

## UBB Quick Start Guide

## Package Contents



UBB (Qty. 2)



Ball Joint Mount (Qty. 2)



Lock Ring (Qty. 2)



Metal Strap (Qty. 2)

Gigabit PoE (48V, 0.32A) with  
Mounting Bracket (Qty. 2)

Power Cord (Qty. 2)

## System Requirements

- One of the following:
  - UniFi Cloud Key (1.0.5 or newer) or UniFi Dream Machine (1.0.1 or newer)
  - Linux, Mac OS X, or Microsoft Windows 7/8/10

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- UniFi Network App (iOS or Android™) or Web Browser (Google Chrome preferred)

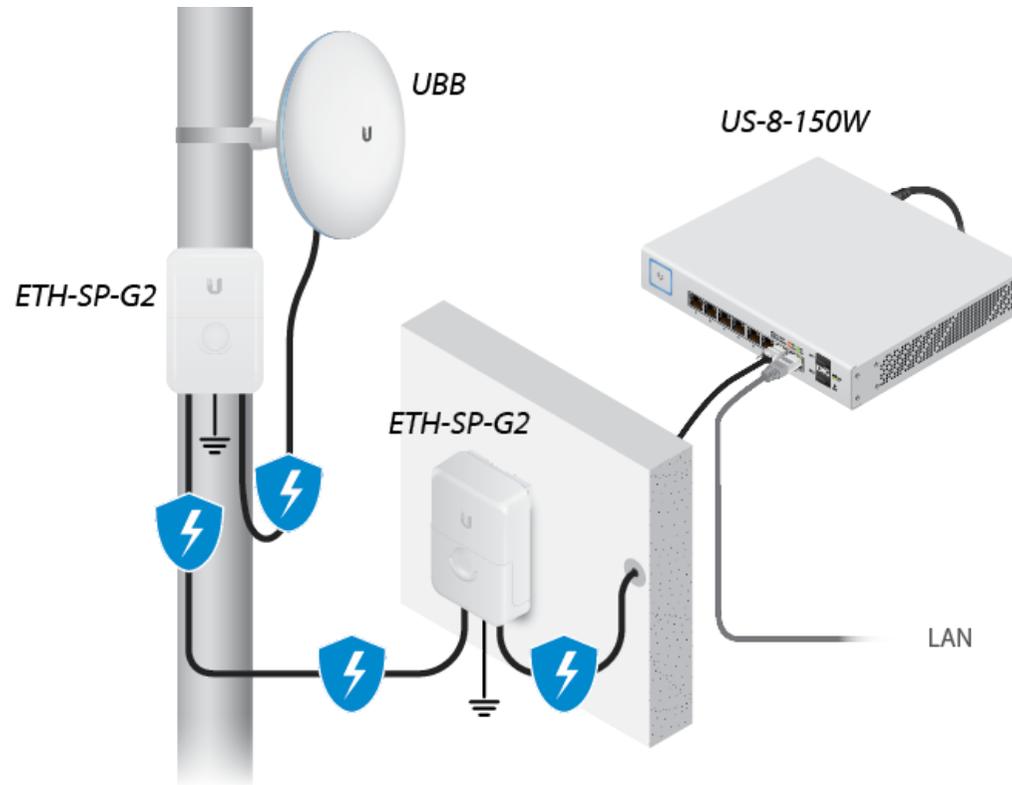
## Installation Requirements

- Pole-mounting: 8 mm socket wrench or screwdriver
- Wall-mounting: wall fastener (not included)
- The device needs to have clear line of sight to the sky for proper GPS operation.
- 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. For more details, visit [ui.com/toughcable](http://ui.com/toughcable)

