



***EdgeSwitch* 16 150W**

Managed PoE+ Gigabit Switch
with SFP

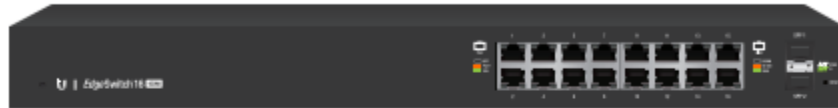
Model: ES-16-150W

QUICK START GUIDE

Introduction

Thank you for purchasing the Ubiquiti Networks® EdgeSwitch®. This Quick Start Guide is designed to guide you through the installation and also includes the warranty terms.

Package Contents



EdgeSwitch ES-16-150W



Power Cord



Mount Brackets
(Qty. 2)



Bracket Screws
(Qty. 8)



Mounting Screws
(Qty. 4)



Cage Nuts
(Qty. 4)



Rubber Feet
(Qty. 4)

TERMS OF USE: All Ethernet cabling runs must use CAT5 (or above). It is the professional installer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, indoor cabling requirements, and Dynamic Frequency Selection (DFS) requirements.

Installation Requirements

- Phillips screwdriver (for rack or wall mounting)
- Standard-sized, 19" wide rack with a minimum of 1U height available (for rack mounting)
- 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 Networks. For more details, visit www.ubnt.com/toughcable



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



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

Hardware Overview

Front Panel Ports



Port	Description
RJ45 1-16	RJ45 ports support 10/100/1000 Ethernet connections.
SFP 1-2	Hot-swappable SFP ports support 1 Gbps connections.

Front Panel LEDs



System

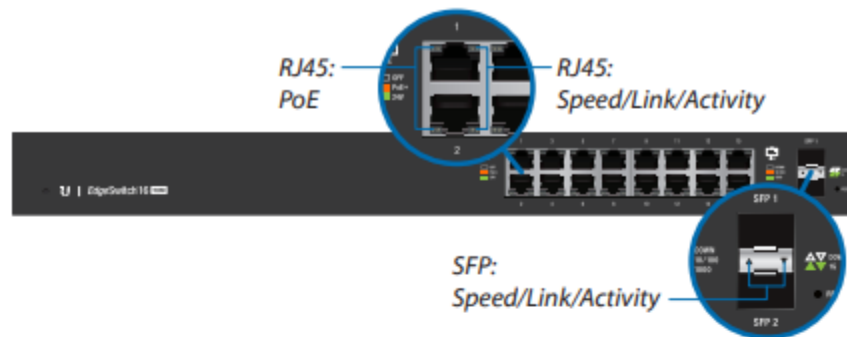
System LED



Note: The System LED functionality has been updated with firmware v1.8.0. We recommend that you update the EdgeSwitch to the latest firmware.

State	Status
Flashing White	Bootup in progress.
White	Ready for use, not connected to Ubiquiti® Network Management System (UNMS™).
Blue	Ready for use, connected to UNMS.
Steady Blue with Occasional Flashing	Ready for use, unable to connect to UNMS, check connection to UNMS server.
Quickly Flashing Blue	Used to locate a device in UNMS.
Alternating Blue/White	Firmware upgrade in progress.

You can use the EdgeSwitch Configuration Interface or UNMS to manage your device. UNMS lets you configure, monitor, upgrade, and back up your devices using a single application. Get started at www.unms.com



