Aruba 310 Series Access Points

Installation Guide

Aruba 310 Series access points (AP-314, AP-315, IAP-314, and IAP-315) support IEEE 802.11ac standards for a high performance WLAN. This device is equipped with two single-band radios that provide network access and monitor the network simultaneously. These access points deliver high-performance 802.11n 2.4GHz and 802.11ac 5GHz functionality, while also supporting 802.11a/b/g wireless services. Multi-user Multiple-in, Multiple-output (MU-MIMO) is enabled when operating in 5GHZ mode for optimal performance. The AP-314 and AP-315 work in conjunction with an Aruba controller, while the IAP-314 and IAP-315 can be configured via the built-in virtual controller.

The Aruba 310 Series provides the following capabilities:

- IEEE 802.11a/b/g/n/ac operation as a wireless access point
- IEEE 802.11a/b/g/n/ac operation as a wireless Air Monitor
- IEEE 802.11a/b/g/n/ac operation as a Spectrum Analysis
- Compatible with IEEE 802.3at PoE+ power sources
- Compatible with IEEE 802.3at PoE power sources
- Support for MCS8 and MCS9
- Centralized management, configuration, and upgrades
- Integrated Bluetooth Low Energy (BLE) radio
- Centralized management, configuration, and upgrades

Package Contents

The following materials are included with this product:

- Aruba 310 Series access point
- 9/16" and 15/16" Ceiling Rail Adapters



Inform your supplier if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed.

Hardware Overview

The following sections outline the hardware components of the 310 Series access point.

XXX-IG-0X | Month Year 1

Figure 1 Aruba AP-315 (front view)



LED

The 310 Series access points have LED displays located on the front panel of the access point indicating the following functions:

System Status

The System Status LED indicates the operating condition of the access point, See Table 1.

Table 1 System Status LEDs



| Color/State | Meaning |
|-------------------------------------|---|
| Off | Device powered off |
| Green- solid | Device ready for use |
| Green- blinking ¹ | Device booting, not ready for use |
| Amber- solid | Device ready; Power Save mode (802.3af PoE) |
| Green/Amber- solid | No software setting/network restrictions |
| Green/Amber - flashing ² | Sub-optimal uplink Ethernet speed (1G) |
| Red- solid | System error condition |

- Blinking: one second on/one second off Flashing: mostly on, shortly off every two seconds

Radio Status



The Radio Status LED indicates the operating mode of the access point's radios. See Table 2.

Table 2 Radio Status LEDs

| Color/State | Meaning |
|-------------|---|
| Off | Device powered off, or both radios disabled |

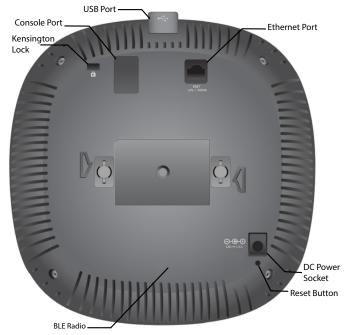
| Color/State | Meaning |
|--------------------------|---|
| Green- solid | Both radios enabled in access mode |
| Green- blinking | One radio enabled in access mode; one radio disabled |
| Amber- solid | Both radios enabled in monitor mode |
| Amber- blinking | One radio enabled in monitor mode; one radio disabled |
| Green/Amber- alternating | One radio in access mode; one radio in monitor mode |
| Red | Both radios in error mode |

LED Display Settings

The LEDs have three operating modes that can be selected in the system management software:

- Default mode: Refer to Table 1 and Table 2
- Off mode: LEDs are off
- Blink mode: LEDs blink green

Figure 2 310 Series Access Point (rear view)



External Antenna Connectors

The AP-314 and IAP-314 access points are equipped with four external antenna connectors located on the front corners of the access point (see Figure 3).

Figure 3 External Antenna Connectors



External antennas for this device must be installed by an Aruba Certified Mobility Professional (ACMP) or other Aruba-certified technician, using manufacturer-approved antennas only.

The Equivalent Isotropically Radiated Power (EIRP) levels for all external antenna devices must not exceed the regulatory limit set by the host country/domain.

Installers are required to record the antenna gain for this device in the system management software.



Les antennes externes pour cet appareil doivent être installées par un professionnel de la mobilité certifié Aruba (ACMP) ou un autre technicien certifié Aruba, en utilisant uniquement des antennes approuvées par le fabricant. Les niveaux équivalents de puissance à rayonnement isotrope (EIRP) pour tous les périphériques d'antenne externe ne doivent pas dépasser la limite réglementaire définie par le pays hôte / domaine.

