

SE-18, SE-26 16/24-Port Unmanaged Gigabit Ethernet Switch



QUICK START GUIDE

### Introduction

These SE Series unmanaged switches offer high-performance, plug-and-play, gigabit Ethernet switching with 16/24 gigabit Ethernet ports and two gigabit SFP ports, providing you a cost-effective, space-saving solution for expanding your network. The fully gigabit Ethernet ports support high bandwidth for today's most demanding applications. The two SFP ports provide the ability to add fiber-optic connectivity between other network switches, giving you the option for long-distance communications.

Automatic MDI/MDI-X crossover detection ensures you will not need to worry about the cable type by automatically switching the port's receive and transmit connections with plugged in devices. Also, flow control ensures the accuracy of transmitted data. What's more, the 802.3x and back-pressure flow control mechanisms work respectively for full- and half-duplex modes.

- Complies with 10 BASE-T specifications of the IEEE802.3 standard, 100BASE-TX specifications of the IEEE802.3u standard, and 1000BASE-T specifications of the IEEE802.3ab standard
- Provides 16/24 10/100/1000 Mbps Ethernet ports, and two 100/1000 Mbps SFP ports for optional fiber connection
- Supports back-pressure (half-duplex) and flow control (IEEE 802.3x)
- Supports NWay protocol for speed (10/100/1000 Mbps) and duplex mode (half/full) auto-detection
- Supports MDI/MDI-X auto crossover and polarity correction
- Supports 8K MAC address
- Supports 4.1 Mbit buffer memory
- · Supports 9K bytes jumbo frame
- Supports IEEE 802.3az Energy Efficient Ethernet
- · Provides extensive LED indicators for network diagnostics
- · Supports automatic loop detection and isolation

#### Package contents

- (1) 16/24-port gigabit switch with 2 SFP ports
- (1) AC power cord
- (1) Rack-mount brackets and screws
- (1) This Quick Start Guide

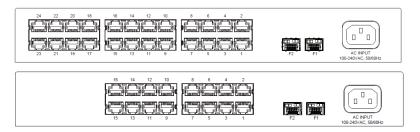
# Overview

### Front panel



LED	Status	Operation
Power	Steady blue	Swith is powered on
	Off	Switch is powered off
Loop	Blinking red	A loop exists
	Off	No loop exists
Link/ACT	Steady blue	Valid port connection
	Blinking blue	Valid port connection, data transmitting/receiving
	Off	Port is disconnected

### Rear panel



Auto-negotiation allows ports to run at one of the following operation modes:

Port	Media	Speed (Mbps)	Duplex mode
10/100/1000 Mbps	10/100/1000 Mbps (copper)	10	Full
			Half
		100	Full
			Half
		1000	Full
	10/100/1000 Mbps (fiber)	100	Half
	(SFP required)	1000	Full

#### Power receptacle

To be compatible with worldwide electric service standards, the switch is designed to use the power supply in the range from 100 to 240VAC, 50/60 Hz. Make sure that your outlet standard is within this range.

#### To power on the switch:

- 1 Connect the power cord securely into the power receptacle on the back of the switch and to an electrical outlet.
- 2 Verify that the power LED on the front of the switch is on and indicating normal power status.

### Installation

This switch can be placed directly on your desktop or mounted in a rack. All features of the switch are available while the switch is powered on.

#### Desktop installation

- 1 Attach the provided rubber feet to the bottom of the switch to keep the switch from slipping. The recommended position has been marked with a small square.
- 2 Place the switch on a level surface that can support the weight of the unit and the relevant components.
- **3** Connect the power cord to the switch and an electrical outlet.

#### Rack-mount installation

The switch can be mounted in a standard 19" rack. Rack mounting produces an orderly installation when you have several related network devices. The switch is supplied with two optional mounting brackets and screws.

#### To rack mount the switch:

- 1 Disconnect all cables from the switch.
- 2 Place the switch on a hard, flat surface with the front facing you.
- **3** On each side of the switch, position a mounting bracket over the bracket mounting holes, then insert and fully tighten the screws with a screwdriver.
- **4** Using the mounting brackets, mount the switch into the equipment rack with the appropriate screws.
- 5 Reconnect all cables.

## Network cable guidelines

- Crossover or straight-through cable: All ports on the switch support Auto-MDI/MDI-X. Straight-through and crossover cables can be used to connect the switch with PCs, as well as other devices such as switches, hubs, or routers.
- Category 5, 5e, 6a, or 7 UTP/STP cable: To make a valid connection and obtain
  optimal performance, appropriate cables corresponding to different transmitting/
  receiving speeds are required. To select a suitable cable, refer to the table below:

Media	Speed (Mbps)	Wiring
10/100/1000 Mbps (copper)	10	Category 5 UTP/STP
	100	Category 5 UTP/STP
	1000	Category 5, 5e, 6a, or 7 UTP/STP
1000 Mbps (fiber) 1000 (SFP required)		The cable type differs depending on the SFP you purchase. Refer to the SFP instructions.

**Tips:** To ensure optimal performance, we strongly recommend the below installation environment:

- The switch has sufficient ventilation. A minimum 1 inch (about 25 mm) space around the unit is recommended.
- The switch and the relevant components are kept away from sources of electrical noise, such as radios, transmitters, and broadband amplifiers.
- · The switch is kept away from moist environments.

# Specifications

Standard	IEEE802.3 (10BASE-T) IEEE802.3u (100BASE-TX) IEEE802.3ab (1000BASE-T) IEEE802.3x full-duplex flow control IEEE802.1p class of service, priority protocols IEEE802.3az (Energy Efficient Ethernet)
Interface	16/24 10/100/1000 Mbps RJ-45 ports 2 SFP 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, 6, or enhanced UTP/STP Fiber: depends on SFP types
Network data rate	10/100/1000 Mbps auto-negotiation
Transmission mode	10/100 Mbps: Full duplex, half duplex 1000 Mbps: Full duplex
LED indications	(1) Power LED (blue) (1) Loop LED (blinking red) (18/26) Port link/act LEDs (blue)

Memory	8K MAC entries 4.1 Mbit buffer memory
Jumbo frame	9K bytes
Temperature	Operating: 32° ~ 104°F (0 ~ 40°C) Storage: 14° ~ 158°F (-20 ~ 70°C)
Humidity	Operating: 10% ~ 90%, non-condensing Storage: 5% ~ 95%, non-condensing
Power supply	Internal power supply 5V/5A

# Technical Support

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