



## NanoBeam<sup>ac</sup>

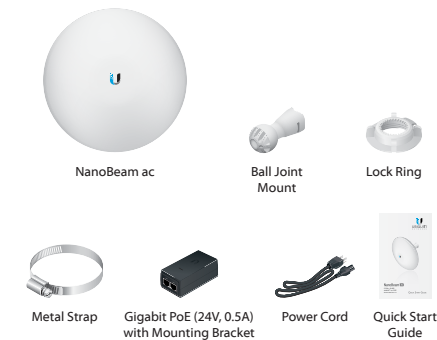
5 GHz, 19 dBi  
airMAX<sup>ac</sup> CPE  
Model: NBE-5AC-19

### QUICK START GUIDE

## Introduction

Thank you for purchasing the Ubiquiti Networks<sup>®</sup> NanoBeam<sup>ac</sup>. This Quick Start Guide is designed to guide you through installation and also includes warranty terms.

### Package Contents



TERMS OF USE: Ubiquiti radio devices must be professionally installed. Shielded Ethernet cable and earth grounding must be used as conditions of product warranty. TOUGH Cable™ is designed for outdoor installations. It is the customer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, and Dynamic Frequency Selection (DFS) requirements.

## Installation Requirements

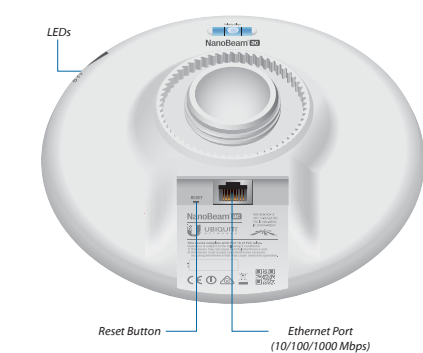
The NanoBeam can be mounted on a pole or to a wall. A *Metal Strap* (included) is used for pole-mounting. For wall-mounting, a suitable fastener such as a screw or bolt (not included) is required.

- Pole-mounting: 7 mm socket wrench or screwdriver
- Wall-mounting: wall fastener (not included)
- 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, TOUGH Cable from Ubiquiti Networks.

For more details, visit [www.ubnt.com/toughcable](http://www.ubnt.com/toughcable)

### Hardware Overview



**Reset Button** To reset to factory defaults, press and hold the *Reset* button for more than 10 seconds while the NanoBeam is already powered on. Alternatively, the NanoBeam may be reset remotely via a *Reset* button located on the bottom of the *Gigabit PoE Adapter*.

**Ethernet Port** This Gigabit Ethernet port is used to connect the power and should be connected to the LAN and DHCP server. Power can be provided by any of the following:

- *Gigabit PoE Adapter* (included)
- Ubiquiti Networks TOUGHSwitch™ PoE
- Ubiquiti Networks EdgeSwitch™ or EdgeRouter™ PoE

### LEDs

- **Power** The Power LED will light blue when the device is connected to a power source.
- **Ethernet** The Ethernet LED will light steady blue when an active Ethernet connection is made and flash when there is activity.
- **Signal** The default values are shown below:
  - LED will light blue when the wireless signal strength is equal to or above -94 dBm.
  - LED will light blue when the wireless signal strength is equal to or above -80 dBm.
  - LED will light blue when the wireless signal strength is equal to or above -73 dBm.
  - LED will light blue when the wireless signal strength is equal to or above -65 dBm.

## Hardware Installation

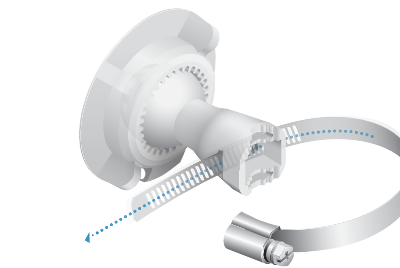
The NanoBeam can be mounted on a pole or to a wall. Perform the steps for the appropriate installation:

### Pole-Mount

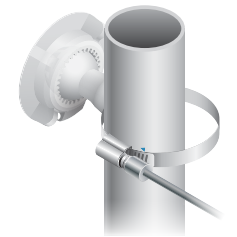
1. Insert the *Ball Joint Mount* into the *Lock Ring* with the threads of the *Lock Ring* facing the ball joint.



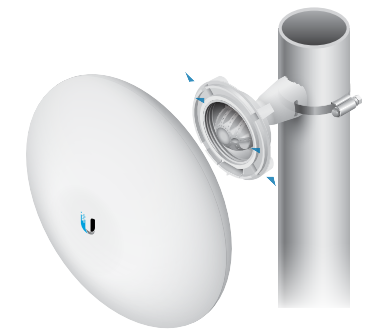
2. Open the *Metal Strap* and feed it through the base of the *Ball Joint Mount*.



