Overview

Shape the Future of QuickSpecs – Your Input Matters

HPE Aruba Networking 510 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 Gbps (HE80/HE40), they deliver the speed and reliability needed for any enterprise environment.

HPE Aruba Networking 510 Series Campus Access Points

Overview

Key features

- Up to 2.69 Gbps combined peak data rate•
- 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
- Embedded ranging technology for accurate indoor location measurements

Standard Features

Incredible Efficiency

The HPE Aruba Networking 510 Series Campus Access Points are also designed to optimize user experience by maximizing Wi-Fi efficiency and dramatically reducing airtime contention between clients.

Features include Orthogonal frequency-division multiple access (OFDMA), multi-user MIMO and cellular optimization. With up to 4 spatial streams (4SS) and 160 MHz channel bandwidth (VHT160), the 510 Series provides groundbreaking wireless capabilities for any enterprise.

Advantages of OFDMA

This capability allows HPE Aruba Networking access points 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 and not competing for airtime and bandwidth.

Multi-User MIMO (MU-MIMO)

The 510 Series APs support downlink MU-MIMO (5 GHz radio) to maximize the use of its MIMO radio capabilities by simultaneously exchanging data with multiple single or dual stream client devices.

Wi-Fi Optimization

Client Optimization

Patented AI-powered HPE Aruba Networking ClientMatch technology eliminates sticky client issues by steering a client to the AP where it receives the best radio signal. ClientMatch steers traffic from the noisy 2.4 GHz band to the preferred 5 GHz or 6 GHz band depending on client capabilities.

ClientMatch also dynamically steers traffic to load balance access points to improve the user experience.

Automated Wi-Fi radio frequency management

To optimize the user experience and provide greater stability, HPE Aruba Networking AirMatch allows organizations to automate network optimization using machine learning. AirMatch provides dynamic bandwidth adjustments to support changing device density, enhanced roaming using an even distribution of Effective Isotropic Radiated Power (EIRP) to radios, and real-time channel assignments to mitigate co-channel interference.

HPE Aruba Networking Advanced Cellular Coexistence (ACC)

This 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)

HPE Aruba Networking access points 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 ready

The 510 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 510 series as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources.

Target Wake Time (TWT)

Ideal for IoT devices 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.

Foundation for Accurate Indoor Location

HPE Aruba Networking APs act as a foundation for accurate indoor location so that location-aware services can be deployed at scale. Using embedded GPS receivers, HPE Aruba Networking Wi-Fi 6E access points are able to self-locate and work with Wi-Fi 6 Aaccess points Ps to establish reference points that can be used to accurately determine indoor client location.

Standard Features

Because they use universal latitude and longitude coordinates, there is no need for custom map development or to create separate applications for indoor and outdoor environments.

HPE Aruba Networking Secure Infrastructure

The 510 series includes components of HPE Aruba Networking Zero Trust and SASE framework 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 new 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 ClearPass Policy Manager.

VPN tunnels

In remote access point (RAP) and IAP-VPN deployments, the 510 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 HPE Aruba Networking access points have an installed TPM for secure storage of credentials and keys, and boot code.

Simple and Secure Access

To simplify policy enforcement, the 510 seriesuses HPE Aruba Networking's policy enforcement firewall (PEF) feature to encapsulate all traffic from the access point 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 HPE Aruba Networking Dynamic Segmentation.

Flexible Operation and Management

Our unified access points can operate as standalone APs or with a gateway for greater scalability, security, and manageability. Access pointscan be deployed using zero touch provisioning — without on-site technical expertise — for ease of implementation in branch offices and for remote work.

HPE Aruba Networking access points can be managed using cloud-based or on-premises solutions for any campus, branch, or remote work environment. HPE Aruba Networking Central provides a single pane of glass for overseeing every aspect of wired and wireless LANs, WANs, and VPNs. AI-powered analytics, end-to-end orchestration and automation, and advanced security features are built natively into the solution.

