# QuickSpecs

### **Overview**

Shape the Future of QuickSpecs - Your Input Matters

### HPE Aruba Networking 720 Series Campus Access Points

Designed to deliver cutting-edge Wi-Fi performance, the HPE Aruba Networking 720 Series Campus Access Points offer enterprises a cost-effective solution that meets the demand for fast, secure, high-performance connectivity. Leveraging the latest Wi-Fi 7 standard, these access points enhance security across both wired and wireless networks, support Internet of Things (IoT) devices, and provide accurate location-aware capabilities. HPE Aruba Networking Central helps drive efficient operations and provides Al-automation and machine learning (ML) insights for fine-tuned wireless connectivity across diverse environments. Like all the HPE Aruba Networking access points, this series is Wi-Fi CERTIFIED and includes a limited lifetime warranty for investment protection.



**HPE Aruba Networking 720 Series Campus Access Points** 



### **Overview**

### **Key Features**

- Wi-Fi 7 (802.11be) brings multilink operation (MLO) for channel aggregation, 4K QAM for higher throughput and lower latency, and the 6 GHz band for more than double the available capacity
- Three 2x2 MIMO radios provide triband coverage across 2.4 GHz, 5 GHz, and 6 GHz to deliver 4.7 Gbps maximum tri-band aggregate data rate
- Flexible integrated IoT radio can be configured for BLE or 802.15.4/Zigbee operation
- Conveniently powered by PoE (IEEE 802.3at)
- Fast 2.5 Gbps Ethernet connectivity
- Al-powered dynamic power save mode helps reduce energy use

### Al-powered Wi-Fi 7

Managing Wi-Fi 7 access points is easier with HPE Aruba Networking Central, which provides intelligent automation, Al insights, and unified infrastructure management.

The HPE Aruba Networking 720 Series Campus Access Points is supported by HPE Aruba Networking Wireless Operating System AOS-10.

### **More Capacity**

The HPE Aruba Networking 720 Series Campus Access Points are designed to take advantage of every bit of available spectrum through three dedicated radios, which translates into high speeds, wider channels for multigigabit traffic, and less interference. Supporting up to 160 MHz wide channels, the series delivers up to 4.7 Gbps maximum triband aggregate data rate, using three 2x2 MIMO radios (2.4 GHz, 5 GHz, and 6 GHz).

### Wi-Fi 7 for Faster Speeds, More Capacity

The **Wi-Fi 7**\_standard (802.11be) extends the capabilities of Wi-Fi 6E, including the use of the 6 GHz band. New capabilities include multilink operation (MLO) for channel aggregation across different bands and failover, and 4096 QAM (4K QAM) modulation for higher peak data rates, and spectrum puncturing to avoid interference or incumbent users of the 6 GHz band.

### Advantages of 6 GHz

Wi-Fi 7 takes advantage of up to 1200 MHz in the 6 GHz band for higher throughput and improved application performance. HPE Aruba Networking 720 Series Campus Access Points support up to seven 160 MHz channels or fourteen 80 MHz channels, enabling improved support of low-latency, bandwidth-hungry applications such as high-definition video and artificial reality/virtual reality applications. Only Wi-Fi 6E or Wi-Fi 7 capable devices can use the 6 GHz band so there is no interference or slowdowns due to legacy devices.

### **Device class support**

HPE Aruba Networking 720 Series Campus Access Points with integrated antennas are part of the Low Power Indoor (LPI) device class. This fixed indoor-only class uses lower power levels and does not require an Automated Frequency Coordination service (AFC) to manage incumbent outdoor services, which is required for standard class access points.

#### **Global readiness**

While the need for more Wi-Fi capacity is recognized across the globe, countries are approaching 6 GHz differently. The HPE Aruba Networking 720 Series Campus Access Points are set up to automatically update regulatory rules once Wi-Fi 7 regulations have been approved and certified.

