

## DATA SHEET

# ARUBA 303 SERIES CAMPUS ACCESS POINTS

Low-cost 802.11ac Wave 2 enterprise AP

The affordable mid-range Aruba 303 Series campus access point delivers high performance 802.11ac with MU-MIMO (Wave 2) for medium density enterprise environments. With the integrated BLE and supporting 802.3af power, the Aruba 303 Series AP enables enterprises to improve their work efficiency and productivity with the lowest TCO.

The compact Aruba 303 Series AP delivers a maximum concurrent data rate of 867 Mbps in the 5GHz band and 300 Mbps in the 2.4GHz band (for an aggregate peak data rate of 1.2Gbps). Featuring 2x2:2SS, the Aruba 303 is designed for medium device density environments, such as schools, retail branches, warehouses, hotels and enterprise offices, where the environment is cost sensitive.

The 303 Series AP has an integrated Bluetooth Low-Energy (BLE) radio, which can be used as an Aruba beacon for advanced locationing, indoor wayfinding, asset tracking, and to enable proximity-based push notification services. The integrated beacon radio also enables the remote management of battery-powered and other standalone beacons in a large-scale network of Aruba beacons. It enables businesses to leverage mobility context to develop applications that will deliver an enhanced user experience and increase the value of the wireless network for organizations.

## UNIQUE BENEFITS

- Unified AP – deploy with or without controller
  - The 303 Series access points can be deployed in either controller-based (ArubaOS) or controller-less (InstantOS) deployment mode
- Dual Radio 2x2 802.11ac access point with Multi-User MIMO (wave 2)
  - Supports up to 867Mbps in the 5GHz band (with 2SS/VHT80 client devices) and up to 300Mbps in the 2.4GHz band (with 2SS/HT40 clients)

# PHOTO COMING SOON

- Built-in Bluetooth Low-Energy (BLE) radio
  - Enables location based services with BLE-enabled mobile devices receiving signals from multiple Aruba Beacons at the same time
  - Enables asset tracking when used with Aruba Asset Tags
- Advanced Cellular Coexistence (ACC)
  - Minimizes interference from 3G/4G cellular networks, distributed antenna systems and commercial small cell/femtocell equipment
- Quality of service for unified communications applications
  - Supports priority handling and policy enforcement for unified communication apps, including Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing
- Aruba AppRF technology leverages deep packet inspection to classify and block, prioritize or limit bandwidth for over 2,500 enterprise apps or groups of apps
- RF Management
  - Adaptive Radio Management (ARM) technology with AirMatch automatically assigns channel, width and power settings based on environment and client density. It also provides airtime fairness and ensures that APs stay clear of all sources of RF interference to deliver reliable, high-performance WLANs
  - The Aruba 303 Series Access Points can be configured to provide part-time or dedicated air monitoring for spectrum analysis and wireless intrusion protection, VPN tunnels to extend remote locations to corporate resources, and wireless mesh connections where Ethernet drops are not available

- Spectrum analysis
  - Capable of part-time or dedicated air monitoring, the spectrum analyzer remotely scans the 2.4GHz and 5GHz radio bands to identify sources of RF interference from HT20 through VHT80 operation
- Aruba Secure Core
  - Device assurance: Use of Trusted Platform Module (TPM) for secure storage of credentials and keys as well as secure boot
  - Integrated wireless intrusion protection offers threat protection and mitigation, and eliminates the need for separate RF sensors and security appliances
  - IP reputation and security services identify, classify, and block malicious les, URLs and IPs, providing comprehensive protection against advanced online threats

### CHOOSE YOUR OPERATING MODE

The Aruba 303 Series Access Points offer a choice of deployment and operating modes to meet your unique management and deployment requirements:

- The 303 Series AP is a unified AP that supports both controller-based and controller-less deployment modes, providing maximum flexibility.
- Controller-based mode – When deployed in conjunction with an Aruba Mobility Controller, Aruba 303 Series Access Points offer centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding.
- Controller-less (Instant) mode – The controller function is virtualized in a cluster of APs in Instant mode. As the network grows and/or requirements change, Instant deployments can easily migrate to controller-based mode.
- Remote AP (RAP) mode for branch deployments
- Air monitor (AM) for wireless IDS, rogue detection and containment
- Spectrum analyzer (SA), dedicated or hybrid, for identifying sources of RF interference
- Secure enterprise mesh portal or point

For large installations across multiple sites, the Aruba Activate service significantly reduces deployment time by automating device provisioning, firmware upgrades, and inventory management. With Aruba Activate, the APs can be factory-shipped to any site and configure themselves when powered up.

### SPECIFICATIONS

#### Hardware Variants

- AP-303: Internal antenna models.

