

Overview

Aruba 560 Series Outdoor Access Points

Entry-level Wi-Fi 6 (802.11ax) for outdoor and warehouse environments

Weatherproof and temperature hardened, Aruba 560 series access points deliver cost-effective Wi-Fi 6 wireless connectivity in outdoor and environmentally challenging locations.

Purpose-built to survive in the harshest outdoor environments, 560 series can withstand exposure to extreme 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.

Aruba Wi-Fi 6 access points provide high-performance connectivity for any organization experiencing growing numbers of IoT and mobility requirements. With maximum aggregate on air data rate of 1.49 Gbps (HE80/HE20), they deliver the speed and reliability needed for most environments.

The Aruba advanced ClientMatch technology and an integrated Bluetooth beacon can help enable Aruba location services.



Aruba 560 Series Outdoor Access Points

Standard Features

Incredible Efficiency

The 560 Series access points (APs) are designed to optimize user experience by maximizing Wi-Fi efficiency and dramatically reducing airtime contention between clients.

Features include Uplink and Downlink Orthogonal Frequency Division Multiple Access (OFDMA), Downlink Multi-User MIMO (MU-MIMO) and cellular co-location filtering. With up to 2 spatial streams, the 560 Series provides reliable connectivity for most any application. Read the Multi-User 802.11ax white paper for further information.

Advantages of OFDMA

OFDMA capability allows Aruba APs to handle multiple Wi-Fi 6 capable clients on each channel simultaneously, regardless of device or traffic type. Channel utilization is optimized by handling each transaction via smaller sub-carriers or resource units (RUs), which means that clients are sharing a channel yet not competing for airtime and bandwidth.

Aruba Air Slice™ for Extended OFDMA Assurance

Initially, APs in controller-less mode (Instant) can provide SLA-grade performance by allocating radio resources, such as time, frequency, and spatial streams, to specific traffic types. By combining Aruba's Policy Enforcement Firewall (PEF) and Layer 7 deep packet inspection (DPI) to identify user roles and applications, the APs will dynamically allocate the bandwidth needed. Non-Wi-Fi 6 clients can also benefit. For APs, Air Slice uses Aruba Central for management. Controller-based APs will be supported in a future software release.

Multi-User MIMO (MU-MIMO)

560 Series APs support downlink MU-MIMO just like Wi-Fi 5 (802.11ac Wave 2) APs. The added benefit is the ability to multiply the number of clients that can now send traffic, thus optimizing client-to-AP spatial stream diversity.

Wi-Fi 6 and MU-MIMO-aware Client Optimization

Aruba's patented AI-powered ClientMatch technology eliminates sticky client issues by placing Wi-Fi 6 capable devices on the best available AP. Session metrics are used to steer mobile devices to the best AP based on available bandwidth, types of applications being used and traffic type – even as users roam.

Aruba Advanced Cellular Coexistence (ACC)

The ACC feature uses built-in filtering to automatically minimize the impact of interference from cellular networks, distributed antenna systems (DAS), and commercial small cell or femtocell equipment.

Intelligent Power Monitoring (IPM)

Aruba APs continuously monitor and report hardware energy consumption. They can also be configured to enable or disable capabilities based on available PoE power – ideal when wired switches have exhausted their power budget.

IoT Platform Capabilities

Like all Aruba Wi-Fi 6 APs, the 560 Series includes an integrated Bluetooth 5 and 802.15.4 radio (for Zigbee support) to simplify deploying and managing IoT-based location services, asset tracking services, security solutions and IoT sensors. This allows organizations to leverage the 560 Series as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources.

Target Wake Time (TWT)

Ideal for IoTs that communicate infrequently, TWT establishes a schedule for when clients need to communicate with an AP. This helps improve client power savings and reduces airtime contention with other clients.

Simple and Secure Access

To simplify policy enforcement, the Aruba 560 Series uses **Aruba's Policy Enforcement Firewall** (PEF) feature to encapsulate all traffic from the AP to the Mobility Controller (or Gateway) for end-to-end encryption and inspection. Policies are applied based on user role, device type, applications, and location. This reduces the manual configuration of SSIDs, VLANs and ACLs. PEF also serves as the underlying technology for **Aruba Dynamic Segmentation**.



