



# NanoSwitch™

Outdoor 4-Port PoE  
Passthrough Switch

Model: N-SW

QUICK START GUIDE

## Introduction

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

## Package Contents



NanoSwitch



Self-Tapping  
Screw



Metal Straps  
(Qty. 2)



Quick Start  
Guide

## Installation Requirements

Mounting accessories and drain wire are not included.

### Pole-Mounting

- Drill with a 4.5 mm Drill Bit
- 7 mm Socket Wrench or Screwdriver

### Wall-Mounting

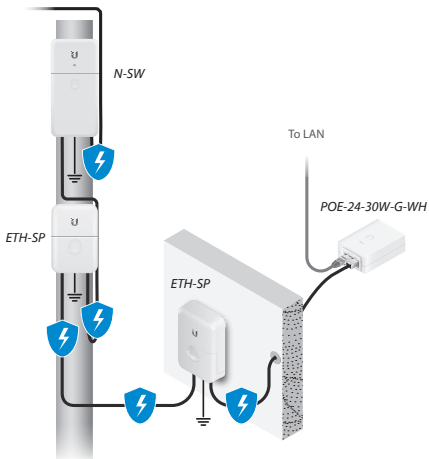
- (2) Screws ( $\leq 5$  mm Screw Head)
- (1) Drain Wire, Optional ( $\leq 16$  AWG,  $\leq 40$  cm)

### Cables

- Shielded Category 5 (or above) cabling with drain wire should be used for all wired Ethernet connections and should be grounded through the AC ground of the PoE.

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](http://www.ubnt.com/toughcable)

- Surge protection should be used for all outdoor installations. We recommend that you use two Ethernet Surge Protectors, model ETH-SP, one near the N-SW and the other at the entry point to the building. The ETH-SP will absorb power surges and safely discharge them into the ground.

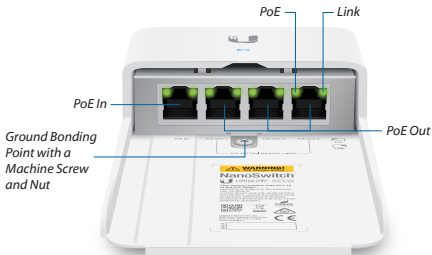


## Hardware Overview

### System LED



The *LED* will light blue when the device is powered on.



## RJ45 LEDs

LED	State	Status
PoE	Green	Active 24V PoE
Link	Green	Link Established
		Flashing Indicates Activity

## Ports

Port	Description
PoE In	RJ45 port supports 10/100/1000 Ethernet connections and supports 24V, 2-pair passive PoE to power the switch. For maximum power consumption of 30W, we recommend supplying power with the POE-24-30W-G-WH PoE adapter (not included).
PoE Out 1-3	RJ45 ports support 10/100/1000 Ethernet connections and provide passive 24V, 2-pair PoE passthrough for up to 30W PoE output.

**!** **WARNING:** PoE is always active. Before connecting a device to a *PoE Out* port, ensure that the device supports passive PoE and the supplied voltage.

**!** **WARNING:** Do NOT provide more than a total of 24W PoE output (24V, 1A) per port or 30W total output; otherwise this will damage the NanoSwitch.

**Ground Bonding Point** The NanoSwitch must be grounded in one of the following ways:

- Use the *Self-Tapping Screw* to ground the NanoSwitch directly to a grounded metal pole or structure.
- Use the *Machine Screw* and *Nut* to attach a drain wire (not included) that is connected to a remote grounding block or structure.

## Connect a Drain Wire (Optional)

If a drain wire is used to ground the NanoSwitch, attach it to the *Ground Bonding Point* with the *Self-Tapping Screw* and nut.



At the installation site, secure the other end of the drain wire to a grounded mast, pole, tower, or grounding bar.



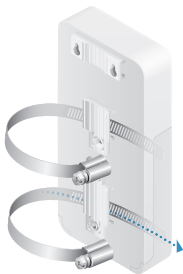
**Note:** The drain wire should be as short as possible and no longer than one meter in length.

## Hardware Installation

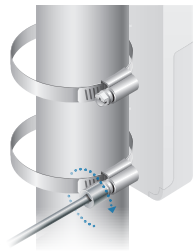
Install the NanoSwitch either on a pole or a wall. Follow the appropriate steps for your installation:

### Pole-Mounting

1. Feed the included *Metal Straps* through the slots located on the back of the NanoSwitch.




2. Wrap the *Metal Straps* around the pole. Use a 7 mm socket wrench or screwdriver to turn the screws clockwise and securely fasten the straps to the pole.



3. Remove the *Port Cover* by pressing on its center and sliding it down.



-  **Note:** If you are using a drain wire for grounding, proceed to the *Connecting Power* section.