Additional Wi-Fi Features

Each access points also includes the following standards-based technologies:

- **Transmit beamforming (TxBF)** increases signal reliability and range
- **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-514: External antenna models
- AP-515: Internal antenna models

Standard Features

Wi-Fi Radio Specifications

- Access point type: Indoor, dual radio, 5 GHz 802.11ax 4x4 MIMO and 2.4 GHz 802.11ax 2x2 MIMO
- 5 GHz radio:
  - Four spatial streams Single User (SU) MIMO for up to 4.8 Gbps wireless data rate to individual 4SS HE160 802.11ax client devices (max)
  - Two spatial streams Single User (SU) MIMO for up to 1.2 Gbps wireless data rate to individual 2SS HE80 802.11ax client devices (typical)
  - Four spatial streams Multi User (MU) MIMO for up to 4.8 Gbps wireless data rate to up to four 1SS or two 2SS HE160 802.11ax DL-MU-MIMO capable client devices simultaneously (max)
  - Four spatial streams Multi User (MU) MIMO for up to 2.4 Gbps wireless data rate to up to four 1SS or two 2SS HE80 802.11ax DL-MU-MIMO capable client devices simultaneously (typical)
- 2.4 GHz radio:
  - Two spatial streams Single User (SU) MIMO for up to 574 Mbps wireless data rate to 2SS HE40 802.11ax client devices (max)
  - Two spatial streams Single User (SU) MIMO for up to 287 Mbps wireless data rate to 2SS HE20 802.11ax client devices (typical)
- Support for up to 512 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 ISM
  - 5.150 to 5.250 GHz U-NII-1
  - 5.250 to 5.350 GHz U-NII-2A
  - 5.470 to 5.725 GHz U-NII-2C
  - 5.725 to 5.850 GHz U-NII-3/ISM
  - 5.850 to 5.895 GHz U-NII-4
- Available channels: Dependent on configured regulatory domain
- Dynamic Frequency Selection (DFS) optimizes the use of available RF spectrum Including Zero-Wait DFS (ZWDFS) to accelerate channel changes
- 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 (for an 80 MHz 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-QAM802.11n 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 (2.4 GHz): 6.5 to 300 (MCS0 to MCS15, HT20 to HT40)
  - 802.11n (5 GHz): 6.5 to 600 (MCS0 to MVC31, HT20 to HT40)
  - 802.11ac: 6.5 to 3,467 (MCS0 to MCS9, NSS = 1 to 4, VHT20 to VHT160)
  - 802.11ax (2.4 GHz): 3.6 to 574 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE40)
  - 802.11ax (5 GHz): 3.6 to 4,803 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE160)
- 802.11n/ac/ax 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: +21 dBm (18 dBm 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

Standard Features

- 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
- 802.11mc Fine Timing Measurement (FTM) for precision distance ranging

Wi-Fi Antennas

- AP-514: Four (female) RP-SMA connectors for external dual band antennas (A0 through A3, corresponding with radio chains 0 through 3 for 5 GHz; 2.4 GHz radio uses A0/A1 and chains 0/1 only). Worst-case internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 1.3 dB in 2.4 GHz and 1.7 dB in 5 GHz.
- AP-515: Four integrated dual-band downtilt omni-directional antennas for 4x4 MIMO (2x2 MIMO for 2.4 GHz) with peak antenna gain of 4.2 dBi in 2.4 GHz and 7.5 dBi in 5 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30°.
  - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the effective per-antenna pattern is 3.8 dBi in 2.4 GHz and 4.6 dBi in 5 GHz.