#### Wi-Fi Radio Specifications

- AP type: Indoor, dual radio, 5GHz 802.11ac 2x2 MIMO and 2.4GHz 802.11n 2x2 MIMO
- 5GHz (radio 0):
  - Two spatial stream Single User (SU) MIMO for up to 867 Mbps wireless data rate to individual 2SS VHT80 client devices
  - Two spatial stream Multi User (MU) MIMO for up to 867 Mbps wireless data rate to two 1SS MU-MIMO capable client devices simultaneously
- 2.4GHz (radio 1):
  - Two spatial stream Single User (SU) MIMO for up to 300 Mbps wireless data rate to individual 2SS HT40 client devices
- Support for up to 256 associated client devices per radio, and up to 16 BSSIDs per radio
- Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835GHz
  - 5.150 to 5.250GHz
  - 5.250 to 5.350GHz
  - 5.470 to 5.725GHz
  - 5.725 to 5.850GHz
- Available channels: Dependent on configured regulatory domain
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
- Supported modulation types:
  - 802.11b: BPSK, QPSK, CCK
  - 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- Transmit power: Configurable in increments of 0.5dBm
- Maximum (aggregate, conducted total) transmit power (limited by local regulatory requirements):
  - 2.4GHz band: +21dBm (18dBm per chain)
  - 5GHz band: +21dBm (18dBm per chain)
  - Note: conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain

- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance
- Short guard interval for 20MHz, 40MHz and 80MHz channels
- Space-time block coding (STBC) for increased range and improved reception
- Low-density parity check (LDPC) for high-efficiency error correction and increased throughput
- Transmit beam-forming (TxBF) for increased signal reliability and range
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
  - 802.11n: 6.5 to 300 (MCS0 to MCS15)
  - 802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2)
  - 802.11n high-throughput (HT) support: HT20/40
  - 802.11ac very high throughput (VHT) support: VHT20/40/80
  - 802.11n/ac packet aggregation: A-MPDU, A-MSDU

### Wi-Fi Antennas

- AP-303: Internal antenna models.
  - Two vertically polarized dual-band downtilt omnidirectional antennas for 2x2 MIMO with peak antenna gain of 3.5dBi (2.4GHz) and 6.9dBi (5GHz) per antenna.
  - The antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 degrees.
  - Combining the patterns of both antennas per radio, the peak gain of the average (effective) pattern is 2.1dBi in 2.4GHz and 5.7dBi in 5GHz.

### Other Interfaces

- E0: One 10/100/1000BASE-T Ethernet network interface (RJ-45)
  - Auto-sensing link speed and MDI/MDX
  - PoE-PD: 48Vdc (nominal) 802.3af PoE
- DC power interface, accepts 2.1/5.5-mm center-positive circular plug with 9.5-mm length
- Bluetooth Low Energy (BLE) radio
  - Up to 3dBm transmit power (class 2) and -93dBm receive sensitivity
  - Integrated vertically polarized omnidirectional antenna with roughly 30 degrees downtilt and peak gain of 4.5dBi

- Visual indicators (tri-color LEDs): for System and Radio status
- Reset button: factory reset (during device power-up), LED mode control (normal/off)
- Serial console interface (proprietary,  $\mu$ USB physical jack)
- Kensington security slot

### Power Sources and Consumption

- The AP supports direct DC power and Power over Ethernet (PoE)
- When both power sources are available, DC power takes priority over PoE
- Power sources are sold separately
- Direct DC source: 12Vdc nominal, +/- 5%
- Power over Ethernet (PoE): 48Vdc (nominal) 802.3af compliant source
- Maximum (worst-case) power consumption: 10.1W (PoE) or 8.8W (DC)
- Maximum (worst-case) power consumption in idle mode: 4.2W (PoE) or 4.0W (DC)

### Mounting

- The AP ships with a (black) mount clips to attach to a 9/16-inch or 15/16-inch flat T-bar drop-tile ceiling
- Several optional mount kits are available to attach the AP to a variety of surfaces; see the Ordering Information section below for details

### Mechanical

- Dimensions and weight (unit, excluding mount accessories):
  - 150mm (W) x 150mm (D) x 35mm (H) or 5.9" (W) x 5.9" (D) x 1.4" (H)
  - 260g or 9.2oz
- Dimensions and weight (shipping):
  - 190mm (W) x 180mm (D) x 60mm (H) or 7.4" (W) x 7.0" (D) x 2.4" (H)
  - 410g or 14.5oz

### Environmental

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

### Reliability

- MTBF: 795khrs (91yrs) at +25C operating temperature

### **Regulatory**

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- UL/IEC/EN 60950
- EN 60601-1-1 and EN 60601-1-2

For more country-specific regulatory information and approvals, please see your Aruba representative.

