



# PowerBridge *M5X3*

Carrier Class  
AirMax BaseStation

QUICK START GUIDE



## Introduction

Thank you for purchasing the PowerBridge M5 X3. This is a point-to-point CPE wireless device.

## Package Contents



PowerBridge  
M5 X3



48V PoE  
Adapter



Power Cord



Antenna Bracket  
Clamps (Qty. 2)



Pole Bracket  
Clamps (Qty. 2)



M8X135  
Carriage Bolts  
(Qty. 4)



Serrated  
Flange Bolts  
(Qty. 4)



Serrated  
Flange Lock  
Nuts (Qty. 4)



GPS Patch  
Antenna



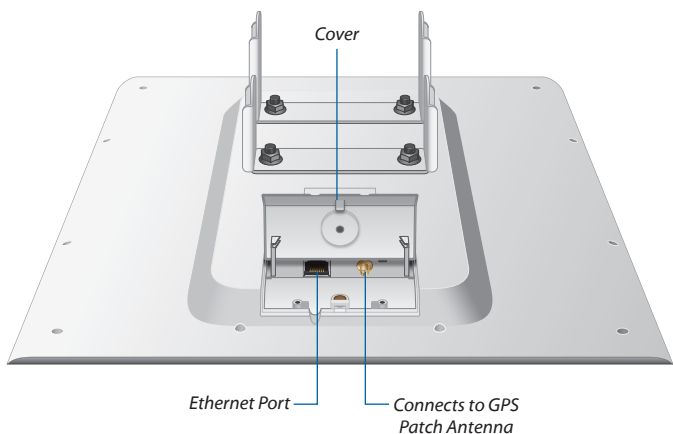
Quick Start  
Guide

## Installation Requirements

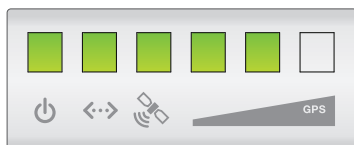
- Adjustable wrench or one 16 mm and one 24 mm wrench
- Flathead screwdriver
- Shielded Category 5 (or above) cabling should be used for all wired Ethernet connections and should be grounded through the AC ground of the PoE.

We recommend that you protect your networks from the most brutal environments and devastating ESD attacks with industrial-grade shielded Ethernet cable from Ubiquiti Networks. For more details, visit [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

## Hardware Overview



## LEDs



**Power** The Power LED will light steady green when the PowerBridge is connected to a power source.

**Ethernet** The Ethernet LED will light steady green when an active Ethernet connection is made and flash when there is activity.

**GPS** The GPS LED lights up green when the GPS signal strength can sustain AirSync operation. This requires a minimum of 3 satellite connections.

**Signal** The first Signal LED is lit when the wireless signal strength is above -94 dBm, the second LED when the wireless signal strength is above -77 dBm, and the third LED when the wireless signal strength is above -65 dBm.

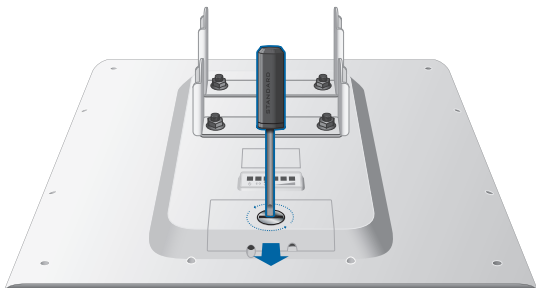


**Note:** By default, the Signal LEDs represent the wireless signal strength with default threshold values. In the airOS interface, you can modify the threshold values for each LED or configure the LEDs to display the GPS connection quality instead. The settings can be configured on the *Advanced* tab under *Signal LED Thresholds*.

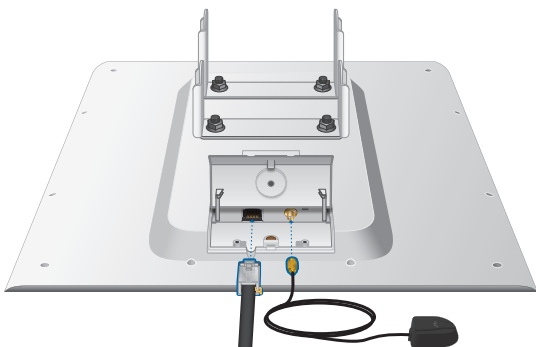
## Hardware Installation

To install the PowerBridge M5 X3, perform the following steps:

