



ES-5160G+ / ES-5240G+

Read Me First

Version 1.0 / June 2007

1.1 Overview

ES-5160G+ / ES-5240G+ complies with IEEE 802.3/u/x/z Gigabit and Fast Ethernet standards. The switch includes 16 or 24 10/100/1000Mbps TP ports and 4 Gigabit SFP fiber slots. The switch can be managed through Ethernet using Web-based management interface. The network administrator can logon to the switch to monitor, configure and control each port's activity. In addition, the switch supports the QoS (Quality of Service), VLAN, and Trunking.

In ES-5160G+, Port 13, 14, 15, 16 or ES-5240G+, Port 21, 22, 23, 24 support two types of media --- TP(10/100/1000Mbps) and SFP(1000Mbps) Fiber (LC, BiDi-SC...) auto-detection function.

1000Mbps LC, Multi-Mode, 220m or 550m SFP Fiber transceiver

1000Mbps LC, Single-Mode, 10km, SFP Fiber transceiver

1000Mbps LC, Single-Mode, 30km, SFP Fiber transceiver

1000Mbps LC, Single-Mode, 50km, SFP Fiber transceiver

1000Mbps BiDi-SC, 20km, 1550nm SFP Fiber WDM transceiver

1000Mbps BiDi-SC, 20km, 1310nm SFP Fiber WDM transceiver

10/100/1000Mbps TP is a standard Ethernet port that meets all IEEE 802.3/u/x/z Gigabit/Fast Ethernet standard. 1000Mbps SFP Fiber transceiver is a Gigabit Ethernet port that fully complies with all IEEE 802.3z and 1000Base-SX/LX standards.

1000Mbps Single Fiber WDM (BiDi) transceiver is designed with the optic Wavelength Division Multiplexing (WDM) technology that transmits bi-directional full duplex signals over a single fiber simultaneously.

1.2 Key Features

QoS:

Supports 802.1p VLAN tag priority and DSCP on Layer 3 of network framework.

VLAN:

Supports Port-based VLAN (46 groups) and IEEE802.1Q Tag VLAN (4094 groups)

Port Trunking:

Allows one or more links to be aggregated together to form a Link Aggregation Group by the static setting.

- **Hardware**

- 16 or 24 10/100/1000Mbps Auto-negotiation Gigabit Ethernet TP ports
- 4 1000Mbps SFP fiber slots
- 400KB on-chip frame buffer
- Supports jumbo frame
- Programmable classifier for QoS (Layer 2/Layer 3)
- 8K MAC address
- Per-port shaping, policing, and broadcast storm control
- Supports IEEE802.1Q-in-Q nested VLAN with 4094 VLAN groups
- Full-duplex flow control (IEEE802.3x) and half-duplex backpressure
- Extensive front-panel diagnostic LEDs; System: Power, TP Port1-16:
LINK/ACT, 10/100/1000Mbps, SFP Port 13, 14, 15, 16(ES-5160G+) or
21, 22, 23, 24(ES-5240G+): SFP(LINK/ACT)

- **Management**

- Supports concisely the status of port and easily port configuration
- Supports per port traffic monitoring counters
- Supports a snapshot of the system information
- Supports port mirror function
- Supports the static trunk function
- Supports 802.1Q VLAN
- Supports user management and limits one user to login

- Maximal packet length can be up to 9600 bytes for jumbo frame application
- Supports Broadcasting Suppression to avoid network suspended or crashed
- Supports to send the trap event while monitored events occur
- Restore the current configuration to default via Web UI or RESET button on the switch
- Supports on-line plug/unplug SFP modules
- Supports Quality of Service (QoS) for real time applications based on the information taken from Layer 2 to Layer 3.
- Built-in web-based management instead of using CLI interface, providing a more convenient GUI for the user

1.3 Package Content:

Before you start installing ES-5160G+/ ES-5240G+, please check the package contains the following items:

One Gigabit 16 / 24 ports Web Smart switch

One AC Power Cord

One set of mounting accessory (for 19 " rack shelf)

One User Guide CD-ROM

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

Power Requirements: AC Line

Voltage	:	100~240 VAC
Frequency	:	50~60 Hz
Consumption	:	30W

Interfaces on the Front Panel (Button, LEDs and Plugs)

There are 16 TP Gigabit Ethernet ports and 4 SFP fiber slots for SFP modules on the front panel of the switch. LED display area, locating on the left side of the panel, contains a Power LED, which indicates the power status and 16 ports working status of the switch.