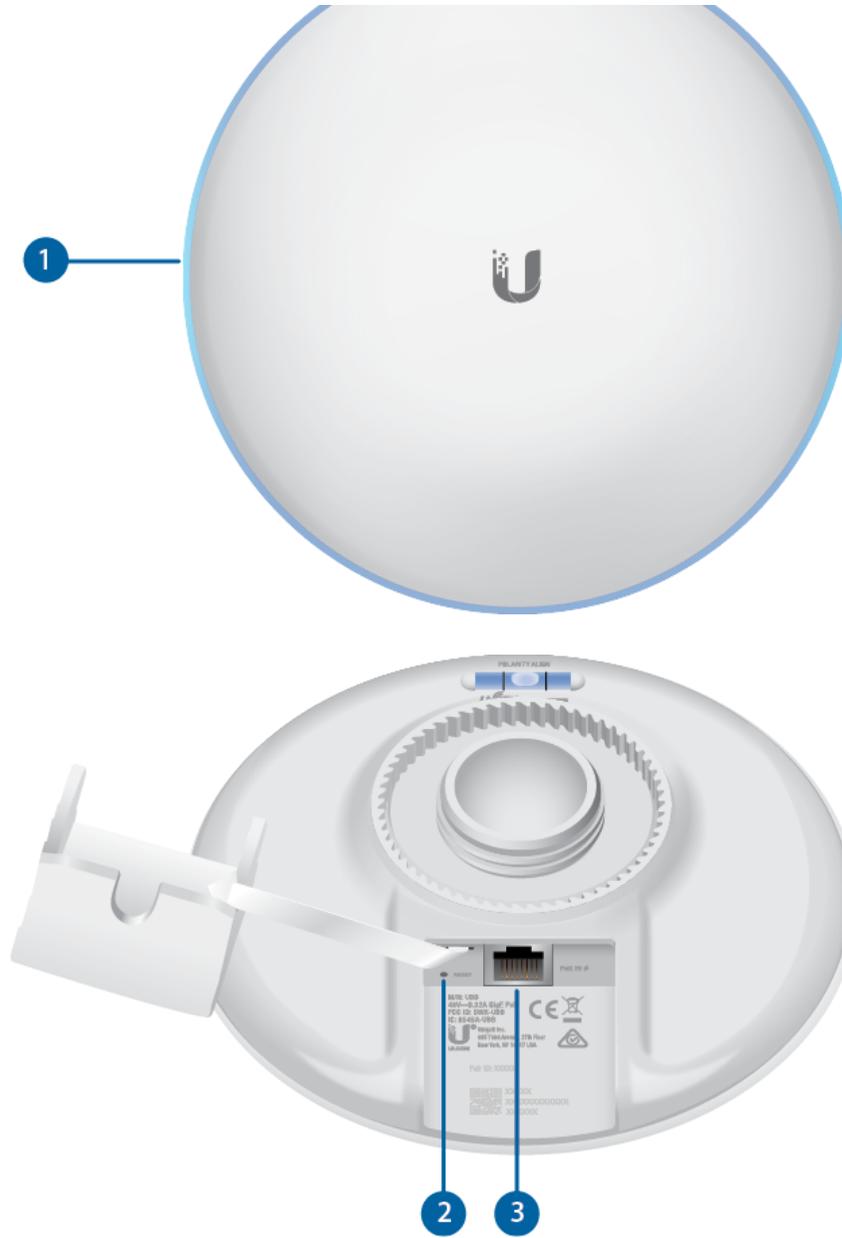
- Surge protection should be used for all outdoor installations. We recommend that you use two Ethernet Surge Protectors, model ETH-SP-G2, one near the device and the other at the entry point to the building. The ETH-SP-G2 will absorb power surges and safely discharge them into the ground.

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## Hardware Overview

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**1** System LED

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|                        |  |
|------------------------|--|
| White                  | Factory defaults, waiting for integration.   |
| Alternating White/Blue | Device is busy; do not touch or unplug it. This usually indicates that a process such as a firmware upgrade is taking place.   |
| Blue                   | Successfully integrated into a network and working properly.   |
| Flashing               | This is used to locate a device.<br>When you click Locate in the UniFi Network Controller software, the LED will flash blue. The software will also display the location of the device on the map. |

## 2 Reset Button

Resets to factory defaults. The device should be running after bootup is complete. Press and hold the Reset button for about 10 seconds until the LED starts flashing and then becomes solidly lit. After a few seconds, the LED will turn off, and the device will automatically reboot.



