

Gigabit Management Switch Quick Installation Guide

Features:

- Comply with IEEE 802.3 Ethernet、IEEE 802.3z、802.3x、802.1q、802.1p、802.1d and 802.3ab standards
- ➤ Backbone width 48G
- > Store-forward structure
- Support 80 IEEE 802.1 Q Tag VLAN, 24 Port VLAN
- > 8K MAC address
- Each port supports MAC address learning
- Port Trunk
- Port Mirror
- ➤ Support 802.1x pass through
- ➤ Broadcasting storm control
- ➤ Port security including static MAC bonding and IP address filter
- > Port bandwidth control
- ➤ Supoort WEB and RS232(out of band) management
- > Support DHCP protocol
- Firmware upgrade through TFTP、HTTP、XMODEM, and setting file upload and download through TFTP、HTTP
- ➤ High quality internal power supply
- > 1U steel 19" rack mountable case design

Specifications:

| Model | | 24 ports Giga managed switch | |
|------------------------------|---------|--|--|
| Standards | | IEEE 802.3 Ethernet、802.3x、802.1Q、802.1p、IEEE802.1Dand 802.3ab | |
| Ports | | 24 1000Base-T ports | |
| Cable | | 10BASE-T: Cat 3 or above UTP and STP | |
| | | 100BASE-TX: Cat 5 UTP and STP | |
| | | 1000BASE-T: Cat 5 UTP and STP | |
| MAC address | | 8K | |
| Backbone width | | 48G | |
| Transmission rate | | 10Mbps: 14880pps; 100Mbps: 148800pps; 1000Mbps: 1488000pps | |
| LED | 10/100M | Link/Act | |
| | other | Power | |
| Size $(L \times W \times H)$ | | 440×285×44 | |
| (mm) | | | |
| Environment | | Working temperature: 0°C~40°C; Humidity:10%~90% | |
| | | Store temperature: $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$; Humidity: $5\% \sim 90\%$ | |
| Power | | Input: 180-260VAC, 50-60Hz; | |

Step 1 Installation

The site where you place the switch may greatly affect its performance. When installing, take the following into your consideration.

1.1 Installation method

Follow the guidelines below to install the switch.

Install the switch in a fairy cool and dry place. See the Technical Specification for the acceptable temperature and humidity operation ranges.

Install the switch on a sturdy, level surface that can support its weight, (at least 4KG).

Connect the power cord to the switch and the power outlet. The distance is no more than 150cm.

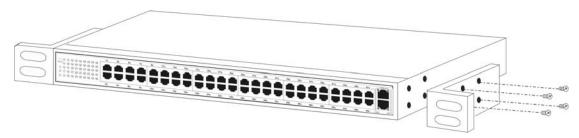
Leave at least 10cm(about 4 inches) of space at the front and rear of the switch for ventilation.

1.2 Desktop or shelf Installation

When installing the switch on the desktop or shelf, please attach the rubber feet to the switch. Peel off the protective paper on the pads and attach them on the bottom of the switch(one at each corner).

1.3 Rack Installation

The switch is rack-mountable and can be installed on an EIA-19 inch equipment rack. To do this, first install the mounting brackets on the switch's side panels(one on each side), secure them with the included screws, and then use the screws provided with the equipment rack to mount the switch on the 19 inch rack.



1.4 Power on the switch

The switch has a universal power supply ranging from 100V to 220V AC, 50-60Hz power source. The AC power connector is located at the rear of the unit adjacent to and the system fan. The switch's power supply will adjust to the local power source automatically.

Step 2 Connecting the switch

This chapter describes how to connect the switch to you Fast Ethernet nework.

2.1 Installation method

A PC can be connected to the switch via a two-pair Category 3,4 or 5 UTP/STP straight-through cable. For 100Mbps operation Category 5 or 5e UTP and for 1000Mbps operation Category 5e or 6 UTP must be used. The PC(equipped with a RJ-45 10M Ethernet or 100M Fast Ethernet NIC) should be connected to any port of the Switch. The LED indicators for PC connection are dependent on the LAN card capabilities. If the LED indicators do not light after making a proper connection, check the PC LAN card, the cable, the switch conditions and connections.

2.2 Hub to Switch

A Hub (10 or 100Base-T) can be connected to the switch via a two-pair Category 3,4 or 5 UTP/STP straight-through cable. For 100Mbps operation Category 5 must be used. The connection is accomplished from any port of the Hub to any port of the Switch.

