

### Overview

### HPE Aruba Networking 530 Series Campus Access Points

#### Very High Wi-Fi 6 (802.11ax) Performance With Dual Radios And Green AP Energy Efficiency

HPE Aruba Networking Wi-Fi 6 access points provide high-performance connectivity for any organization experiencing growing numbers of IoT and mobility requirements. With a maximum aggregate data rate of 3.55 Gbps (HE80/HE40), the HPE Aruba Networking 530 Series deliver the speed and reliability needed for any enterprise.

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### HPE Aruba Networking 530 Series Campus Access Points

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#### Key Features

- 3.55 Gbps of maximum throughput
  - WPA3 and Enhanced Open security
  - Built-in technology that resolves sticky client issues for Wi-Fi 6 and Wi-Fi 5 devices
  - OFDMA and MU-MIMO for enhanced multi-user efficiency
  - IoT-ready Bluetooth 5 and Zigbee support
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## Standard Features

### IoT Platform Capabilities

Like all HPE Aruba Networking Wi-Fi 6 APs, the 530 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 HPE Aruba Networking 530 Series as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources.

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### 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.

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### HPE Aruba Networking Secure Infrastructure

The HPE Aruba Networking 530 Series includes components of HPE Aruba Networking's 360 Secure Fabric to help protect user authentication and wireless traffic. Select capabilities include:

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### 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 new protection for users connecting to open networks where each session is automatically encrypted to protect user passwords and data on guest networks.

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### 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 ClearPass Policy Manager.

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### VPN Tunnels

In Remote AP (RAP) and IAP-VPN deployments, the HPE Aruba Networking 530 Series can be used to establish a secure SSL/IPSec VPN tunnel to a Mobility Controller that is acting as a VPN concentrator.

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### Trusted Platform Module (TPM)

For enhanced device assurance, all HPE Aruba Networking APs have an installed TPM for secure storage of credentials and keys, and boot code.

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### Simple And Secure Access

To simplify policy enforcement, the HPE Aruba Networking 530 Series uses HPE Aruba Networking'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 dynamic segmentation.

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### High-Density Connectivity

Like the higher-end 550 Series AP, each HPE Aruba Networking 530 Series AP provides connectivity for a maximum of 1024 associated clients per radio (2048 in total). In real-world scenarios, the maximum recommended client density is dependent on environmental conditions.

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### Flexible Operation And Management

A unique feature of HPE Aruba Networking APs is the ability to operate in either controllerless (Instant) or controller-based mode. In controllerless mode, one AP serves as a virtual controller for the entire network.

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 HPE Aruba Networking OS datasheet.

Available management solutions include HPE Aruba Networking 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 HPE Aruba Networking Central or AirWave. This reduces deployment time, centralizes configuration, and helps manage inventory.

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## Standard Features

### Warranty

HPE Aruba Networking Limited lifetime warranty

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## Configuration Information

### BTO Models

Remarks	Description	SKU
	<b>535 Internal Antenna Access Points</b>	
	Aruba AP-535 (EG) Dual Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ333A
	Aruba AP-535 (IL) Dual Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ334A
	Aruba AP-535 (JP) Dual Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ335A
	Aruba AP-535 (RW) Dual Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ336A
	Aruba AP-535 (US) Dual Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ337A
	<b>534 External Antenna Access Points</b>	
	Aruba AP-534 (EG) Dual Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ328A
	Aruba AP-534 (IL) Dual Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ329A
	Aruba AP-534 (JP) Dual Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ330A
	Aruba AP-534 (RW) Dual Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ331A
	Aruba AP-534 (US) Dual Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ332A
	<b>535 Internal Antenna Access Points - TAA Models</b>	
	Aruba AP-535 (EG) TAA Dual-Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ343A
	Aruba AP-535 (IL) TAA Dual-Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ344A
	Aruba AP-535 (JP) TAA Dual-Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ345A
	Aruba AP-535 (RW) TAA Dual-Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ346A
	Aruba AP-535 (US) TAA Dual-Radio 4x4:4 802.11ax Internal Antennas Unified Campus AP	JZ347A
	<b>534 External Antenna Access Points - TAA Models</b>	
	Aruba AP-534 (EG) TAA Dual-Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ338A
	Aruba AP-534 (IL) TAA Dual-Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ339A
	Aruba AP-534 (JP) TAA Dual-Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ340A
	Aruba AP-534 (RW) TAA Dual-Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ341A
	Aruba AP-534 (US) TAA Dual-Radio 4x4:4 802.11ax External Antennas Unified Campus AP	JZ342A
<b>Notes:</b>	<a href="#">OCA Only Model Selection Form - HPE Offering</a> > <a href="#">HPE Aruba Networking</a> > <a href="#">Wireless</a> > <a href="#">Access Points</a> > <a href="#">Campus: HPE Aruba Networking 530 Series Campus Access Points</a>	

