QuickSpecs

Overview

Aruba 360 Series Outdoor Access Points
Low-cost 802.11ac Wave 2 outdoor access points

Product overview

Multifunctional 360 Series outdoor 802.11ac Wave 2 access points deliver cost-effective wireless connectivity for mobile and IoT devices in educational, enterprise, retail, and industrial settings.

By supporting dual radio operation, the 360 Series APs deliver a maximum data rate of 866 Mbps in the 5-GHz band and 400 Mbps in the 2.4-GHz band, while supporting MU-MIMO operation for simultaneous transmission for up to two 802.11ac Wave 2 devices.

Able to survive in harsh outdoor environments, the 360 Series can withstand exposure to high and low temperatures, persistent moisture and precipitation, and are fully sealed to keep out airborne contaminants. All electrical interfaces include industrial strength surge protection.

The outdoor 360 Series have integrated Aruba ClientMatch™ technology to eliminate sticky clients and enhanced Wave 2 WLAN performance. These outdoor APs continuously gather session performance metrics and utilize the data to steer mobile devices to the best AP and radio on the WLAN, even while users roam. The enhanced ClientMatch technology enables the 360 Series to automatically detect, classify and group 802.11ac Wave 2 capable mobile devices under a single Wave 2 radio, increasing network capacity and efficiency.

Like all Aruba Wave 2 access points, the outdoor 360 Series APs have an integrated Bluetooth Aruba Beacon that simplifies remote management for a network of large-scale battery-powered Aruba Beacons, while also providing advanced location and indoor wayfinding and proximity- based push notification capabilities. This enables businesses to leverage mobility context for developing applications that deliver an enhanced user experience – thus increasing the value of the wireless network for organizations.

Features and Benefits

Unique Benefits

- Delivers 1.27 Gbps aggregate throughput
- Advanced Cellular Coexistence (ACC)
    - Minimizes interference from 3G/4G cellular networks, distributed antenna systems and commercial small cell/femtocell equipment

Overview

- Quality of service for unified communication apps
  - Supports priority handling and policy enforcement for unified communication apps, including cellular Wi-Fi calling and Microsoft Skype for Business with encrypted videoconferencing, voice, chat and desktop sharing
- Best-in-class RF management
  - Integrated Adaptive Radio Management technology manages the 2.4-GHz and 5-GHz radio bands and ensures that APs stay clear of RF interference
- Built-in Bluetooth Low-Energy (BLE) radio
  - Enables proximity-based push notifications and location- based services for BLE-enabled mobile devices
  - Enables management for deployment of battery powered Aruba Beacons
- 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
- Wireless mesh
  - Wireless mesh connections are convenient where Ethernet drops are not available

Choose Your Operating Mode

The 360 Series APs offer a choice of operating modes to meet your unique management and deployment requirements.

- Controller-managed AP or Remote AP (RAP) running ArubaOS – When managed by Aruba Mobility Controllers, 360 Series APs offer centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding.
  Please refer to the **Aruba Mobility Controller** data sheets for more details
- Aruba 360 Series APs running InstantOS – In Aruba Instant mode, a single AP automatically distributes the network configuration with other APs in Instant mode in the WLAN.
- Air monitor
- Hybrid WLAN AP and air monitor
- 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, Aruba APs in Instant mode are factory shipped to any site and configure themselves when powered up.

If WLAN and network requirements change, a built-in migration path allows 360 Series APs in Instant mode to become part of a WLAN that is centrally managed by a Mobility Controller.

AP-360 Series Specification

- AP-365
  - 2.4-GHz (400 Mbps max) and 5-GHz (866 Mbps max) radios, each with 2x2 MIMO and integrated omni-directional antennas.
- AP-367
  - 2.4-GHz (400 Mbps max) and 5-GHz (866 Mbps max) radios, each with 2x2 MIMO and integrated directional antennas.

Wireless Radio Specifications

- AP type: outdoor, dual radio, 5 GHz 802.11ac and 2.4 GHz 802.11n
  - In addition to 802.11n data rates, the 2.4-GHz radio supports 802.11ac data rates using 256-QAM modulation.
- 2x2 MIMO with two spatial streams and up to 1,266 Mbps wireless data rate
- Supported frequency bands (country-specific restrictions apply):
  - 2.4000 GHz to 2.4835 GHz
  - 5.150 GHz to 5.250 GHz