Standard Features

Aruba Secure Infrastructure

The Aruba 560 Series includes components of Aruba's Zero Trust Security to help protect user authentication and wireless traffic. Select capabilities include:

- WPA3 and Enhanced Open
 - Support for stronger encryption and authentication is provided via the latest version of WPA for enterprise protected networks.
 - Enhanced Open offers seamless protection for users connecting to open networks where each session is automatically encrypted to protect user passwords and data on guest networks.
 - WPA2-MPSK
 - MPSK enables simpler passkey management for WPA2 devices – should the Wi-Fi password on one device or device type change, no additional changes are needed for other devices. Requires **Aruba ClearPass Policy Manager**
 - VPN Tunnels
 - In Remote AP (RAP) and IAP-VPN deployments, the Aruba 560 Series can be used to establish a secure SSL/IPSec VPN tunnel to a Mobility Controller that is acting as a VPN concentrator.
 - Trusted Platform Module (TPM)
 - For enhanced device assurance, all Aruba APs have an installed TPM chip for secure storage of credentials and keys, and boot code.
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Flexible Operation and Management

- Controller-less (Instant) Mode
 - In controllerless mode, one AP serves as a virtual controller for the entire network. Learn more about Instant mode in this **technology brief**.
 - Mobility Controller Mode
 - For optimized network performance, roaming and security, APs tunnel all traffic to a mobility controller for centrally managed traffic forwarding and segmentation, data encryption, and policy enforcement. Learn more in the **ArubaOS datasheet**.
 - Management Options
 - Available management solutions include **Aruba Central** (cloud- managed) or **Aruba AirWave** – a multi-vendor on-premises management solution. For large installations across multiple sites, APs can be factory-shipped and can be activated with Zero Touch Provisioning through Aruba Central or AirWave.
 - This reduces deployment time, centralizes configuration, and helps manage inventory.
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Additional Wi-Fi Features

Each AP also includes the following standards-based technologies:

- Transmit Beamforming (TxBF)
 - Increased signal reliability and range
 - Passpoint Release 2
 - Seamless cellular-to-Wi-Fi carryover for guests
 - Dynamic Frequency Selection (DFS)
 - Optimized use of available RF spectrum
 - Maximal Ratio Combining (MRC)
 - Improved receiver performance for multi- antenna access points.
 - Cyclic Delay/Shift Diversity (CDD/CSD)
 - Enable use of multiple transmit antennas
 - Space-Time Block Coding (STBC)
 - Increased connection robustness
 - Low-Density Parity Check (LDPC)
 - High performance error detection and correction coding for enhanced receiver performance.
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Standard Features

High-Density Connectivity

Each 560 Series AP provides connectivity for a maximum of 256 associated clients per radio (512 in total). In real-world scenarios, the maximum recommended client density is dependent on environmental conditions.



Configuration Information

BTO Models

Remarks	Description	SKU
	565 Unified Access Points	
	Aruba AP-565 (EG) 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W40A
	Aruba AP-565 (IL) 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W41A
	Aruba AP-565 (JP) 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W42A
	Aruba AP-565 (RW) 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W43A
	Aruba AP-565 (US) 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W44A
	567 Unified Access Points	
	Aruba AP-567 (EG) 802.11ax Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	R4W45A
	Aruba AP-567 (IL) 802.11ax Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	R4W46A
	Aruba AP-567 (JP) 802.11ax Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	R4W47A
	Aruba AP-567 (RW) 802.11ax Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	R4W48A
	Aruba AP-567 (US) 802.11ax Dual 2x2:2 Radio Integrated Directional Antenna Outdoor AP	R4W49A
	565 TAA Unified Access Points	
	Aruba AP-565 (EG) TAA 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W50A
	Aruba AP-565 (IL) TAA 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W51A
	Aruba AP-565 (JP) TAA 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W52A
	Aruba AP-565 (RW) TAA 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W53A
	Aruba AP-565 (US) TAA 802.11ax Dual 2x2:2 Radio Integrated Omni Antenna Outdoor AP	R4W54A
	567 TAA Unified Access Points	
	Aruba AP-567 (EG) TAA 802.11ax Dual 2x2:2 Radio Integ Directional Antenna Outdoor AP	R4W55A
	Aruba AP-567 (IL) TAA 802.11ax Dual 2x2:2 Radio Integ Directional Antenna Outdoor AP	R4W56A
	Aruba AP-567 (JP) TAA 802.11ax Dual 2x2:2 Radio Integ Directional Antenna Outdoor AP	R4W57A
	Aruba AP-567 (RW) TAA 802.11ax Dual 2x2:2 Radio Integ Directional Antenna Outdoor AP	R4W58A
	Aruba AP-567 (US) TAA 802.11ax Dual 2x2:2 Radio Integ Directional Antenna Outdoor AP	R4W59A
Notes:	OCA Only Model Selection Form - Aruba > Wireless > Access Points > Outdoor / Rugged: Aruba 560 Series Access Points	