### Mount Accessories

For 534, 535 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Remarks	Description	SKU
	<b>AP Mount Kits</b>	
*	AP-MNT-A Campus AP mount bracket kit (individual) type A: suspended ceiling rail flat 9/16	R3J15A
	HPE Aruba Networking AP-MNT-MP10-A Campus AP 10-Pack 9/16 Flat Ceiling Rail Mount Bracket Kit	JZ370A
*	AP-MNT-B Campus AP mount bracket kit (individual) type B: suspended ceiling rail flat 15/16	R3J16A
*	HPE Aruba Networking AP-MNT-MP10-B Campus AP 10-Pack 15/16 Flat Ceiling Rail Mount Bracket Kit	Q9G69A
	HPE Aruba Networking AP-MNT-MP10-B1 Campus AP 10-Pack 15/16 Adj Flat Ceiling Rail Mount Bracket Kit	R6T34A
*	AP-MNT-C Campus AP mount bracket kit (individual) type C: suspended ceiling rail profile 9/16	R3J17A
	HPE Aruba Networking AP-MNT-MP10-C Campus AP 10-Pack Profile 9/16 Ceiling Rail Mount Bracket Kit	Q9G70A
*	AP-MNT-D Campus AP mount bracket kit (individual) type D: solid surface	R3J18A
	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	Q9G71A
	AP-MNT-E Campus AP mount bracket kit (individual) type E: wall-box	R3J19A
*	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	R1C72A
*	HPE Aruba Networking AP-MNT-MP10-U Campus AP Universal Mount Bracket Kit (10-pack)	SOJ40A

## Configuration Information

\* AP-MNT-MP10-X Campus AP mount adapter kit (10-pack) R3T20A

- Notes:**
- \*Kit contains mounts for 10 access points
  - Access Points do not include a Mount. Qty 1 Mount kits should be selected

### Antennas

For 534 Series Std (Min 0 // max 1) User Selection (min 0 // max 1)

#### Antennas

*	AP-ANT-1W 2.4-2.5GHz (4dBi)/4.9-5.875GHz (6dBi) Hi Gain Dual-band Omni-Dir Indoor Antenna	JW009A
*	AP-ANT-13B 2.4-2.5GHz (2.3dBi)/4.9-5.9GHz (4.0dBi) Downtilt Smallest Omni-Dir Single Ant	JW001A
*	AP-ANT-19 2.4/5G Dual Band Omni-Dir 3dBi/6dBi Indr/Otrd RPSMA Cnctr Ant w/36in Intgrtd Cable	JW004A
*	AP-ANT-20W 2.4-2.5GHz (2dBi)/4.9-5.875GHz (2dBi) Compact Omni-Dir DMt Indr White Antenna	JW011A
	AP-ANT-40 Dual Band Downtilt Omni 4dBi 4 Elmt MIMO Ceiling Mount 4xRPSMA Pigtail Antenna	JW017A
	AP-ANT-45 Dual Band 90x90deg 5dBi 4 Element MIMO 4xRPSMA Pigtail Antenna	JW018A
	AP-ANT-48 Dual Band 60x60deg 8.5dBi 4 Element MIMO 4xRPSMA Pigtail Antenna	JW019A
	HPE Aruba Networking AP-ANT-311 Direct-Mount RP-SMA Tri-Band 1x1 Omni Dipole Antenna	S1F79A
	HPE Aruba Networking AP-ANT-312 Direct-Mount RP-SMA Tri-Band 1x1 Low-Profile Omni Dipole Antenna	S1F80A
	HPE Aruba Networking AP-ANT-313 Cabled RP-SMA Tri-Band 1x1 Omni Dipole Antenna	S1F81A
	HPE Aruba Networking AP-ANT-340 Cabled RP-SMA Tri-Band 4x4 Downtilt Omni Ceiling Antenna	S1F82A
	HPE Aruba Networking AP-ANT-345 Cabled RP-SMA Tri-Band 4x4 Medium Gain Directional Panel Antenna	S1F83A
	HPE Aruba Networking AP-ANT-348 Cabled RP-SMA Tri-Band 4x4 High Gain Directional Panel Antenna	S1F84A