**Note:** The UBB radios are pre-paired. If a link is lost due to configuration changes, you can reset both UBB radios to re-establish the link.

## 3 Ethernet Port

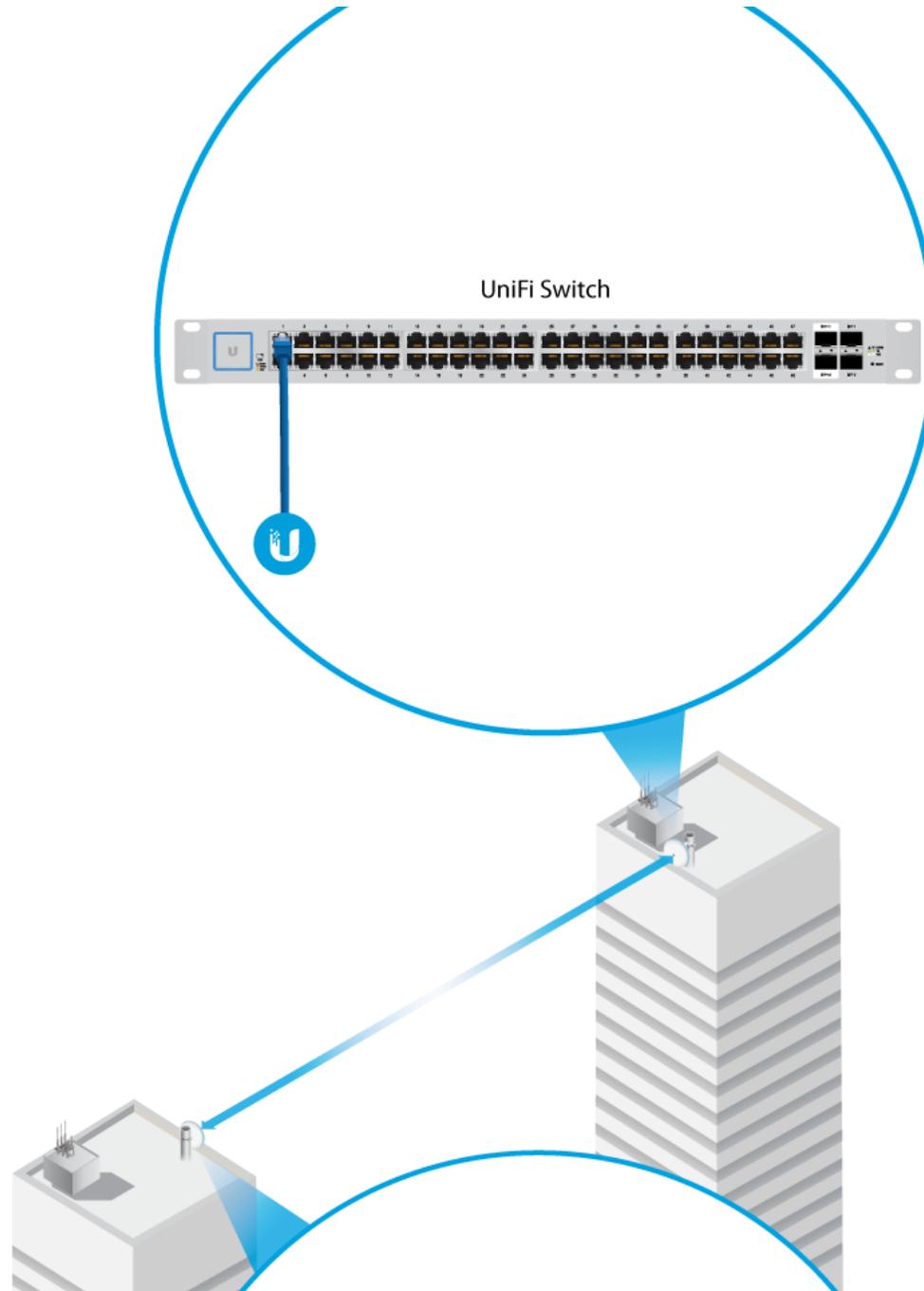
**Local UBB radio (source LAN)** This Gigabit Ethernet port is used to connect the power and should be connected to the LAN and DHCP server.