Les installateurs doivent enregistrer le gain d'antenne pour cet appareil dans le logiciel de gestion du système.

Antenna ports ANTO and ANT1 are connected to a dual-band radio and support 2.4GHz and 5GHz. The ANT2 and ANT3 antenna ports support 5GHz only.

Bluetooth Low Energy Radios

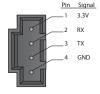
310 Series access points are equipped with an integrated BLE radio that provide the following capabilities:

- location beacon applications
- wireless console access

Console Port

The console port allows the user to connect to the access point directly to a serial terminal or laptop for local management. Connect the device to a terminal or terminal server using an AP-CBL-SERU cable. For pin-out details, refer to Figure 4.

Figure 4 Console Port Pin-out

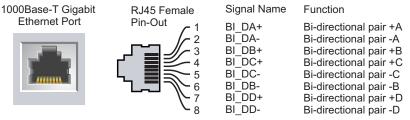


Ethernet Ports

The Aruba 310 Series is equipped with a 10/100/1000Base-T auto-sensing MDI/MDX Ethernet port. The port supports wired-network connectivity, in addition to Power over Ethernet (PoE) from IEEE 802.3af and 802.3at

compliant power sources. This device accepts 56V DC (802.3at), or 48V DC (802.3af) nominal as a standard powered device (PD) from power sourcing equipment, including PoE midspan injector or a PoE-sourcing network infrastructure. The port is an RJ45 connector with pin-out details shown in Figure 2.

Figure 5 Ethernet Port Pin-Out



Kensington Lock Slot

The 310 Series is equipped with a Kensington lock slot for additional security.

USB Interface

The 310 Series is equipped with a USB port for connectivity with cellular modems and other USB client devices. When powered by an 802.3at or DC source, the USB port can supply power up to 5W. The USB interface is disabled when the access point is powered by an 802.3af PoE source.

Figure 6 USB Port



Reset Button

The reset button can be used to reset the access point to factory default settings or turn off/on the LED display. To reset the access point to factory default settings, follow this procedure:

- 1. Power off the access point.
- 2. Press and hold the push button using a small, narrow object, such as a paper clip.
- 3. Power-on the access point without releasing the push button. The System Status LED will flash within 5 seconds.
- 4. Release the reset button.

The system status LED will flash again within 15 seconds indicating that the reset is completed. The access point will now continue to boot with the factory default settings.

Power

The Ethernet port supports PoE-in, allowing the device to draw power from an 802.3at source.

If PoE is unavailable, the 310 Series access points have a single 12V/36W DC power input to support the AP-AC-12V30UN AC-to-DC power adapter kit (sold separately).

When both 802.3at and DC power sources are available, the DC power source takes precedence. The access point simultaneously draws a minimal current from the PoE source. In the event that the DC source fails, the access point switches to the 802.3at source.

The 310 Series operates without restriction when powered by 802.3at compliant and DC power sources. In this mode, the USB interface is enabled and supports up to 1A/5W to a powered device (PD). When powered by an 802.3af PoE+ source, the access point operates in power-saving mode. In this mode, the USB interface is disabled. See Table 3 for power modes.

Table 3 Power Modes

| Power Source | Limitations | USB Output |
|-------------------|-----------------|------------|
| DC (AP-AC-12V30B) | No restrictions | 1A/5W |
| 802.3at PoE | No restrictions | 1A/5W |
| 802.3af PoE+ | USB disabled | Disabled |

Before You Begin

Refer to the sections below before beginning the installation process.



FCC Statement: Improper termination of access points installed in the United States configured to non-US model controllers is a violation of the FCC grant of equipment authorization. Any such willful or intentional violation may result in a requirement by the FCC for immediate termination of operation and may be subject to forfeiture (47 CFR 1.80).