- Notes:**
- \*Must select Qty 0 or Qty 4
  - **OCA Blue Notes:**
  - AP-ANT-1W, and AP-ANT-20W are usually direct connect to the chassis
  - AP-ANT-45,AP-ANT-48 ship with hardware for flush mount to a flat surface
  - AP-534 has 4x RPSMA female, concurrent dual-band connections

#### Antenna Mount Kits

For 534 Series Std (Min 0 // max 1) User Selection (min 0 // max 1)

1	Aruba AP-ANT-MNT-4 AZ/EL Adjustable Antenna Pole/Wall Mount Kit	JW021A
2	Aruba AP-ANT-MNT-5 AZ/EL Adjustable Antenna Pole/Wall Mount Kit	JW022A
3	HPE Aruba Networking AP-ANT-MNT-U Universal AZ/EL Adjustable Antenna Pole Wall Mount Kit	S1J09A

#### Configuration Rules

Rule#	Description	SKU
1	Compatible with antenna AP-ANT-48	
2	Compatible with antenna AP-ANT-45	
3	AP-ANT-MNT-U compatible with AP-ANT-345 and AP-ANT-348	

### Power Options

For 534, 535 Series Std (Min 0 // max 1) User Selection (min 0 // max 1)

- Notes:**
- Most devices are PoE powered from switch so these are optional
  - If this Power Supply is selected, bring in (Min 1 // Max 1) Localized power cord based on the HPE Aruba Networking Localization Menu

#### Compatible with 534 and 535 AP models

AP-POE-BTSR 1-Port Smart Rate 802.3bt 60W midspan injector	R1C73A
AP-AC2-48C 48V/50W AC/DC desktop style power adapter with 1.35/3.5mm connector	R3K01A



## Configuration Information

### Accessories

For 535 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Remarks	Description	SKU
	<b>Snap-on Covers</b>	
	AP-535-CVR-20 20-pack for AP-535 White Non-glossy Snap-on Covers	JZ368A
<b>Notes:</b>	<ul style="list-style-type: none"> <li>- <a href="#">Kit contains 20 optional snap-on covers</a></li> <li>- <a href="#">Central AP-535-CVR-20 20-pk White Non-glossy Snap-on Covers</a></li> </ul>	
	<b>Other Accessories</b>	
	For 535 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)	
	AP-MOD-SERU Micro-USB TTL3.3V to RJ45 RS232 AP Console Adapter Module	R6Q99A
	AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable	JY728A
	Aruba USB LTE Modem for use with Access Points and Gateways	R8F34A
	Aruba USB Extender Cable Kit for use with Aruba USB LTE Modem	R8G76A

### Software

#### Central

#### Cloud Services / Access Point Foundation Subscriptions

2, 8	HPE Aruba Networking Central AP Foundation 1 year Subscription E-STU	Q9Y58AAE
2, 8	HPE Aruba Networking Central AP Foundation 3 year Subscription E-STU	Q9Y59AAE
2, 8	HPE Aruba Networking Central AP Foundation 5 year Subscription E-STU	Q9Y60AAE
2, 8	HPE Aruba Networking Central AP Foundation 7 year Subscription E-STU	Q9Y61AAE
2, 8	HPE Aruba Networking Central AP Foundation 10 year Subscription E-STU	Q9Y62AAE