Additional Interfaces

- E0: HPE Smart rate port (RJ-45, maximum negotiated speed 2.5 Gbps)
  - Auto-sensing link speed (100/1000/2500BASE-T) and MDI/ MDIX
  - 2.5 Gbps speeds comply with NBase-T and 802.3bz specifications
  - PoE-PD: 48 VDC (nominal) 802.3af/at/bt (class 3 or higher)
  - 802.3az Energy Efficient Ethernet (EEE)
- E1: 10/100/1000BASE-T Ethernet network interface (RJ-45)
  - Auto-sensing link speed and MDI/MDIX
  - 802.3az Energy Efficient Ethernet (EEE)
- Link Aggregation (LACP) support between both network ports for redundancy and increased capacity
- DC power interface: 12 VDC (nominal, +/-5%), accepts 2.1 mm/5.5 mm center-positive circular plug with 9.5 mm length
- USB 2.0 host interface (Type A connector)
  - Capable of sourcing up to 1A/5W to an attached device
- Bluetooth 5 and Zigbee (802.15.4) radio (2.4 GHz)
  - Bluetooth 5: up to 8 dBm transmit power (class 1) and -95 dBm receive sensitivity
  - Zigbee: up to 8 dBm transmit power and -97 dBm receive sensitivity
  - Integrated vertically polarized omnidirectional antenna with roughly 30° downtilt and peak gain of 3.5 dBi (AP-515) or 4.9 dBi (AP-514)
- Visual indictors (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

Power Sources and Power Consumption

- The AP supports direct DC power and Power over Ethernet (PoE; on port E0)
- When both 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 or 802.3at (class 4)/802.3bt (class 5) PoE, the access point will operate without restrictions.
- When powered by 802.3af (class 3) PoE and with the IPM feature enabled, the access point will start up in unrestricted mode, but it may apply restrictions depending on the PoE budget and actual power. What IPM restrictions to apply, and in what order, is programmable.

Standard Features

- Operating the access point with an 802.3af (class 3 or lower) PoE source and IPM disabled is not supported (except for AP staging; no radios will be enabled).
- Maximum (worst-case) power consumption:
  - DC powered: 16.0W
  - PoE powered (802.3af, IPM enabled): 13.5W
  - PoE powered (802.3at/bt): 20.8W
  - 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 access point is up to 5.7W (PoE powered) or 5.5W (DC powered).
- Maximum (worst-case) power consumption in idle mode: 12.6W (PoE) or 9.7W (DC)
- Maximum (worst-case) power consumption in deep-sleep mode: 5.9W (PoE) or 1.5W (DC)

Mounting Details

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

Mechanical Specifications

- Dimensions/weight (AP-515; unit, excluding mount bracket):
  - 200 mm (W) x 200 mm (D) x 46 mm (H)/7.9" (W) x 7.9" (D) x 1.8" (H)
  - 810g/28.5 oz
- Dimensions/weight (AP-515; shipping):
  - 230 mm (W) x 220 mm (D) x 72 mm (H)/9.1" (W) x 8.7" (D) x 2.8" (H)
  - 1010g/35.5 oz

Environmental specifications

- Operating conditions
  - Temperature: 0° C to +50°C/+32°F to +122°F
  - 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: -40°C to +70°C/-40°F to +158°F
  - Humidity: 5% to 93% non-condensing
  - ETS 300 019 classes 1.2 and 2.3 environments

Reliability

Mean Time Between Failure (MTBF): 560,000 hrs (64 yrs) at +25°C operating temperature.

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 62368-1
- EN 60601-1-1, EN60601-1-2
- Railway Certs (AP-515 Only): EN 50155:2017 — Railway Applications
- EN 50121-1:2017 — Railway EMC
  - EN 50121-3-2 — Railway EMC
  - EN 50121-4:2016 — Railway Immunity

Standard Features

- IEC 61373 ed2:2008 — Railway Shock and Vibration

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

Regulatory Model Numbers

- AP-514: APIN0514
- AP-515: APIN0515

Certifications

- UL2043 plenum rating
- Wi-Fi Alliance:
  - Wi-Fi CERTIFIED a, b, g, n, ac, ax
  - WPA, WPA2 and WPA3 — Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE)
  - WMM, WMM-PS, W-Fi Agile Multiband
  - Wi-Fi CERTIFIED Location™
- Bluetooth SIG

Warranty

HPE Aruba Networking's hardware limited lifetime warranty.

