

## DATA SHEET

# ARUBA 207 SERIES ACCESS POINTS

Fast 802.11ac that's affordable for everyone

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 867 Mbps in the 5GHz band and 400 Mbps in the 2.4GHz band (for an aggregate peak data rate of 1.3Gbps). Featuring 2x2:2SS, and increased operating temperature, the 207 AP is designed 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.

## UNIQUE BENEFITS

- Dual Radio 802.11ac Access Point
  - Supports up to 867 Mbps in the 5GHz band (with 2SS/VHT80 clients) and up to 400 Mbps 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-performance WLANs.
  - The Aruba 207 Series APs can be configured to provide part-time or dedicated air monitoring for 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 thousands of applications in a range of categories.

- 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.
- 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.

### AP-207 SERIES SPECIFICATIONS

- AP-207 (controller-managed) and IAP-207 (Instant):
  - 802.11ac – 5GHz 2x2 MIMO (867 Mbps max rate) and 2.4GHz 2x2 MIMO (400 Mbps 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 867 Mbps wireless data rate to individual 2x2 VHT80 client devices
- 2.4GHz: Two spatial stream Single User (SU) MIMO for up to 400 Mbps wireless data rate to individual 2x2 VHT40 client devices (300 Mbps for HT40 802.11n 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 0.5 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 peak antenna gain of 3.9dBi in 2.4GHz and 6.8dBi 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.
  - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the effective per-antenna pattern is 2.7dBi in 2.4GHz and 4.8dBi 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)
- 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 (black) 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 93% non-condensing
- Storage and transportation:
  - Temperature: -40° C to +70° C (-40° F to +158° F)

## 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-207 and IAP-207: APIN0207

## RELIABILITY

- MTBF: 753,457hrs (86yrs) at +25C operating temperature

## CERTIFICATIONS

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

## WARRANTY

- [Aruba limited lifetime warranty](#)

## MINIMUM OPERATING SYSTEM SOFTWARE VERSIONS

- ArubaOS 6.5.1.0, 8.1.0.0
- Aruba InstantOS 4.3.1.0

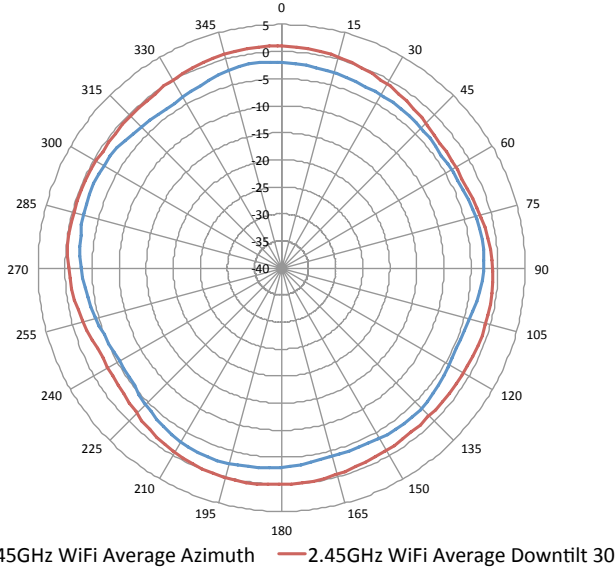
RF PERFORMANCE TABLE		
	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
<b>802.11b 2.4GHz</b>		
1 Mbps	18.0	-90.0
11 Mbps	18.0	-90.0
<b>802.11g 2.4GHz</b>		
6 Mbps	18.0	-90.0
54 Mbps	18.0	-75.0
<b>802.11n HT20 2.4GHz</b>		
MCS0/8	18.0	-90.0
MCS7/15	18.0	-71.0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