### **Regulatory Model Numbers**

- AP-303: APIN0303

### **Certifications**

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance (WFA) certified 802.11 a/b/g/n/ac
- Wi-Fi Alliance certified (WFA) 802.11ac with Wave 2 features

### **WARRANTY**

- Aruba limited lifetime warranty

### **MINIMUM SOFTWARE VERSIONS**

- ArubaOS & Aruba InstantOS 8.3.0.0

<b>RF PERFORMANCE TABLE</b>		
	<b>Maximum transmit power (dBm) per transmit chain</b>	<b>Receiver sensitivity (dBm) per receive chain</b>
<b>802.11b 2.4GHz</b>		
1 Mbps	18.0	-93.0
11 Mbps	18.0	-87.0
<b>802.11g 2.4GHz</b>		
6 Mbps	18.0	-90.0
54 Mbps	16.0	-73.0
<b>802.11n HT20 2.4GHz</b>		
MCS0/8	18.0	-90.0
MCS7/15	14.0	-71.0
<b>802.11n HT40 2.4GHz</b>		
MCS0/8	18.0	-87.0
MCS7/15	14.0	-68.0
<b>802.11a 5GHz</b>		
6 Mbps	18.0	-90.0
54 Mbps	16.0	-73.0
<b>802.11n HT20 5GHz</b>		
MCS0/8	18.0	-90.0
MCS7/15	14.0	-71.0
<b>802.11n HT40 5GHz</b>		
MCS0/8	18.0	-87.0
MCS7/15	14.0	-68.0
<b>802.11ac VHT20 5GHz</b>		
MCS0	18.0	-90.0
MCS9	12.0	-67.0
<b>802.11ac VHT40 5GHz</b>		
MCS0	18.0	-87.0
MCS9	12.0	-62.0
<b>802.11ac VHT80 5GHz</b>		
MCS0	18.0	-84.0
MCS9	12.0	-59.0

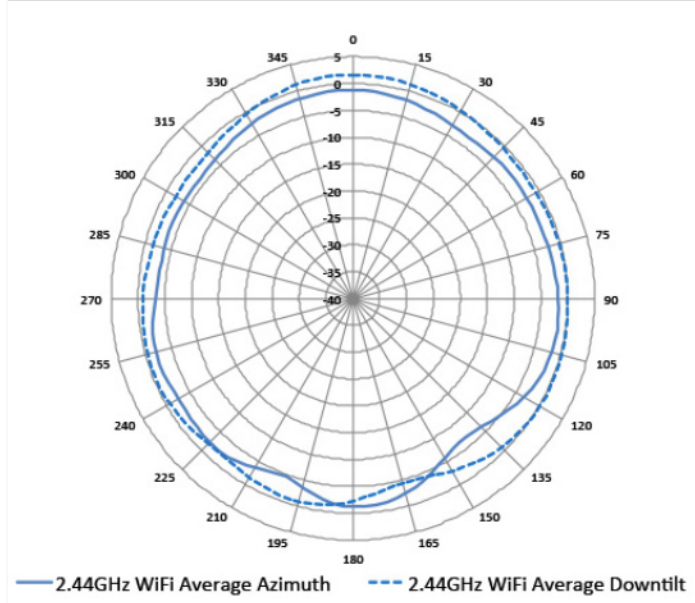
Note: Table shows the maximum hardware capability of the AP (excluding antenna and MIMO/MRC gain). Actual maximum transmit power may be limited below these numbers to ensure compliance with local regulatory requirements.



