Overview

Aruba 207 Series Access Points

Fast 802.11ac that's affordable for everyone

Product overview

The affordable mid-range Aruba 207 Series access point delivers high performance 802.11ac for medium density enterprise environments. With the integrated BLE and supporting 802.3af power, the Aruba 207 Series AP enables enterprises to improve their work efficiency and productivity with the lowest TCO.

The compact Aruba 207 Series AP delivers a maximum concurrent data rate of 867Mbps in the 5GHz band and 400 Mbps in the 2.4GHz band (for an aggregate peak data rate of 1.3Gbps).

Featuring 2x2:2SS, VHT160MHz and increased operating temperature, the 207 AP is ideal for medium device density environments, such as schools, retail branches, warehouses, hotels and enterprise offices, where the environment is cost sensitive.

With the integrated Bluetooth Aruba Beacon, the 207 Series provides advanced location and indoor wayfinding, and proximity-based push notification services while simplifying the remote management of battery-powered 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.

Features and Benefits

Unique Benefits

- Dual Radio 802.11ac Access Point
  - Supports up to 867Mbps in the 5GHz band (with 2SS/VHT80 clients) and up to 400Mbps in the 2.4GHz band (with 2SS/VHT40 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 management of a network of Aruba Beacons
- 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 Communication apps
  - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business, with encrypted videoconferencing, voice, chat and desktop sharing.
- RF Management
  - Adaptive Radio Management (ARM) technology automatically assigns channel and power settings, provides airtime fairness, and ensures that APs stay clear of all sources of RF interference to deliver reliable, high-

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performance WLANs.
- The Aruba 207 Series APs 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.

- • Intelligent app visibility and control
  - AppRF technology leverages deep packet inspection to classify and block, prioritize or limit bandwidth for over 2,500 enterprise apps or groups of apps.

- • Security
  - 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 files, URLs and IPs, providing comprehensive protection against advanced online threats.
  - Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys

Choose your Operating Mode

Aruba 207 Series APs offer a choice of operating modes to meet your unique management and deployment requirements.

- Controller-managed mode - When managed by Aruba Mobility Controllers, Aruba 207 Series APs offer centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding.
- Aruba Instant mode - In Aruba Instant mode, a single AP automatically distributes the network configuration to other Instant APs in the WLAN. Simply power-up one Instant AP, configure it over the air, and plug in the other APs - the entire process takes about five minutes. If WLAN requirements change, a built-in migration path allows 207 Series instant APs to become part of a WLAN that is managed by a Mobility Controller.
- Remote AP (RAP) for branch deployments.
- Air monitor (AM) for wireless IDS, rogue detection and containment.
- Spectrum analyzer, dedicated or hybrid, for identifying sources of RF interference.
- Secure enterprise mesh.

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, Instant APs are factory-shipped to any site and configure themselves when powered up.

207 Series Access Point

- • AP-207 (controller-managed) and IAP-207 (Instant):
  - 802.11ac - 5GHz 2x2 MIMO (867Mbps max rate) and 2.4GHz 2x2 MIMO (400Mbps max rate) radios, with a total of two integrated omni-directional downtilt dual-band antennas

WI-FI Radio Specifications

- • AP type: Indoor, dual radio, 5GHz 802.11ac 2x2 MIMO and 2.4GHz 802.11n 2x2 MIMO
- • Software-configurable dual radio supports 5GHz (Radio 0) and 2.4GHz (Radio 1)
- • 5GHz: Two spatial stream Single User (SU) MIMO for up to 867Mbps wireless data rate to individual 2x2 VHT80 client devices
- • 2.4GHz: Two spatial stream Single User (SU) MIMO for up to 400Mbps wireless data rate to individual 2x2 VHT40 client devices (300Mbps for HT40 802.11n client devices)
- • Support for up to 255 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

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- • 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 0.5 dBm
- • Maximum (conducted) transmit power (limited by local regulatory requirements):
  - 2.4GHz band: +18 dBm per chain, +21 dBm aggregate (2x2)
  - 5GHz band: +18 dBm per chain, +21 dBm aggregate (2x2)
  - **NOTE:** conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain
- • Advanced Cellular Coexistence (ACC) minimizes 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 for VHT20/40/80
- • 802.11n high-throughput (HT) support: HT 20/40
- • 802.11ac very high throughput (VHT) support: VHT 20/40/80
- • 802.11n/ac packet aggregation: A-MPDU, A-MSDU

WI-FI Antennas

- AP-207/IAP-207: Two integrated dual-band downtilt omni-directional antennas for 2x2 MIMO with maximum antenna gain of 3.4dBi in 2.4GHz and 6.6dBi in 5GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 degrees.
  - The maximum gain of the combined (summed) antenna patterns for all elements operating in the same band is 5.2dBi in 2.4GHz and 7.5dBi in 5GHz.