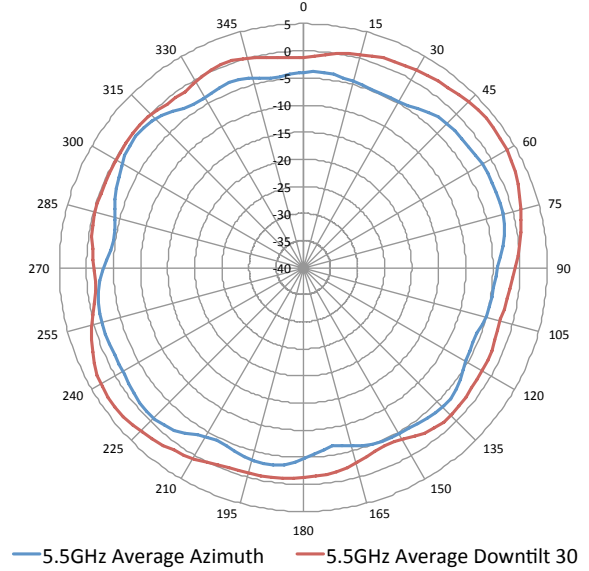
## AP-207 ANTENNA PATTERN PLOTS

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

Showing azimuth (0 degrees) and 30 degrees downtilt pattern



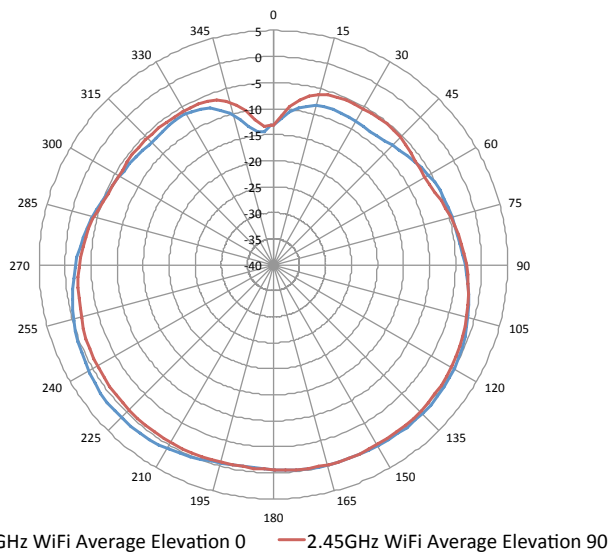
2.45GHz Wi-Fi (antennas W0, W1)



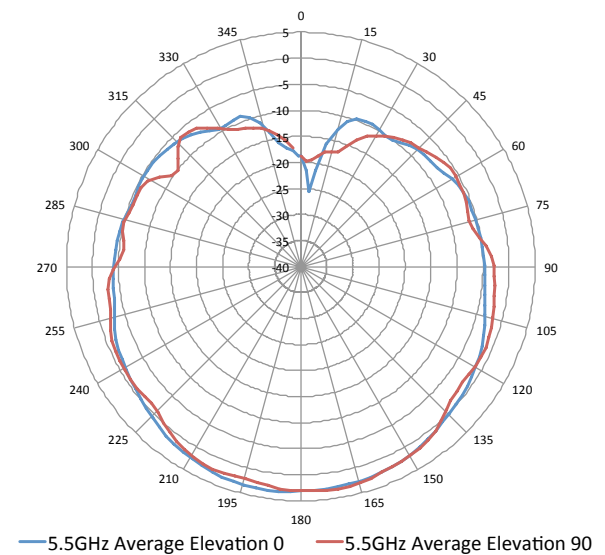
5.5GHz Wi-Fi (antennas W0, W1)

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

Showing side view with AP rotated 0 and 90 degrees



2.45GHz Wi-Fi (antennas W0, W1)



5.5GHz Wi-Fi (antennas W0, W1)

## ORDERING INFORMATION

Part Number	Description
<b>AP-207 Series Access Points</b>	
JX952A	Aruba AP-207 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX953A	Aruba AP-207 FIPS/TAA-compliant 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
<b>AP-207 Series Instant Access Points</b>	
JY860A	Aruba Instant IAP-207 (EG) 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX956A	Aruba Instant IAP-207 (IL) 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX957A	Aruba Instant IAP-207 (JP) 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX954A	Aruba Instant IAP-207 (RW) 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX958A	Aruba Instant IAP-207 (RW) FIPS/TAA 802.11n/ac 2x2:2 Dual Radio Integrated Ant AP
JX955A	Aruba Instant IAP-207 (US) 802.11n/ac 2x2:2 Dual Radio Integrated Antenna AP
JX959A	Aruba Instant IAP-207 (US) FIPS/TAA 802.11n/ac 2x2:2 Dual Radio Integrated Ant AP
<b>Mounting Spares</b>	
JW044A	AP-220-MNT-C1 2x Ceiling Grid Rail Adapter for Basic Flat Rails Mount Kit
<b>Mounting Accessories</b>	
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
<b>Other Accessories</b>	
JX960A	AP-207-CVR-20 20-pk for AP-207 with Holes for LED Indicators White Non-glossy Snap-on Covers
<b>Generic Indoor AP Accessories</b>	
JX990A	AP-AC-12V30B 12V/30W AC/DC Desktop Style 2.1/5.5/9.5mm Circular 90 Deg Plug DoE Level VI Adapter
JW627A	PD-3501G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector
JW071A	AP-CBL-SER AP Proprietary DB9 Female Serial Adapter Cable



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[www.arubanetworks.com](http://www.arubanetworks.com)

3333 SCOTT BLVD | SANTA CLARA, CA 95054

1.844.473.2782 | T: 1.408.227.4500 | FAX: 1.408.227.4550 | [INFO@ARUBANETWORKS.COM](mailto:INFO@ARUBANETWORKS.COM)

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