-TX, } \\ \text { IEEE 802.3ab 1000 BASE-T, IEEE 802.3az(EEE), } \\ \text { IEEE 802.3x }\end{array} \\ \hline \text { Interface } & 24 \text { 10/100/1000 Mbps RJ-45 Ethernet ports }\end{array} \right\rvert\, \begin{array}{ll|}\hline \text { RJ-45 (10BASE-T): Category 3,4,5 UTP/STP } \\ \text { RJ-45 (100BASE-TX): Category 5 UTP/STP } \\ \text { RJ-45(1000BASE-T):Category5, 5e or enhanced UTP/STP }\end{array}\right\}$