4. Remove the *Self-Tapping Screw* and nut from the *Ground Bonding Point*, and drill a 4.5 mm pilot hole into the pole.



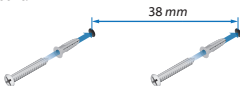


5. Insert the *Self-Tapping Screw* into the pilot hole. Securely fasten the screw to ensure the *Ground Bonding Point* is bonded to the pole.

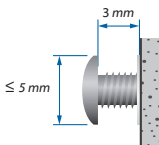


## Wall-Mounting

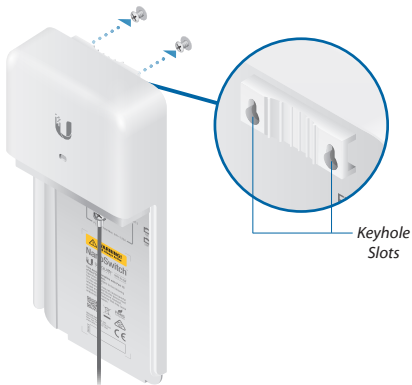
1. Secure two screws (not included) to the wall, spaced 38 mm apart.



2. Leave a gap of 3 mm from each screw head to the wall.



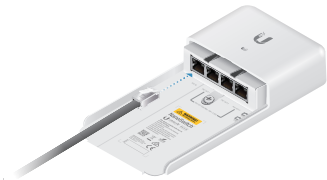
3. With the drain wire already attached, insert the screw heads into the *Keyhole Slots* on the back of the NanoSwitch. Press down on the NanoSwitch to secure it.



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## Connecting Power

The NanoSwitch is powered by PoE. Connect an Ethernet cable from a passive 24V, 2-pair PoE power source to the *PoE In* port.



## Connecting Ethernet

**!** **WARNING:** PoE is always active. Before connecting a device to a *PoE Out* port, ensure that the device supports passive PoE and the supplied voltage.

1. Connect an Ethernet cable to a *PoE Out* port.



2. Connect the other end of the Ethernet cable to a passive 24V, 2-pair PoE device.

## Specifications

N-SW	
Dimensions (Excluding Mount)	196.4 x 93.5 x 32.4 mm ( 7.73 x 3.68 x 1.28")
Weight	271 g (9.6 oz)
Enclosure Characteristics	White Polycarbonate
Total Non-Blocking Line Rate	4 Gbps
Typical Power Consumption	1.5W
Max. Power Consumption	30W
Power Method	24V, 2-Pair Passive PoE
Networking Interfaces	(4) 10/100/1000 Mbps Ethernet RJ45
Total Passive PoE Max Wattage	24V, 2-Pair, 1A for 3 Ports (30W)
Passive PoE Max Wattage per Port	24V, 2-Pair, 1A per Port (24W)
Passive PoE Voltage Range	21.6 - 30V
ESD/EMP Protection	± 24kV Air, ± 24kV Contact
Operating Temperature	-30 to 70° C (-22 to 158° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

## Safety Notices

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



**WARNING:** Do not use this product in a 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.

## Limited Warranty

[www.ubnt.com/support/warranty/](http://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.

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 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.



## 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

Die Europäische Richtlinie 2012/19/EU verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist, nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltsmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.



## 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 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'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

**български [Bulgarian]** С настоящото UBIQUITI NETWORKS декларира, че това устройство N-SW е в съответствие със съществените изисквания и други приложими разпоредби на Директиви 2014/30/ЕС, 2014/35/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Hrvatski [Croatian]** UBIQUITI NETWORKS ovim putem izjavljuje da je ovaj uređaj N-SW sukladan osnovnim zahtjevima i ostalim bitnim odredbama Direktiva 2014/30/EU, 2014/35/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Čeština [Czech]** UBIQUITI NETWORKS tímto prohlašuje, že toto N-SW zařízení, je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnic 2014/30/EU, 2014/35/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Dansk [Danish]** Hermed, UBIQUITI NETWORKS, erklærer at denne N-SW enhed, er i overensstemmelse med de væsentlige krav og øvrige relevante krav i direktiver 2014/30/EU, 2014/35/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Nederlands [Dutch]** Hierbij verklaart UBIQUITI NETWORKS, dat deze N-SW apparaat, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijnen 2014/30/EU, 2014/35/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**English** Hereby, UBIQUITI NETWORKS, declares that this N-SW 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](http://www.ubnt.com/compliance)