Pre-Installation Checklist

Before installing your Aruba 310 Series access point, be sure that you have one of the following:

- Cat5E UTP cable (or better) with network access installed in the wall box
- One of the following power sources:
 - IEEE 802.3at or 802.3af-compliant Power over Ethernet (PoE) source. The PoE source can be any power source equipment (PSE) controller or midspan PSE device.
 - Aruba AP-AC-12V30UN adapter kit (sold separately)

For AP-314 and AP-315 access points only:

- Aruba controller provisioned on the network:
 - Layer 2/3 network connectivity to your access point
 - One of the following network services:
 - Aruba Discovery Protocol (ADP)
 - DNS server with an "A" record
 - DHCP Server with vendor-specific options



Aruba Networks, Inc., in compliance with governmental requirements, has designed the 310 Series access points so that only authorized network administrators can change the settings. For more information about access point configuration, refer to the *ArubaOS Quick Start Guide/Aruba Instant Quick Start Guide* and *ArubaOS User Guide/Aruba Instant User Guide*.

Pre-Installation Connectivity



The instructions for this section are applicable to AP-314 and AP-315 only.

Before installing access points in a network environment, make sure that they are able to locate and connect to the controller after power on.

Verify the following conditions:

- When connected to the network, each access point is assigned a valid IP address
- Access points are able to locate the controller

Refer to the ArubaOS Quick Start Guide for instructions on locating and connecting to the controller.

Pre-Installation Network Requirements

After WLAN planning is complete and the appropriate products and their placement have been determined, the Aruba controller(s) must be installed and initial setup performed before the Aruba access points are deployed. For initial setup of the controller, refer to the *ArubaOS Quick Start Guide* for the software version installed on the controller.

Identifying Specific Installation Locations

The 310 Series access point can be mounted to a wall or on the ceiling. Use the access point placement map generated by Aruba's RF Plan software application to determine the proper installation location(s). Each location should be as close as possible to the center of the intended coverage area and should be free from obstructions or obvious sources of interference. These RF absorbers/reflectors/interference sources impact RF propagation and should have been accounted for during the planning phase and adjusted for in RF plan.

Identifying Known RF Absorbers/Reflectors/Interference Sources

Identifying known RF absorbers, reflectors, and interference sources while in the field during the installation phase is critical. Make sure that these sources are taken into consideration when you attach an access point to its fixed location.

RF absorbers include:

- Cement/concrete—Old concrete has high levels of water dissipation, which dries out the concrete, allowing for potential RF propagation. New concrete has high levels of water concentration in the concrete, blocking RF signals.
- Natural Items—Fish tanks, water fountains, ponds, and trees
- Brick

RF reflectors include:

- Metal Objects—Metal pans between floors, rebar, fire doors, air conditioning/heating ducts, mesh windows, blinds, chain link fences (depending on aperture size), refrigerators, racks, shelves, and filing cabinets.
- Do not place an access point between two air conditioning/heating ducts. Make sure that access points are placed below ducts to avoid RF disturbances.

RF interference sources include:

- Microwave ovens and other 2.4 or 5 GHz objects (such as cordless phones)
- Cordless headset such as those used in call centers or lunch rooms

RF Radiation Exposure Statement: This equipment complies with RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 13.78 inches (35cm) between the radiator and your body for 2.4 GHz and 5 GHz operations. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



Déclaration sur les limites d'exposition aux radiofréquences: cet équipement est conforme aux limites d'exposition aux rayonnements radioélectriques spécifiées. Il doit être installé et utilisé à une distance minimale de 35 cm par rapport à votre corps pour les fréquences de 2,4 et 5 GHz. Cet émetteur-récepteur ne doit pas être utilisé ou situé à proximité d'autres antennes ou émetteurs-récepteurs.

Access Point Installation

Refer to the following steps to install the Aruba 310 Series access points using the AP Ceiling Rail Mount Kit (AP-220-MNT-C1).

All Aruba access points should be professionally installed by an Aruba-Certified Mobility Professional (ACMP). The installer is responsible for ensuring that grounding is available and meets applicable national and electrical codes. Failure to properly install this product may result in physical injury and/or damage to property.



Tous les points d'accès Aruba doivent impérativement être installés par un professionnel agréé. Ce dernier doit s'assurer que l'appareil est mis à la terre et que le circuit de mise à la terre est conforme aux codes électriques nationaux en vigueur. Le fait de ne pas installer correctement ce produit peut entraîner des blessures corporelles et / ou des dommages matériels.

Using the Ceiling Rail Adapter

The 310 Series access point ships with two ceiling rail adapters for 9/16" and 15/16" ceiling rails. Additional wall

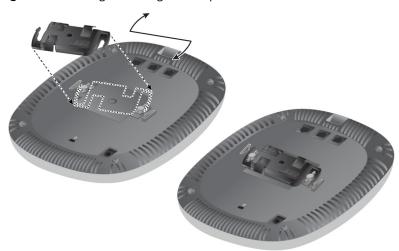
mount adapters for other rail adapters for other rail styles are available as accessory kits.