**Remote UBB radio (bridged LAN)** This Gigabit Ethernet port is used to connect the power and should be connected to the LAN. It will receive its IP address from the

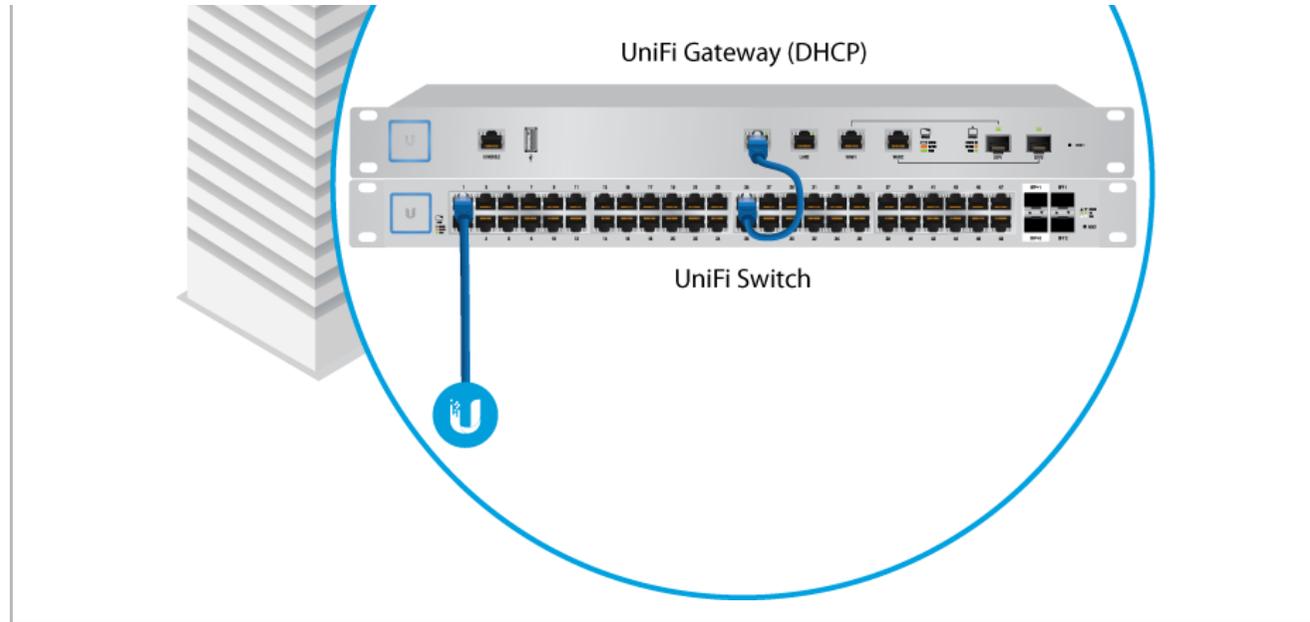
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## Hardware Installation

For each UBB radio, go to the appropriate mounting instructions: Pole Mounting or [“Wall Mounting”](#).

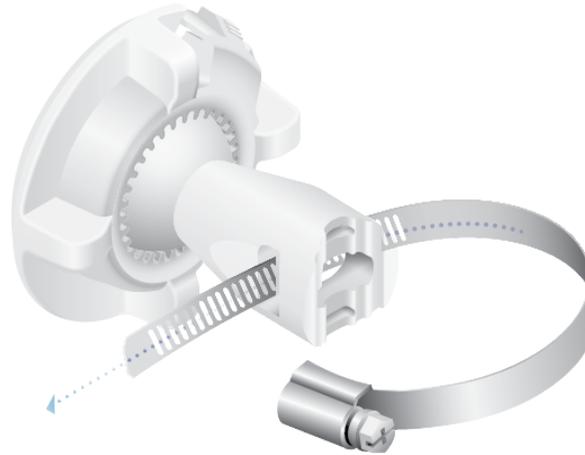
### Pole-Mounting

- 1.