#### Cloud Services / Access Point Advanced Subscriptions

2, 8	HPE Aruba Networking Central AP Advanced 1 year Subscription E-STU	Q9Y63AAE
2, 8	HPE Aruba Networking Central AP Advanced 3 year Subscription E-STU	Q9Y64AAE
2, 8	HPE Aruba Networking Central AP Advanced 5 year Subscription E-STU	Q9Y65AAE
2, 8	HPE Aruba Networking Central AP Advanced 7 year Subscription E-STU	Q9Y66AAE
2, 8	HPE Aruba Networking Central AP Advanced 10 year Subscription E-STU	Q9Y67AAE

#### On-Prem Services / Access Point Foundation Subscriptions

3, 8	HPE Aruba Networking Central on Prem AP Foundation 1 year Subscription E-STU	R6U63AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 3 year Subscription E-STU	R6U64AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 5 year Subscription E-STU	R6U65AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 7 year Subscription E-STU	R6U66AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 10 year Subscription E-STU	R6U67AAE

#### FedRAMP Services / Access Point Advanced Subscriptions

6, 8	Aruba Central AP Advanced 1yr Subscription Government E-STU	R8K84AAE
6, 8	Aruba Central AP Advanced 3yr Subscription Government E-STU	R8K85AAE
6, 8	Aruba Central AP Advanced 5yr Subscription Government E-STU	R8K86AAE
6, 8	Aruba Central AP Advanced 7yr Subscription Government E-STU	R8K87AAE
6, 8	Aruba Central AP Advanced 10yr Subscription Government E-STU	R8K88AAE

#### Configuration Rules

Rule #	Description	SKU
2	<a href="#">Add the Central Cloud Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking &gt; Network Management &gt; Central &gt; Cloud Services</a>	
3	<a href="#">Add the Central On-Prem Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking &gt; Network Management &gt; Central &gt; On-Prem Services</a>	
6	<a href="#">Add the Central FedRAMP Service Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking &gt; Network Management &gt; Central &gt; FedRAMP</a>	

## Configuration Information

- 8 For OCA: When configuring the following AP 10-Pack, selection condition for this Subscription should be 0(default) or 10

HPE Aruba Networking AP-503 (RW) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack Campus Access Point	S1E83A
HPE Aruba Networking AP-503 (US) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack Campus Access Point	S1E84A

### As-a-Service

#### Cloud Services / Access Point Foundation Subscriptions

7	HPE Aruba Networking Central AP Foundation 1 year Subscription SaaS	Q9Y58AAS
7	HPE Aruba Networking Central AP Foundation 3 year Subscription SaaS	Q9Y59AAS
7	HPE Aruba Networking Central AP Foundation 5 year Subscription SaaS	Q9Y60AAS
7	HPE Aruba Networking Central AP Foundation 7 year Subscription SaaS	Q9Y61AAS
7	HPE Aruba Networking Central AP Foundation 10 year Subscription SaaS	Q9Y62AAS

#### Cloud Services / Access Point Advanced Subscriptions

7	HPE Aruba Networking Central AP Advanced 1 year Subscription SaaS	Q9Y63AAS
7	HPE Aruba Networking Central AP Advanced 3 year Subscription SaaS	Q9Y64AAS
7	HPE Aruba Networking Central AP Advanced 5 year Subscription SaaS	Q9Y65AAS
7	HPE Aruba Networking Central AP Advanced 7 year Subscription SaaS	Q9Y66AAS
7	HPE Aruba Networking Central AP Advanced 10 year Subscription SaaS	Q9Y67AAS

#### Configuration Rules

Rule#	Description	SKU
7	For IRIS reference only. No action required for OCX and Clic	



