EdgeSwitch® 8 150W

AC or DC Powered, Managed PoE+ Gigabit Switch with SFP

Model: ES-8-150W
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

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 shelf or wall mounting)
- (Optional) 42 to 56VDC power source, such as the EdgePower™ EP-54V-150W, for stand-alone DC power or redundant power backup.
- 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

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ45 1-8</td>
<td>RJ45 ports support 10/100/1000 Ethernet connections and configurable Power over Ethernet (auto PoE+ or 24V Passive).</td>
</tr>
<tr>
<td>SFP 1-2</td>
<td>Hot-swappable SFP ports support 1 Gbps connections.</td>
</tr>
</tbody>
</table>
Front Panel LEDs

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.

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

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**

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PoE</td>
<td>Off</td>
<td>No PoE</td>
</tr>
<tr>
<td></td>
<td>Amber</td>
<td>IEEE 802.3af/802.3at</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>24V Passive</td>
</tr>
<tr>
<td>Speed/Link/Activity</td>
<td>Off</td>
<td>No Link</td>
</tr>
<tr>
<td></td>
<td>Amber</td>
<td>Link Established at 10/100 Mbps</td>
</tr>
<tr>
<td></td>
<td>Amber Flashing</td>
<td>Link Activity at 10/100 Mbps</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Link Established at 1000 Mbps (1 Gbps)</td>
</tr>
<tr>
<td></td>
<td>Green Flashing</td>
<td>Link Activity at 1000 Mbps (1 Gbps)</td>
</tr>
</tbody>
</table>

**SFP LEDs**

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed/Link/Activity</td>
<td>Off</td>
<td>No Link</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Link Established at 1 Gbps</td>
</tr>
<tr>
<td></td>
<td>Green Flashing</td>
<td>Link Activity at 1 Gbps</td>
</tr>
</tbody>
</table>
There are two methods to reset the EdgeSwitch to factory defaults:

**Runtime Reset (Recommended)**

The EdgeSwitch should be running after bootup is complete, and the System LED is white. Press and hold the **Reset** button. The EdgeSwitch will reboot, and the System LED becomes blue after three seconds. Continue to hold the **Reset** button for about 15 seconds until the System LED flashes blue for two seconds. This indicates that the EdgeSwitch Fiber has reset to its factory defaults.

**Power-on Reset**

1. Disconnect the *Power Cord* from the EdgeSwitch.
2. While connecting the *Power Cord* to the EdgeSwitch, hold the **Reset** button for about 15 seconds until the System LED flashes blue for two seconds. This indicates that the EdgeSwitch has reset to its factory defaults.
**Back Panel**

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Console** | 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 Console port to your computer. Then configure the following settings as needed:  
  • **Baud rate** 115200  
  • **Data bits** 8  
  • **Parity** NONE  
  • **Stop bits** 1  
  • **Flow control** NONE |
| **DC Input** | Optional DC input for connecting a redundant or stand-alone 42 to 56VDC power source, such as the EdgePower EP-54V-150W.                             |
| **AC Power** | Connect the included Power Cord to the AC Power port.                                                                                           |
| **Ground**  | Ground bonding point for an optional ground wire.                                                                                              |

**Note:** The redundant DC power source may be used as a hot backup. The DC power source will provide continuous power in the event of an interruption or loss of AC power.
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: The ES-8-150W must not be stacked. Do not place it on top of another switch. Do not place anything on top of the ES-8-150W.
Hardware Installation

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

Mounting on a Shelf

1. Position the two *Mount Brackets* as shown below, and attach the brackets using the eight *Bracket Screws*.

2. Secure the EdgeSwitch to the shelf using the four *Mounting Screws*.
Mounting on a Wall

1. Position the two *Mount Brackets* as shown below, and attach the brackets using the eight *Bracket Screws*.

2. Attach the EdgeSwitch to the wall using the four *Screw Anchors* and four *Mounting Screws*. 
Connecting AC Power

1. Connect the *Power Cord* to the *AC Power* port on the back of the EdgeSwitch.

2. Connect the other end of the *Power Cord* to a power outlet.
Connecting DC Power (Optional)

For stand-alone DC power or redundant power backup, connect a 42 to 56VDC power source to the EdgeSwitch:

**Note:** Only AC power or DC power can be used at any one time. With both power sources connected, the input with the highest voltage will be used (output voltage of the internal AC/DC PSU is 54VDC); the other power source defaults to backup.