Minimum Operating System Software Versions

- HPE Aruba Networking Wireless Operating System and HPE Aruba Networking InstantOS 8.4.0.0 (with some restrictions). For unrestricted operation,use 8.6.0.0 or later.
- HPE Aruba Networking Wireless Operating System 10.0.0.0

Configuration Information

BTO Models

Remarks	Description	SKU
	HPE Aruba Networking 515 Internal Antenna Access Points	
Notes:	Add Mount Kit	
3	HPE Aruba Networking AP-515 (EG) Dual Radio 4x4/2x2 802.11ax Internal Antennas Unified Campus AP	Q9H59A
4	HPE Aruba Networking AP-515 (IL) Dual Radio 4x4/2x2 802.11ax Internal Antennas Unified Campus AP	Q9H60A
5	HPE Aruba Networking AP-515 (JP) Dual Radio 4x4/2x2 802.11ax Internal Antennas Unified Campus AP	Q9H61A
1, 6	HPE Aruba Networking AP-515 (RW) Dual Radio 4x4/2x2 802.11ax Internal Antennas Unified Campus AP	Q9H62A
2, 7	HPE Aruba Networking AP-515 (US) Dual Radio 4x4/2x2 802.11ax Internal Antennas Unified Campus AP	Q9H63A
8	HPE Aruba Networking AP-515 (ID) Dual Radio 4x4/2x2 802.11ax Internal Antennas Campus Access Point	S5D86A
	515 Internal Antenna Access Points - 10-Pack Eco-Friendly Bundle	
Notes:	Add Mount Kit	
1	HPE Aruba Networking AP-515 (RW) Dual Radio 4x4/2x2 Wi-Fi 6 10-pack Campus Access Point	S3J29A
2	HPE Aruba Networking AP-515 (US) Dual Radio 4x4/2x2 Wi-Fi 6 10-pack Campus Access Point	S3J30A
	HPE Aruba Networking 514 External Antenna Access Points	
Notes:	Add Mount Kit, Antennas	
3	HPE Aruba Networking AP-514 (EG) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP	Q9H54A
4	HPE Aruba Networking AP-514 (IL) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP	Q9H55A
5	HPE Aruba Networking AP-514 (JP) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP	Q9H56A
1	HPE Aruba Networking AP-514 (RW) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP	Q9H57A
2	HPE Aruba Networking AP-514 (US) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP	Q9H58A
	HPE Aruba Networking 515 Internal Antenna Access Points - TAA Models	
Notes:	Add Mount Kit	
3	HPE Aruba Networking AP-515 (EG) TAA Dual Radio 4x4/2x2 802.11ax Internal Ants Unified Campus AP	Q9H69A
4	HPE Aruba Networking AP-515 (IL) TAA Dual Radio 4x4/2x2 802.11ax Internal Ants Unified Campus AP	Q9H70A
5	HPE Aruba Networking AP-515 (JP) TAA Dual Radio 4x4/2x2 802.11ax Internal Ants Unified Campus AP	Q9H71A
1	HPE Aruba Networking AP-515 (RW) TAA Dual Radio 4x4/2x2 802.11ax Internal Ants Unified Campus AP	Q9H72A
2	HPE Aruba Networking AP-515 (US) TAA Dual Radio 4x4/2x2 802.11ax Internal Ants Unified Campus AP	Q9H73A
	HPE Aruba Networking 514 External Antenna Access Points - TAA Models	
Notes:	Add Mount Kit, Antennas	
3	HPE Aruba Networking AP-514 (EG) TAA Dual Radio 4x4/2x2 802.11ax Ext Antennas Unified Campus AP	Q9H64A
4	HPE Aruba Networking AP-514 (IL) TAA Dual Radio 4x4/2x2 802.11ax Ext Antennas Unified Campus AP	Q9H65A