The installer is responsible for securing the access point onto the ceiling tile rail in accordance with the steps below. Failure to properly install this product may result in physical injury and/or damage to property.

- 1. Pull the necessary cables through a prepared hole in the ceiling tile near where the access point will be placed.
- 2. Place the adapter against the back of the access point with the adapter at an angle of approximately 30 degrees to the tabs. See Figure 7.
- 3. Twist the adapter clockwise until it snaps into place in the tabs. See Figure 7.

Figure 7 Attaching the Ceiling Rail Adapter



- 4. If necessary, connect the console cable to the console port on the back of the access point.
- 5. Hold the access point next to the ceiling tile rail with the ceiling tile rail mounting slots at approximately a 30-degree angle to the tile rail. See Figure 8. Make sure that any cable slack is above the ceiling tile.
- 6. Pushing toward the ceiling tile, rotate the access point clockwise until the device clicks into place on the ceiling tile rail.

Figure 8 *Mounting the Access Point*



7. On the (I)AP-314, install the external antennas according to the manufacturer's instructions, and connect the antennas to the antenna interfaces on the access points.

Connecting Required Cables

Install cables in accordance with all applicable local and national regulations and practices.

Software

Aruba 310 Series requires ArubaOS 6.5.0.0 or higher. For instructions on choosing operating modes and initial

software configuration, refer to the ArubaOS User Guide and ArubaOS Quick Start Guide.



Access points are radio transmission devices and are subject to governmental regulation. Network administrators responsible for the configuration and operation of access points must comply with local broadcast regulations. Specifically, access points must use channel assignments appropriate to the location in which the access point is used.

Verifying Post-Installation Connectivity

The integrated LED on the access point can be used to verify that the access point access point is receiving power and initializing successfully (see Table 1 and Table 2). Refer to the *ArubaOS Quick Start Guide* for further details on verifying post-installation network connectivity.

Configuring the 310 Series



The instructions for this section are applicable to AP-314 AP-315 only.

Access Point Provisioning/Reprovisioning

Provisioning parameters are unique to each access point. These local access point parameters are initially configured on the controller, and are then pushed out to the access points and stored on the devices. Aruba recommends that provisioning settings be configured via the ArubaOS Web UI only. Refer to the *ArubaOS User Guide* for complete details.

Access Point Configuration

Configuration parameters are network or controller specific and are configured and stored on the controller. Network configuration settings are pushed out to the access points, but remain stored on the controller. Configuration settings can be configured via the ArubaOS Web UI or ArubaOS CLI. Refer to their respective guides for further details. See the *ArubaOS User Guide*.

Electrical and Environmental Specifications

For additional specifications on this product, please refer to the product data sheet at arubanetworks.com

Electrical

- Ethernet:
 - 100/1000T Base-T auto-sensing Ethernet RJ45 interface
 - IEEE 802.3u (100 Base-T). IEEE 802.3ab (1000 Base-T)
- Power:
 - 48VDC power interference, support powering through an AC-to-DC power adapter (AP-AC-48V36B)
 - Maximum power consumption (excluding USB): 20W (PoE) or 18.5W (DC)



If a power adapter other than the Aruba-approved adapter is used in the US or Canada, it should be NRTL listed, with an output rated 48VDC, minimum 2A, marked "LPS" and "Class 2", and suitable for plugging into a standard power receptacle in the US and Canada.

Environmental

- Operating:
 - Temperature: 0°C to +40°C (+32°F to +104°F)
 - Humidity: 5% to 93% non-condensing
- Storage and transport:
 - Temperature: -40°C to +70°C (-40°F to +158°F)



For indoor use only. The access point, AC adapter, and all connected cables are not designed for outdoor use.

Proper Disposal of Aruba Equipment

Dispose of Aruba products per local regulation. For the most current information about Global Environmental Compliance and Aruba products, see our website at arubanetworks.com.

Waste of Electrical and Electronic Equipment



Aruba products at end of life are subject to separate collection and treatment in the EU Member States, Norway, and Switzerland and therefore are marked with the symbol shown at the left (crossed-out wheelie bin). The treatment applied at end of life of these products in these countries shall comply with the applicable national laws of countries implementing Directive 2002/96EC on Waste of Electrical and Electronic Equipment (WEEE).