1. Insert the DC power cable wires into the *DC Input* terminal block. Polarity is self-correcting.

2. Turn the two terminal block screws clockwise to secure the wires to the terminal block.
Connecting Ethernet

1. Connect an Ethernet cable from your DHCP server or LAN to any port on the EdgeSwitch.

2. Connect your computer or host system and other devices to the other ports on the EdgeSwitch.
Using SFP Ports

To use an SFP port:

1. Remove the protective plug covering the SFP port.
2. Plug a compatible fiber module into the SFP port.

3. Connect the fiber optic cable to the fiber module. Then connect the other end of the cable to another fiber device.

For information about compatible fiber SFP modules, visit: community.ubnt.com/edgemax
Accessing the Configuration Interface

The EdgeSwitch is set to DHCP by default, so it will try to automatically obtain an IP address. If that fails, then it will use the default fallback IP address, 192.168.1.2. Proceed to the appropriate section, DHCP or “Fallback IP Address”:

**DHCP**

Use one of the following methods:

- Set up the DHCP server to provide a specific IP address to the EdgeSwitch based on its MAC address (on the label).
- Let the EdgeSwitch obtain an IP address and then check the DHCP server to see which IP address was assigned.

To log in, follow these steps:

1. Launch your web browser. Type the appropriate IP address in the address field. Press enter (PC) or return (Mac).
2. The login screen will appear. Enter ubnt in the Username and Password fields. Click Sign In.
3. The EdgeSwitch Configuration Interface will appear. Customize additional settings as needed.

For more information, refer to the EdgeSwitch documentation, which is available at [www.ubnt.com/download/edgemax](http://www.ubnt.com/download/edgemax)

You can also manage your device using the Ubiquiti Network Management System. UNMS lets you configure, monitor, upgrade, and back up your devices using a single application. Get started at [www.unms.com](http://www.unms.com)

**Fallback IP Address**

1. Ensure that your computer (or other host system) is connected to the EdgeSwitch.

2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.

3. Launch your web browser. Type the appropriate IP address in the address field (192.168.1.2 is the default fallback IP address). Press enter (PC) or return (Mac).
4. The login screen will appear. Enter **ubnt** in the *Username* and *Password* fields. Click **Sign In**.

5. The EdgeSwitch Configuration Interface will appear. Click the **Settings** icon.
6. Change the **IP Address** to a unique IP address. Click **Apply**.

**Note:** If you change the IP settings, then the session will be cut off, and you will need to reconnect to the EdgeSwitch using the new IP address.