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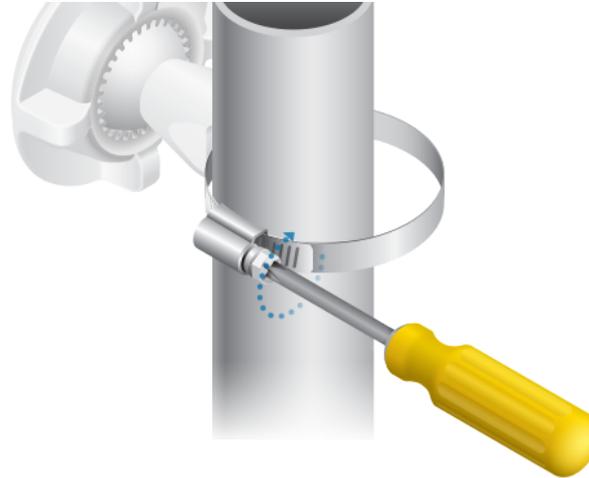


2.



3.

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4.

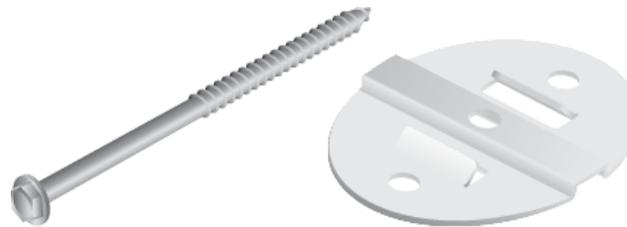


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The device must be mounted directly to a wood stud or other structurally stable surface to avoid damage to the mounting hole when you adjust the aim.

### Optional Accessory

To enhance stability, you can use the NanoBeam® Wall Mount Kit, model NBE-WMK (sold separately).