Configuration Information

5	HPE Aruba Networking AP-514 (JP) TAA Dual Radio 4x4/2x2 802.11ax Ext Antennas Unified Campus AP	Q9H66A
1	HPE Aruba Networking AP-514 (RW) TAA Dual Radio 4x4/2x2 802.11ax Ext Antennas Unified Campus AP	Q9H67A
2	HPE Aruba Networking AP-514 (US) TAA Dual Radio 4x4/2x2 802.11ax Ext Antennas Unified Campus AP	Q9H68A

Configuration Rules

Rule#	Description	SKU
6	If the ordered qty of this AP is greater than or equal to 10, then the default will be the following Eco-Friendly 10-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs;	
	HPE Aruba Networking AP-515 (RW) Dual Radio 4x4/2x2 Wi-Fi 6 10-pack Campus Access Point	S3J29A
	If ordering greater than or equal to qty10 of this AP, consider ordering the Eco-Friendly 10-Packs(S3J29A). Please revert back to single pack if individual sale is desired.	
7	If the ordered qty of this AP is greater than or equal to 10, then the default will be the following Eco-Friendly 10-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs;	
	HPE Aruba Networking AP-515 (US) Dual Radio 4x4/2x2 Wi-Fi 6 10-pack Campus Access Point	S3J30A
	If ordering greater than or equal to qty10 of this AP, consider ordering the Eco-Friendly 10-Packs(S3J30A). Please revert back to single pack if individual sale is desired.	

Notes: OCA Only Model Selection Form - HPE Offering > HPE Aruba Networking > Access Points - Indoor: HPE Aruba Networking 510 Series Campus Access Points

Mount Accessories

Remarks	Description	SKU
	AP Mount Kits	
	HPE Aruba Networking AP-MNT-A Campus AP Type A Suspended Ceiling Rail Flat 9/16 Mount Bracket Kit	R3J15A
*	HPE Aruba Networking AP-MNT-MP10-A Campus AP 10-Pack 9/16 Flat Ceiling Rail Mount Bracket Kit	JZ370A
	HPE Aruba Networking AP-MNT-B Campus AP Type B Suspended Ceiling Rail Flat 15/16 Mount Bracket Kit	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-C Campus AP Type C Suspended Ceiling Rail 9/16 Profile Mnt Bracket Kit	R3J17A
*	HPE Aruba Networking AP-MNT-MP10-C Campus AP 10-Pack Profile 9/16 Ceiling Rail Mount Bracket Kit	Q9G70A
	HPE Aruba Networking AP-MNT-D Campus AP Type D Solid Surface Mount Bracket Kit	R3J18A
*	HPE Aruba Networking AP-MNT-MP10-D Campus AP 10-Pack Solid Surface Mount Bracket Kit	Q9G71A
	HPE Aruba Networking AP-MNT-E Campus AP Type E Wall-Box Mount Bracket Kit	R3J19A
*	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	R1C72A
	HPE Aruba Networking AP-MNT-U Campus Access Point Type U Universal Mount Bracket Kit	S4K79A
*	HPE Aruba Networking AP-MNT-MP10-U Campus AP Universal 10-pack Mount Bracket Kit	S0J40A
*	HPE Aruba Networking AP-MNT-MP10-X Campus AP 10-Pack Mount Adapter Kit	R3T20A

Notes:
- *Kit contains mounts for 10 access points
- For 514, 515, Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Configuration Information

Antennas

For HPE Aruba Networking 514 Std (Min 0 // max1) User Selection (min 0 // max 1)

Antennas

*	HPE Aruba Networking AP-ANT-311 Direct-Mount RP-SMA Tri-Band 1x1 Omni Dipole Antenna • Direct mount	S1F79A
*	HPE Aruba Networking AP-ANT-312 Direct-Mount RP-SMA Tri-Band 1x1 Low-Profile Omni Dipole Antenna • Direct mount	S1F80A
*	HPE Aruba Networking AP-ANT-313 Cabled RP-SMA Tri-Band 1x1 Omni Dipole Antenna • Direct, using pigtails	S1F81A
	HPE Aruba Networking AP-ANT-340 Cabled RP-SMA Tri-Band 4x4 Downtilt Omni Ceiling Antenna • Direct, using pigtails	S1F82A
	HPE Aruba Networking AP-ANT-345 Cabled RP-SMA Tri-Band 4x4 Medium Gain Directional Panel Antenna • Direct, using pigtails	S1F83A
	HPE Aruba Networking AP-ANT-348 Cabled RP-SMA Tri-Band 4x4 High Gain Directional Panel Antenna • Direct, using pigtails	S1F84A