Customize additional settings as needed. For more information, refer to the EdgeSwitch documentation, which is available at [www.ubnt.com/download/edgemax](http://www.ubnt.com/download/edgemax)
## Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions</strong></td>
<td>204 x 43 x 235 mm (8.03 x 1.69 x 9.25&quot;&quot;)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Without Wall Mount</td>
<td>1.72 kg (3.79 lb)</td>
</tr>
<tr>
<td>With Wall Mount</td>
<td>1.8 kg (3.96 lb)</td>
</tr>
<tr>
<td><strong>Total Non-Blocking Line Rate</strong></td>
<td>10 Gbps</td>
</tr>
<tr>
<td><strong>Max. Power Consumption</strong></td>
<td>20W (Excludes PoE Output)</td>
</tr>
<tr>
<td><strong>Power Method</strong></td>
<td>AC/DC Integrated PSU, Universal Input</td>
</tr>
<tr>
<td></td>
<td>DC External, (Self-Correcting Polarity Protection) Terminal Block Input</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>Internal AC/DC 150W</td>
</tr>
<tr>
<td><strong>Operating Voltage</strong></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>100 to 240VAC, 50-60 Hz</td>
</tr>
<tr>
<td>DC</td>
<td>42 to 56VDC</td>
</tr>
<tr>
<td><strong>LEDs</strong></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>PoE; Link/Speed/Activity</td>
</tr>
<tr>
<td>RJ45 Data Ports</td>
<td>Link/Speed/Activity</td>
</tr>
<tr>
<td>SFP Data Ports</td>
<td></td>
</tr>
<tr>
<td><strong>Networking Interfaces</strong></td>
<td>(8) 10/100/1000 Mbps RJ45 Ports</td>
</tr>
<tr>
<td></td>
<td>(2) 1 Gbps SFP Ports</td>
</tr>
<tr>
<td><strong>Management Interface</strong></td>
<td>Ethernet In-Band, UART Console Out-of-Band</td>
</tr>
<tr>
<td><strong>PoE Interfaces</strong></td>
<td>(8) IEEE 802.3at/af 2-Pair (+1, 2; -3, 6)</td>
</tr>
<tr>
<td></td>
<td>(8) 24V/0.7A 2-Pair (+4, 5; -7, 8)</td>
</tr>
<tr>
<td><strong>ESD/EMP Protection</strong></td>
<td>± 24kV Air, ± 24kV Contact</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td></td>
</tr>
<tr>
<td>Internal AC/DC @ 150W</td>
<td>-25 to 45° C (-13 to 113° F)</td>
</tr>
<tr>
<td>Internal AC/DC @ 100W</td>
<td>-25 to 55° C (-13 to 131° F)</td>
</tr>
<tr>
<td>External DC</td>
<td>-25 to 60° C (-13 to 140° F)</td>
</tr>
<tr>
<td><strong>Operating Humidity</strong></td>
<td>5 to 95% Noncondensing</td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td>CE, FCC, IC</td>
</tr>
</tbody>
</table>
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 20mm 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.
   e. Protective bonding must be installed in accordance with local national wiring rules and regulations.
Limited Warranty

www.ubnt.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.

NOTE: 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)

This Class A digital apparatus complies with Canadian CAN ICES-003.

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

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Australia and New Zealand

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.
RoHS/WEEE Compliance Statement

English

European Directive 2012/19/EU requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Deutsch


Español

La Directiva 2012/19/UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.
Français

La directive européenne 2012/19/UE exige que l’équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiquées par le gouvernement et les pouvoirs publics des collectivités territoriales. L’élimination et le recyclage en bonne et due forme ont pour but de lutter contre l’impact néfaste potentiel de ce type de produits sur l’environnement et la santé publique. Pour plus d’informations sur le mode d’élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l’endroit où vous avez acheté le produit.

Italiano

La direttiva europea 2012/19/UE richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull’imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l’ambiente e per la salute dell’essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.
Declaration of Conformity

English  Hereby, UBIQUITI NETWORKS, declares that this ES-8-150W device, is in compliance with the essential requirements and other relevant provisions of Directives 2014/30/EU, 2014/35/EU. The full text of the EU declaration of conformity is available at the following internet address: www.ubnt.com/compliance


Português [Portuguese] UBIQUITI NETWORKS declara que este dispositivo ES-8-150W, está conforme com os requisitos essenciais e outras disposições das Directivas 2014/30/UE, 2014/35/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.ubnt.com/compliance


Slovenčina [Slovak] Týmto UBIQUITI NETWORKS, prehlasuje, že toto ES-8-150W zariadenie, je v súlade so základnými požiadavkami a ďalšími relevantnými ustanoveniami smernice 2014/30/EU, 2014/35/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.ubnt.com/compliance


Español [Spanish] Por medio de la presente UBIQUITI NETWORKS declara que este dispositivo ES-8-150W, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de las Directivas 2014/30/UE, 2014/35/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.ubnt.com/compliance


Online Resources
Support  help.ubnt.com
Community  community.ubnt.com
Downloads  downloads.ubnt.com