2.3 Switch to Switch (other devices)

The switch can be connected to another switch or other devices (routers, bridges, etc.) via a two-pair Category 3,4 or 5 UTP/STP straight or crossover cable. A Category 5 cable must be used for 100Mbps operation. The connection can be done from any (MDI-X) port of the switch (Switch A) to any of the 10Mbps, 100Mbps (MDI-X) port of the other switch (Switch B) or other devices.

2.4 Port Speed & Duplex Mode

After plugging the selected cable to a specific port, the system uses auto-negotiation to determine the transmission mode for any new twisted-pair connection:

If the attached device does not support auto negotiation or has auto-negotiation disabled, an auto sensing process is initiated to select the speed and set the duplex mode to half-duplex.

Step 3 Manegement

This chapter describes three management methods of the Switch.

- · Web-based mangagement
- Console management
- Telnet management

3.1 Web-based management

The switch has a Web GUI interface for switch configuration. The Switch can be configured through the Web browser. A network administrator can manage, control, and monitor the Switch from the local LAN. This section indicates how to configure the Switch to enable its smart functions including:

System configuration: Overal configuration, Ports configuration, Port VLAN, 802.1Q VLAN, 802.1Q VLAN advanced setting, Port trunking, MAC bonding, MAC list management, Port mirror, QoS, Port filtering, Port width setting, Broadcasting storm control

System status monitor: Port statical information

System maintenance: Restort to factory default settings, Firmware upgrade, system file save and quit

Before you configure this device, note that when the Switch is configured through an Ethernet connection, the manager PC must be set on the same the IP network. For example, when the default network address of the default IP address of the Switch is 192.168.1.254, then the manager PC should be set at 192.168.2.x (where x is a number between 1 and 256 except 254), and the default subnet mask is 255.255.255.0.

Open an Internet Explorer 5.0 or above Web browser.

Enter the IP address http://192.168.1.254 (the factory-default IP address setting)in the address loaction.

NOTE:

The factory-default IP address: 192.168.1.254, Sub-network mask 255.255.255.0, Gateway 192.168.1.1

Through the Web Management Utility, you do need to remember the IP Address; select the device shown in the Monitor List of the Web Management Utility to settle the device on the browser.

When the following dialog page appears, enter the default user name and passport and press Login to enter the main configuration window.

| Enter the passv | ord . | |
|-----------------|-------|----|
| password | | OK |

NOTE:

The factory-default User name is empty. Pass word is "admin"

After entering the password, you can access main page of your switch.

3.2 Console Management (Out-of-band)

A local console is a terminal or a workstation running a terminal emulation program that is connected directly to the switch via the RS-232 console port on the rear of the switch. Local console management uses the terminal connection to operate the console program built-in to the Switch a network Administer can manage, control and monitor the switch from the console program.

To start using the Console Management program, first connect an EIA-232 serial cable to a COM port on a PC or notebook computer and to the Console Port on the rear panel of the Switch.

If you are using Microsoft Windows, boot up the computer, go to "Start"-"Programs"-"Accessories",-"Communications", and open the "HyperTerminal". After that follow the instructions below to setup a new terminal connection software, please select the correct COM port and setup the connection properties according to step 3 below.

- 1. Type in a name for the connection, select an icon for the connection, and click "OK".
- 2. Select the COM port that you are using for this connection and click "OK".
- 3. Setup the COM port properties by using the information below and click "OK".

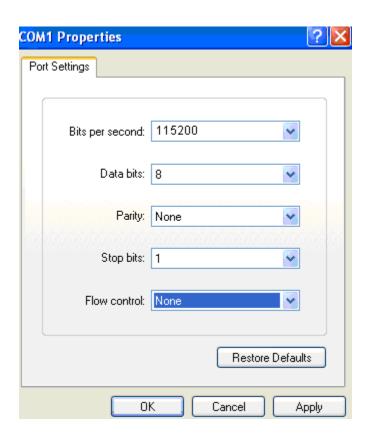
NOTE:

The console port is set at the factory for the following configuration:

Baud rate: 115200 bps Data width: 8 bits Parity: none

Stop bits:1

Flow Control: None



4. You should see some boot-up messages displayed within your "HyperTerminal" session.



5. At the "password" field type in "admin" and hit "Enter". You are now logged into the Switch's configuration program.

Commands at top level:

System - System commands
Console - Console commands
Port - Port commands
MAC - MAC commands
VLAN - VLAN commands

Aggr - Aggregation commands User Group - User Group commands

QoS - QoS commands Mirror - Mirror commands IP - IP commands

IP - IP commands
Filter - Filter commands
Debug - Debug commands

NOTE:

The factory-default User name is empty.

Pass word is "admin"