

210 SERIES ACCESS POINT SPECIFICATIONS

AP-215 and IAP-215

- 2.4-GHz (450 Mbps max rate) and 5-GHz (1.3 Gbps max rate) radios, each with 3x3 MIMO and six integrated omni-directional downtilt antennas.

AP-214 and IAP-214

- 2.4-GHz (450 Mbps max rate) and 5-GHz (1.3 Gbps max rate) radios, each with 3x3 MIMO and three combined, diplexed (dual-band) 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.
- 210 series APs can be configured to provide part-time or dedicated air monitoring for spectrum analysis and wireless intrusion protection, VPN tunnels to extend corporate resources to remote locations, 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.

POWER

Maximum (worst-case) power consumption: 14.9 watts (PoE) or 13.6 watts (DC)

- Excludes power consumed by external USB device (and internal overhead); this could add up to 6 watts (PoE) or 5.5 watts (DC) for 5W/1A USB device

Maximum (worst-case) power consumption in idle mode: 8.2 watts (PoE) or 7.4 watts (DC)

Direct DC source: 12 Vdc nominal, +/- 5%

Power over Ethernet: 48 Vdc (nominal) 802.3af/802.3at compliant source

- USB port is disabled when using an 802.3af PoE power source; for unrestricted operation with PoE power, use an 802.3at compliant source

Power sources sold separately

When both power sources are available, DC power takes priority

WIRELESS RADIO SPECIFICATIONS

AP type: Indoor, dual radio, 5 GHz 802.11ac and 2.4 GHz 802.11n 3x3:3

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

3x3 MIMO with three spatial streams and up to 1.3 Gbps wireless data rate

Supported frequency bands (country-specific restrictions apply):

- 2.4000 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: +23 dBm (18 dBm per chain)
- 5-GHz band: +23 dBm (18 dBm per chain)

- Note: conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain

Advanced Cellular Coexistence (ACC) minimizes interference from LTE 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

Transmit beamforming (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 450 (MCS0 to MCS23)
- 802.11ac: 6.5 to 1,300 (MCS0 to MCS9, NSS = 1 to 3)

802.11n high-throughput (HT) support: HT 20/40

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

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

ANTENNAS

AP-214/IAP-214: Three RP-SMA connectors for external dual-band antennas.

Internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 1.0 dB in 2.4 GHz and 2.0 dB in 5 GHz.

AP-215/IAP-215: Six integrated downtilt omni-directional antennas for 3x3 MIMO with maximum antenna gain of 5.0 dBi in 2.4 GHz and 5.0 dBi in 5 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP.

Downtilt angle for maximum gain is roughly 30 degrees.

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)
- PoE-PD: 48 Vdc (nominal) 802.3af or 802.3at PoE

DC power interface, accepts 1.7/4.0-mm center-positive circular plug with 9.5-mm length

USB 2.0 host interface (Type A connector)

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

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 flat-surface wall/ceiling mount bracket
- AP-220-MNT-W2: Aruba AP mount kit contains one flat-surface wall/ceiling secure mount cradle

MECHANICAL

Dimensions/weight (unit, excluding mount accessories):

- 180 mm x 180 mm x 45 mm (W x D x H)
- 610 g

Dimensions/weight (shipping):

- 220 mm x 225 mm x 55 mm (W x D x H)
- 860 g

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 1999/5/EC

Low Voltage Directive 2006/95/EC

EN 300 328

EN 301 489

EN 301 893

UL/IEC/EN 60950

EN 60601-1-1, EN60601-1-2

CERTIFICATIONS

CB Scheme Safety, cTUVus

UL2043 plenum rating

Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac

WARRANTY

Aruba limited lifetime warranty

REGULATORY MODEL NUMBERS

AP-214 and IAP-214: APIN0214

AP-215 and IAP-215: APIN0215

MINIMUM ARUBAOS VERSION

ArubaOS™ 6.4.2.0

Aruba InstantOS™ 4.1.1.0

RELIABILITY

MTBF: 538,975 hours (61.5 years) at +25° C operating temperature