#### Extend the benefits of Wi-Fi 6

The HPE Aruba Networking 720 Series Campus Access Points are based on the 802.11be standard, which means that all its efficiency and security enhancements are also available on the 6 GHz band. Wi-Fi 6 features such as Orthogonal Frequency Division Multiple Access (OFDMA), BSS coloring are fully supported on HPE Aruba Networking Wi-Fi 6E and Wi-Fi 7 access points as well. Comprehensive Network Security

### **Advantages of OFDMA**

This capability allows HPE Aruba Networking access points to handle multiple 802.11be capable clients on each channel simultaneously, regardless of device or traffic type. Channel utilization is optimized by handling each transaction through smaller subcarriers or resource units (RUs), which means that clients are sharing a channel and not competing for airtime and bandwidth.

### Cost-effective, future-proof Wi-Fi 7

Leveraging Al-powered HPE Aruba Networking Central, the HPE Aruba Networking 720 Series Campus Access Points is an integral part of the HPE Aruba Networking Wi-Fi 7 access point portfolio. Built on the same high-performance Wi-Fi 7 platform as the HPE Aruba Networking 730 Series Campus Access Points, the HPE Aruba Networking 720 Series Campus Access Points offers a cost-effective solution by omitting high-end features such as 320 MHz channel bandwidth support, dual IoT radios, dual 10 Gbps ports, and MACsec support.



## Wi-Fi optimization Client optimization

The patented Al-powered HPE Aruba Networking Central ClientMatch technology reduces sticky client issues by steering a client to the access point where it receives the best radio signal. It steers traffic from the noisy 2.4 GHz band to the preferred 5 GHz or 6 GHz band depending on client capabilities. 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. It 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.

### **Reduces interference**

Unique HPE Aruba Networking Advanced Cellular Coexistence uses built-in filtering to automatically help minimize the impact of interference from cellular networks, distributed antenna systems (DAS), and commercial small cell or femtocell equipment.

### Dynamic power save mode

Access points switch into a dynamic power save mode and automatically wake up at a schedule when connectivity demand arises, reducing power demands and saving money in alignment with the organization's sustainability initiatives.

### Intelligent power monitoring (IPM)

For better insights into energy consumption, HPE Aruba Networking access points continuously monitor and report hardware energy usage. Unlike other vendors' access points, HPE Aruba Networking access points can also be configured to enable or disable capabilities based on available PoE power—ideal when wired switches have exhausted their power budget. Enterprises can deploy Wi-Fi 7 access points and update switching and power at a later if needed based on their actual usage.

### **Location-Aware Services**

Indoor location shouldn't require guesswork or costly or complex overlay technologies. HPE Aruba Networking Wi-Fi 6, Wi-Fi 6E, and Wi-Fi 7 access points help organizations leverage their wireless investment to deliver indoor location capabilities everywhere.

As part of HPE Aruba Networking indoor location solutions, they serve as reference points for client devices and other technologies using fine time measurement.

Open Locate, an emerging standard that allows access points to share their location over the air and through cloud-based APIs, enables mobile devices to locate themselves and applications to support network analytics.

The HPE Aruba Networking 720 Series Campus Access Points support FTM 802.11az for sub-1 meter accuracy, which allows it to participate in a cluster of access points that also support Open Locate. By using anchor access points in that cluster, the HPE Aruba Networking 720 Series Campus Access Points can determine its location.

#### Access Points as Flexible and Secure IoT Platform

By combining the IoT radio with a zero-trust network framework, the HPE Aruba Networking 720 Series Campus Access Points can serve as flexible IoT platforms that bolster network security, provide coverage for a broad range of IoT devices, and helps reduce the need for network overlays just for IoT devices.

The HPE Aruba Networking 720 Series Campus Access Points includes an integrated Bluetooth 5.4 or 802.15.4 radio for Zigbee support to simplify deploying and managing IoT-based location services, asset tracking services, security solutions, and IoT sensors. There is also a USB host port to provide IoT connectivity to a wider range of devices.

These IoT capabilities allow organizations to leverage the access point as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources and can accelerate IoT initiatives.