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- 5.250 GHz to 5.350 GHz
- 5.470 GHz to 5.725 GHz
- 5.725 GHz to 5.875 GHz
- Available channels: Dependent upon configured regulatory domain
- Dynamic frequency selection (DFS) compliant to radar coexistence requirements
- Supported radio technologies:
    - 802.11b: Direct-sequence spread-spectrum (DSSS)
    - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
    - 802.11n/ac: 2x2 MU-MIMO with up to two spatial streams
- Supported modulation types:
    - 802.11b: BPSK, QPSK, CCK
    - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
    - 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (conducted aggregate) transmit power (limited by local regulatory requirements):
    - 2.4-GHz band: +21 dBm (18 dBm per chain)
    - 5-GHz bands: +25 dBm (22 dBm per chain)
- Advanced cellular coexistence (ACC) feature to effectively deal with interference from cellular systems
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay diversity (CDD) 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 beam-forming (TxBF) for increased reliability in signal delivery
- 802.11ac wave 2 MU-MIMO
- 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 866 (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 Power
- Maximum power consumption: 12.5 watts
- Power over Ethernet (PoE): 48 Vdc (nominal) 802.3af-compliant source

Antennas

Supports 802.11ac TxBF which provides an effectively infinite variety of antenna patterns

- AP-365: Integrated Omni antennas (H and V polarized)
    - 2.7 dBi @ 2.4 GHz
    - 4.3 dBi @ 5.x GHz
- AP-367: Integrated Directional antennas (+/-45 polarized)
    - 6.3 dBi @ 2.4 GHz (90° Vertical x 90° Horizontal)
    - 6.5 dBi @ 5.x GHz (90° Vertical x 100° Horizontal)

Other Interfaces

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

Overview

- Serial console interface (micro USB)
- Reset button
- Visual indicator (LED):
    - Power/system status

Mounting

- Ordered separately
- Optional mounting kits:
    - AP-270-MNT-V1: Outdoor AP long mount kit for pole/wall mounting. Reduces impact of obstruction by pole or extends away from corner
    - AP-270-MNT-V2: Outdoor AP short mount kit for pole/wall mounting
    - AP-270-MNT-H1: Outdoor AP mount kit for hanging from inclined/horizontal structures
    - AP-270-MNT-H2: Outdoor AP flush mount kit for hanging from inclined/horizontal structures

Mechanical

- Dimensions/weight (unit, excluding mount accessories):
    - 165mm (W) x 165mm (D) x 110mm (H), 6.5" (W) x 6.5" (D) 4.3" (H)
    - 800g/1.75lbs
- Dimensions/weight (shipping):
    - 198mm (W) x 198mm (D) x 128mm (H), 7.8" (W) x 7.8" (D) x5.0" (H)
    - 1,000g/2.2lbs

Environmental

- Operating:
    - Temperature: -40° C to +55° C (-40° F to +131°F) ambient in full sun
    - Humidity: 5% to 95% non-condensing
- Storage and transportation:
    - Temperature: -40° C to +70° C (-40° F to +158°F)
    - EN 300 019 Storage and Transportation
- Shock, vibration, and earthquake
    - IEC 60068-2-64/-27/-6
- Weather resistance
    - IP66/67
    - ASTM B117-07A: Salt spray testing per UL50 NEMA 4x
    - EN 300 019 Environmental testing
      Non-weather protected locations
      Full solar exposure

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, EN60601-1-2

Overview

For more country-specific regulatory information and approvals, please see your Aruba representative.

Regulatory Model Numbers

- AP-365: APEX0365
- AP-367: APEX0367

Certifications

- CB Scheme Safety, cTUVus
- Wi-Fi CERTIFIED a,b,g,n
- Wi-Fi CERTIFIED ac (with wave 2 features

Warranty

- **Aruba Limited lifetime warranty**

Minimum Software Versions

- ArubaOS 6.5.2.0
- Aruba InstantOS 4.3.2

Configuration

Ordering Information

Step 1: Select AP Model

Description	Part Number
Aruba AP-365 (EG) 802.11n/ac Dual 2x2:2 Radio Integrated Omni Ant Outdoor AP	JX963A
Aruba AP-365 (IL) 802.11n/ac Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	JX964A
Aruba AP-365 (JP) 802.11n/ac Dual 2x2:2 Radio Integrated Omni Ant Outdoor AP	JX965A
Aruba AP-365 (RW) 802.11n/ac Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	JX966A
Aruba AP-365 (US) 802.11n/ac Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	JX967A
Aruba AP-365 (RW) FIPS/TAA 802.11n/ac Dual 2x2:2 Radio Integrated Omni Ant Outdoor AP	JX968A
Aruba AP-365 (US) FIPS/TAA 802.11n/ac Dual 2x2:2 Radio Integrated Omni Ant Outdoor AP	JX969A
Aruba AP-367 (EG) 802.11n/ac Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	JX970A
Aruba AP-367 (IL) 802.11n/ac Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	JX971A
Aruba AP-367 (JP) 802.11n/ac Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	JX972A
Aruba AP-367 (RW) 802.11n/ac Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	JX973A
Aruba AP-367 (US) 802.11n/ac Dual 2x2:2 Radio Integrated Directional Ant Outdoor AP	JX974A
Aruba AP-367 (RW) FIPS/TAA 802.11n/ac Dual 2x2:2 Radio Integrated Direct Ant Outdoor AP	JX975A
Aruba AP-367 (US) FIPS/TAA 802.11n/ac Dual 2x2:2 Radio Integrated Direct Ant Outdoor AP	JX976A

