



Aruba 303 Series Access Points Data Sheet



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Leading Network Hardware Supplier

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OVERVIEW

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.

Figure 1 shows the appearance of Aruba 303 AP.



KEY FEATURES

- 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)
- 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

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

This table shows the specifications.

Category	Description
Hardware Variants	<ul style="list-style-type: none"> • AP-303: Internal antenna models.
Wi-Fi Radio Specifications	<ul style="list-style-type: none"> • AP type: Indoor, dual radio, 5GHz 802.11ac 2x2 MIMO and 2.4GHz 802.11n 2x2 MIMO • 5GHz (radio 0): <ul style="list-style-type: none"> - 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): <ul style="list-style-type: none"> - 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): <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 802.11b: Direct-sequence spread-spectrum (DSSS)

	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> • AP-303: Internal antenna models. - Two vertically polarized dual-band downtilt omnidirectional antennas for 2x2 MIMO with peak antenna gain of 3.3dBi (2.4GHz) and 5.9dBi (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 4.6dBi in 5GHz.
Other Interfaces	<ul style="list-style-type: none"> • E0: One 10/100/1000BASE-T Ethernet network interface (RJ-45) - Auto-sensing link speed and MDI/MDX - 802.3az Energy Efficient Ethernet (EEE) - 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

	<ul style="list-style-type: none"> - 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, μUSB physical jack) • Kensington security slot
Power Sources and Consumption	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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) - 410g or 14.5oz
Environmental	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • MTBF: 795khrs (91yrs) at +25C operating temperature
Regulatory	<ul style="list-style-type: none"> • 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 <p>For more country-specific regulatory information and approvals, please contact us.</p>
Regulatory Model Numbers	<ul style="list-style-type: none"> • AP-303: APIN0303
Certifications	<ul style="list-style-type: none"> • CB Scheme Safety, cTUVus • UL2043 plenum rating • Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac

- Wi-Fi Alliance certified (WFA) 802.11ac with Wave 2 features
- Passpoint® (Release 2) with ArubaOS and Instant 8.3+

ORDERING INFORMATION

Order the Aruba 303 AP and accessories here:

Model	Description
Aruba 303 Series Campus Access Points	
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
Mounting Spares	
JW044A	AP-220-MNT-C1 2x Ceiling Grid Rail Adapter for Basic Flat Rails Mount Kit
Mounting Accessories	
JW045A	AP-220-MNT-C2 2x Ceiling Grid Rail Adapter for Interlude and Silhouette Mt Kit
JX961A	AP-MNT-CM1 Industrial Grade Indoor Access Point Metal Suspended Ceiling Rail Mount Kit
JW046A	AP-220-MNT-W1 Flat Surface Wall/Ceiling Black AP Basic Flat Surface Mount Kit
JW047A	AP-220-MNT-W1W Flat Surface Wall/Ceiling White AP Basic Flat Surface Mount Kit
JY705A	AP-200-MNT-W3 White Low Profile Box Style Secure Small AP Flat Surface Mount Kit
Q9U25A	AP-MNT-W4 White Low Profile Basic AP Flat Surface Mount Kit
Cosmetic Covers	
JZ327A	AP-303-CVR-20 20-pack for AP-303 with Holes for LED Indicators White Non-glossy Snap-on Covers
Power Accessories	
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
Other Accessories	
JY728A	AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable

WHERE TO BUY

Want to buy this series of products? please contact:

- Tel: +1-626-239-8066 (USA) / +852-3050-1066 / +852-3174-6166
- Fax: +852-3050-1066 (Hong Kong)
- Email: sales@router-switch.com (Sales Inquiries)

Or visit: [Aruba 300 Series Access Points](#)

About us

Router-switch.com (HongKong Yejian Technologies Co., Ltd), founded in 2002, is one of the biggest Global Network Hardware Supplier. We are a leading provider of network products with 14,500+ customers in over 200 countries. We provide original new and used network equipments (Cisco, Huawei, HPE, Dell, Juniper, EMC, etc.), including Routers, Switches, Servers, Storage, Telepresence and Videoconferencing, IP Phones, Firewalls, Wireless APs & Controllers, EHWIC/HWIC/VWIC Cards, SFPs, Memory & Flash, Hard Disk, Cables, and all kinds of network solutions related products.

SOURCES

<https://www.arubanetworks.com/products/networking/access-points/303-series/>