



airPRISM[®]

5 GHz, 3x30° HD
Sector Antenna

Model: AP-5AC-90-HD

QUICK START GUIDE

Introduction

Thank you for purchasing the Ubiquiti Networks® airPrism® 5 GHz 3x30° HD Sector Antenna. This Quick Start Guide is designed to guide you through installation and also includes warranty terms.

Package Contents



airPrism
Antenna



Protective
Shrouds (Qty. 3)



U-Brackets
(Qty. 2)



Pole Brackets
(Qty. 2)



Pole Clamps
(Qty. 2)



Carriage Bolts
(M10x150, Qty. 4)



Hex Bolts with Washers
(M8x20, Qty. 8)



Serrated Flange Nuts
(M10, Qty. 4)



Hex Nuts
(M10, Qty. 4)

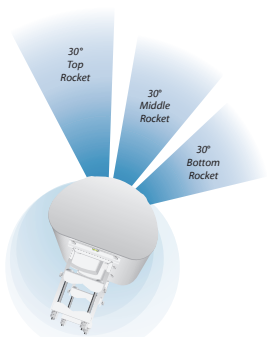
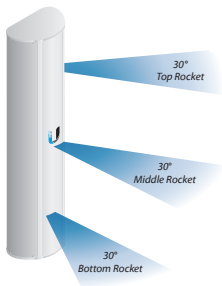


Quick Start Guide

TERMS OF USE: Ubiquiti radio devices must be professionally installed. Shielded Ethernet cable and earth grounding must be used as conditions of product warranty. TOUGHcable™ 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.

Beamwidth

The airPrism antenna works with the Rocket®5ac Prism™ radios for Point-to-MultiPoint (PtMP) links. Each Rocket radio corresponds with a specific 30° beamwidth and independently transmits and receives.

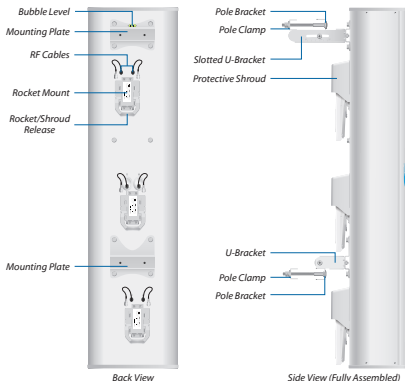


Channel Offset

The following table describes how much offset is needed with the channels used by the Rocket5ac Prism radios:

Channel Width	Separation
10 MHz	20 MHz
20 MHz	30 MHz
30 MHz	50 MHz
40 MHz	60 MHz

Hardware Overview



Installation Requirements

- (3) Rocket5ac Prism Radios, model R5AC-PRISM (sold separately)
- 13 mm and 17 mm Wrenches
- 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 harmful outdoor environments and destructive ESD events with industrial-grade, shielded Ethernet cable from Ubiquiti Networks. For more details, visit: www.ubnt.com/toughcable

Hardware Installation

1. Press down on the port cover of the Rocket and slide it off.



2. Connect an Ethernet cable to the LAN port.



3. Replace the port cover.

4. Attach the Rocket to the *Rocket Mount*.
 - a. Align the mounting tabs on the back of the Rocket with the four mounting slots on the bracket.
 - b. Slide the Rocket down until it locks into place.



5. Attach the ends of the *RF Cables* to the RF connectors in this combination: *V* to *Chain 1* and *H* to *Chain 0*.



6. Slide the *Protective Shroud* over the Rocket until it locks into place on the *Rocket Mount*.




Note: If you have trouble locking the shroud into place, try adjusting the placement of the *RF Cables*.

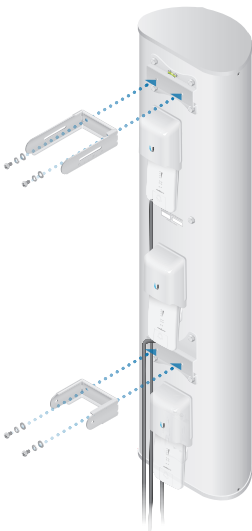
7. Repeat steps 1-6 for the other two Rocket radios.

