ES-16XP Quick Start Guide





EdgeSwitch 16XP



Flathead Screws (Qty. 2)



Phillips Screws (Qty. 4)





Cage Nuts (Qty. 4)

Power Cords (Qty. 2)

## **Installation Requirements**

- Phillips and flathead screwdrivers
- Standard-sized, 19" wide rack with an available 1U space
- For indoor applications, use Category 5 (or above) UTP cabling approved for indoor use.
- For outdoor applications, shielded Category 5 (or above) cabling should be used for all wired Ethernet connections and should be grounded through the AC ground of the power supply.

We recommend that you protect your networks from harmful outdoor environments and destructive ESD events with industrial-grade, shielded Ethernet cable from Ubiquiti. For more details, visit **ui.com/toughcable** 



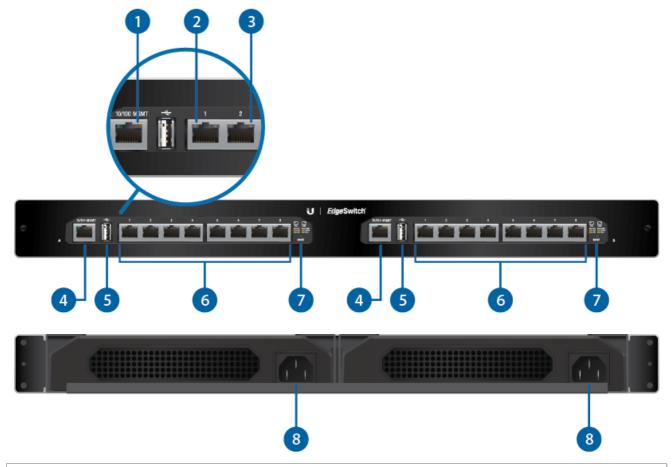
**IMPORTANT:** Although the cabling can be located outdoors, the EdgeSwitch itself should be housed inside a protective enclosure.



**WARNING:** To reduce the risk of fire or electric shock, do not expose this EdgeSwitch to rain or moisture.



**WARNING:** FAILURE TO PROVIDE PROPER VENTILATION MAY CAUSE FIRE HAZARD. KEEP AT LEAST 20 MM OF CLEARANCE NEXT TO THE VENTILATION HOLES FOR ADEQUATE AIRFLOW. A and B designate the two 8-Port EdgeSwitch devices housed in the rack. This may be useful for the Location setting on the Device tab in the Configuration Interface.



1 Management Power/Link LED				
Off	No Power/No Link			
Amber	After bootup, the LED indicates power. After an initial link is established, the LED indicates a 10/100 Mbps connection. If the link terminates, the LED turns off until a link is re-established. If the unit reboots, the LED will again indicate power until a link is established.			
2 RJ45 PoE LED (Ports 1 - 8)				
Off	No Power over Ethernet			
Green	24V Power over Ethernet			
Amber	48V Power over Ethernet			
<b>3</b> RJ45 Speed/Link/Act LED (Ports 1 - 8)				
Off	No link			
Amber	Link established at 10/100 Mbps			
Amber Flashing	Link activity at 10/100 Mbps			

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#### Green Flashing

Link activity at 1000 Mbps

### 4 Management Port

10/100 Mbps port used to access the EdgeSwitch Configuration Interface.

#### 5 USB Port

Reserved for future use.

### 6 RJ45 (Ports 1 - 8)

10/100/1000 Mbps ports for switching and PoE (also available for management by default).

#### 7 Reset Button

To reset to factory defaults, press and hold the Reset button for more than 10 seconds while the unit is powered on.

8 Power

Connect the included Power Adapter to the Power port.