3. Wrap the *Metal Strap* around the pole. Use a 7 mm socket wrench to turn the screw clockwise and securely fasten the clamp to the pole.



4. Attach the NanoBeam to the *Ball Joint Mount* and turn the *Lock Ring* to secure it. Keep the *Lock Ring* loose enough to allow the NanoBeam to pivot for aiming.



### Wall-Mount

The NanoBeam 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.

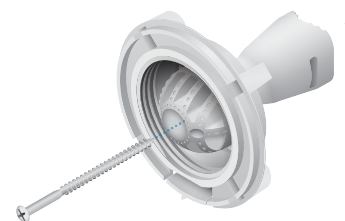
### Installation Instructions

1. Mark the desired location of the mounting point.
2. If needed, drill a pilot hole for the fastener (not included).
3. Insert the *Ball Joint Mount* into the *Lock Ring* with the threads of the *Lock Ring* facing the ball joint.

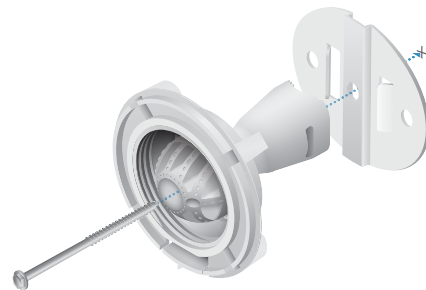


4. If you are using the optional NanoBeam Wall Mount Kit, then skip to step b.

- a. To attach the *Ball Joint Mount* to the wall, insert a fastener (not included) through the center of the ball joint, and into the wall. Securely tighten the fastener. Proceed to step 5.



- b. To attach the *Ball Joint Mount* to the wall, insert the *Wall Mount Kit* screw through the center of the ball joint, through the *Wall Mount Kit* plate, and into the wall. Securely tighten the screw.



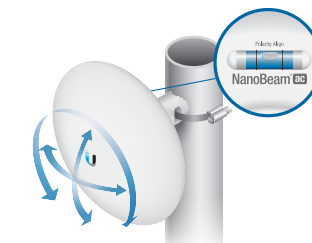
5. Attach the NanoBeam to the mount *Ball Joint Mount* and turn the *Lock Ring* to secure it. Keep the *Lock Ring* loose enough to allow the NanoBeam to pivot for aiming.



### Aiming

1. Aim the front of the NanoBeam towards the other end of the wireless link, while using the bubble level to ensure level alignment.
2. Hand-tighten the *Lock Ring* to lock the aim.

**Note:** Do not use a tool to tighten the *Lock Ring*. Tighten the *Lock Ring* by hand only.



### Connecting to the PoE Adapter

1. Remove the port cover by pressing down the center of the cover and sliding the cover out.



2. Connect an Ethernet cable to the *Ethernet* port.



3. Replace the port cover.

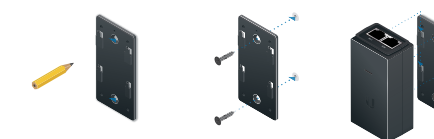
### Connecting Power over Ethernet

1. Connect the Ethernet cable from the NanoBeam's *Ethernet* port to the adapter's **POE** port.
2. Connect an Ethernet cable from your LAN to the adapter's **LAN** port.
3. Connect the *Power Cord* to the adapter's power port. Connect the other end of the *Power Cord* to a power outlet.



### Mounting the PoE Adapter (Optional)

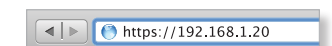
1. Remove the *PoE Mounting Bracket* from the adapter, place the bracket at the desired location, and mark the two holes.
2. Pre-drill the holes if necessary, and secure the bracket using two fasteners (not included).
3. Align the adapter's slots with the tabs of the *PoE Mounting Bracket*, and then slide the adapter down.



### Accessing airOS

Verify connectivity in the airOS<sup>®</sup> Configuration Interface.

1. Make sure that your host system is connected via Ethernet to the NanoBeam.
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 and type <https://192.168.1.20> in the address field. 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:** For the *Country* setting, U.S. product versions are restricted to a choice of Canada, Puerto Rico, or the U.S. to ensure compliance with FCC/IC regulations.

The airOS Configuration Interface will appear, allowing you to customize your settings as needed. For additional details on the airOS Configuration Interface, refer to the User Guide available at [documentation.ubnt.com/airmax](http://documentation.ubnt.com/airmax)