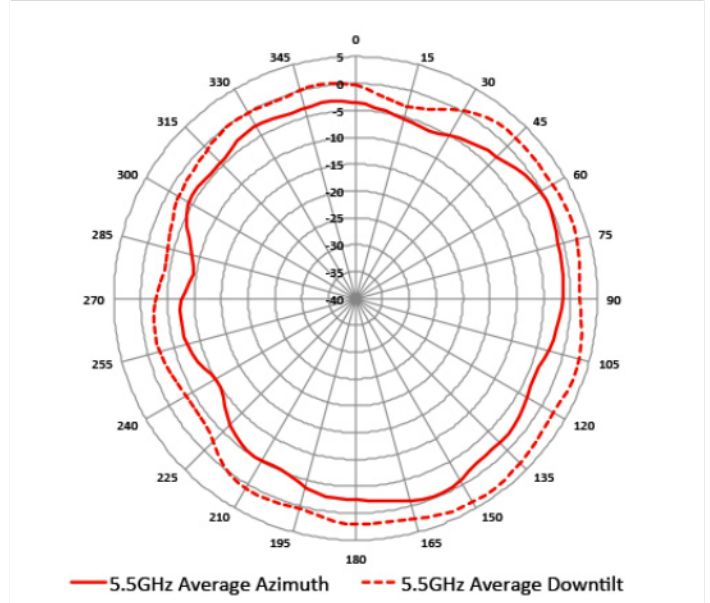
### ANTENNA PATTERN PLOTS

#### Horizontal planes (top view, AP facing forward)

Showing both azimuth (0 degrees) and 30 degrees downtilt patterns



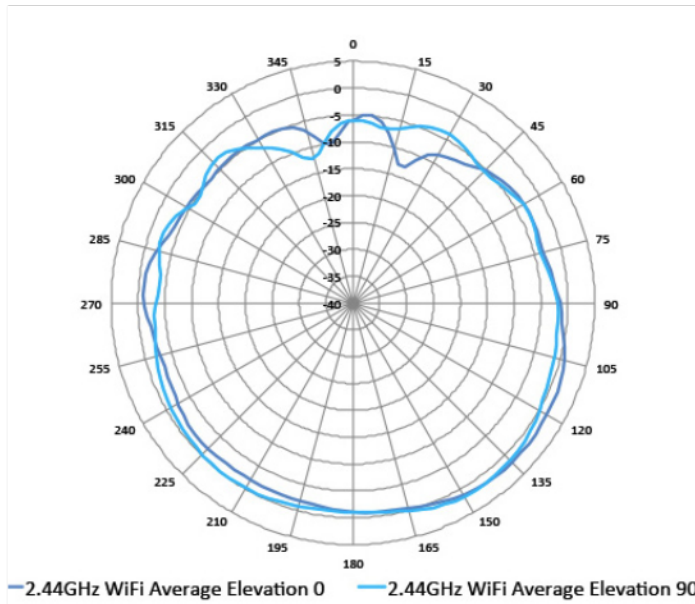
2.44GHz Wi-Fi (radio 1)



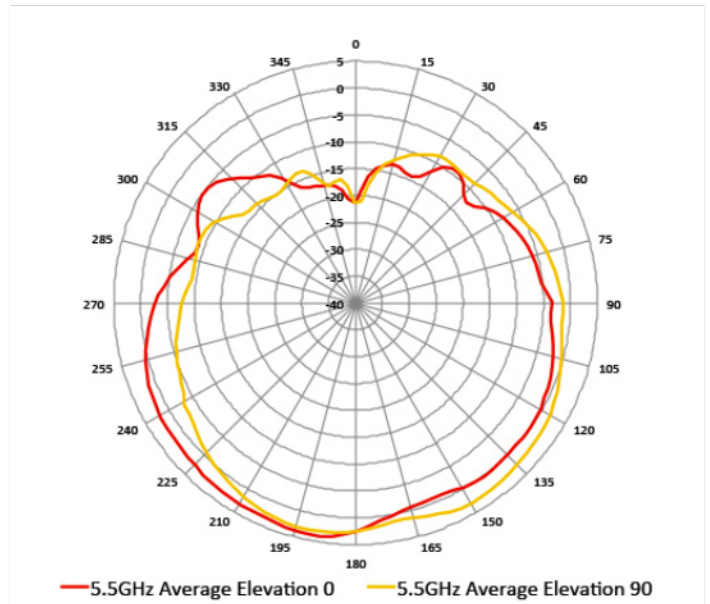
5.5GHz Wi-Fi (radio 0)

#### Elevation planes (side view, AP facing down)

Showing side view with AP rotated 0 and 90 degrees



2.44GHz Wi-Fi (radio 1)



5.5GHz Wi-Fi (radio 0)

<b>ORDERING INFORMATION</b>	
Part Number	Description
<b>Aruba 303 Series Campus Access Points</b>	
JZ317A	Aruba AP-303 (EG) Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus AP
JZ318A	Aruba AP-303 (IL) Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus AP
JZ319A	Aruba AP-303 (JP) Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus AP
JZ320A	Aruba AP-303 (RW) Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus AP
JZ321A	Aruba AP-303 (US) Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus AP
<b>Mount Kits – Spares</b>	
JW044A	AP-220-MNT-C1 2x Ceiling Grid Rail Adapter for Basic Flat Rails Mount Kit
<b>Mount Kits – Accessories</b>	
JW045A	AP-220-MNT-C2 Kit with two suspended ceiling grid rail adapters for Interlude and Silhouette style rails
JX961A	AP-MNT-CM1 Industrial grade indoor Access Point metal suspended ceiling rail mount kit
JW046A	AP-220-MNT-W1 Flat surface wall/ceiling basic flat surface AP mount kit (black)
JW047A	AP-220-MNT-W1W Flat surface wall/ceiling basic flat surface AP mount kit (white)
JY705A	AP-200-MNT-W3 Low profile box style secure small flat surface AP mount kit (white)
<b>Cosmetic Covers</b>	
JZ327A	AP-303-CVR-20 20-pack for AP-303 with Holes for LED Indicators White Non-glossy Snap-on Covers
<b>Power Accessories</b>	
JW627A	PD-3501G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector
JX990A	AP-AC-12V30B 12V/30W AC/DC Desktop Style 2.1/5.5/9.5mm Circular 90 Deg Plug DoE Level VI Adapter
<b>Other Accessories</b>	
JY728A	AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable

# Aruba 303 Series Campus Access Points

## Installation Guide

The Aruba 303 Series campus access points support IEEE802.11ac Wave 2, delivering high performance with the MU-MIMO (Multi-User Multiple-Input, Multiple-Output) technology, while also supporting 802.11a/b/g/n wireless services. The 303 Series access points can be deployed in either a controller-based (ArubaOS) or controller-less (InstantOS) deployment mode.