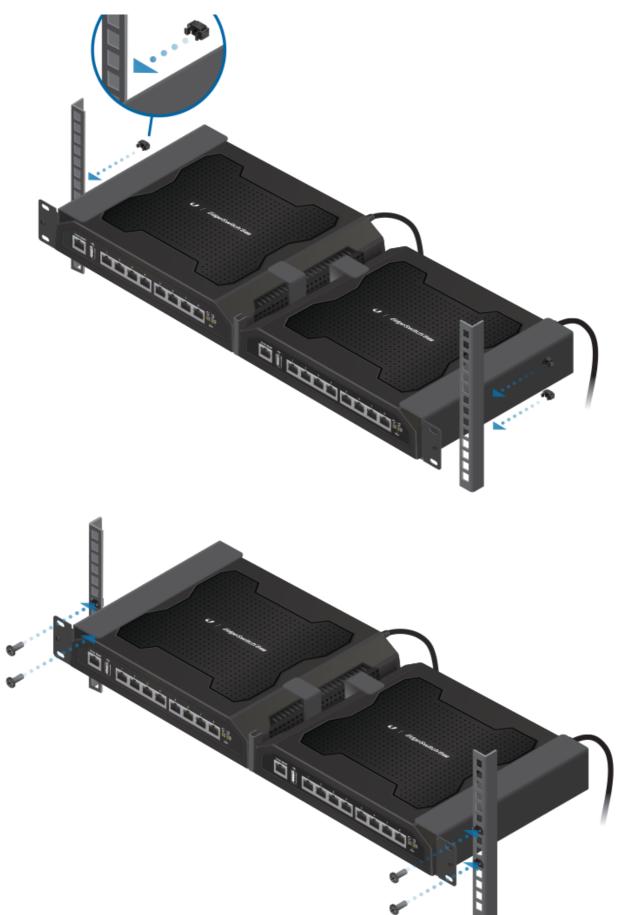
## **Hardware Installation**

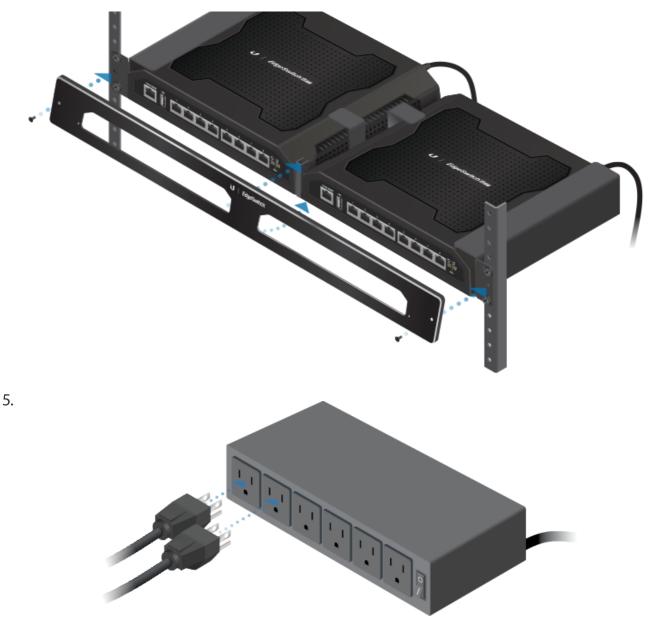




3.

OR





# **Daisy-Chain (Optional)**

All data ports are available as uplink ports. If you want to daisy-chain EdgeSwitch A and B, we recommend that you connect an Ethernet cable from port 8 of EdgeSwitch A to port 1 of EdgeSwitch B.



Note: PoE is disabled by default on all numbered ports and is not available on the Management port. To enable PoE on the appropriate ports, use the Ports tab in the Configuration Interface.

# **Accessing the Configuration Interface**

Connect to the Configuration Interface by performing the following steps:

1. Ensure that your computer is connected to the Management port on the EdgeSwitch.



**Note:** By default, you can configure the EdgeSwitch via any port; however, we recommend the Management port. (Access to the Configuration Interface can be limited to the Management port only. You can configure this setting on the Device tab.)

- 2. Configure the Ethernet adapter on your computer with a static IP address on the 192.168.1.x subnet (e.g., 192.168.1.100).
- 3. Launch your web browser. Type https://192.168.1.20 in the address field. Press enter (PC) or return (Mac).



4. Enter ubnt in the Username and Password fields. Click Login.

<i>Edge</i> Switch	812	Usemame: Ubnt Password: ***	Login	
_	ke Installations P Google Play	Plug and Play		

The Configuration Interface will appear, allowing you to customize your settings as needed.