In addition, Target Wake Time (TWT) establishes a schedule for when clients need to communicate with an access point. This helps improve client power savings and reduces airtime contention with other clients, which is ideal for IoT.

### Streamline IoT operations

HPE Aruba Networking Central IoT Operations dashboard unifies visibility of IT and OT infrastructure within the network health dashboard by extending network monitoring and insights to BLE, Zigbee, and other non-IP IoT devices. It helps streamline non-Wi-Fi device onboarding and data collection.

### Al Client Insights

ML-based classification of all clients and IoT devices through HPE Aruba Networking Central Client Insights uses deep packet inspection to provide additional context and behavioral information that help ensure devices are receiving proper policy enforcement and continuously monitor for rogue devices.

### **Technology Partnerships**

A broad ecosystem of technology partners provide interoperability for easier installations and operations, and certified solutions are available to help digital transformation and extend capabilities of network infrastructure.

### Security built-in

The HPE Aruba Networking 720 Series Campus Access Points includes security capabilities such as:

### **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.

### Trusted Platform Module (TPM)

For enhanced device assurance, all HPE Aruba Networking access points include an installed Trusted Platform Module (TPM). A TPM is a secure hardware component that performs cryptographic operations and stores sensitive keys to ensure platform integrity, secure boot, TPM-based identity binding for anti-counterfeiting and trusted attestation.

### User and device authentication

Cloud-native network access control (NAC) provided by HPE Aruba Networking Central further simplifies how IT controls network access while providing a frictionless experience for end users. Global policy automation and orchestration enables IT to define and maintain global policies at scale with ease, using UI-driven, intuitive workflows that automatically translate security intent into policy design and map user roles for employees, contractors, guests, and devices to their proper access privileges.

#### Intrusion detection

HPE Aruba Networking Central utilizes the Rogue AP Intrusion Detection Service (RAPIDS) to identify and resolve issues caused by rogue APs and clients. Wired and wireless data are automatically correlated to identify potential threats, thereby strengthening network security and improving incident response processes by reducing false positives.

#### Web content filtering

Web Content Classification (WebCC) classifies websites by content category and rates them by reputation and risk score, enabling IT to block malicious sites to help prevent phishing, DDoS, botnets, and other common attacks.

### Simple and secure access

To improve security and ease of management, IT can centrally configure and automatically enforce role-based policies that define proper access privileges for employees, guests, contractors, and other user groups—no matter where users connect on wired and WLANs. Dynamic segmentation eliminates the time-consuming and error-prone task of managing complex and static VLANs, ACLs, and subnets by dynamically assigning policies and keeping traffic secure and separated.

### Seamless handoffs to cellular

Built on the technical foundations of Passpoint® and Wi-Fi Calling, HPE Aruba Networking Air Pass creates a roaming network across the HPE Aruba Networking enterprise customer footprint, extending cellular coverage and enhancing the visitor and subscriber experience to deliver a great experience for your guests while reducing costs and management overhead for DAS.

### **HPE Aruba Networking Wireless Operating System**

Cloud-native HPE Aruba Networking Wireless Operating System AOS-10 is the distributed network operating system working with HPE Aruba Networking Central that acts as the control layer for HPE Aruba Networking APs and gateways.

With its flexible architecture, IT can deliver reliable and secure wireless connectivity for small offices, mid-sized branches, large campus environments, and remote workers.

Working in tandem with cloud-native HPE Aruba Networking Central, HPE Aruba Networking Wireless Operating System AOS-10 provides the WLAN management and control to deliver greater scalability, security, and AI-powered optimization. This reduces the processing required by on-site gateways for managing clients and access points, allowing enterprises to deploy fewer gateways even in large environments with thousands of access points and devices.

### **Flexible Operation and Management**

Our unified access points can operate as stand-alone access points or with a gateway for greater scalability, security, and manageability.