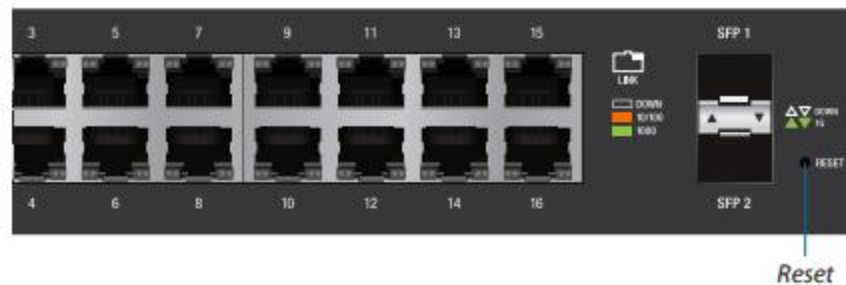
RJ45 LEDs

LED	State	Status
PoE	Off	No PoE
	Amber	IEEE 802.3af/802.3at
	Green	24V Passive
Speed/ Link/ Activity	Off	No Link
	Amber	Link Established at 10/100 Mbps
	Amber Flashing	Link Activity at 10/100 Mbps
	Green	Link Established at 1000 Mbps (1 Gbps)
	Green Flashing	Link Activity at 1000 Mbps (1 Gbps)

SFP LEDs

LED	State	Status
Speed/ Link/ Activity	Off	No Link
	Green	Link Established at 1 Gbps
	Green Flashing	Link Activity at 1 Gbps

Front Panel Button



Button	Description
Reset	<p>There are two methods to reset the EdgeSwitch to factory defaults:</p> <p>Runtime Reset (Recommended)</p> <p>The EdgeSwitch should be running after bootup is complete, and the <i>System</i> LED is white. Press and hold the Reset button. The EdgeSwitch will reboot, and the <i>System</i> LED becomes blue after three seconds. Continue to hold the Reset button for about 15 seconds until the <i>System</i> LED flashes blue for two seconds. This indicates that the EdgeSwitch has reset to its factory defaults.</p> <p>Power-on Reset</p> <ol style="list-style-type: none">1. Disconnect the <i>Power Cord</i> from the EdgeSwitch.2. While connecting the <i>Power Cord</i> to the EdgeSwitch, hold the Reset button for about 15 seconds until the <i>System</i> LED flashes blue for two seconds. This indicates that the EdgeSwitch has reset to its factory defaults.

Back Panel Console Port



Port	Description
Console	<p>RJ45 serial console port for Command Line Interface (CLI) management. Use an RJ45-to-DB9, serial console cable, also known as a rollover cable, to connect the <i>Console</i> port to your computer. Then configure the following settings as needed:</p> <ul style="list-style-type: none">• <i>Baud rate</i> 115200• <i>Data bits</i> 8• <i>Parity</i> NONE• <i>Stop bits</i> 1• <i>Flow control</i> NONE

Hardware Installation

The EdgeSwitch can be placed on a horizontal surface, mounted in a rack, or mounted on a wall.

! **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.

Place the *Rubber Feet* on the bottom of the EdgeSwitch if you do not plan to mount it. For rack or wall mounting, follow the appropriate steps:

Specifications

ES-16-150W	
Dimensions	443 x 43 x 221 mm (17.44 x 1.69 x 8.70")
Weight	2.80 kg (6.17 lb)
With Mount Brackets	2.89 kg (6.37 lb)
Total Non-Blocking Line Rate	18 Gbps
Max. Power Consumption	150W
Power Method	100-240VAC/50-60 Hz, Universal Input
Power Supply	AC/DC, Internal, 150W DC
Shock and Vibration	ETSI300-019-1.4 Standard
LEDs Per Port	
RJ45 Data Ports	PoE, Speed/Link/Activity
SFP Data Ports	Speed/Link/Activity
Networking Interfaces	(16) 10/100/1000 Mbps RJ45 Ports (2) 1 Gbps SFP Ports
Management Interface	UART Console Out-of-Band, Ethernet In-Band
PoE Interfaces	PoE+ IEEE 802.3af/at (pins 1, 2+; 3, 6-) 24VDC Passive PoE (pins 4, 5+; 7, 8-)
Voltage Range	
802.3at Mode	50-57V
24V Passive PoE	20-27V
Max. Wattage per Port	
PoE+	34.2W
Passive PoE	17W
Rack-Mount	Yes, 1U High
Operating Temperature	-5 to 40° C (23 to 104° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC