## AP-320 SERIES SPECIFICATIONS

**AP-325 and IAP-325**

- 5 GHz (1,733 Mbps max rate) and 2.4 GHz (800 Mbps max rate) radios, each with 4x4 MIMO support and a total of eight integrated omni-directional downtilt antennas.

**AP-324 and IAP-324**

- 5 GHz (1,733 Mbps max rate) and 2.4 GHz (800 Mbps max rate) radios, each with 4x4 MIMO support and a total of four combined, diplexed (dual-band) external RP-SMA antenna connectors.

## WIRELESS RADIO SPECIFICATIONS

**AP type: Indoor, dual radio, 5 GHz 802.11ac and 2.4 GHz 802.11n 4x4 MIMO. Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1). Four spatial stream SU-MIMO for up to 1,733 Mbps wireless data rate to a single client device.**

**Three spatial stream MU-MIMO for up to 1,300 Mbps wireless data rate to up to three MU-MIMO capable client devices simultaneously.**

**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 2.4835 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: +24 dBm (18 dBm per chain)
- 5 GHz band: +24 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 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 1,733 (MCS0 to MCS9, NSS = 1 to 4)

**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**

## POWER

**Maximum (worst-case) power consumption: 20W (802.3at PoE), 13.5W (802.3af PoE) or 18.5W (DC)**
- Excludes power consumed by external USB device (and internal overhead); this could add up to 6W (POE) or 5.5W (DC) for 5W/1A USB device

**Maximum (worst-case) power consumption in idle mode: 8W (PoE) or 7W (DC).**

**Direct DC source: 48Vdc nominal, +/- 5%.**

**Power over Ethernet (PoE): 12 Vdc (nominal) 802.3af/802.3at compliant source**
- Unrestricted functionality with 802.3at PoE
- Power-save mode with reduced functionality from 802.3af PoE

**USB port disabled**

**Second Ethernet port disabled**

**2.4 GHz radio in 1x1:1 mode**

**Power sources sold separately**

**When both power sources are available, DC power takes priority**

## WI-FI ANTENNAS

**AP-324/IAP-324:**
- Four RP-SMA connectors for external dual band antennas. Internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 2.5 dB in 2.4 GHz and 1.5 dB in 5 GHz.

**AP-325/IAP-325:**
- Eight integrated downtilt omni-directional antennas for 4x4 MIMO with maximum antenna gain of 3.5 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. The downtilt angle for maximum gain is ~ 30 degrees.

## OTHER INTERFACES

**Two 10/100/1000BASE-T Ethernet network interfaces (RJ-45)**
- Auto-sensing link speed and MDI/MDX
- Load balancing support to achieve platform throughput greater than 1 Gbps
- 802.3az Energy Efficient Ethernet (EEE)
- PoE-PD: 48 Vdc (nominal) 802.3af or 802.3at PoE

**DC power interface, accepts 2.1/5.5-mm center-positive circular plug with 9.5-mm length**

**USB 2.0 host interface (Type A connector)**

**Bluetooth Low Energy (BLE) radio**
- Up to 4dBm transmit power (class 2) and -94dBm receive sensitivity
- Integrated antenna, -5dBi gain (30 degree downtilt)
- Can be disabled with configuration

**Visual indicators (tri-color LEDs): For system and radio status**

**Reset button: Factory reset (during device power up)**

**Serial console interface (RJ-45)**

**Kensington security slot**

## 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):**
* 203 mm (W) x 203 mm (D) x 57 mm (H), 8.0" (W) x 8.0" (D) x 2.2" (H)
* 950 g/34 oz

**Dimensions/weight (shipping):**
* 315 mm (W) x 265 mm (D) x 100 mm (H), 12.4" (W) x 10.4" (D) x 3.9" (H)
* 1,350 g/48 oz

## 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.

## RELIABILITY

MTBF: 739,935 hrs (84.5yrs) at +25C operating temperature (AP-325)

## REGULATORY MODEL NUMBERS

**AP-324 and IAP-324: APIN0324**
**AP-325 and IAP-325: APIN0325**

## CERTIFICATIONS

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

## WARRANTY

Aruba limited lifetime warranty

## MINIMUM SOFTWARE VERSIONS

**ArubaOS 6.4.4.0**
**320 Series Access Points are not supported on 650 Series Mobility Controllers.**
**Aruba InstantOS 4.2.1.0**