China RoHS

Aruba products also comply with China environmental declaration requirements and are packaged with the following "EFUP25" label.

<u>有毒有害物质声明</u> <u>Hazardous Materials Declaration</u>

| 部件名称 | 有毒有害物质或元素 (Hazardous Substance) | | | | | |
|-------------------------------------|---------------------------------|-----------|-----------|---------------------------|---------------|-----------------|
| 印行在45 (Parts) | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr [⊕]) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 电路板 (PCA Boards) | × | 0 | 0 | 0 | 0 | 0 |
| 机械组件 (Mechanical Sub-Assemblies) | × | 0 | 0 | 0 | 0 | 0 |

- O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。 Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.
- ※:表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求。 Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard.

对销售之日的所售产品,本表显示,供应链的电子信息产品可能包含这些物质。

This table shows where these substances may be found in the supply chain of electronic information products, as of the date of sale of the enclosed product.

此标志为针对所涉及产品的环保使用期标志. 某些零部件会有一个不同的环保使用期(例如,电池单元模块)贴在其产品上.

此环保使用期限只适用于产品是在产品手册中所规定的条件下工作.

The Environment- Friendly Use Period (EFUP) for all enclosed products and their parts are per the symbol shown here. The Environment- Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.



Taiwan RoHS

Table-APIN0314/APIN0315-20180213 無線接收盒: 802.11ac Wireless Access Point Type Designation: APIN0314_APIN0315

台灣限用物質含有情況標示

| | 限用物質及其化學符號 | | | | | |
|----------------------|------------|--------|--------|-----------------|---------------|-----------------|
| 單元 | 鉛 (Pb) | 汞 (Hg) | 鎘 (Cd) | 六價鉻 (Cr(VI)) | 多溴聯苯 (PBB) | 多溴二苯醚 (PBDE) |
| 傳輸線和網路線 | 0 | 0 | 0 | 0 | 0 | 0 |
| 斷路器 | _ | 0 | 0 | 0 | О | 0 |
| 冷卻及加熱系統 | 0 | 0 | 0 | 0 | О | 0 |
| 磁碟控制器 | _ | 0 | 0 | 0 | О | 0 |
| 外殼 | _ | 0 | 0 | 0 | 0 | 0 |
| 風扇 | 0 | 0 | 0 | 0 | 0 | 0 |
| 液晶顯示器 | _ | 0 | 0 | 0 | 0 | 0 |
| 存取裝置(HDD) | _ | 0 | 0 | 0 | О | 0 |
| 液壓/氣壓系統 | 0 | 0 | 0 | 0 | 0 | 0 |
| 鍵盤 | 0 | 0 | 0 | 0 | О | 0 |
| 影音設備(CD/DVD/光 碟機) | 0 | О | О | 0 | 0 | 0 |
| 記憶體 | 0 | 0 | 0 | 0 | 0 | 0 |
| 滑鼠 | 0 | 0 | 0 | 0 | 0 | 0 |
| 其他機械組裝設備 | _ | 0 | 0 | 0 | 0 | 0 |
| 變壓器/電源供應器 | _ | 0 | 0 | 0 | О | 0 |
| 印刷電路零組件 (PCAs) | _ | 0 | 0 | 0 | 0 | 0 |
| 無線網路線 | _ | 0 | 0 | 0 | О | 0 |

備考1. "O" 係指該項限用物質之百分比含量未超出百分比含量基準值。

備考2. "一" 係指該項限用物質為排除項目。

European Union RoHS

Aruba products comply with the EU Restriction of Hazardous Substances Directive 2011/65/EC (RoHS). EU RoHS restricts the use of specific hazardous materials in the manufacture of electrical and electronic equipment. Specifically, restricted materials under the RoHS Directive are Lead (including Solder used in printed circuit assemblies), Cadmium, Mercury, Hexavalent Chromium, and Bromine. Some Aruba products are subject to the exemptions listed in RoHS Directive Annex 7 (Lead in solder used in printed circuit assemblies).

India RoHS

This product complies with RoHS requirements as prescribed by E-Waste (Management & Handling) Rules, governed by the Ministry of Environment & Forests, Government of India.

Turkey RoHS

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Ukraine RoHS

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

Regulatory Information

For the purpose of regulatory compliance certifications and identification, this product has been assigned a

unique regulatory model number (RMN). The regulatory model number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to this regulatory model number. The regulatory model number is not the marketing name or model number of the product.