Other Interfaces

- One 10/100/1000BASE-T Ethernet network interface (RJ-45)
  - Auto-sensing link speed and MDI/MDX
  - 802.3az Energy Efficient Ethernet (EEE)
- Bluetooth Low Energy (BLE) radio
  - Up to 3dBm transmit power (class 2) and -92dBm receive sensitivity
  - Integrated antenna with roughly 30 degrees downtilt and peak gain of 2.2dBi
- Visual indicators (multi-color LEDs): for System and Radio status
- Reset button: factory reset (during device power up)
- Serial console interface (proprietary; optional adapter cable available)
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- 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%
  - Interface accepts 2.1/5.5-mm center-positive circular plug with 9.5-mm length
- Power over Ethernet (POE): 48 Vdc (nominal) 802.3af/802.3at compliant source
  - Unrestricted functionality with 802.3af POE
- Maximum (worst-case) power consumption: 12.3W (POE) or 10.1W (DC)
- Maximum (worst-case) power consumption in idle mode: 5.3W (POE) or 4.4W (DC)

Mounting

- The AP ships with two (white) mounting 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/weight (unit, excluding mount accessories):
  - 150mm x 150mm x 40mm
  - 380g
- Dimensions/weight (shipping):
  - 190mm x 180mm x 70mm
  - 590g

Environmental

- Operating:
  - Temperature: 0° C to +50° C (+32° F to +122° F)
  - Humidity: 5% to 95% non-condensing
- Storage and transportation:
  - Temperature: -40° C to +70° C (-40° F to +158° F)

Regulatory

- FCC/Industry of Canada
- CE Marked
- R&TTE Directive 1995/5/EC
- Low Voltage Directive 72/23/EEC
- EN 300 328
- EN 301 489
- EN 301 893
- 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-207 and IAP-207: APIN0207

Certifications

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

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Warranty

- **Aruba Limited lifetime warranty**

Minimum Software Versions

- ArubaOS 6.5.1.0
- Aruba InstantOS 4.3.1.0

Ordering Guide

Step 1: Select AP Model

Description	Part Number	Configuration Impact
Controller-based Access Points		
Aruba AP-207 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP	JX952A	Add POE injector or AC adapter
Aruba AP-207 FIPS/TAA-compliant 802.11n/ac Dual 2x2:2 Dual Radio Integrated Antenna AP	JX953A	Add POE injector or AC adapter

NOTE: All models ship with ceiling rail adapters (for flat rails) in the box.

Step 2: Add Powering Accessories (Optional)

Description	Part Number	Configuration Impact
Select one of the following:		
PD-3510G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector	JW627A	Add AC power cord
AP-AC-12V30B 12V/30W AC/DC Desktop Style 2.1/5.5/9.5mm Circular 90 Deg Plug DoE Level VI Adapter	JX990A	Add AC power cord
Add 3-prong AC power cord for injector or AC adapter:		
PC-AC-ARG Argentina 220V AC 10A 2-meter AC Power Cord	JW113A	
PC-AC-AUS Australian AC Power Cord	JW114A	
PC-AC-BR Brazil AC Power Cord	JW115A	
PC-AC-CHN China AC Power Cord	JW116A	
PC-AC-DEN Denmark 220V AC 10A 2-meter AC Power Cord	JW117A	
PC-AC-EC Continental European/Schuko AC Power Cord	JW118A	
PC-AC-IN India AC Power Cord	JW119A	
PC-AC-IL Israel 250V AC 10A 2-meter AC Power Cord	JW120A	
PC-AC-IT Italian AC Power Cord	JW121A	
PC-AC-JP Japanese AC Power Cord	JW122A	
PC-AC-KOR Korea AC Power Cord	JW123A	
PC-AC-NA North America AC Power Cord	JW124A	
PC-AC-SWI Switzerland 220V AC 10A 2-meter AC Power Cord	JW125A	
PC-AC-TW Taiwan AC Power Cord	JW126A	
PC-AC-UK UK AC Power Cord	JW127A	
PC-AC-ZA South Africa 250V AC 10A 2-meter AC Power Cord	JW128A	

Step 3: Add Mount Accessories (Optional)

Description	Part Number
AP-220-MNT-C2 2x Ceiling Grid Rail Adapter for Interlude and Silhouette Mt Kit	JW045A

Configuration

AP-MNT-CM1 Industrial Grade Indoor Access Point Metal Suspended Ceiling Rail Mount Kit	JX961A
AP-220-MNT-W1 Flat Surface Wall/Ceiling Black AP Basic Flat Surface Mount Kit	JW046A
AP-220-MNT-W1W Flat Surface Wall/Ceiling White AP Basic Flat Surface Mount Kit	JW047A
AP-220-MNT-W3 White Low Profile Box Style Secure Large AP Flat Surface Mount Kit	JY706A

Step 4: Add cosmetic snap-on cover (optional)

Description	Part Number	Comments
207-CVR-20 20-pk for AP-207 with Holes for LED Indicators White Non-glossy Snap-on Covers	JX960A	One kit per 20 access points

RF Performance Table		
	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
802.11b 2.4GHz		
1 Mbps	18.0	-90.0
11 Mbps	18.0	-90.0
802.11g 2.4GHz		
6 Mbps	18.0	-90.0
54 Mbps	18.0	-75.0
802.11n HT20 2.4GHz		
MCS0/8	18.0	-90.0
MCS7/15	18.0	-71.0
802.11n HT40 2.4GHz		
MCS0/8	18.0	-87.0
MCS7/15	18.0	-68.0
802.11a 5GHz		
6 Mbps	18.0	-90.0
54 Mbps	17.5	-75.0
802.11n HT20 5 GHz		
MCS0/8	18.0	-91.0
MCS7/15	17.0	-71.0
802.11n HT40 5GHz		
MCS0/8	18.0	-87.0
MCS7/15	17.0	-68.0
802.11ac VHT20 5GHz (SU-MIMO)		
MCS0	18.0	-90.0
MCS8	16.0	-67.0
802.11ac VHT40 5GHz (SU-MIMO)		
MCS0	18.0	-87.0
MCS9	15.0	-62.0
802.11ac VHT80 5GHz (SU-MIMO)		

Technical Specifications

MCS0	18.0	-84.0
MCS9	15.0	-59.0

Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.

Summary of Changes

Date	Version History	Action	Description of Change
01-Nov-2016	Version 1	Created	Document creation.

Sign up for updates

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To learn more, visit: http://www.hpe.com/networking

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