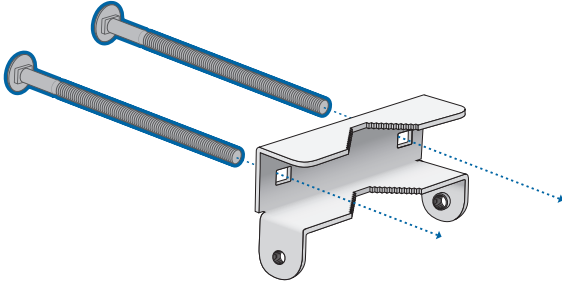
1. Use a flathead screwdriver to unlock the cover. Turn the screw counter-clockwise until it is loose. The screw remains attached to the cover. Lift the cover by pressing down and raising it up.



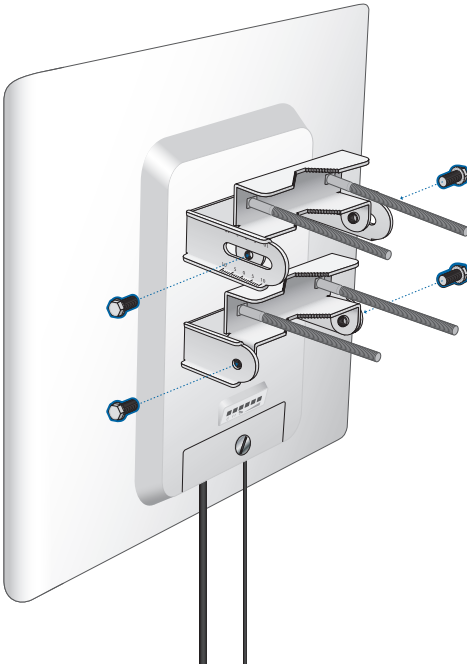
2. Connect an Ethernet cable and the GPS Patch Antenna. There are grooves for the cables on the cover. Align them properly and slide the cover back on and secure it with the screw.



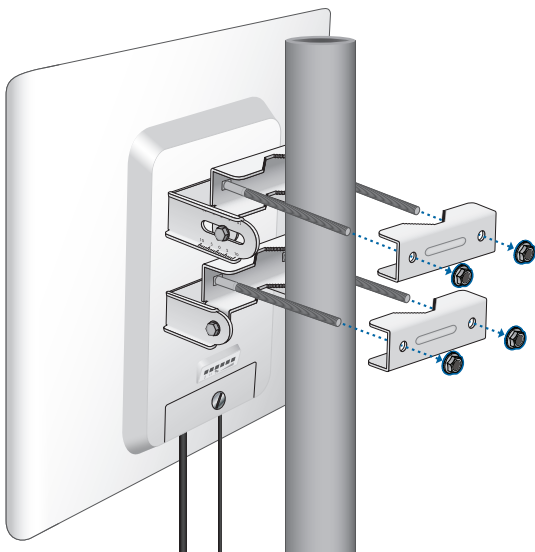
3. Insert the *M8X135 Carriage Bolts* into the *Antenna Bracket Clamps*.



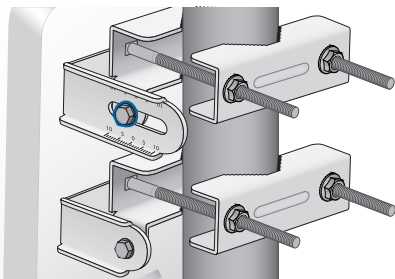
4. Connect the *Antenna Bracket Clamps* to the *PowerBridge* using the four *Serrated Flange Bolts*.



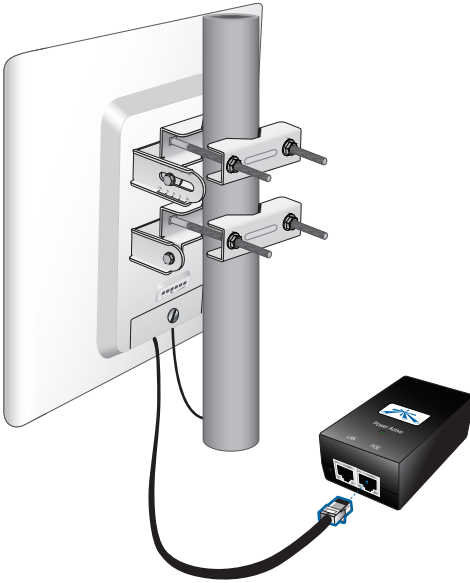
5. Mount the *PowerBridge* to the pole by performing the following steps:
  - a. Position the *PowerBridge* in the desired mounting location on the pole.
  - b. Slide the *Pole Bracket Clamps* on to the *Carriage Bolts*.
  - c. Use the four *Serrated Flange Lock Nuts* to secure the *PowerBridge* to the pole.



