Managed PoE+ Gigabit Switch with SFP
Model: US-16-150W

Quick Start Guide
Introduction

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

Package Contents

- UniFi Switch US-16-150W
- Power Cord
- Rack-Mount Brackets (Qty. 2)
- Bracket Screws (Qty. 8)
- Mounting Screws (Qty. 4)
- Cage Nuts (Qty. 4)
- Rubber Feet (Qty. 4)
- Quick Start Guide

IMPORTANT: We strongly recommend using UPS backup and power regulation to prevent equipment damage due to stability issues with local AC power.

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

- Linux, Mac OS X, or Microsoft Windows 7/8/10
- Java Runtime Environment 1.6 (1.8 or newer recommended)
- Web Browser: Google Chrome (Other browsers may have limited functionality.)
- UniFi Controller software v5.4.x or above, available at: downloads.ubnt.com/unifi

Installation Requirements

- Phillips screwdriver (for rack-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 UniFi Switch itself should be housed inside a protective enclosure.
Network Topology Requirements

- A DHCP-enabled network for the UniFi Switch to obtain an IP address (connected devices will also obtain IP addresses after deployment)
- A UniFi Cloud Key or management station running the UniFi Controller software v5.4.x or above, located either on-site and connected to the same Layer 2 network, or off-site in a cloud or NOC

Sample Network Diagram

All UniFi devices support off-site management controllers. For setup details, refer to the User Guide on the website: documentation.ubnt.com/unifi
## Hardware Overview

### Front Panel

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ45 1-16</td>
<td>RJ45 ports support Power over Ethernet (PoE) and 10/100/1000 Ethernet connections.</td>
</tr>
<tr>
<td>SFP 1-2</td>
<td>Hot-swappable SFP ports support 1 Gbps connections.</td>
</tr>
</tbody>
</table>

**Reset Button**

This button serves two functions for the UniFi Switch:

- **Restart** Press and release the *Reset* button quickly.
- **Restore to Factory Default Settings** Press and hold the *Reset* button for more than five seconds.
Front Panel System LED

<table>
<thead>
<tr>
<th>State</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Factory defaults, waiting for integration.</td>
</tr>
<tr>
<td>Flashing White</td>
<td>Initializing.</td>
</tr>
<tr>
<td>Alternating White/Blue</td>
<td>Device is busy; do not use or unplug it. This usually indicates that a process such as a firmware upgrade is taking place.</td>
</tr>
<tr>
<td>Blue</td>
<td>Successfully integrated into a network and working properly.</td>
</tr>
<tr>
<td>Flashing Blue</td>
<td>This is used to locate a device. When you click Locate in the UniFi Controller software, the System LED will flash blue. The software will also display the location of the UniFi Switch on the map.</td>
</tr>
</tbody>
</table>
## Front Panel Port LEDs

### RJ45 PoE

<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>
</tbody>
</table>

### RJ45 Speed/Link/Activity

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-16</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></td>
<td>Flashing Indicates Activity</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Link Established at 1000 Mbps (1 Gbps)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flashing Indicates Activity</td>
</tr>
</tbody>
</table>

### SFP Speed/Link/Activity

<table>
<thead>
<tr>
<th>LED</th>
<th>State</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</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></td>
<td>Flashing Indicates Activity</td>
</tr>
</tbody>
</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

<table>
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</tr>
<tr>
<td></td>
<td>• <strong>Stop bits</strong> 1</td>
</tr>
<tr>
<td></td>
<td>• <strong>Flow control</strong> NONE</td>
</tr>
</tbody>
</table>
Hardware Installation

The UniFi Switch 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.

Mounting in a Rack (Optional)

1. Attach the *Rack-Mount Brackets* to the UniFi Switch using the eight *Bracket Screws*.

2. Attach the UniFi Switch to the rack using the four *Mounting Screws*. (If the rack has square slots, use the *Cage Nuts* with the *Mounting Screws*.)
Connecting Power

1. Connect the *Power Cord* to the *Power* port of the UniFi Switch.

2. Connect the other end of the *Power Cord* to a power outlet.
Connecting Ethernet

1. Connect a UniFi Cloud Key, management computer, or LAN running the UniFi Controller to the UniFi Switch.

2. Connect Ethernet cables from the gateway or router (DHCP server) and other devices to the UniFi Switch.
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/unifi
Software Installation

Download and install the latest version of the UniFi Controller software at downloads.ubnt.com/unifi and follow the on-screen instructions.

Note: If you already have UniFi Controller v5.4.x or newer installed, skip to the section, Adopting the UniFi Switch.

After you have installed the software and run the UniFi Installation Wizard, a login screen will appear for the UniFi Controller management interface. Enter the admin name and password that you created and click Log In.

You can manage your network and view network statistics using the UniFi Controller management interface.

To adopt the UniFi Switch, proceed to the Adopting the UniFi Switch section.

For information on configuring and using the UniFi Controller software, refer to the User Guide on the website: documentation.ubnt.com/unifi
Adopting the UniFi Switch

1. From the UniFi Controller dashboard, click **Devices** in the left menu bar.

2. On the **Devices** screen, locate the UniFi Switch in the list of devices under the **Model** column. To adopt the UniFi Switch, click **Adopt**.