You can also manage your device using the Ubiquiti<sup>®</sup> Network Management System. UNMS<sup>™</sup> lets you configure, monitor, upgrade, and back up your devices using a single application.

## **Configuring PoE Settings**

**WARNING:** Before activating PoE, ensure that the connected device supports passive PoE and the supplied voltage. By default, PoE is off on each port.

1. Click the Ports tab.



2. On the Ports tab, select the Ethernet port you want to configure. Select the appropriate PoE Status setting, and then click Save Changes.

	Ì <b>F</b>		Ĺ		• UNMS	Total 51. Throughput <sub>TX N</sub>	2   15.6 <sub>bps</sub>   <sub>RX kbps</sub>
Port	Name	Port Status	PoE	Link Speed	Ping Watchdog	STP	Alerts
1	IP phone	Enabled	48V	Autonegotiation	Disabled	Disabled	Off
2	IP phone	Enabled	48V	Autonegotiation	Disabled	Disabled	Off
3	IP phone	Enabled	48V	Autonegotiation	Disabled	Disabled	Off
4	Port 4	Enabled	Off	Autonegotiation	N/A - PoE is Off	Disabled	Off
5	Port 5	Enabled	Off	Autonegotiation	N/A - PoE is Off	Disabled	Off
6	Port 6	Enabled	0#	Autonegotiation	N/A - PoE is Off	Disabled	Off
7	Port 7	Enabled	Off	Autonegotiation	N/A - PoE is Off	Disabled	Off
8	Uplink	Enabled	Off	Autonegotiation	N/A - PoE is Off	Disabled	Off
Basic Settings for P							
	Name: Port 5				PoE V Off 24V	0	
F	Port Status: 🗹 Enable			Link Sj	peed, Mbps 48V	0	
				F	low Control: 🕑 Enable	-	
Ping Watchdog for I	Port 5						
Configure Alerts for							
Comgure Alerts for	Porto						
Clone Settings for A	Il Ports					Save	Changes
	5						

The PoE LED on the Ethernet port will confirm the PoE setting.

# **Specifications**

	ES-16XP
Dimensions	480 x 44.5 x 186 mm (18.9 x 1.75 x 7.32")
Weight	3.95 kg (8.71 lb)
Hardware Configuration	(2) 8-Port EdgeSwitch 8XP Devices
Mounting	19" 1U Rack-Mount
	8-Port ES-8XP*
Power Input	100-240VAC
Max. Power Consumption	150W
PoE Out Voltage Range	45-48VDC / 22-24VDC
Max. PoE Wattage Per Data Port	11.5W (24V) 23W (48V)
ESD Rating	±24 kV Air/Contact
PoE Method	Passive
Button	Reset
USB Port	2.0 Type A (Reserved for Future Use)
Processor	MIPS 24K, 400 MHz
System Memory	64 MB
Code Storage	8 MB
Certifications	CE, FCC, IC

Operating Humidity	90% Noncondensing
PoE Configurable Per Port	
Management Port	N/A
Data Ports	Off/24V/48V
LEDs Per Port	
Management Port	Power/Link
Data Ports	PoE, Speed/Link/Activity
Networking Interfaces	
Management Port	(1) 10/100 Ethernet Port
Data Ports	(8) 10/100/1000 Ethernet Ports

\* Specifications apply to each 8-Port EdgeSwitch ES-8XP unit.

# **Safety Notices**

- 1. Read, follow, and keep these instructions.
- 2. Heed all warnings.
- 3. Only use attachments/accessories specified by the manufacturer.



**WARNING:** Failure to provide proper ventilation may cause fire hazard. Keep at least 20 mm of clearance next to the ventilation holes for adequate airflow.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.



WARNING: Do not use this product in location that can be submerged by water.



**WARNING:** Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

# **Electrical Safety Information**

- 1. Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
- 2. There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
- 3. This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
  - a. Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
  - b. The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
  - c. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
  - d. Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.

## **Limited Warranty**

#### ui.com/support/warranty

The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.

# Compliance

### FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

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. Operations 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.

### **ISED Canada**

CAN ICES-3(A)/NMB-3(A)

### Australia and New Zealand



Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

### **CE Marking**

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

CE

### **WEEE Compliance Statement**

**Declaration of Conformity** 

### **Online Resources**

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