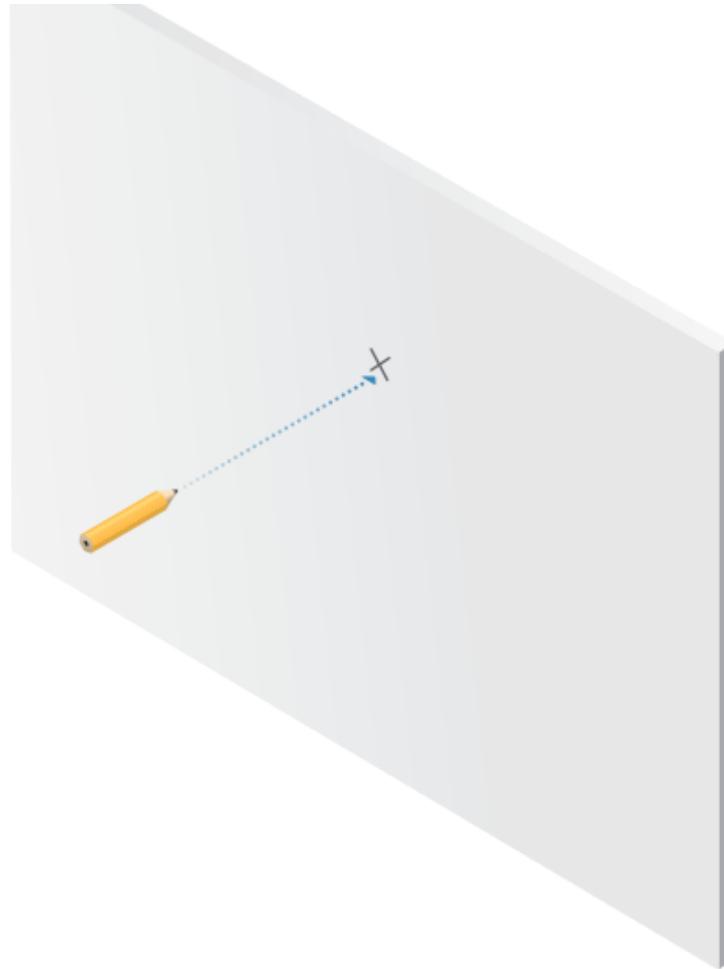


**Note:** Center screw included. Two optional screws (not included) provide additional stability.

### Installation Instructions

- 1.

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2.

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3.

OR

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*Fastener (not included)*



*NanoBeam Wall Mount Kit*

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## Aiming

Visually aim the UBB radios at each other:

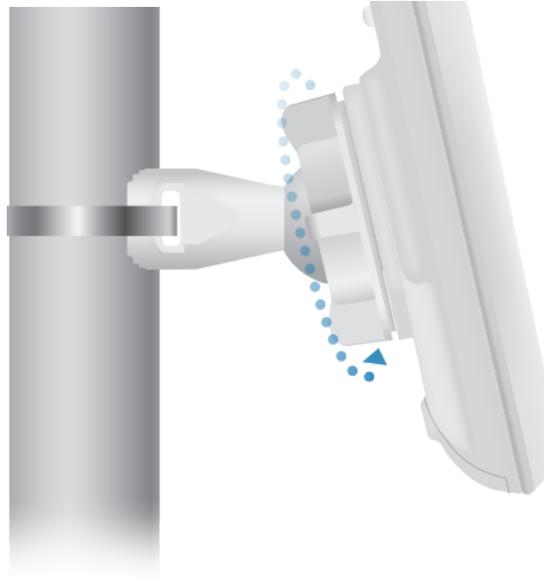
- 1.

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2.

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## Connecting Power

For each UBB radio:

- 1.

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2.

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3.

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4.  **WARNING:** The switch port must comply with the power specifications listed in the Specifications section of this Quick Start Guide.

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OR



Optional

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## Adopting the UBB

The UBB radios are pre-paired. For each UBB radio, you have the following options:

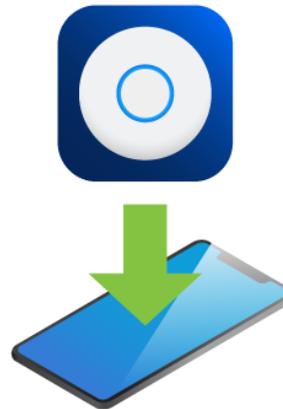
- [“Using the UniFi Network App”](#)
- [“Using the UniFi Network Software”](#)



**Note:** If a link is lost due to configuration changes, you can reset both UBB radios to re-establish the link.

## Using the UniFi Network App

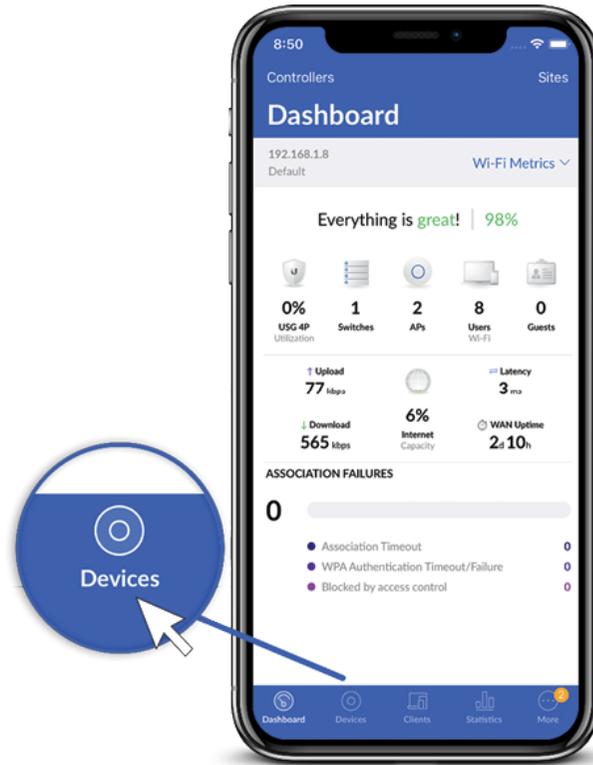
1.