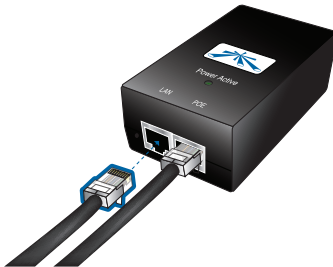
6. Adjust the operating angle of the *PowerBridge* by adjusting the *Serrated Flange Bolts* on the top *Antenna Bracket Clamp*.



7. Connect the other end of the Ethernet cable from the *PowerBridge* to the Ethernet port labeled **POE** on the *PoE Adapter*.



8. Connect an Ethernet cable from your LAN to the Ethernet port labeled **LAN** on the *PoE Adapter*.

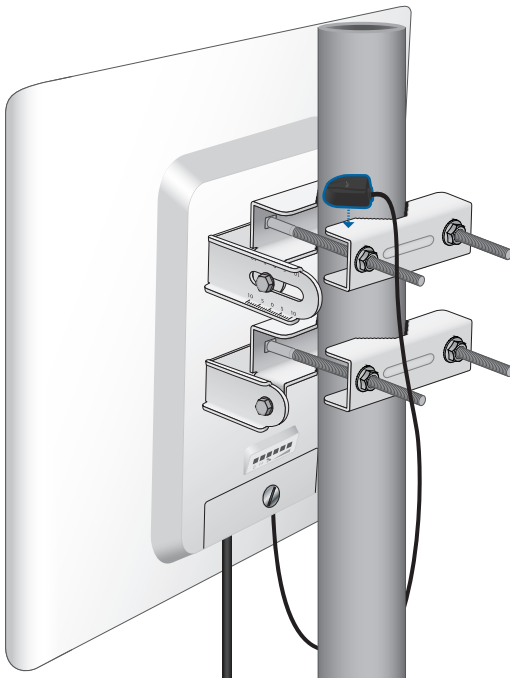




9. Connect the power cord to the power port on the *PoE Adapter*. Connect the other end of the power cord to a power outlet.



10. Place the GPS Patch Antenna on the mounting hardware.



## Accessing the AirOS Utility

1. Make sure that your host machine is connected to the LAN that is connected to the PowerBridge.
2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet (e.g. 192.168.1.100).
3. Launch your Web browser and type **http://192.168.1.20** in the address field and press enter (PC) or return (Mac).



4. The login screen will appear. Enter **ubnt** in the *Username* and *Password* fields. Select your *Country* and *Language*. You must agree to the *Terms of Use* to use the product. Click **Login**.



**Note:** U.S. product versions are locked to the U.S. Country Code to ensure compliance with FCC regulations.

A screenshot of the AirOS login interface. The top left features the "air OS" logo. On the right, there are input fields for "Username" (containing "ubnt"), "Password" (with masked characters), "Country" (set to "United States"), and "Language" (set to "English"). Below these fields is a "Login" button. On the left side, under the heading "TERMS OF USE", there is a paragraph of text and a checkbox labeled "I agree to these terms of use" which is checked.

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

## Installer Compliance Responsibility

Devices must be professionally installed and it is the professional installer's responsibility to make sure the device is operated within local country regulatory requirements.

## Specifications

Enclosure Size	445 x 416 x 34 mm
Weight	3.82 kg
Max Power Consumption	8 Watts
Power Supply	48V, 0.5A surge protection integrated PoE adapter included
Power Method	Passive PoE (Pairs 4, 5+; 7,8 return)
Operating Temperature	-30 to 80° C
Operating Humidity	5 to 95% Condensing
Operating Frequency	
Device Supports	5170 - 5875 MHz
USA/Canada Supports*	5745 - 5850 MHz
Networking Interface	(1) 10/100/1000 Ethernet Port

\* Products shipped in the USA/Canada are locked to the US Country Code to ensure compliance with FCC regulations.