Mounting Accessories

Outdoor AP Mount Kits

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

- Notes:**
- [Add mounting bracket](#)
 - For 565:
 - o [V2 bracket most often used for wall or pole mount.](#)
 - o [H1 bracket most often used for hanging from inclined or horizontal structure.](#)
 - o [The AP-56x chassis does not ship with bracket](#)
 - For 567:
 - o [H1 bracket most often with \(I\)AP-367 for mounting to a wall. Allows chassis tilt.](#)
 - o [V1 and V2 brackets can be used but will result in the AP-367 pointing down.](#)
 - o [The AP-56x chassis does not ship with bracket.](#)



Configuration Information

Power Options

Remarks	Description	SKU
	PoE Power Options	
	AP-POE-AFGE 1-Port GbE 802.3af 15.4W midspan injector	R6P68A
Notes:	If this Power Injector is selected, bring in (Min 1 // Max 1) Localized power cord based on the Aruba Localization Menu	
	Aruba PD-3510G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector	JW627A
Notes:	If this Power Injector is selected, bring in (Min 1 // Max 1) Localized power cord based on the Aruba Localization Menu	
	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
Notes:	<ul style="list-style-type: none"> - Add POE accessories for units to be POE powered - Indoor Injector provides no surge protection - Indoor injector requires indoor AC power cord - AP-56x is powered by PoE only - Power Cord for JW630A is not sourced by Aruba 	
	Power Injector Mounts	
	Aruba PD-MOUNT-OD Outdoor PoE Midspan Injectors Pole/Mast Mount Kit	JW620A
Notes:	<ul style="list-style-type: none"> - Add mounting kit for outdoor poe midspan injector (optional) - This is optional but recommended for outdoor injectors 	

Accessories

Remarks	Description	SKU
	Spare Items	
	Std (Min 0 // max 99) User Selection (min 0 // max 99)	
	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
Notes:	These items are replacement items or special application	



Technical Specifications

AP-560 Series Specification

AP-565

- Built-in omni-directional antennas
 - 5 GHz antennas 5.4 dBi
 - 2.4 GHz antennas 3.2 dBi
 - BLE/802.15.4 antennas 3.3d dBi

AP-567

- Built-in 90°H x 90°V directional antennas
 - 5 GHz antennas 6.7 dBi
 - 2.4 GHz antennas 7.0 dBi
 - BLE/802.15.4 antennas 3.2d dBi

Mechanical

AP-565

- Dimensions/weight (excluding mount):
 - 16.5 cm (W) x 16.5 cm (D) x 11 cm (H)
 - 6.5" (W) x 6.5" (D) x 4.3" (H)
 - 1.03 kg/2.27 lbs

AP-567

- Dimensions/weight (excluding mount):
 - 16.5 cm (W) x 16.5 cm (D) x 11 cm (H)
 - 6.5" (W) x 6.5" (D) x 4.3" (H)
 - 1.09 kg/2.4 lbs

Regulatory Model Number

- AP-565: APEX0565
- AP-567: APEX0567

Mounting

- AP-270-MNT-V1
- AP-270-MNT-V2
- AP-270-MNT-H1
- AP-270-MNT-H2
- AP-270-MNT-H3

Wi-Fi Radio Specifications

- AP type: outdoor hardened, Wi-Fi 6 dual radio, 5 GHz 2x2 MIMO and 2.4 GHz 2x2 MIMO
- Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)
- 5 GHz:
 - Two spatial stream Single User (SU) MIMO for up to 1.2 Gbps wireless data rate with individual 2SS HE80 802.11ax client devices, or with two 1SS HE80 802.11ax MU-MIMO capable client devices simultaneously
- 2.4 GHz
 - Two spatial stream Single User (SU) MIMO for up to 574 Mbps (287 Mbps) wireless data rate with individual 2SS HE40 (HE20) 802.11ax client devices or with two 1SS HE40 (HE20) 802.11ax MU-MIMO capable client devices simultaneously
- Up to 256 associated client devices per radio
- 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