- AP-314/IAP-314 RMN: APIN0314
- AP-315/IAP-315 RMN: APIN315



Changes or modifications to this unit not expressly approved by the party responsible for regulatory compliance could void the user's authority to operate this equipment.

Toute modification effectuée sur cet équipement sans l'autorisation expresse de la partie responsable de la conformité est susceptible d'annuler son droit d'utilisation.

Federal Communication Commission

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 B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit that is different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.



Improper termination of access points installed in the United States configured to a non-US model controller is a violation of the FCC grant of equipment authorization. Any such willful or intentional violation may result in a requirement by the FCC for immediate termination of operation and may be subject to forfeiture (47 CFR 1.80). The network administrator(s) is/are responsible for ensuring that this device operates in accordance with local/regional laws of the host domain.



Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate this equipment.

Toute modification effectuée sur cet équipement sans l'autorisation expresse de la partie responsable de la conformité est susceptible d'annuler son droit d'utilisation.

European Union

The Declaration of Conformity made under RED 2014/53/EU is available for viewing at: arubanetworks.com, then navigate to the **Declarations of Conformity > Access Point** folder, select the document that corresponds to your device's model number as it is indicated on the product label. This radio transmitter model has been approved to operate with the antenna types listed in the online ordering guide (link provided below) with the maximum permissible gain indicated. Antenna types not included in this list, having a greater gain than the maximum gain indicated for the type, are strictly prohibited for use with this device. Compliance is only assured if the Aruba approved accessories as listed in the ordering guide are used. https://www.arubanetworks.com/assets/og/OG_AP-310Series.pdf

Wireless Channel Restrictions

5150-5350MHz band is limited to indoor only in the following countries; Austria (AT), Belgium (BE), Bulgaria (BG),

Croatia (HR), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Iceland (IS), Ireland (IE), Italy (IT), Latvia (LV), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Slovakia (SK), Slovenia (SL), Spain (ES), Sweden (SE), Switzerland (CH), Turkey (TR), United Kingdom (UK).

| Frequency Range MHz | Max EIRP |
|---------------------|------------|
| 2402-2480 | 9 dbm |
| 2412-2472 | 20 dbm |
| 5150-5250 | 23 dbm |
| 5250-5350 | 23 dbm |
| 5470-5725 | 30 dbm |
| 5725-5850 | N/A for EU |



Lower power radio LAN product operating in 2.4 GHz and 5 GHz bands. Please refer to the ArubaOS User Guide/Instant User Guide for details on restrictions.

Industry Canada

This Class B digital apparatus meets all of the requirements of the Canadian Interference-Causing Equipment Regulations.

In accordance with Industry Canada regulations, this radio transmitter and receiver may only be used with an antenna, the maximum type and gain of which must be approved by Industry Canada. To reduce potential radio interference, the type of antenna and its gain shall be chosen so that the equivalent isotropic radiated power (EIRP) does not exceed the values necessary for effective communication.

This device complies with Industry Canada's license-exempt RSS regulations. Operation of this device 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.

When operated in the 5.15 to 5.25 GHz frequency range, this device is restricted to indoor use to reduce the potential for harmful interference with co-channel Mobile Satellite Systems.

This radio transmitter model APIN0314 has been approved by Industry Canada to operate with the antenna types listed in the online ordering guide (link provided below) with the maximum permissible gain indicated. Antenna types not included in this list, having a greater gain than the maximum gain indicated for that type, are strictly prohibited for use with this device. http://www.arubanetworks.com/assets/og/OG AP-310Series.pdf

Déclaration d'Industrie Canada

Conformément aux réglementations d'Industrie Canada, cet émetteur-récepteur radio doit être utilisé uniquement avec une antenne dont le type et le gain maximal doivent être approuvés par Industrie Canada. Pour réduire les interférences radio potentielles, le type d'antenne et son gain doivent être choisis de façon à ce que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas les valeurs nécessaires à une communication efficace.

Ce périphérique est conforme aux règlements RSS exempts de licence d'Industrie Canada. L'utilisation de ce périphérique est soumise aux deux conditions suivantes : (1) ce périphérique ne doit pas provoquer d'interférences, et (2) ce périphérique doit accepter toute interférence, y compris les interférences susceptibles de provoquer un dysfonctionnement.