## 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 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.

## General Warranty

UBIQUITI NETWORKS, Inc (“UBIQUITI NETWORKS”) represents and warrants that the Products furnished hereunder 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 under the foregoing warranty shall be to repair or replace, at its option, any defective Product that fails during the warranty period. The expense of removal and reinstallation of any item is not included in this warranty.

The foregoing warranty is exclusive and in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose and any warranties arising from a course of dealing, usage or trade practice with respect to the products. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of Buyer for breach of warranty and shall constitute fulfillment of all liabilities of UBIQUITI NETWORKS with respect to the quality and performance of the Products. UBIQUITI NETWORKS reserves the right to inspect all defective Products (which must be returned by Buyer to UBIQUITI NETWORKS factory freight prepaid).

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned to Buyer freight collect. UBIQUITI NETWORKS shall have no obligation to make repairs or replacement necessitated by catastrophe, fault, negligence, misuse, abuse, or accident by Buyer, Buyer’s customers or any other parties. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

## Warranty Conditions

The foregoing warranty shall apply only if:

- (I) The Product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident.

- (II) No modification, alteration or addition has been made to the Product by persons other than UBIQUITI NETWORKS or UBIQUITI NETWORK'S authorized representatives or otherwise approved by UBIQUITI NETWORKS.
- (III) The Product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation.
- (IV) All Ethernet cabling runs use CAT5 (or above) shielded cabling.

Disclaimer: UBIQUITI NETWORKS does not warrant that the operation of the products is error-free or that operation will be uninterrupted. In no event shall UBIQUITI NETWORKS be responsible for damages or claims of any nature or description relating to system performance, including coverage, buyer's selection of products for buyer's application and/or failure of products to meet government or regulatory requirements.

## Returns

In the unlikely event a defect occurs, please work through the dealer or distributor from which this product was purchased.

## Compliance

### FCC

Changes or modifications not expressly approved by Ubiquiti Networks, Inc. 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 interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

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.

## RF Exposure Warning

The transceiver described here emits radio frequency energy. Although the power level is low, the concentrated energy from a directional antenna may pose a health hazard. Do not allow people to come closer than 157 cm to the antenna when the transmitter is operating.

Additional information on RF exposure is available on the Internet at **[www.fcc.gov/oet/info/documents/bulletins](http://www.fcc.gov/oet/info/documents/bulletins)**

L'émetteur-récepteur décrit ici émet de l'énergie de fréquence radio. Bien que le niveau de puissance est faible, l'énergie concentrée à partir d'une antenne directionnelle peut présenter un danger pour la santé. Ne pas permettre aux gens de se rapprocher de 157 cm à l'antenne lorsque l'émetteur est en marche.

Des renseignements supplémentaires sur l'exposition aux RF est disponible sur Internet à **[www.fcc.gov/oet/info/documents/bulletins](http://www.fcc.gov/oet/info/documents/bulletins)**

## CE Marking

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

### Alert sign! Follows CE marking

Alert sign must be indicated if a restriction on use applied to the product and it must follow the CE marking.



### NB-Identification number (if there is any)

Notified body number is indicated if it is involved in the conformity assessment procedure.



Please check the CE mark on the product label to find out which notified body was involved during assessment.

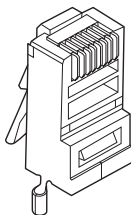
## Declaration of Conformity

Česky [Czech]	UBIQUITI NETWORKS tímto prohlašuje, že tento UBIQUITI NETWORKS device, je ve shodě se základními požadavky a dále s ostatními ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede UBIQUITI NETWORKS erklærer herved, at følgende udstyr UBIQUITI NETWORKS device, overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Nederlands [Dutch]	Hierbij verklaart UBIQUITI NETWORKS dat het toestel UBIQUITI NETWORKS device, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. Bij deze verklaart UBIQUITI NETWORKS dat deze UBIQUITI NETWORKS device, voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
English	Hereby, UBIQUITI NETWORKS, declares that this UBIQUITI NETWORKS device, is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Eesti [Estonian]	Käesolevaga kinnitab UBIQUITI NETWORKS seadme UBIQUITI NETWORKS device, vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Suomi [Finnish]	UBIQUITI NETWORKS vakuuttaa täten että UBIQUITI NETWORKS device, tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Français [French]	Par la présente UBIQUITI NETWORKS déclare que l'appareil UBIQUITI NETWORKS device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Deutsch [German]	Hiermit erklärt UBIQUITI NETWORKS, dass sich diese UBIQUITI NETWORKS device, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW)
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ UBIQUITI NETWORKS ΔΗΛΩΝΕΙ ΟΤΙ UBIQUITI NETWORKS device, ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1995/5/ΕΚ.
Magyar [Hungarian]	Alulírott, UBIQUITI NETWORKS nyilatkozom, hogy a UBIQUITI NETWORKS device, megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Íslenska [Icelandic]	Hér með lýsir UBIQUITI NETWORKS yfir við a UBIQUITI NETWORKS device, er í samræmi við grunnkröfur og a rar kröfur, sem ger a eru í tilskipun 1999/5/EC.
Italiano [Italian]	Con la presente UBIQUITI NETWORKS dichiara che questo UBIQUITI NETWORKS device, è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.