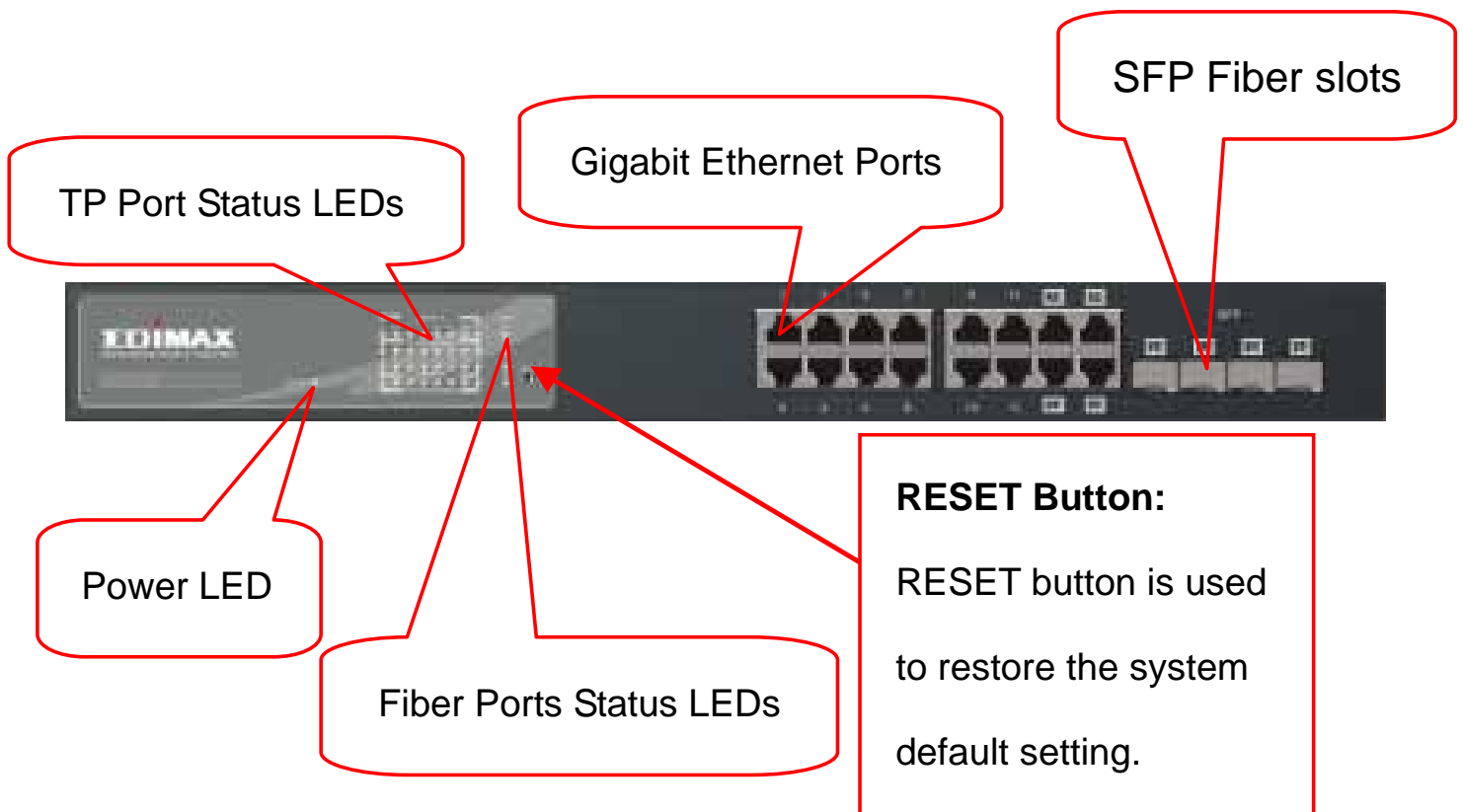


Fig. 1-2 Front View of ES-5160G+

LED Indicators

LED	Color	Function
System LED		
POWER	Green	Lit when +3.3V power is coming up
10/100/1000Ethernet TP Port 1 to 16 LED		
LINK/ACT	Green	Lit when connection with remote device is good Blinks when any traffic is present
10/100/1000Mbps	Green/ Amber	Lit Green when TP link on 1000Mbps speed Lit Amber when TP link on 100Mbps speed Off when 10Mbps or no link occurs Blinks when any traffic is present
1000SX/LX Gigabit Fiber Port 13, 14, 15, 16 or 21, 22, 23, 24 LED		
SFP(LINK/ACT)	Green	Lit when SFP connection with remote device is good Blinks when any traffic is present

Interfaces on the Rear Panel

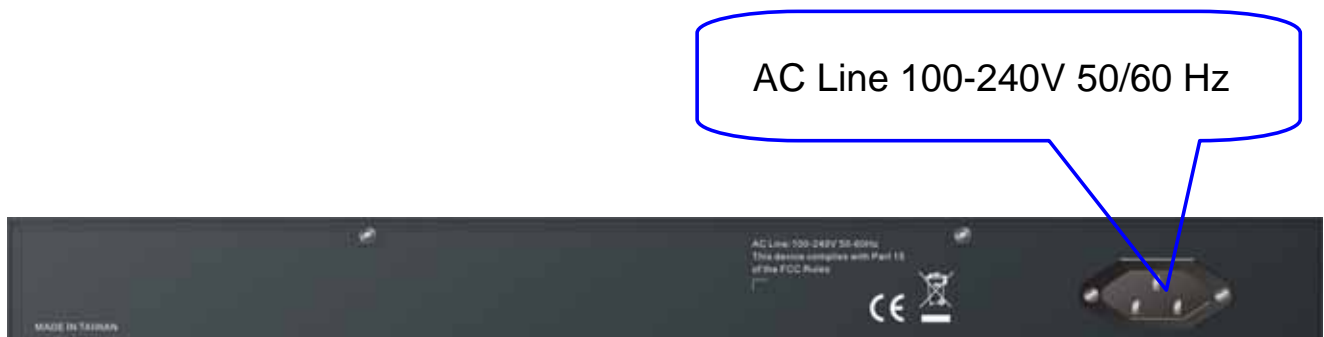


Fig. 1-3 Rear View of ES-5160G+

Quick Installation:

1. Install the switch in the rack with mounting accessory.
2. Connect the switch to an AC power source.
3. The connectors of port 1–16 or 1-24 are RJ-45 jack. Use Category 5 UTP cable to connect between the switch and end station.
4. The port 13~16 or 21~24 includes two types of media --- TP and SFP fiber module with auto-detected function.
5. The default values of the switch are as below:

IP Address : 192.168.1.1

Subnet Mask : 255.255.255.0

Default Gateway : 192.168.1.254

Password : admin

User can use web interface to configure the switch with the default IP address and password. Please refer to User's Guide in Autorun CD-ROM for details of the parameters setting.