The 303 Series access points provide 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
- Compatibility with IEEE 802.3af PoE
- Integrated Bluetooth Low Energy (BLE) radio

### Package Contents

- 303 Series Access Point
- Ceiling mount bracket (Spare: AP-220-MNT-C1 mount kit)
- Startup guide
- Declaration of Conformity for Europe



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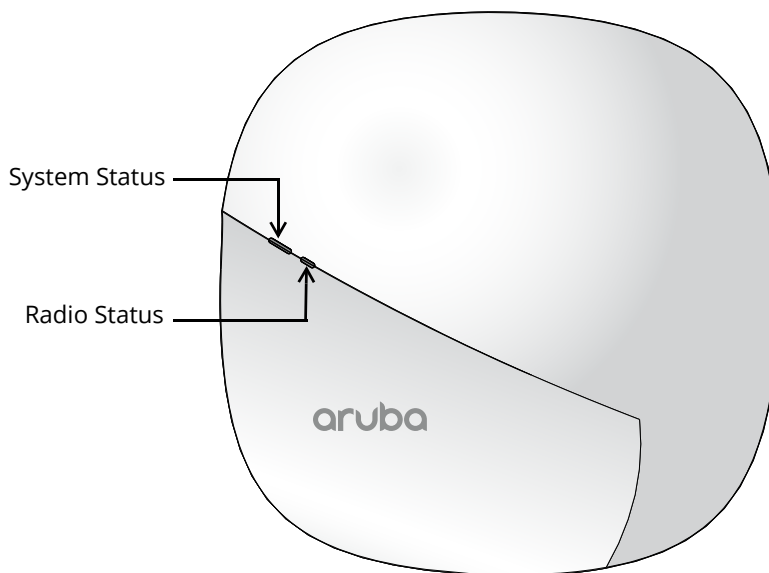
Inform your supplier if there are any incorrect, missing, or damaged parts. If possible, retain the carton, including the original packing materials. Use these materials to repack and return the unit to the supplier if needed.

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### Hardware Overview

The following sections outline the hardware components of the 303 Series access points.

**Figure 1** 303 Series (front view)





## LED

The 303 Series access points have two LEDs that indicate the system and radio status of the device. These two LEDs can be configured via ArubaOS or Aruba Instant software into three separate modes:

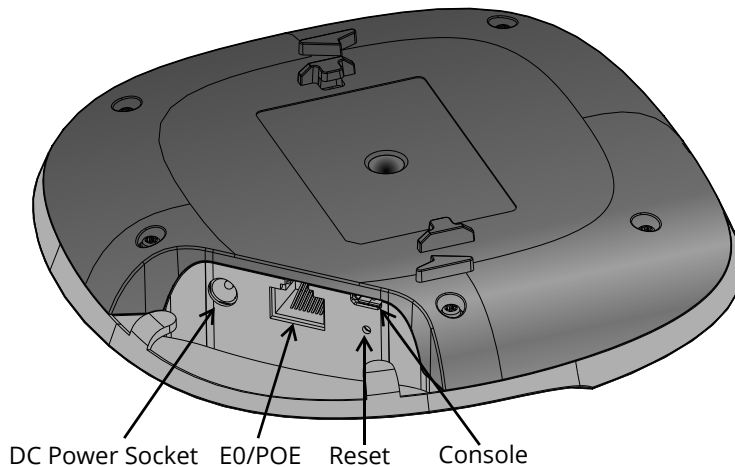
- Normal mode (by default): See [Table 1](#)
- Both LEDs off
- Blink mode: Both LEDs blink green (synchronized)

**Table 1** 303 Series Access Point LEDs Status in Normal Mode

LED	Color/State	Meaning
System Status	Off	Device powered off
	Green- Blinking <sup>1</sup>	Device booting, not ready for use
	Green- Solid	Device ready for use, no restrictions
	Green- Flashing <sup>2</sup>	Device ready for use, uplink negotiated in sub optimal speed (<1Gbps)
	Red- Solid	System error condition - immediate action required
Radio Status	Off	Device powered off, or both radios disabled
	Green- Solid	Both radios enabled in access mode
	Green- Blinking	One radio enabled in access mode, other disabled
	Amber- Solid	Both radios enabled in monitor mode
	Amber- Blinking	One radio enabled in monitor mode, other disabled
	Alternating <sup>3</sup>	<ul style="list-style-type: none"><li>• Green: one radio in access mode</li><li>• Amber: one radio in monitor mode</li></ul>

- 1 blinking: one second on, one second off, 2 seconds cycle  
2 flashing: mostly on, fraction of a second off, 2 second cycle  
3 alternating: one second each color, 2 second cycle

**Figure 2** 303 Series (rear view)



## E0/POE Port

The 303 Series access point is equipped with one 10/100/1000Base-T auto-sensing, MDI/MDX Ethernet port (E0) for wired network connectivity. This port supports IEEE 802.3af Power over Ethernet (PoE), accepting 48Vdc (nominal) as a standard defined Powered Device (PD) from a Power Sourcing Equipment (PSE) such as a PoE midspan injector, or network infrastructure that supports PoE.

## Console Port

The console port is a Micro-B connector located on the back of this device. A proprietary serial adapter cable (AP-CBL-SERU) is needed to use this interface. It is sold separately to connect the AP to a serial terminal or a laptop for direct local management.

## DC Power Socket

If PoE is not available, a proprietary Aruba AP-AC-12V30B power adapter kit (sold separately) can be used to power the 303 Series access points.