<b>Latviski</b> [Latvian]	Ar o UBIQUITI NETWORKS deklar , ka UBIQUITI NETWORKS device, atbilst Direkt vas 1999/5/EK b tiskaj m pras b m un citiem ar to saist tajiem noteikumiem.
<b>Lietuviškai</b> [Lithuanian]	UBIQUITI NETWORKS deklaruoja, kad šis UBIQUITI NETWORKS įrenginys atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
<b>Malti</b> [Maltese]	Hawnhekk, UBIQUITI NETWORKS, jiddikjara li dan UBIQUITI NETWORKS device, jikkonforma mal- ti ijjiet essenzjali u ma provvedimenti o rajn rilevanti li hemm fid-Dirrettiva 1999/5/EC.
<b>Norsk</b> [Norwegian]	UBIQUITI NETWORKS erklærer herved at utstyret UBIQUITI NETWORKS device, er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
<b>Slovensky</b> [Slovak]	UBIQUITI NETWORKS t mto vyhlasuje, e UBIQUITI NETWORKS device, sp a základné po iadavky a v etky príslu né ustanovenia Smernice 1999/5/ES.
<b>Svenska</b> [Swedish]	Härmed intygar UBIQUITI NETWORKS att denna UBIQUITI NETWORKS device, står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
<b>Español</b> [Spanish]	Por medio de la presente UBIQUITI NETWORKS declara que el UBIQUITI NETWORKS device, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
<b>Polski</b> [Polish]	Niniejszym, firma UBIQUITI NETWORKS o wiadcza, e produkt serii UBIQUITI NETWORKS device, spełnia zasadnicze wymagania i inne istotne postanowienia Dyrektywy 1999/5/EC.
<b>Português</b> [Portuguese]	UBIQUITI NETWORKS declara que este UBIQUITI NETWORKS device, está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

# TOUGH Cable™



## English

We recommend that you protect your networks from the most brutal environments and devastating ESD attacks with industrial-grade shielded Ethernet cable from Ubiquiti Networks. For more details, visit [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

## Deutsch

Schützen Sie Ihre Netzwerke vor extremen Umwelteinflüssen und verheerender elektrostatischer Entladung (ESD), indem Sie abgeschirmte Ethernetkabel in Unternehmensqualität von Ubiquiti Networks verwenden. Weitere Informationen erhalten Sie unter [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

## Español

Le recomendamos que proteja sus redes de los entornos más hostiles y los devastadores efectos de las descargas electrostáticas utilizando cable Ethernet blindado con calidad-industrial de Ubiquiti Networks. Para obtener más información, visite [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

## Français

Nous vous recommandons de protéger vos réseaux contre les environnements les plus brutaux et les décharges électrostatiques les plus dévastatrices avec un câble Ethernet Ubiquiti Networks avec blindage renforcé. Pour en savoir plus, rendez-vous sur [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

## Italiano

Si consiglia di proteggere le reti dagli ambienti e dagli attacchi ESD più invasivi con il cavo Ethernet schermato-di tipo industriale di Ubiquiti Networks. Per ulteriori informazioni, visitare il sito Web [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)



## Ubiquiti Networks Support

Email: **support@ubnt.com**

Phone (9 a.m. - 5 p.m. PST): **408-942-1153**

## Online Resources

Wiki Page: **www.ubnt.com/wiki**

Support Forum: **www.ubnt.com/forum**

Knowledge Base: **www.ubnt.com/kb**

Downloads: **www.ubnt.com/support/downloads**