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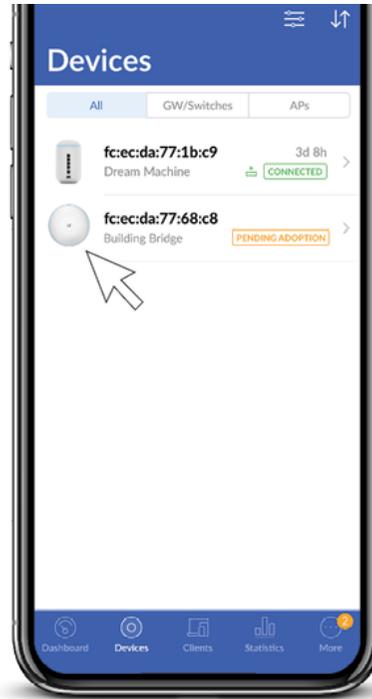


2.



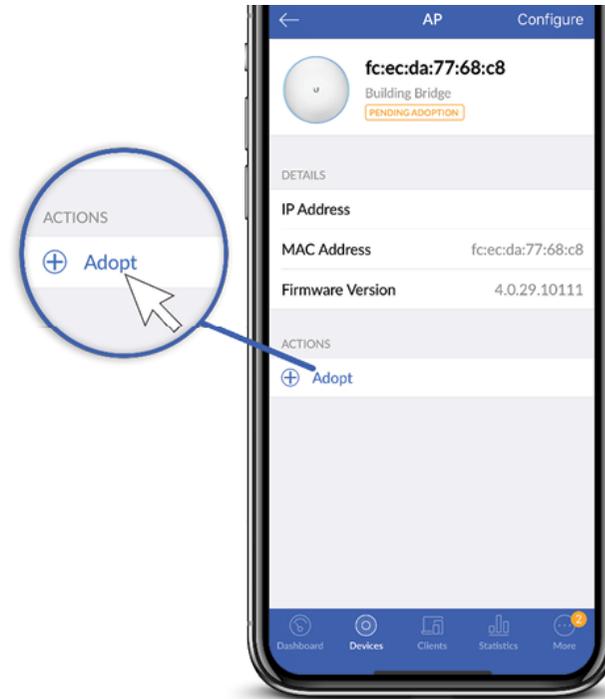
3.

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4.

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5. The System LED will turn blue to confirm that it has been successfully adopted.

## Using the UniFi Network Software

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

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- On the Devices screen, locate the UBB in the list of devices under the Model column. To adopt the UBB, click Adopt.

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| DEVICE NAME | IP ADDRESS   | STATUS | MODEL      | VERSION   | EVENTS | POWER | IP           | CHANNEL   |
|-------------|--------------|--------|------------|-----------|--------|-------|--------------|-----------|
| uwb01_1     | 192.168.1.10 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.10 | 4.0.1.001 |
| uwb01_2     | 192.168.1.11 |        | UBB-AP-001 | 4.0.1.001 | 2      | 20.00 | 192.168.1.11 | 4.0.1.001 |
| uwb01_3     | 192.168.1.12 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.12 | 4.0.1.001 |
| uwb01_4     | 192.168.1.13 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.13 | 4.0.1.001 |
| uwb01_5     | 192.168.1.14 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.14 | 4.0.1.001 |
| uwb01_6     | 192.168.1.15 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.15 | 4.0.1.001 |
| uwb01_7     | 192.168.1.16 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.16 | 4.0.1.001 |
| uwb01_8     | 192.168.1.17 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.17 | 4.0.1.001 |
| uwb01_9     | 192.168.1.18 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.18 | 4.0.1.001 |
| uwb01_10    | 192.168.1.19 |        | UBB-AP-001 | 4.0.1.001 | 1      | 20.00 | 192.168.1.19 | 4.0.1.001 |