Additionally, a locally-sourced AC-to-DC adapter (or any DC source) can be used to power this device, as long as it complies with all applicable local regulatory requirements and the DC interface meets the following specifications:

- 12 Vdc (+/- 5%) and at least 12W
- 2.1/5.5 mm center-positive circular plug, 9.5 mm length

## Reset Button

To reset the 303 Series access points to factory default settings, press and hold down the reset button using a small, narrow object such as a paper clip for several seconds while powering up the AP, or for more than 10 seconds during normal operation.

To turn off all the LED display, press and release the reset button using a small, narrow object, such as a paperclip for less than 10 seconds during normal operation of the access point.

## Before You Begin

Refer to the sections below before beginning the installation process.



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**FCC Statement:** Improper termination of access points installed in the United States configured to non-US model controllers will be in 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).

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### EU Statement:

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



Produit réseau local radio basse puissance operant dans la bande fréquence 2.4 GHz et 5 GHz. Merci de vous référer au *ArubaOS/Instant User Guide* pour les details des restrictions.

Low Power FunkLAN Produkt, das im 2.4 GHz und im 5 GHz Band arbeitet. Weitere Informationen bezüglich Einschränkungen finden Sie im *ArubaOS/Instant User Guide*.

Apparati Radio LAN a bassa Potenza, operanti a 2.4 GHz e 5 GHz. Fare riferimento alla *ArubaOS/Instant User Guide* per avere informazioni dettagliate sulle restrizioni.

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## Pre-Installation Checklist

Before installing the 303 Series access point, be sure that you have the following:

- Cat5E or better UTP cable
- One of the following power sources:
  - IEEE 802.3af-compliant Power over Ethernet (PoE) source
  - Aruba AP-AC-12V30B adapter kit (sold separately)

For 303 Series access point running ArubaOS 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



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This device in compliance with governmental requirements, and is designed the so that only authorized network administrators can change the settings. For more information about access point configuration, refer to the *ArubaOS Quick Start Guide and ArubaOS User Guide*.

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Access points are radio transmission devices and as such 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 will be used.

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## Verifying Pre-Installation Connectivity



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The instructions in this section are applicable to the 303 Series access points running ArubaOS only.

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Before you install access points in a network environment, make sure that the access points will be able to locate and connect to the controller when they are powered on. Specifically, you must 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.

## Identifying Specific Installation Locations

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 will impact RF propagation and should be 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

## Installing the Access Point

The 303 Series access points ship with a ceiling mount bracket to attach to a 9/16" or 15/16" ceiling rail. Additional ceiling or wall mount kits are sold separately as accessories.



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Service to all Aruba products should be performed by trained service personnel only.

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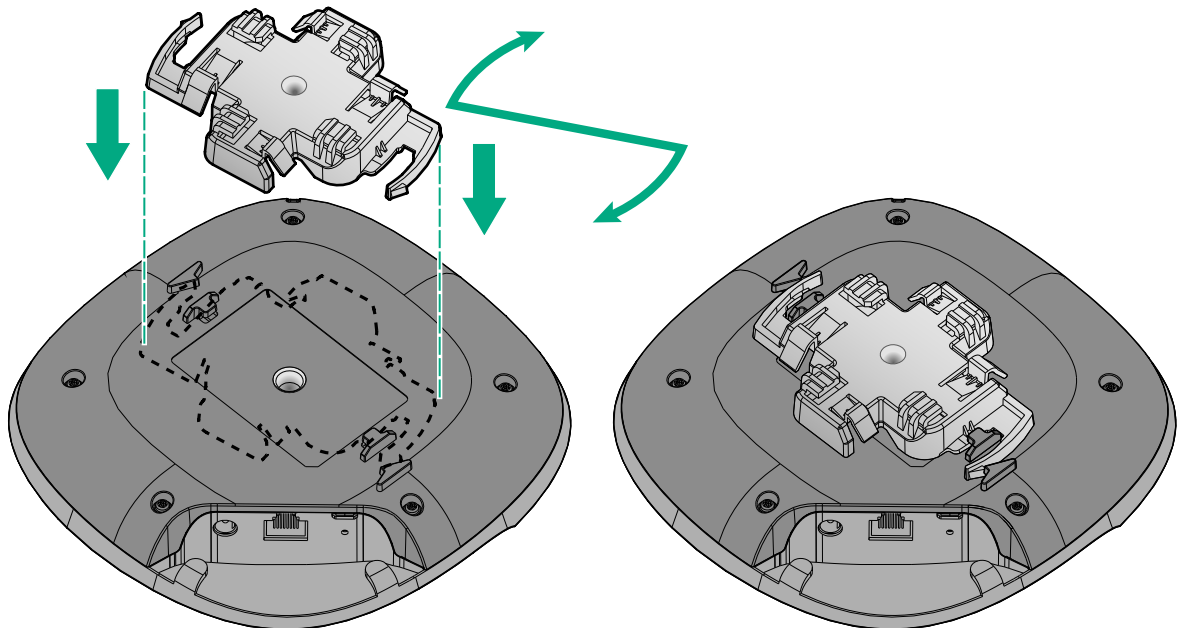
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The installer is responsible for securing the access point onto the ceiling tile rail in accordance with the steps below. Failure to properly install this product may result in physical injury and/or damage to property.