## Technical Specifications

RF performance table		
Band, rate	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
<b>2.4GHz, 802.11b</b>		
1Mbps	18	-96
11Mbps	18	-88
<b>2.4GHz, 802.11g</b>		
6Mbps	18	-93
54Mbps	17	-75
<b>2.4GHz, 802.11n HT20</b>		
MCS0	18	-93
MCS7	16	-75
<b>2.4GHz, 802.11ax HE20</b>		
MCS0	18	-92
MCS11	14	-62
<b>5GHz, 802.11a</b>		
6Mbps	18	-93
54Mbps	17	-75
<b>5GHz, 802.11n HT20</b>		
MCS0	18	-93
MCS7	16	-73
<b>5GHz, 802.11n HT40</b>		
MCS0	18	-90
MCS7	16	-70
<b>5GHz, 802.11ac VHT20</b>		
MCS0	18	-93
MCS9	16	-68
<b>5GHz, 802.11ac VHT40</b>		
MCS0	18	-90
MCS9	16	-65
<b>5GHz, 802.11ac VHT80</b>		
MCS0	18	-87
MCS9	16	-62
<b>5GHz, 802.11ac VHT160</b>		
MCS0	18	-84
MCS9	16	-59
<b>5GHz, 802.11ax HE20</b>		
MCS0	18	-90
MCS11	14	-60
<b>5GHz, 802.11ax HE40</b>		
MCS0	18	-87
MCS11	14	-57
<b>5GHz, 802.11ax HE80</b>		
MCS0	18	-84
MCS11	14	-54
<b>5GHz, 802.11ax HE160</b>		
MCS0	18	-81
MCS11	13	-51



## Technical Specifications

### Wi-Fi Radio Specifications

- AP type: Indoor, dual radio, 5GHz and 2.4GHz 802.11ax 4x4 MIMO
- 5GHz radio: Four spatial stream Single User (SU) MIMO for up to 2.4Gbps wireless data rate with individual 4SS HE80 (or 2SS HE160) 802.11ax client devices, or with four 1SS or two 2SS HE80 802.11ax MU-MIMO capable client devices simultaneously
- 2.4GHz radio: Four spatial stream Single User (SU) MIMO for up to 1,150Mbps wireless data rate with individual 4SS HE40 802.11ax client devices or with two 2SS HE40 802.11ax MU-MIMO capable client devices simultaneously
- Support for up to 1,024 associated client devices per radio (typical recommended limit for active clients is 200), and up to 16 BSSIDs per radio
- Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835GHz
  - 5.150 to 5.250GHz
  - 5.250 to 5.350GHz
  - 5.470 to 5.725GHz
  - 5.725 to 5.850GHz
- 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 37 resource units (for an 80MHz channel)
- 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

### Other Interfaces

- E0, E1: HPE SmartRate port (RJ-45, maximum negotiated speed 5Gbps)
  - Auto-sensing link speed (100/1000/2500/5000BASE-T) and MDI/MDX
  - 2.5Gbps and 5Gbps speeds comply with NBase-T and 802.3bz specifications
  - POE-PD: 48Vdc (nominal) 802.3af/at/bt POE (class 3 or higher)
  - 802.3az Energy Efficient Ethernet (EEE)
- Link aggregation (LACP) support between both network ports for redundancy and increased capacity
- POE power can be drawn from either port (single source, or set to prioritize) or both ports simultaneously (set to combine)
- DC power interface: 48Vdc (nominal, +/- 5%), accepts 1.35mm/3.5mm center-positive circular plug with 9.5mm length
- USB 2.0 host interface (Type A connector)
  - Capable of sourcing up to 1A / 5W to an attached device
- Bluetooth Low Energy (BLE5.0) and Zigbee (802.15.4) radio
  - BLE: up to 8dBm transmit power (class 1) and -95dBm receive sensitivity
  - Zigbee: up to 8dBm transmit power and -97dBm receive sensitivity
  - Integrated vertically polarized omnidirectional antenna with roughly 30 degrees downtilt and peak gain of 3.1dBi (AP-535) or 5.0dBi (AP-534)
- Visual indicators (two multi-color LEDs): for System and Radio status
- Reset button: factory reset, LED mode control (normal/off)
- Serial console interface (proprietary, micro-B USB physical jack)
- Kensington security slot