Access points can 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 through HPE Aruba Networking Central, which provides a single pane of glass for overseeing every aspect of wired and wireless LANs, WANs, and SD-WAN. Al-powered analytics, end-to-end orchestration and automation, and advanced security features are built natively into the solution.

### Simplified, Flexible Consumption

The HPE Aruba Networking 720 Series Access Points require HPE Aruba Networking Central subscription-based licenses, which are purchased on a per-device basis for APs and gateways. Licenses are available in 1-, 3-, 5-, 7-, and 10-year increments, making it easy to align requirements for AlOps, security, and other desired management features. HPE Aruba Networking Wireless Operating System AOS-10 is included in the subscription. Learn more about HPE Aruba Networking Central.

### **HPE Aruba Networking Wi-Fi Solutions**

Wherever Wi-Fi is needed, **HPE Aruba Networking Wi-Fi 7**, Wi-Fi 6E, and Wi-Fi 6 access points are ready to provide fast, reliable, and secure coverage. Our access points provide broad network observability, improve mobile client coverage, optimize Wi-Fi bandwidth, and increase operational efficiencies with a choice of cloud or on-premises deployment options. Our portfolio includes Wi-Fi CERTIFIED indoor, outdoor, ruggedized, and remote Wi-Fi access points to address a wide range of enterprise use cases and price points, with solutions backed by a limited lifetime warranty.

As part of a full portfolio of Wi-Fi 7 access points, the HPE Aruba Networking 720 Series Campus Access Points offer a cost-effective way to deliver fast, resilient, and secure Wi-Fi 7 wireless access across campus networks. Supported by HPE Aruba Networking Central, they help deliver an Al-powered, security-first network.

## **Configuration Information**

### Access Point Models

710000	725 Internal Antonna Access Daints	
Dula #	725 Internal Antenna Access Points	CICL
Rule #	Description Add Manager 1971 (continued only)	SKU
Notes:	Add Mount Kit (not included)	C/ A10 A
3	HPE Aruba Networking AP-725 (EG) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A19A
6	HPE Aruba Networking AP-725 (ID) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A18A
4	HPE Aruba Networking AP-725 (IL) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A20A
5	HPE Aruba Networking AP-725 (JP) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A21A S4A22A
1, 7	HPE Aruba Networking AP-725 (RW) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	54AZZA
1	HPE Aruba Networking AP-725 (RW1) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A23A
2, 8	HPE Aruba Networking AP-725 (US) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A25A
	725 Internal Antenna Access Points - 5-Pack Eco-Friendly Bundle	
Rule #	Description	SKU
1	HPE Aruba Networking AP-725 (RW) Tri Radio 2x2 Wi-Fi 7 Internal Antennas 10-pack Campus	S4A24A
	Access Point	
	Add 10 mount kits (not included); eco-pack includes one JY728A console adapter cable	
2	HPE Aruba Networking AP-725 (US) Tri Radio 2x2 Wi-Fi 7 Internal Antennas 10-pack Campus	S4A26A
	Access Point	
	Add 10 mount kits (not included); eco-pack includes one JY728A console adapter cable	
	Configuration Rules	
Rule #	Description	
1	Available everywhere except India, US, Israel, Egypt, Indonesia and Japan. Partners must have an	
	SOT (Cross border agreement).	
2	Available in US only. Partners must have an SOT (Cross border agreement).	
3	Available in Egpyt only. Partners must have an SOT (Cross border agreement).	
4	Available in Israel only. Partners must have an SOT (Cross border agreement).	
5	Available in Japan only. Partners must have an SOT (Cross border agreement).	
6	Available in Indonesia only. Partners must have an SOT (Cross border agreement).	
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;	S4A22A
	HPE Aruba Networking AP-725 (RW) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	54AZZA
	If ordering greater than or equal to qty10 of this AP, consider ordering the Eco-Friendly 10-	
	Packs(S4A22A). Please revert back to single pack if individual sale is desired.	
8	If the ordered qty of this AP is greater than or equal to 10, then the default will be the following	
O	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-725 (US) Tri Radio 2x2 Wi-Fi 7 Internal Antennas Campus Access Point	S4A25A
	If ordering greater than or equal to qty10 of this AP, consider ordering the Eco-Friendly 10-	3 17 12 37 1
	Packs(S4A25A). Please revert back to single pack if individual sale is desired.	
Notes:	OCA Only Model Selection Form - HPE Aruba Networking > Access Points > Indoor Campus:	
	720 Series Campus AP	
	•	