En cas d'utilisation dans la plage de fréquences de 5,15 à 5,25 GHz, cet appareil doit uniquement être utilisé en intérieur afin de réduire les risques d'interférence avec les systèmes satellites mobiles partageant le même canal.

Ce modèle d'émetteur radio APIN0314 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés dans le guide de commande en ligne (lien ci-dessous) avec le gain maximal admissible indiqué. Les types d'antennes non inclus dans cette liste, ayant un gain supérieur au gain maximal indiqué pour ce type, sont strictement interdits pour une utilisation avec cet appareil. http://www.arubanetworks.com/assets/og/OG_AP-310Series.pdf

Japan

ご使用になっている装置に VCCI マークが付いていましたら、次の説明文をお読み下さい。

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Brazil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Mexico

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debeaceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Este equipo ha sido diseñado para operar con las antenas que enseguida se enlistan, en el punto 4: https://www.arubanetworks.com/assets/og/OG_AP-310Series.pdf y para una ganancia máxima de antena de 8.5 dBi. El uso con este equipo de antenas no incluidas en esta lista o que tengan una ganancia mayor que 8.5 dBi quedan prohibidas La impedancia requerida de la antena es de 50 ohms.

Morocco



Нормативные требования Евразийского Экономического Союза

Russia



HPE Russia: ООО "Хьюлетт Паккард Энтерпрайз" Российская Федерация, 125171, г. Москва, Ленинградское шоссе, 16A, стр.3, Телефон: +7 499 403 4248 Факс: +7 499 403 4677

'HPE Belarus': ИООО «Хьюлетт-Паккард Бел», Республика Беларусь, 220030, г. Минск, ул. Интернациональная, 36-1, Телефон/факс: +375 17 392 28 20

'HPE Kazakhstan': TOO «Хьюлетт-Паккард (К)», Республика Казахстан, 050040, г. Алматы, Бостандыкский район, проспект Аль-Фараби, 77/7, Телефон/факс: + 7 727 355 35 50

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Korean

| B급 기기 (가정용 방송통신기기) | 이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주 로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사 |
|-----------------------|--|
| | 용할 수 있습니다. |

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

=> 사용자 안내문은 "업무용방송통신기자재 '에만 해당된다

Taiwan

第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現 象時,應立即停用,並改善至無干擾時方得繼續使用。

前項合法通信、指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機

設備之干擾。

- 1. 應避免影響附近雷達系統之操作。
- 2. 高增益指向性天線只得應用於固定式點對點系統。
- 3. 電磁波暴露量 MPE 標準值 1 mW/cm2, 送測產品實測值為: 0.900 mW/cm2

Medical

- 1. Equipment not suitable for use in the presence of flammable mixtures.
- 2. Connect to only IEC 60950-1 or IEC 60601-1 3rd edition certified products and power sources. The end user is responsible for the resulting medical system complies with the requirements of IEC 60601-1 3rd edition.
- 3. Wipe with a dry cloth, no additional maintenance required.
- 4. No serviceable parts, the unit must be sent back to the manufacturer for repair.
- 5. No modifications are allowed without Aruba approval.



Expected Service Life 10 years. For additional compliance information, refer to the regulatory label on the back of this device.

Contact Aruba

| Main Site | http://www.arubanetworks.com |
|--|---|
| Support Site | http://www.arubanetworks.com |
| Airheads Social Forums and Knowledge Base | http://community.arubanetworks.com/ |
| North America Telephone | 1-800-943-4526 (toll free) 1-408-754-1200 |
| International Telephone | http://arubanetworks.com/support-services/contact-support/ |
| Software Licensing Site | http://hpe.com/networking/support |
| End-of-Life Information | http://arubanetworks.com/support-services/end-of-life/ |
| Security Incident Response Team (SIRT) | Site: http://www.arubanetworks.com/support-service/security-bulletins/ Email: sirt@arubanetworks.com |

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A complete machine-readable copy of the source code corresponding to such code is available upon request. This offer is valid to anyone in receipt of this information and shall expire three years following the date of the final distribution of this product version by Hewlett Packard Enterprise Company.

To obtain such source code, send a check or money order in the amount of US \$10.00 to:

Hewlett Packard Enterprise Company

Attn: General Counsel 3000 Hanover Street Palo Alto, CA 94304 USA

Warranty

 $This \ hardware \ product \ is \ protected \ by \ an \ Aruba \ warranty. \ For \ more \ details \ visit \ www.hpe.com/us/en/support.html$