## Technical Specifications

### Wi-Fi Radio Specifications

- 802.11n high-throughput (HT) support: HT20/40
- 802.11ac very high throughput (VHT) support: VHT20/40/80/160
- 802.11ax high efficiency (HE) support: HE20/40/80/160
- 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 600 (MCS0 to MCS31, HT20 to HT40), 800 with 256-QAM
  - 802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4, VHT20 to VHT160), 2,166 with 1024-QAM
  - 802.11ax (2.4GHz): 3.6 to 1,147 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE40)
  - 802.11ax (5GHz): 3.6 to 2,402 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE160)
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU
- 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 (18dBm per chain)
  - 5 GHz band: +24 dBm (18 dBm per chain)

**Notes:** Conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain.
- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance
- 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
- 802.11ax Target Wait Time (TWT) to support low-power client devices

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### Wi-Fi Antennas

- AP-534: Four (female) RP-SMA connectors for external dual band antennas (A0 through A3, corresponding with radio chains 0 through 3). Worst-case internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 0.8dB in 2.4GHz and 1.3dB in 5GHz.
- AP-535: Four integrated dual-band downtilt omni-directional antennas for 4x4 MIMO with peak antenna gain of 3.5dBi in 2.4GHz and 5.4dBi in 5GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 degrees.
  - A mix of horizontally and vertically polarized antenna elements is used
  - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 1.9dBi in 2.4GHz and 3.5dBi in 5GHz.

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### Environmental Specifications

- Operating conditions
  - Temperature: 0C to +50C / +32F to +122F
  - Humidity: 5% to 93% non-condensing
  - AP is plenum rated for use in air-handling spaces
  - ETS 300 019 class 3.2 environments
- Storage and transportation conditions
  - Temperature: -40C to +70C / -40F to +158F
  - Humidity: 5% to 93% non-condensing
  - ETS 300 019 classes 1.2 and 2.3 environments

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### Reliability

- Mean Time Between Failure (MTBF): 500,000hrs (57yrs) at +25C operating temperature.
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## Technical Specifications

### Power Sources and Power Consumption

- The AP supports direct DC power and Power over Ethernet (POE; on port E0 and/or E1)
- When POE power is supplied to both Ethernet ports, the AP can be configured to combine or prioritize power sources
- When both DC and POE power sources are available, DC power takes priority over POE
- Power sources are sold separately; see the ordering Information section below for details
- When powered by DC, 802.3bt (class 5) POE or 2x 802.3at (class 4) POE, the AP will operate without restrictions.
- When powered by 1x 802.3at (class 4) POE and with the IPM feature disabled, the AP will disable the USB port and disable the other Ethernet port
- In the same configuration but 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 and order can be programmed.
- Operating the AP with an 802.3af (class 3 or lower) POE source is not supported.
- Maximum (worst-case) power consumption:
  - DC powered: 29W
  - POE powered (802.3bt or dual 802.3at): 30W
  - POE powered (802.3at, IPM enabled): 25W
  - All numbers above are without an external USB device connected. When sourcing the full 5W power budget to such a device, the incremental (worst-case) power consumption for the AP is up to 6W (POE powered) or 6W (DC powered).
- Maximum (worst-case) power consumption in idle mode: 12W (POE) or 12W (DC)
- Maximum (worst-case) power consumption in deep-sleep mode: 3W (POE) or 3W (DC)

### Regulatory Compliance

- 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 HPE Aruba Networking representative.