Notes:
- *Must select Qty 0 or Qty 4
- 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-514 has 4x RPSMA female, concurrent dual-band connections

Antenna Mount Kits

For HPE Aruba Networking 514 Series Std (Min 0 // max 1) User selection (min 0 // max 1)

Rule#	Description	SKU
1	HPE Aruba Networking AP-ANT-MNT-4 AZ/EL Adjustable Antennas Pole/Wall Mount Kit	JW021A
2	HPE Aruba Networking AP-ANT-MNT-5 AZ/EL Adjustable Antennas 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	Only compatible with JW019A	
2	Only compatible with JW018A	
3	AP-ANT-MNT-U compatible with AP-ANT-345 and AP-ANT-348	

Power Options

For 514, 515 Series Std (Min 0 // max 1) User Selection (min 0 // max 1)

Remarks	Description	SKU
Notes:	– If this Power Supply is selected, bring in (Min 1 // Max 1) Localized power cord based on the Localization Menu – Most devices are PoE powered from switch so these are optional.	
	HPE Aruba Networking AP-POE-ATSR 1-Port Smart Rate 802.3at 30W Midspan Injector	R6P67A
	HPE Aruba Networking AP-AC2-12B 12V/48W AC/DC Desktop Style Power Adapter with 2.1/5.5mm Connector	R3K00A

Configuration Information

Accessories

For 515 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Snap-on Covers

	HPE Aruba Networking AP-MNT-MP10-B1 Campus AP 10-Pack 15/16 Adj Flat Ceiling Rail Mount Bracket Kit	R6T34A
	HPE Aruba Networking AP-515-CVR-20 20pk for AP-515 White Non-glossy Snap-On Covers	Q9H74A
Notes:	Kit contains 20 optional Snap-On covers	

Other Accessories

For 514, 515 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

	HPE Aruba Networking AP-MOD-SERU Micro-USB TTL3.3V to RJ45 RS232 AP Console Adapter Module	R6Q99A
	HPE Aruba Networking AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable	JY728A
	HPE Aruba Networking USB LTE Modem for Access Points and Gateways	R8F34A
	HPE Aruba Networking USB Extender Cable Kit	R8G76A

Software

HPE Aruba Networking 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

Configuration Rules

Rule #	Description	SKU
2	Add the HPE Aruba Networking Central Cloud SKUs to the Catalog as Standalone: HPE Aruba Networking> Network Management > HPE Aruba Networking Central > Cloud Services	
3	Add the HPE Aruba Networking Central On-Prem SKUs to the Catalog as Standalone: HPE Aruba Networking > Network Management > HPE Aruba Networking Central > On-Prem Services	
6	Add the HPE Aruba Networking Central FedRAMP Service SKUs to the Catalog as Standalone: HPE Aruba Networking > Network Management > HPE Aruba Networking Central > FedRAMP	
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) 10-Pack Dual Radio 2x2:2 Wi-Fi 6 Campus Access Point	S1E83A
	HPE Aruba Networking AP-503 (US) 10-Pack Dual Radio 2x2:2 Wi-Fi 6 Campus Access Point	S1E84A