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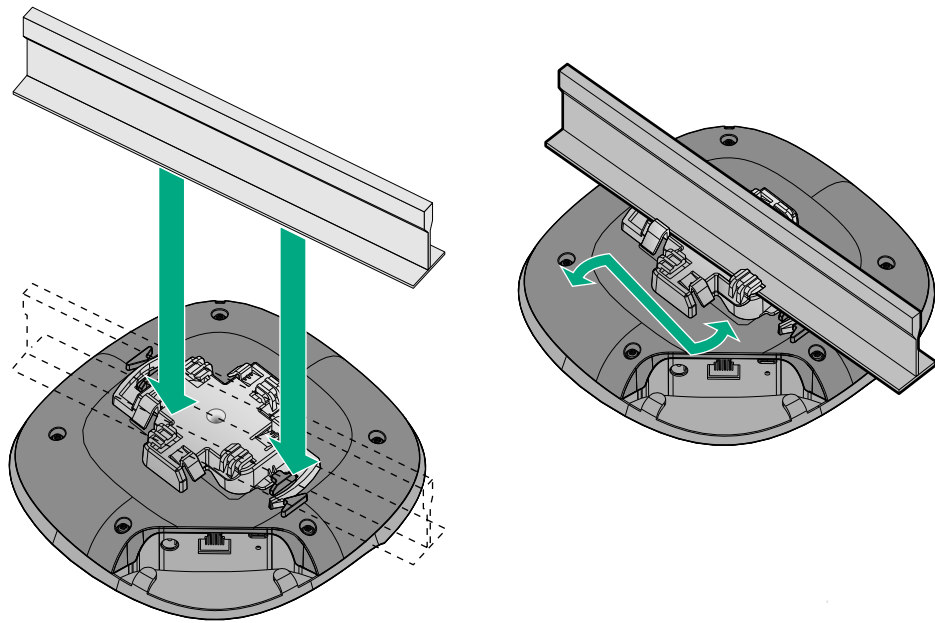
1. Pull the necessary cables through a prepared hole in the ceiling tile near where the access point will be placed.
2. Place the mount bracket against the back of the access point with the mount bracket at an angle of approximately 30 degrees to the tabs (see [Figure 3](#)).
  - Twist the mount bracket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

**Figure 3** Attaching the Ceiling Mount Bracket to the AP

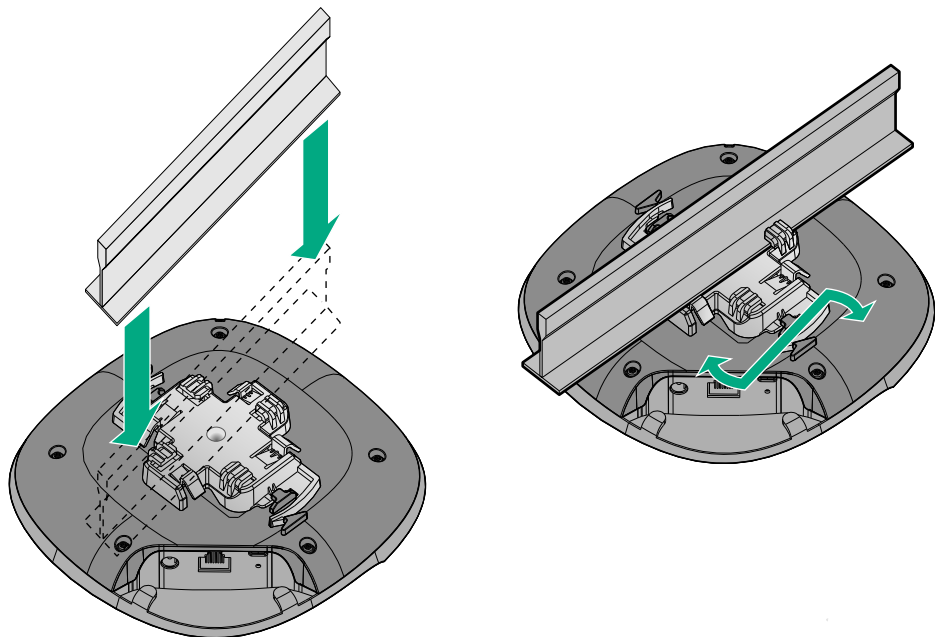


3. Hold the access point next to the ceiling tile rail with the ceiling tile rail mounting slots at approximately a 30-degree angle to the ceiling tile rail (see [Figure 4](#)). Make sure that any cable slack is above the ceiling tile.
4. Pushing toward the ceiling tile, rotate the access point clockwise until the device clicks into place on the ceiling tile rail.

**Figure 4** Mounting the Access Point to a 15/16" ceiling rail



**Figure 5** Mounting the Access Point to a 9/16" ceiling rail



## Verifying Post-Installation Connectivity

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

## Electrical and Environmental Specifications

For additional specifications on this product, please refer to the product data sheet at [www.arubanetworks.com](http://www.arubanetworks.com).