### Regulatory Model Numbers

- AP-534: APIN0534
- AP-535: APIN0535

### Certifications

- UL2043 plenum rating
- Wi-Fi Alliance:
  - Wi-Fi CERTIFIED a, b, g, n, ac
  - Wi-Fi CERTIFIED ax<sup>1</sup>
  - WPA, WPA2 and WPA3 – Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE)
  - WMM, WMM-PS, Wi-Fi Vantage, Wi-Fi Agile Multiband
  - Wi-Fi Location<sup>2</sup>
  - Passpoint (release 2)
- Bluetooth SIG
- Ethernet Alliance (POE, PD device, class 4)

#### Notes:

- <sup>1</sup> Will require software update. Certification effort will be kicked off as soon as the Wi-Fi Alliance starts the program
- <sup>2</sup> Not available initially; will require a software upgrade



## Technical Specifications

### Minimum Operating System Software Versions

- HPE Aruba Networking OS
  - HPE Aruba Networking InstantOS 8.5.0.0
- 

### Additional Wi-Fi Features

Each AP also includes the following standards-based technologies:

- Transmit beamforming (TxBF) increases signal reliability and range
  - Passpoint Wi-Fi (Release 2) (Hotspot 2.0) offers seamless cellular-to-Wi-Fi carryover for guests
  - Dynamic Frequency Selection (DFS) optimizes use of available RF spectrum
  - Maximum Ratio Combining (MRC) improves receiver performance
  - Cyclic Delay/Shift Diversity (CDD/CSD) provides greater downlink RF performance
  - Space-Time Block Coding increases range and improved reception
  - Low-Density Parity Check (LDPC) provides a high-efficiency error correction for increased throughput
- 

### Specifications - Hardware Variants

- AP-534: External antenna models
  - AP-535: Internal antenna models
- 

### Mounting

- A mounting bracket has been pre-installed on the back of the AP.
  - This bracket is used to secure the AP to any of the mount kits (sold separately); see the ordering Information section below for details.
- 

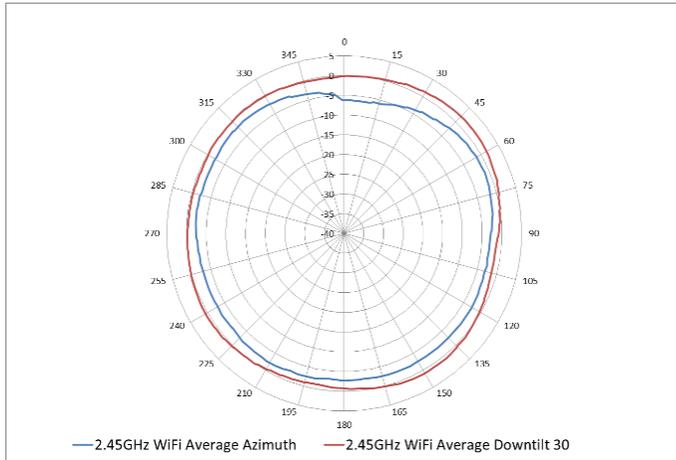


## Technical Specifications

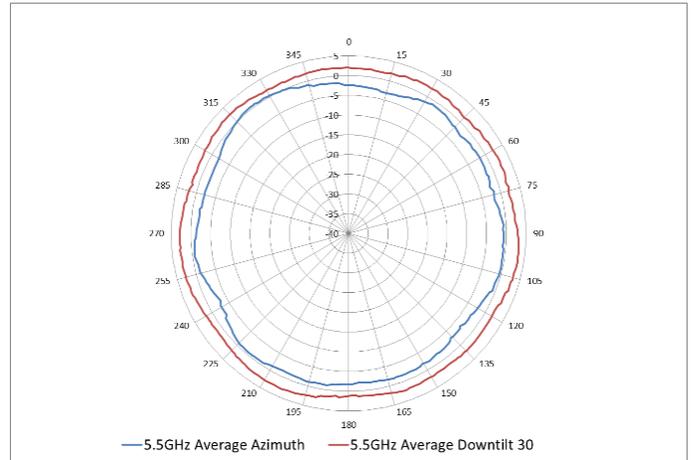
### Antenna Patterns

#### Horizontal Planes (Top View)

Showing azimuth (0 degrees) and 30 degrees downtilt patterns (averaged patterns for all applicable antennas)