**Eesti keel [Estonian]** Käesolevaga UBIQUITI NETWORKS kinnitab, et antud N-SW seade, on vastavus olulistele nõuetele ja teistele asjakohastele sätetele direktiivide 2014/30/EL, 2014/35/EL. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Suomi [Finnish]** Täten UBIQUITI NETWORKS vakuuttaa, että tämä N-SW laite, on yhdenmukainen olennaisten vaatimusten ja muiden sitä koskevien direktiivien 2014/30/EU, 2014/35/EU. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Français [French]** Par la présente UBIQUITI NETWORKS déclare que l'appareil N-SW, est conforme aux exigences essentielles et aux autres dispositions pertinentes des directives 2014/30/UE, 2014/35/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Deutsch [German]** Hiermit erklärt UBIQUITI NETWORKS, dass sich dieses N-SW Gerät, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinien 2014/30/EU, 2014/35/EU befindet. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Ελληνικά [Greek]** Δια του παρόντος, UBIQUITI NETWORKS, δηλώνει ότι αυτή η συσκευή N-SW, είναι σε συμμόρφωση με τις βασικές απαιτήσεις και τις λοιπές σχετικές διατάξεις των οδηγιών 2014/30/ΕΕ, 2014/35/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Magyar [Hungarian]** Ezennel UBIQUITI NETWORKS kijelenti, hogy ez a N-SW készülék megfelel az alapvető követelményeknek és más vonatkozó 2014/30/EU, 2014/35/EU irányelvek rendelkezéseit. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Íslenska [Icelandic]** Hér, UBIQUITI NETWORKS, því yfir að þetta N-SW tæki er í samræmi við grunnkröfur og önnur viðeigandi ákvæði tilskipana 2014/30/ESB, 2014/35/ESB. Fullur texti ESB samræmisýrirlýsing er að finna á eftirfarandi netfangi: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Italiano [Italian]** Con la presente, UBIQUITI NETWORKS, dichiara che questo dispositivo N-SW, è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti delle direttive 2014/30/UE, 2014/35/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Latviešu valoda [Latvian]** Ar šo, UBIQUITI NETWORKS, deklarē, ka N-SW ierīce, ir saskaņā ar būtiskajām prasībām un citiem attiecīgiem noteikumiem Direktīvās 2014/30/ES, 2014/35/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Lietuvių kalba [Lithuanian]** UBIQUITI NETWORKS deklaruoja, kad šis N-SW įrenginys atitinka esminius reikalavimus ir kitas 2014/30/ES, 2014/35/ES Direktyvų nuostatas. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Malti [Maltese]** Hawnhekk, UBIQUITI NETWORKS, tidjikkjara li dan il-mezz N-SW huwa konformi mar-rekwiżiti essenzjali u dispożizzjonijiet rilevanti oħrajn ta' Direttivi 2014/30/UE, 2014/35/UE. Id-dikjarazzjoni tal-konformità tista' tiġi kkonsultata minn [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Norsk [Norwegian]** Herved UBIQUITI NETWORKS, erklærer at denne N-SW enheten, er i samsvar med de grunnleggende kravene og andre relevante bestemmelser i direktivene 2014/30/EU, 2014/35/EU. Den fulle teksten til EU-samsvarserklæringen er tilgjengelig på følgende internetadresse: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Polski [Polish]** Niniejszym, Ubiquiti Networks, oświadczam, że urządzenie N-SW, jest zgodny z zasadniczymi wymaganiami oraz pozostałymi stosownymi postanowieniami Dyrektyw 2014/30/UE, 2014/35/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Português [Portuguese]** UBIQUITI NETWORKS declara que este dispositivo N-SW, 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](http://www.ubnt.com/compliance)

**Română [Romanian]** Prin prezenta, UBIQUITI NETWORKS declară că acest dispozitiv N-SW este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivelor 2014/30/UE, 2014/35/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

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

**Slovenščina [Slovenian]** Družba UBIQUITI NETWORKS izjavlja, da je naprava N-SW v skladu z obveznimi zahtevami in drugimi ustreznimi določbami direktiv 2014/30/EU in 2014/35/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

**Español [Spanish]** Por medio de la presente UBIQUITI NETWORKS declara que este dispositivo N-SW, 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](http://www.ubnt.com/compliance)

**Svenska [Swedish]** Härmed UBIQUITI NETWORKS, intygar att denna N-SW enhet är i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiven 2014/30/EU, 2014/35/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: [www.ubnt.com/compliance](http://www.ubnt.com/compliance)

## Online Resources

Website [www.ubnt.com](http://www.ubnt.com)

Support [help.ubnt.com](http://help.ubnt.com)

Community [community.ubnt.com](http://community.ubnt.com)

Downloads [downloads.ubnt.com](http://downloads.ubnt.com)



[www.ubnt.com](http://www.ubnt.com)

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