3. The **System** LED on the UniFi Switch will turn blue to confirm that it has been successfully adopted.
Configuring PoE Settings

The RJ45 ports are auto-sensing by default, so 802.3af/at devices can be plugged in and automatically receive Power over Ethernet. To disable or enable PoE, follow these instructions:

1. On the Devices screen, locate the UniFi Switch in the list of devices under the Model column. Click its Name/MAC Address to access its settings.

2. Click the Ports tab.
3. Click **Actions** for the port you want to configure.

4. Select the appropriate **PoE** setting: **Off** or **PoE+**. Then click **Apply**.

For more information, refer to the User Guide on the website: [documentation.ubnt.com/unifi](http://documentation.ubnt.com/unifi)
## Specifications

<table>
<thead>
<tr>
<th>UniFi Switch US-16-150W</th>
</tr>
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<tbody>
<tr>
<td><strong>Dimensions</strong></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td>With Mount Brackets</td>
</tr>
<tr>
<td><strong>Total Non-Blocking Line Rate</strong></td>
</tr>
<tr>
<td><strong>Max. Power Consumption</strong></td>
</tr>
<tr>
<td><strong>Power Method</strong></td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
</tr>
<tr>
<td><strong>Rack-Mount</strong></td>
</tr>
<tr>
<td><strong>LEDs Per Port</strong></td>
</tr>
<tr>
<td>RJ45 Data Ports</td>
</tr>
<tr>
<td>SFP Data Ports</td>
</tr>
<tr>
<td><strong>Interfaces</strong></td>
</tr>
<tr>
<td>Networking Interfaces</td>
</tr>
<tr>
<td>Management Interface</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>PoE Output (RJ45 Ports)</strong></td>
</tr>
<tr>
<td><strong>PoE Voltage Range 802.3at Mode</strong></td>
</tr>
<tr>
<td><strong>Max. PoE+ Wattage per Port</strong></td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
</tr>
<tr>
<td><strong>Operating Humidity</strong></td>
</tr>
<tr>
<td><strong>Shock and Vibration</strong></td>
</tr>
<tr>
<td><strong>Certifications</strong></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 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.
   e. Protective bonding must be installed in accordance with local national wiring rules and regulations.
Limited Warranty

UBIQUITI NETWORKS, Inc (“UBIQUITI NETWORKS”) warrants that the product(s) furnished hereunder (the “Product(s)”) shall be free from defects in material and workmanship for a period of one (1) year from the date of shipment by UBIQUITI NETWORKS under normal use and operation. UBIQUITI NETWORKS’ sole and exclusive obligation and liability under the foregoing warranty shall be for UBIQUITI NETWORKS, at its discretion, to repair or replace any Product that fails to conform to the above warranty during the above warranty period. The expense of removal and reinstallation of any Product is not included in this warranty. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

Warranty Conditions

The above warranty does not apply if the Product:

(IV) has been modified and/or altered, or an addition made thereto, except by Ubiquiti Networks, or Ubiquiti Networks’ authorized representatives, or as approved by Ubiquiti Networks in writing;

(V) has been painted, rebranded or physically modified in any way;

(VI) has been damaged due to errors or defects in cabling;

(VII) has been subjected to misuse, abuse, negligence, abnormal physical, electromagnetic or electrical stress, including lightning strikes, or accident;

(VIII) has been damaged or impaired as a result of using third party firmware;

(IX) has no original Ubiquiti MAC label, or is missing any other original Ubiquiti label(s); or

(X) has not been received by Ubiquiti within 30 days of issuance of the RMA.

In addition, the above warranty shall apply only if: the product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation; all Ethernet cabling runs use CAT5 (or above), and for outdoor installations, shielded Ethernet cabling is used, and for indoor installations, indoor cabling requirements are followed.
**Returns**

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS during the warranty period, and the Products being received at UBIQUITI NETWORKS’ facility freight prepaid in accordance with the RMA process of UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned freight collect or subject to disposal. Information on the RMA process and obtaining an RMA number can be found at: [www.ubnt.com/support/warranty](http://www.ubnt.com/support/warranty).

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Limitation of Liability

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Note

Some countries, states and provinces do not allow exclusions of implied warranties or conditions, so the above exclusion may not apply to you. You may have other rights that vary from country to country, state to state, or province to province. Some countries, states and provinces do not allow the exclusion or limitation of liability for incidental or consequential damages, so the above limitation may not apply to you. EXCEPT TO THE EXTENT ALLOWED BY LOCAL LAW, THESE WARRANTY TERMS DO NOT EXCLUDE, RESTRICT OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE LICENSE OF ANY SOFTWARE (EMBEDDED IN THE PRODUCT) TO YOU. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to any transactions regarding the sale of the Products.
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.

Industry Canada

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

This Class A digital apparatus complies with Canadian CAN ICES-3(A).

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

Cet appareil numérique de la classe A est conforme à la norme NMB-3(A) 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 deshacerse de estos aparatos correctamente a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar correctamente estos aparatos eléctricos y electrónicos estará contribuyendo a evitar posibles consecuencias negativas para su propio 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 indiqués 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’imballo 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 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.
Hereby, UBIQUITI NETWORKS, declares that this UBIQUITI NETWORKS device, is in compliance with the essential requirements and other relevant provisions of Directives 2014/30/EU, 2014/35/EU.
UBIQUITI NETWORKS declares, that this UBIQUITI NETWORKS device meets the essential requirements as well as other relevant provisions of the Directives 2014/30/UE, 2014/35/UE.
Online Resources

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

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