Step 2: Add mounting bracket

Description	Part Number
AP-270-MNT-V1 AP-270 Series Outdoor Pole/Wall Long Mount Kit	JW052A
AP-270-MNT-V2 AP-270 Series Outdoor Pole/Wall Short Mount Kit	JW053A
AP-270-MNT-H1 AP-270 Series Outdoor AP Hanging or Tilt Install Mount Kit	JW054A
AP-270-MNT-H2 AP-270 Series Access Flush Wall or Ceiling Mount	JW055A

Step 3: Add POE powering accessories for units to be POE powered

Description	Part Number
Aruba PD-3510G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector	JW627A
Aruba PD-9001GO-DC 30W 802.3at PoE+ 10/100/1000 12-24V DC in Outdoor Surge Prot Midspan Injector	JW630A
Aruba PD-9001GO-INTL 30W 802.3at PoE+ 10/100/1000 Outdoor Surge Prot Intl Power Cord Injector	JW701A
Aruba PD-9001GO-NA 30W 802.3at PoE+ 10/100/1000 Otdr Surge Prot NA Power Cord Mdspan Injector	JW700A

Step 4: Add mounting kit for outdoor POE Midspan injector (optional)

Description	Part Number
Aruba PD-MOUNT-OD Outdoor PoE Midspan Injectors Pole/Mast Mount Kit	JW620A

Step 5: Select 3-prong AC power cord for indoor POE injector

Description	Part Number
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

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PC-AC-EC Continental European/Schuko AC Power Cord	JW118A
PC-AC-IL Israel 250V AC 10A 2-meter AC Power Cord	JW120A
PC-AC-IN India AC Power Cord	JW119A
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 6: Spares of items that are shipped with chassis (optional)

Description	Part Number
Outdoor AP Covers and Glands 1-pk M25/5-pk M20 Cover/2-pk M16 Cover/5-pk M20 Gland/2-pk Ground Kit	Q8N47A
Outdoor AP Metric to Standard M20 to 1/2 inch NPT 5-pk Thread Adapter	Q8N48A

Technical Specifications

RF Performance Table		
	Maximum transmit power (dBm) per transmit chain	**Receiver sensitivity (dBm) per receive chain**
802.11b 2.4 GHz		
1 Mbps	18.0	-91.0
11 Mbps	18.0	-88.0
802.11g 2.4 GHz		
6 Mbps	18.0	-91.0
54 Mbps	18.0	-73.0
802.11n HT20 2.4 GHz		
MCS0/8	18.0	-91.0
MCS7/15	18.0	-72.0
802.11n HT40 2.4 GHz		
MCS0/8	18.0	-88.0
MCS7/15	18.0	-69.0
802.11ac VHT20 2.4 GHz		
MCS0 Nss1&Nss2	18.0	-91.0
MCS8 Nss1&Nss2	18.0	-67.0
802.11ac VHT40 2.4 GHz		
MCS0 Nss1&Nss2	18.0	-88.0
MCS9 Nss1&Nss2	17.0	-63.0
802.11a VHT80 5 GHz		
6 Mbps	22.0	-91.0
54 Mbps	20.0	-74.0
802.11n HT20 5 GHz		
MCS0/8	22.0	-91.0
MCS7/15	20.0	-72.0
802.11n HT40 5 GHz		

Technical Specifications

MCS0/8	22.0	-88.0
MCS7/15	20.0	-69.0
802.11ac VHT20 5 GHz (SU-MIMO)		
MCS0 Nss1&Nss2	22.0	-91.0
MCS8 Nss1&Nss2	19.0	-68.0
802.11ac VHT40 5 GHz (SU-MIMO)		
MCS0 Nss1&Nss2	22.0	-87.0
MCS9 Nss1&Nss2	19.0	-63.0
802.11ac VHT80 5 GHz (SU-MIMO)		
MCS0 Nss1&Nss2	22.0	-85.0
MCS8 Nss1&Nss2	19.0	-59.0

NOTE: please check with your country manager for regional product schedules…

Summary of Changes

Date	Version History	Action	Description of Change
06-Nov-2017	From Version 1 to 2	Added	SKUs added: Q8N47A, Q8N48A
09-Jan-2017	Version 1	Created	Document creation.

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