1 Unpacking

Unpack the items. Your package should include:

➢ One EX89000 Series hardened managed switch

➢ Rack-mounting hardware brackets

➢ One CD containing this user's guide

If items are missing or damaged, notify your EtherWAN representative. Keep the carton and packing material.

2 What Else You Need

➢ Appropriate cables for data ports

➢ Personal computer or laptop

3 Select a Location

➢ Desktop installations: Mount on a flat table or shelf surface.

➢ Rack installations: Use a 19-inch (48.3-centimeter) EIA standard equipment rack that is grounded and physically secure.

➢ Identify a power source within 6 feet (1.8 meters).

➢ Choose a dry area with ambient temperature between -40 and 75ºC (-40 and 167ºF).

➢ Keep away from heat sources, sunlight, warm air exhausts, hot-air vents, and heaters.

➢ Be sure there is adequate airflow.

➢ Keep the switch at least 6 ft. (1.83 m) away from the nearest source of electromagnetic noise, such as a photocopy machine.

4 Connect to the Data Ports

Depending on the model, your switch can have the following ports:

➢ 0, 8, 16, or 24 10/100Base-TX ports

➢ 0-to-18 100Base-FX ports

➢ 0, 2, or 4 Gigabit ports

10/100Base-TX and 100Base-FX Ports

These ports can connect to devices such as an IP surveillance camera or a Voice Over Internet Protocol (VoIP) phone.

A. Insert one end of an appropriate cable into a switch port.

B. Connect the other end into the Ethernet port of the device.

C. Repeat steps A and B for each additional device you want to connect to the switch.

Gigabit Ports

Some switch models have 2 or 4 10/100/1000Base-TX ports, 1000Base-SX/LX/BX ports, or 4-port 1000Base SFP-combo with 10/100/1000Base-TX ports. You can connect these ports to network devices such as a computer, printer, network video recorder (NVR), network storage, or they can connect to the network itself.

SFP-combo ports operate in "either/or" fashion. This means that attaching to a 1 Gbps combo port renders the equivalent partner combo port unavailable. See the following examples.

Connecting to this port…

…makes this port unavailable

…makes this port unavailable
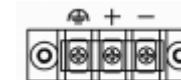
Connecting to this port…
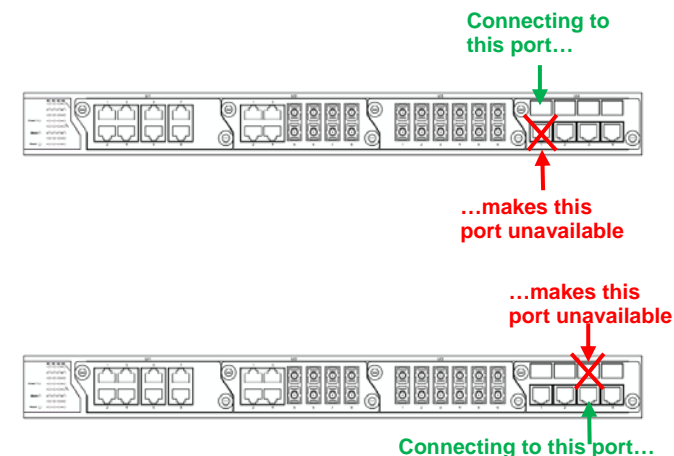
5 Apply Power

All switches have a 100-240 VAC receptacle:

Connect the female end of the supplied AC power cable to the power receptacle on the back of the switch. Connect the 3-pronged end of the cable to a grounded 3-pronged AC outlet.

Some models have one of these terminal blocks:

	+48VDC	-48VDC
−	0	-48
+	+48	0
⏚	Earth Ground	

	88-370VDC	90-264VAC
–	0	N
+	88 – 370	L
⏚	Earth Ground	

The switch also has a relay with these settings:

Setting	Relay Settings
Relay normal	b — c CLOSE, c — a OPEN
Relay alarm	b — c OPEN, c — a CLOSE

When you apply power, all **Link/ACT** LEDs blink momentarily, the **Power 1** LED goes ON, and LEDs for every port connected to a device flash.
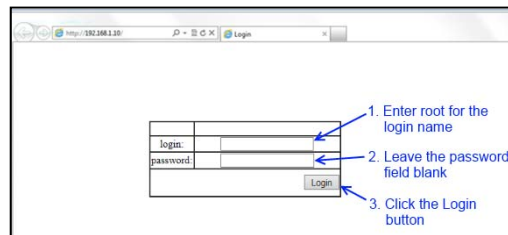
6 Front Panel LEDs

LED	Color	Status
Power 1	Green	ON = power on.
		OFF = power off.
Alarm	Red	ON = power failure occurred.
		OFF = normal operation (no power failure).
10/100Base-TX, 100Base-FX/BX LEDs		
Link/Act	Green	ON = valid network connection is established.
		Flashing = port sending or receiving data.
10/100/1000Base-TX/SFP LEDs		
Link/Act	Green	ON = valid network connection is established.
		Flashing = port sending or receiving data.

| LED	Color	Status
SFP	Green	ON = valid SFP connection is established.
1000Base-SX/LX/BX LEDs		
Link/Act	Orange	ON = valid network connection is established.
		Flashing = port sending or receiving data.
SFP	Green	ON = valid SFP connection is established.

7 Managing the Switch

A. Connect a PC to an available switch port using an appropriate cable.

B. Confirm that the **Link/ACT** LED for the switch port to which the PC is connected is ON. If not, choose a different port.

C. Configure the PC's TCP/IP settings to use the subnet 192.168.1.x and subnet mask 255.255.255.0, where x is a number from 2 to 254 other than 10.

D. In a Web browser address bar, type http://192.168.1.10 and press Enter.

E. Log in to the management interface:

1. Enter root for the login name
2. Leave the password field blank
3. Click the Login button

F. Change the system name:
- In the left pane, click **+** next to **System**, then click **System Name/Password**.

- On the right side, click in the **System Name** text box.
- Replace the name shown with a name you want to assign to the switch.
- Click the **Update Setting** button below the **System Name** text box.
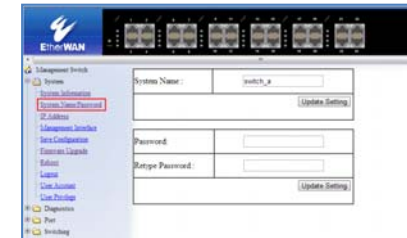
G. By default there is no password assigned to the switch. To add a password:
- In the page above, click in the **Password** text box, enter a password, and retype it in the **Retype Password** text box.
- Click **Update Setting** below the **Retype Password** text box.

H. Change the switch's IP address and subnet mask to match the scheme on your network:

1. Click on the + next to system
2. Click on IP Address
3. Enter the IP Address and Subnet Mask
4. Click on the Apply & Save button