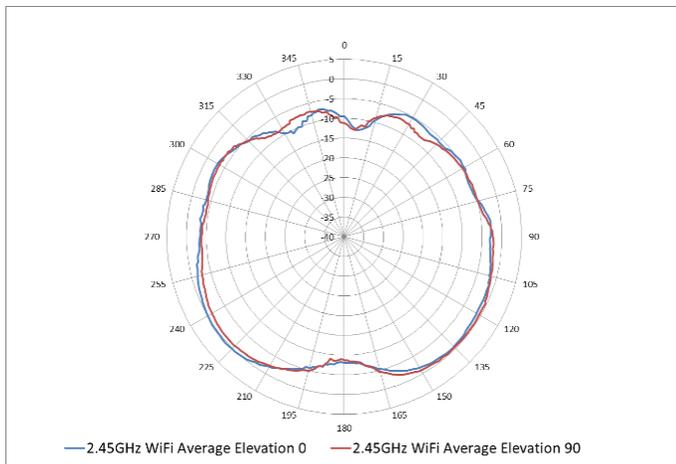
**2.45GHz Wi-Fi (Antennas 1, 2, 3, 4)**



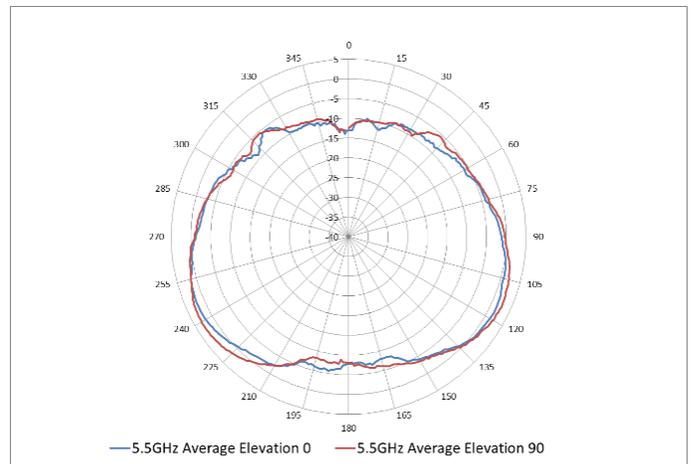
**5.5GHz Wi-Fi (Antennas 1, 2, 3, 4)**

#### Vertical (Elevation) Planes (Side View, AP Facing Down)

Showing side view with AP rotated 0 and 90 degrees (averaged patterns for all applicable antennas)



**2.45GHz Wi-Fi (Antennas 1, 2, 3, 4)**



**5.5GHz Wi-Fi (Antennas 1, 2, 3, 4)**



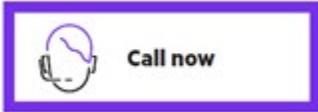
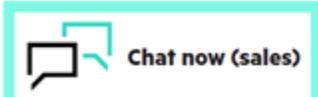
## Summary of Changes

Date	Version History	Action	Description of Change
04-Dec-2023	Version 13	Changed	Series name was updated.
05-Sep-2023	Version 12	Changed	Configuration Information section was updated.
07-Aug-2023	Version 11	Changed	Configuration Information section was updated.
01-May-2023	Version 10	Changed	Configuration Information section was updated, new SKU was added.
05-Jul-2022	Version 9	Changed	Configuration Information section was updated, new SKUs were added.
06-Dec-2021	Version 8	Changed	SKUs were added in Configuration Information section.
15-Mar-2021	Version 7	Changed	SKUs were added in Configuration Information section.
08-Sep-2020	Version 6	Changed	Configuration Information section was updated. New SKUS were added. Obsolete SKUs were removed.
09-Dec-2019	Version 5	Changed	Standard Features and Configuration Information sections were updated.
04-Nov-2019	Version 4	Changed	Configuration Information section was updated. New SKUS were added
07-Oct-2019	Version 3	Changed	Overview, Standard Features and Configuration Information sections were updated New SKUS were added
03-Jun-2019	Version 2	Changed	Configuration Information section was updated. New SKUs were added.
02-Apr-2019	Version 1	New	New QuickSpecs



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