Configuration Information

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

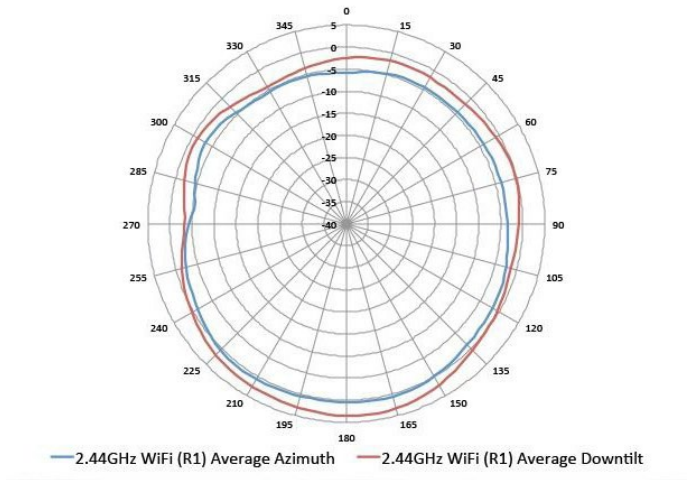
Band, Rate	Maximum Transmit Power (Dbm) Per Transmit Chain	Receiver Sensitivity (Dbm) Per Receive Chain
2.4GHz, 802.11b		
1Mbps	18	-96
11Mbps	18	-88
2.4GHz, 802.11g		
6Mbps	18	-93
54Mbps	17	-75
2.4GHz, 802.11n HT20		
MCS0	18	-93
MCS7	16	-75
2.4GHz, 802.11ax HE20		
MCS0	18	-92
MCS11	14	-62
5GHz, 802.11a		
6Mbps	18	-93
54Mbps	17	-75
5GHz, 802.11n HT20		
MCS0	18	-93
MCS7	16	-73
5GHz, 802.11n HT40		
MCS0	18	-90
MCS7	16	-70
5GHz, 802.11ac VHT20		
MCS0	18	-93
MCS9	16	-68
5GHz, 802.11ac VHT40		
MCS0	18	-90
MCS9	16	-65
5GHz, 802.11ac VHT80		
MCS0	18	-87
MCS9	16	-62
5GHz, 802.11ac VHT160		
MCS0	18	-84
MCS9	16	-59
5GHz, 802.11ax HE20		
MCS0	18	-90
MCS11	14	-60
5GHz, 802.11ax HE40		
MCS0	18	-87
MCS11	14	-57
5GHz, 802.11ax HE80		
MCS0	18	-84
MCS11	14	-54
5GHz, 802.11ax HE160		
MCS0	18	-81
MCS11	13	-51

Technical Specifications

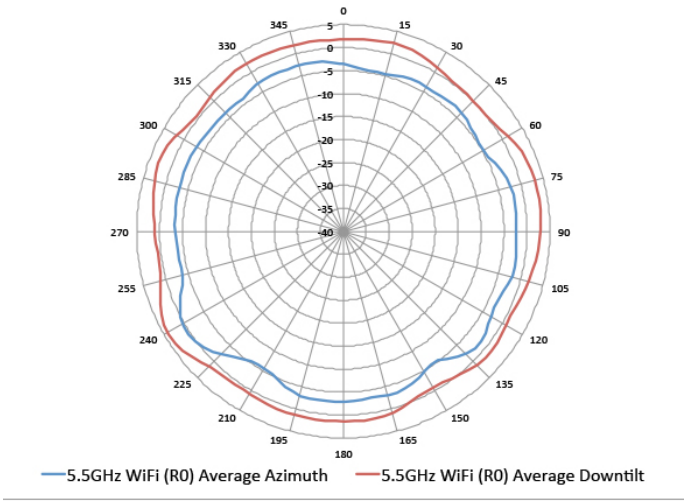
Antenna Patterns

Horizontal Planes (Top View)