8. Attach the *U-Brackets* to the antenna:

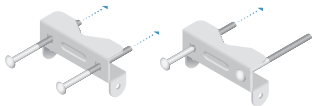
 **Note:** Orient both *U-Brackets* as shown below.

- a. Secure the *Slotted U-Bracket* to the upper *Mounting Plate* of the antenna using two *Hex Bolts*, two lock washers, and two flat washers.
- b. Secure the other *U-Bracket* to the lower *Mounting Plate* of the antenna using two *Hex Bolts*, two lock washers, and two flat washers.

 **Note:** Ensure that each lock washer is always installed between the *Hex Bolt* and flat washer.



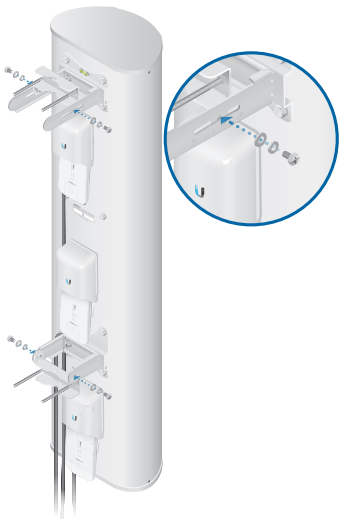
9. Insert two *Carriage Bolts* into each *Pole Bracket*.



10. Attach a *Pole Bracket* to each *U-Bracket* using two *Hex Bolts*, two lock washers, and two flat washers. Hand-tighten only.



Note: Ensure that each lock washer is always installed between the *Hex Bolt* and flat washer.



11. Attach the mounting assembly to a pole.

- a. Slide the holes of each *Pole Clamp* over each pair of *Carriage Bolts*.
- b. Place one *Serrated Flange Nut* on each *Carriage Bolt*.
- c. Secure each *Serrated Flange Nut* with one *Hex Nut*.

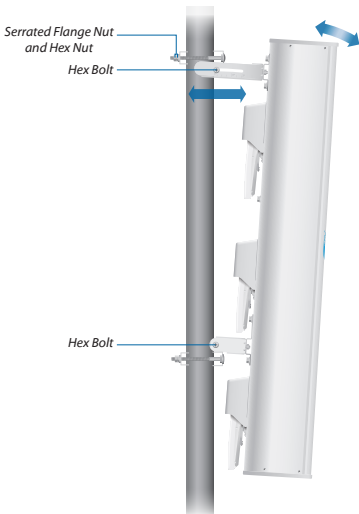


Note: The mounting assembly can accommodate a $\text{Ø } 38 - 76 \text{ mm}$ pole.



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12. The antenna has an electrical downtilt of 2°. To further adjust the elevation angle:
- Loosen the four *Hex Bolts* on the *U-Brackets* and the nuts on the upper *Pole Clamp*.
 - Slide the antenna to the desired tilt. (The brackets may slide along the pole, depending on the angle of the elevation tilt.)
 - Tighten all bolts to 25 N-m and all nuts to 50 N-m or less to avoid deforming the pole.



Specifications

AP-5AC-90-HD	
Dimensions (Mount Included)	322.6 x 201.5 x 1300 mm (12.7 x 7.93 x 51.18")
Weight (Mount Included)	13.1 kg (28.9 lb)
Frequency Range	5.15 - 5.85 GHz
Gain	22 dBi
HPOL Beamwidth	3 x 30° (6 dB)
VPOL Beamwidth	3 x 30° (6 dB)
Elevation Beamwidth	8°
Electrical Downtilt	2°
Polarization	Dual-Linear
Max. VSWR	1.75:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	534 N @ 200 km/h (120 lbf @ 125 mph)
Interfaces	(6) RP-SMA Connectors (Weatherproof)
Compatible Radio	Rocket5ac Prism
Mounting	Pole Mount (Kit Included)
ETSI Specification	EN 302 326 DN2
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 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

