200 SERIES SPECIFICATIONS

AP-205 and IAP-205
- 2.4-GHz (300 Mbps max rate) and 5-GHz (867 Mbps max rate) radios, each with 2×2 MIMO and four integrated omni-directional downtilt antennas.

AP-204 and IAP-204
- 2.4-GHz (300 Mbps max rate) and 5-GHz (867 Mbps max rate) radios, each with 2×2 MIMO and two combined, diplexed external RP-SMA antenna connectors.

ADVANCED FEATURES

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 200 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.

Spectrum analysis
- Capable of part-time or dedicated air monitoring, the spectrum analyzer remotely scans the 2.4-GHz and 5-GHz radio bands to identify sources of RF interference.

Security
- Integrated wireless intrusion protection offers thread 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, URL and IPs, providing comprehensive protection against advanced online threats.
- Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys.
- SecureJack-capable for secure tunneling of wired Ethernet traffic.

OPERATING MODES

Aruba Instant AP
Mobility Controller-managed AP
Remote AP (RAP) for branch deployments
Air monitor (AM) for wireless IDS, rogue detection and containment
Spectrum analyzer, dedicated or hybrid
Secure enterprise mesh (*Available Q2 2015)

WIRELESS RADIO SPECIFICATIONS

AP type: Indoor, dual radio, 5-GHz 802.11ac and 2.4-GHz 802.11n 2×2:2

Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)

2×2 MIMO with two spatial streams and up to 867 Mbps wireless data rate

Supported frequency bands (country-specific restrictions apply):

- 2.4000 GHz to 2.4835 GHz
- 5.150 to 5.250 GHz
- 5.250 to 5.350 GHz
- 5.470 to 5.725 GHz
- 5.725 to 5.850 GHz

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 (aggregate, conducted total) transmit power (limited by local regulatory requirements):

- 2.4 GHz band: +21 dBm (18 dBm per chain)
- 5 GHz band: +21 dBm (18 dBm per chain)

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 20-MHz, 40-MHz and 80-MHz 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

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: HT 20/40

802.11ac very high throughput (VHT) support: VHT 20/40/80

802.11n/ac packet aggregation: A-MPDU, A-MSDU

ANTENNAS

AP-204/IAP-204: Two RP-SMA connectors for external dual band antennas. Internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 1.5 dB in 2.4 GHz and 3.0 dB in 5 GHz.
AP-205/IAP-205: Four integrated down-tilt omni-directional antennas for 2×2 MIMO with maximum antenna gain of 4.0 dBi in 2.4 GHz and 6.0 dBi in 5 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP.

OTHER INTERFACES

10/100/1000BASE-T Ethernet network interface (RJ-45)
- Auto-sensing link speed and MDI/MDX
- 802.3az Energy Efficient Ethernet (EEE)
- PoE-PD: 48 Vdc (nominal) 802.3af PoE

DC power interface, accepts 1.7/4.0-mm center-positive circular plug with 9.5-mm length
Serial console interface (proprietary; optional adapter cable available)
Visual indicators (LEDs):
- Power/system status
- Ethernet link status (ENET)
- Radio status (two; RAD0, RAD1)

Reset button: factory reset (during device power up)
Serial console interface (RJ-45)
Kensington security slot

POWER

Maximum (worst-case) power consumption: 12.5 watts (PoE) or 11.7 watts (DC)
Maximum (worst-case) power consumption in idle mode: 8.4 watts (PoE) or 7.7 watts (DC)
Direct DC source: 12 Vdc nominal, +/- 5%
Power over Ethernet (PoE): 48 Vdc (nominal) 802.3af-compliant source
Power sources sold separately
When both power sources are available, DC power takes priority

MOUNTING

Included with AP:
- Mounting brackets (2) for attaching to 9/16-inch or 15/16-inch T-bar drop-tile ceiling

Spare mounting kit:
- AP-220-MNT-C1: Aruba AP mount kit contains two ceiling-grid rail adapters for flat rails

Optional mounting kits
- AP-220-MNT-C2: Aruba AP mount kit contains two ceiling-grid rail adapters for Interlude and Silhouette style rails
- AP-220-MNT-W1: Aruba AP mount kit contains one basic flat-surface wall/ceiling mount bracket
- AP-200-MNT-W2: Aruba AP mount kit contains one secure flat-surface wall/ceiling mount cradle

MECHANICAL

Dimensions/weight (unit, excluding mount accessories):
- 150 mm x 150 mm x 41.5 mm (W x D x H)
- 380 g

Dimensions/weight (shipping):
- 190 mm x 187 mm x 57 mm (W x D x H)
- 550 g

ENVIRONMENTAL

Operating:
- Temperature: 0° C to +40° C (+32° F to +104° F)
- Humidity: 5% to 95% non-condensing

Storage and transportation temperature range:
- 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.

RELIABILITY

MTBF: 711,187 hours (81.2 years) at +25° C operating temperature

REGULATORY MODEL NUMBER

AP-204 and IAP-204: APIN0204
AP-205 and IAP-205: APIN0205

CERTIFICATIONS

CB Scheme Safety, cTUVus
UL2043 plenum rating
Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac
For more country-specific regulatory information and approvals, please see your Aruba representative.

WARRANTY

Aruba limited lifetime warranty

MINIMUM SOFTWARE VERSION

ArubaOS™ 6.4.1.0
Aruba InstantOS™ 4.1.1.0