Technical Specifications

- 5.850 to 5.925 GHz
- 5.825 to 5.875 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)
 - 802.11ax: Orthogonal frequency-division multiple access (OFDMA) with up to 16 resource units (RU)
- Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM (proprietary extension)
 - 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024 QAM (proprietary extension)
 - 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024 QAM
- 802.11n high-throughput (HT) support: HT 20/40
- 802.11ac very high throughput (VHT) support: VHT 20/40/80
- 802.11ax high efficiency (HE) support: HE20/40/80
- 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, HT20 to HT40), 400 with 256-QAM
 - 802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2, VHT20 to VHT80), 1,083 with 1024-QAM
 - 802.11ax (2.4GHz): 3.6 to 574 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE40)
- 802.11n/ac/ax Packet aggregation: A-MPDU, A-MSDU
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (conducted) transmit power (limited by local regulatory requirements):
 - 2.4 GHz band: +23 dBm per chain, +26 dBm aggregate (2x2)
 - 5 GHz band: +23 dBm per chain, +26 dBm aggregate (2x2)
 - Note: conducted transmit power levels exclude antenna gain.
- Maximum EIRP (limited by local regulatory requirements):
 - 2.4 GHz band:
 - o 565: 29.2 dBm EIRP
 - o 567: 31.4 dBm EIRP
 - 5 GHz band:
 - o 565: 33 dBm EIRP
 - o 567: 32.7 dBm EIRP
- Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) to enable the use of multiple transmit antennas
- Short guard interval for 20-MHz, 40-MHz, and 80-MHz
- 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

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, EN60601-1-2
- For more country-specific regulatory information and approvals, please see your Aruba representative.



Technical Specifications

Power

- Maximum (worst-case) power consumption: 15.6W
- Maximum (worst case) power consumption in idle mode: 4.2W
- Maximum (worst case) power consumption in deep-sleep mode: 1.7
- Power sources sold separately
- Power over Ethernet (PoE+): 802.3at-compliant
- When powered by 1x 802.3at, there are no restrictions
- When powered by 1x 802.3af with IPM enabled, the AP will start up in unrestricted mode, but may dynamically apply restrictions depending on the POE budget and actual power. The feature restrictions can be programmed.
- When powered by 1x 802.3af with IPM disabled, the AP will lower the 2.4Ghz radio to 1x1:1

Additional Interfaces

- E0: 10/100/1000BASE-T (RJ-45)
 - Auto-sensing link speed and MDI/MDX
 - PoE-PD: 48Vdc (nominal) 802.3at/bt (Class 3 or higher)
 - 802.3az Energy Efficient Ethernet (EEE)
- Bluetooth 5 and 802.15.4 radio
 - 2.4 GHz
 - Bluetooth 5: up to 8 dBm transmit power and -95 dBm receive sensitivity
 - Zigbee: up to 8 dBm transmit power and -97 dBm receive sensitivity
 - Up to 4 dBm transmit power (class 2) and -91 dBm receive sensitivity
- Visual indicator (multi-color LED): For system and radio status
- Reset button: Factory reset (during device power up)
- USB-C console interface

Environmental

- Operating:
 - Temperature: -40° C to +55° C (-40° F to +140° F) with full solar loading
 - Humidity: 5% to 95% non-condensing internal
 - Rated for operation in all weather conditions
- Storage and transportation:
 - Temperature: -40° C to +70° C (-40° F to +158° F)
- Operating Altitude: 3,000 m
- Water and Dust: IP66/67
- Salt Tolerance: Tested to ASTM B117-07A Salt Spray 200hrs
- Wind Survival: Up to 165 Mph
- Shock and Vibration ETSI 300-19-2-4

Certifications

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance certified 802.11a/b/g/n/
- Wi-Fi Alliance certified Wi-Fi 6 (802.11ax)
- Wi-Fi CERTIFIED™ ac (with wave 2 features)
- Passpoint® (Release 2) with ArubaOS and Instant 8.3+

Warranty

- **Aruba Limited lifetime warranty**

Minimum Software Versions

- ArubaOS and Aruba InstantOS 8.8.0.0
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Technical Specifications

RF Performance Table		
Band, rate	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
2.4 GHz, 802.11b		
1 Mbps	22	-97
11 Mbps	22	-89
2.4 GHz, 802.11g		
6 Mbps	22	-93
54 Mbps	20	-76
2.4 GHz, 802.11n/ac HT20		
MCS0	22	-93
MCS8	19	-75
2.4GHz, 802.11ax HE20		
MCS0	22	-93
MCS11	17	-62
5GHz, 802.11a		
6 Mbps	22	-92
54 Mbps	20	-75
5GHz, 802.11n/ac HT20/VHT20		
MCS0	22	-92
MCS8	19	-72
5GHz, 802.11n/ac HT40/VHT40		
MCS0	22	-90
MCS9	19	-65
5GHz, 802.11ac VHT80		
MCS0	22	-88
MCS9	19	-63
5GHz, 802.11ax HE20		
MCS0	22	-94
MCS11	17	-62
5GHz, 802.11ax HE40		
MCS0	22	-91
MCS11	17	-60
5GHz, 802.11ax HE80		
MCS0	22	-87
MCS11	17	-57
<p>Notes: Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.</p>		



Summary of Changes

Date	Version History	Action	Description of Change
08-Sep-2020	Version 1	New	New QuickSpecs



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