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



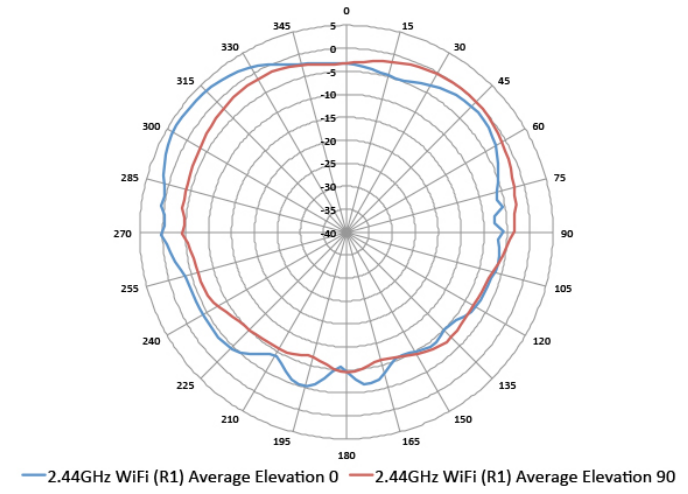
2.44GHz Wi-Fi (antennas 1, 2)



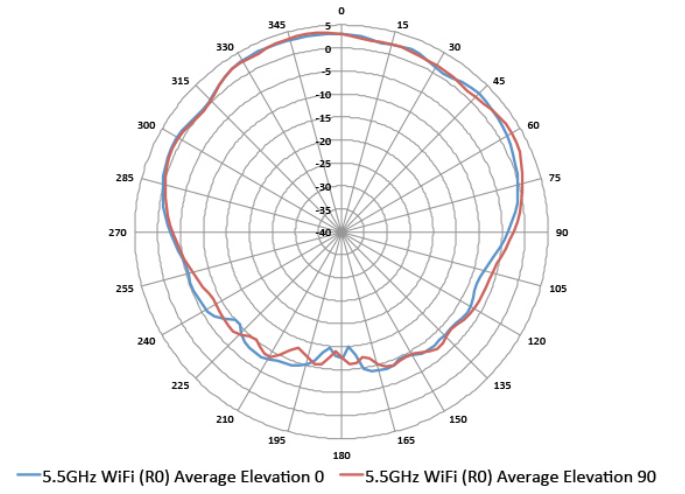
5.5GHz Wi-Fi (antennas 1, 2, 3, 4)

Vertical (elevation) planes (side view, AP facing up)

Showing side view with access point rotated 0° and 90° (averaged patterns for all applicable antennas))



2.44GHz Wi-Fi (antennas 1, 2)



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

Summary of Changes

Date	Version History	Action	Description of Change
28-Jul-2025	**Version 18**	Changed	Update survey link.
07-Apr-2025	**Version 17**	Changed	Overview, Standard Features, Configuration Information, and Technical Specification sections were updated.
03-Feb-2025	**Version 16**	Changed	Configuration Information section was updated
21-Jan-2025	**Version 15**	Changed	QuickSpecs was updated.
16-Dec-2024	**Version 14**	Changed	Standard Features and Configuration Information sections were updated.
01-Jul-2024	**Version 13**	Changed	Configuration Information section was updated
04-Dec-2023	**Version 12**	Changed	Series name was updated
05-Sep-2023	**Version 11**	Changed	Configuration Information section was updated
07-Aug-2023	**Version 10**	Changed	Configuration Information section was updated
01-May-2023	**Version 9**	Changed	Configuration Information section was updated, new SKU was added.
05-Jul-2022	**Version 8**	Changed	Configuration Information section was updated.
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
04-Nov-2019	**Version 5**	Changed	Configuration Information section was updated New SKUS were added
07-Oct-2019	**Version 4**	Changed	Overview, Standard Features and Configuration Information sections were updated New SKUS were added
03-Jun-2019	**Version 3**	Changed	Configuration and Accessories sections were updated. New SKUs were added.
18-Feb-2019	**Version 2**	Changed	Minor change made on Technical Specifications
13-Nov-2018	**Version 1**	New	New QuickSpecs

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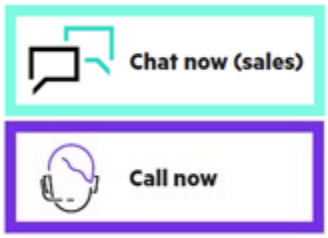

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