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:

- (I) 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;
- (II) has been painted, rebranded or physically modified in any way;
- (III) has been damaged due to errors or defects in cabling;
- (IV) has been subjected to misuse, abuse, negligence, abnormal physical, electromagnetic or electrical stress, including lightning strikes, or accident;
- (V) has been damaged or impaired as a result of using third party firmware;
- (VI) has no original Ubiquiti MAC label, or is missing any other original Ubiquiti label(s); or
- (VII) 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.

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Limitation of Liability

EXCEPT TO THE EXTENT PROHIBITED BY LOCAL LAW, IN NO EVENT WILL UBIQUITI OR ITS SUBSIDIARIES, AFFILIATES OR SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES (INCLUDING LOST PROFIT, LOST DATA, OR DOWNTIME COSTS), ARISING OUT OF THE USE, INABILITY TO USE, OR THE RESULTS OF USE OF THE PRODUCT, WHETHER BASED IN WARRANTY, CONTRACT, TORT OR OTHER LEGAL THEORY, AND WHETHER OR NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

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

RF Exposure Warning

The antenna and transmitter must be installed to provide a separation distance from all persons and must not be located or operating in conjunction with any other antenna or transmitter. For the specific separation distance, refer to the Quick Start Guide for your Rocket device (transmitter).

L'antenne et l'émetteur doit être installé pour fournir une distance de séparation de toute les personnes et ne doit pas être situé ou opérant en conjonction avec une autre antenne ou un autre émetteur. Pour la distance spécifique de séparation, se référer au Guide de démarrage rapide pour votre appareil Rocket (l'émetteur).

RoHS/WEEE Compliance Statement



English

European Directive 2002/96/EC 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 2002/96/EC 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 2002/96/CE de la 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 2002/96/CE 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 2002/96/EC 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

Česky [Czech]	UBIQUITI NETWORKS tímto prohlašuje, že toto UBIQUITI NETWORKS zařízení, je ve shod se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Hermed, UBIQUITI NETWORKS, erklærer at denne UBIQUITI NETWORKS enhed, er i overensstemmelse med de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Nederlands [Dutch]	Hierbij verklaart UBIQUITI NETWORKS, dat deze UBIQUITI NETWORKS apparaat, in overeenstemming is met de essentiële eisen en de andere 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 UBIQUITI NETWORKS kinnitab, et antud UBIQUITI NETWORKS seade, on vastavus oluliste nõuetele ja teistele asjakohastele sätetele direktiivi 1999/5/EÜ.
Suomi [Finnish]	Täten UBIQUITI NETWORKS vakuuttaa, että tämä UBIQUITI NETWORKS laite, on yhdenmukainen olennaisten vaatimusten ja muiden sitä koskevien direktiivin 1999/5/EY.
Français [French]	Par la présente UBIQUITI NETWORKS déclare que l'appareil UBIQUITI NETWORKS, est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Deutsch [German]	Hiermit erklärt UBIQUITI NETWORKS, dass sich dieses UBIQUITI NETWORKS Gerät, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet.
Ελληνική [Greek]	Δια του παρόντος, UBIQUITI NETWORKS, δηλώνει ότι αυτή η συσκευή UBIQUITI NETWORKS, είναι σε συμμόρφωση με τις βασικές απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1995/5/EK.
Magyar [Hungarian]	Ezennel UBIQUITI NETWORKS kijelenti, hogy ez a UBIQUITI NETWORKS készülék megfelel az alapvető követelményeknek és más vonatkozó 1999/5/EK irányelv rendelkezéseit.
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Română [Romanian]	Prin prezenta, UBIQUITI NETWORKS declară că acest dispozitiv UBIQUITI NETWORKS este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 1999/5/CE.



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