3. The System LED will turn blue to confirm that it has been successfully adopted.

## Specifications

| UBB                  |  |
|----------------------|--|
| Dimensions           | 140 x 140 x 90 mm (5.51 x 5.51 x 3.54")                |
| Weight               | 376 g (13.3 oz)  |
| Antenna Gain         |  |
| 2.4 GHz (BLE)        | 2 dBi  |
| 5 GHz                | 10 dBi   |
| 60 GHz               | 17.2 dBi   |
| GPS                  | Yes  |
| Networking Interface | 10/100/1000 Ethernet Ports<br>Bluetooth for Management |
| Enclosure            | UV-Resistant Polycarbonate                             |

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|                        |   |
|------------------------|---|
| Power Method           | 0.32A Supported<br>Passive Power over Ethernet (48V)          |
| Power Supply           | UniFi PoE Switch<br>48V, 0.32A Gigabit PoE Adapter (Included) |
| Max. Power Consumption | 11W   |
| Wind Loading           | 56 N @ 200 km/h (12.6 lbf @ 125 mph)                          |
| Wind Survivability     | 200 km/h (125 mph)  |
| Mounting               | Pole-Mount (Kit Included)<br>Wall-Mount (Not Included)        |
| ESD/EMP Protection     | ± 24kV Contact/Air  |
| Operating Temperature  | -40 to 60° C (-40 to 140° F)                                  |
| Operating Humidity     | 5 to 95% Noncondensing  |
| Certifications         | CE, FCC, IC   |

| Operating Frequency (MHz) |          |                                |
|---------------------------|----------|--------------------------------|
| Worldwide                 |          | 5150 - 5875<br>57,000 - 66,000 |
| US/CA                     | U-NII-1: | 5150 - 5250                    |
|                           | U-NII-3: | 5725 - 5850                    |
|                           |          | 57,000 - 66,000                |

| Bluetooth (MHz) |               |
|-----------------|---------------|
| Worldwide       | 2400 - 2483.5 |

## Safety Notices

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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.

## Limited Warranty

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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.

This radio transmitter has been approved by FCC.

### ISED Canada

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

This device complies with ISED Canada licence-exempt RSS standard(s). 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.

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The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

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

Le présent appareil est conforme aux CNR d'ISDE Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage;
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Le présent émetteur radio a été approuvé par ISDE Canada.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

## IMPORTANT NOTE

### Radiation Exposure Statement

- This equipment complies with radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## AVIS IMPORTANT

### Déclaration sur l'exposition aux rayonnements

- Cet équipement est conforme aux limites prévues pour l'exposition aux rayonnements dans un environnement non contrôlé.

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- Cet émetteur ne doit être installé à proximité d'aucune autre antenne ni d'aucun autre émetteur, et ne doit être utilisé conjointement à aucun autre de ces appareils.

### 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.

### Brazil



Nota: Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

### CE Marking

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



Country List



|    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| AT | BE | BG | CY | CZ | DE | DK | EE | EL | ES | FI | FR | HR | HU |
| IE | IT | LV | LT | LU | MT | NL | PL | PT | RO | SE | SI | SK | UK |

BFWA (Broadband Fixed Wireless Access) members noted in blue



Note: This device meets Max. TX power limit per ETSI regulations.

The following apply to products that operate in the 5 GHz frequency range:

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-  **Note:** All countries listed may operate at 30 dBm. BFWA member states may operate at 36 dBm.
-  **Note:** Operation in the 5.8 GHz frequency band is prohibited in BFWA member states. Other countries listed may use the 5.8 GHz frequency band.

## WEEE Compliance Statement

## Online Resources



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