## Electrical

- Ethernet:
  - One 10/100/1000 Base-T auto-sensing Ethernet interface (RJ-45)
- Power:
  - Direct DC source: 12Vdc nominal, +/- 5%
  - Power over Ethernet (PoE): 802.3af complaint source
  - Connect only to IEC 60950-1 or IEC 60601-1 products and power sources.



NOTE

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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 12Vdc, minimum 1A, marked “LPS” and “Class 2”, and suitable for plugging into a standard power receptacle in the US and Canada.

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## 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)

## Regulatory Information

The following regulatory model names apply to the 303 Series access points:

- AP-303: APIN0303

## FCC



CAUTION

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**RF Radiation Exposure Statement:** This equipment complies with FCC RF radiation exposure limits. This equipment should be installed and operated with a minimum distance of 7.87 inches (20cm) 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.

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CAUTION

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**Déclaration sur les limites d'exposition aux radiofréquences :** cet équipement est conforme aux limites d'exposition aux rayonnements radioélectriques spécifiées par la FCC. Il doit être installé et utilisé à une distance minimale de 20 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.

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CAUTION

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The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

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## FCC Class B Part 15

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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause interference harmful to radio communications.

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

If this equipment does cause interference, 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.



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

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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.

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## Canada

Complies with the Class B limits for radio noise emissions as set out in the interference-causing equipment standard entitled "Digital Apparatus," CAN ICES-3(B)/NMB-3(B).

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This device complies with Industry Canada license-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.

### Déclaration d'Industrie Canada

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du 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.



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This equipment complies with IC RSS-102 RF 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.

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Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

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Under Industry Canada regulations, when operated in 5150 to 5250 MHz frequency range, this device is restricted to indoor use to reduce the potential for harmful interference with co-channel Mobile Satellite Systems. Users are advised that high power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850MHz and that these radars could cause interference and/or damage to LE-LAN devices.

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Conformément aux réglementations d'Industrie Canada, en cas d'utilisation dans la plage de fréquences de 5150 à 5250 MHz, cet appareil doit uniquement être utilisé en intérieur afin de réduire les risques d'interférence avec les systèmes satellites mobiles partageant le même canal. Les utilisateurs êtes avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL

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## CE EU Regulatory Conformance

Aruba Networks Inc., hereby declares that the 303 Series Wireless Access Points are in compliance with directives listed below:

- EMC Directive 2004
- Low Voltage Directive 2006
- R&TTE Directive 1999
- REACH Regulation (EC) No 1907/2006
- RoHS Directive 2011
- WEEE Directive 2002

A Declaration of Conformity for these directives is available for viewing at [www.arubanetworks.com](http://www.arubanetworks.com).

Users are advised that high power Radars are allocated as primary users of the bands 5250-5350 MHz and 5650-5850 MHz and these Radars could cause interference and/or damage to Licensed Exempt WLAN devices.

## Medical

1. Equipment not suitable for use in the presence of flammable mixtures.
2. Connect to only IEC 60950-1 or IEC 60601-1 certified products and power sources. The end user is responsible for the resulting medical system complies with the requirements of IEC 60601-1.
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.



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This device is intended for indoor use, in hallways, breakrooms, office areas of professional medical facilities. This device should not be installed in rooms housing patients.

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### 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。



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

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## Brazil

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

## México

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 debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

## 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 [www.arubanetworks.com](http://www.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 wheeled 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 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE).

## 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.

## European Union RoHS



Aruba products also 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). Products and packaging will be marked with the "RoHS" label shown at the left indicating conformance to this directive.

## China RoHS



Aruba products also comply with China environmental declaration requirements and are labeled with the "EFUP 25" label shown at the left.

有毒有害物质声明  
Hazardous Materials Declaration

部件名称 (Parts)	有毒有害物质或元素 (Hazardous Substance)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr <sup>6+</sup> )	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路模块 (circuit modules)	X	O	O	O	O	O
电缆及电缆组件 (Cables & Cable Assemblies)	O	O	O	O	O	O
金属部件 (Metal Parts)	O	O	O	O	O	O
塑料和聚合物部件 (Plastic and Polymeric Parts)	O	O	O	O	O	O

O: 表示该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.

X: 表示该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.

对销售之目的所售产品，本表显示供应链的电子产品信息可能包含这些物质。  
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.

## Contacting Support

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

### Copyright

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### Open Source Code

This product includes code licensed under the GNU General Public License, the GNU Lesser General Public License, and/or certain other open source licenses.

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 details, see Aruba Networks standard warranty terms and conditions.

### Software End User License Agreement

To view the Software End User License Agreement, visit <http://support.arubanetworks.com>, open the **Documentation** tab, then select **Software End User License Agreement**.

The Aruba logo consists of the word "aruba" in a lowercase, rounded, orange sans-serif font.

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Enterprise company  
[www.arubanetworks.com](http://www.arubanetworks.com)  
3333 Scott Boulevard  
Santa Clara, California 95054  
USA