## **Configuration Information**

## Mount Accessories

	AP Mount Kits	
Rule#	Description	SKU
	HPE Aruba Networking AP-MNT-A Campus AP Type A Suspended Ceiling Rail Flat 9/16 Mount	R3J15A
	Bracket Kit	
1	HPE Aruba Networking AP-MNT-MP10-A Campus AP 10-Pack 9/16 Flat Ceiling Rail Mount	JZ370A
	Bracket Kit	
<b>Notes:</b>	This kit contains mounts for 10 access points	
	HPE Aruba Networking AP-MNT-B Campus AP Type B Suspended Ceiling Rail Flat 15/16 Mount	R3J16A
	Bracket Kit	
1	HPE Aruba Networking AP-MNT-MP10-B Campus AP 10-Pack 15/16 Flat Ceiling Rail Mount	Q9G69A
	Bracket Kit	
Notes:	This kit contains mounts for 10 access points	
1	HPE Aruba Networking AP-MNT-MP10-B1 Campus AP 10-Pack 15/16 Adj Flat Ceiling Rail Mount	R6T34A
	Bracket Kit	
Notes:	This kit contains mounts for 10 access points	
	HPE Aruba Networking AP-MNT-C Campus AP Type C Suspended Ceiling Rail 9/16 Profile Mnt	R3J17A
4	Bracket Kit	000704
1	HPE Aruba Networking AP-MNT-MP10-C Campus AP 10-Pack Profile 9/16 Ceiling Rail Mount	Q9G70A
Market	Bracket Kit	
Notes:	This kit contains mounts for 10 access points	D7 14 0 A
1	HPE Aruba Networking AP-MNT-D Campus AP Type D Solid Surface Mount Bracket Kit	R3J18A
1	HPE Aruba Networking AP-MNT-MP10-D Campus AP 10-Pack Solid Surface Mount Bracket Kit This kit contains mounts for 10 access points	Q9G71A
Notes:	HPE Aruba Networking AP-MNT-E Campus AP Type E Wall-Box Mount Bracket Kit	R3J19A
1	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	R1C72A
Notes:	This kit contains mounts for 10 access points	KIC/ZA
Notes:	HPE Aruba Networking AP-MNT-U Campus Access Point Type U Universal Mount Bracket Kit	S4K79A
1	HPE Aruba Networking AP-MNT-MP10-U Campus AP Universal 10-pack Mount Bracket Kit	S0J40A
Notes:	This kit contains mounts for 10 access points	30340/1
1	HPE Aruba Networking AP-MNT-MP10-X Campus AP 10-Pack Mount Adapter Kit	R3T20A
Notes:	This kit contains mounts for 10 access points	11312011
	Configuration Rules	
Rule #	Description	
1	Kit contains mounts for 10 access points	
Notes:	Access Points do not include a Mount. Qty 1 Mount kits should be selected.	
	Ontions	

## **Power Options**

	Power Options	
Rule#	Description	SKU
1	HPE Aruba Networking AP-POE-ATSR 1-Port Smart Rate 802.3at 30W Midspan Injector	R6P67A
	Add AC power cord	
	Unrestricted	
1	HPE Aruba Networking AP-POE-AFGE 1-Port GbE 802.3af 15.4W Midspan Injector	R6P68A
	Add AC power cord	
	USB port disabled and max RF transmit power reduced by 3dB (IPM disabled)	
	Configuration Rules	
Rule#	Description	

If this Power Supply is selected, bring in (Min 1 // Max 1) Localized power cord based on the Aruba Wireless Power Cord Table Menu

**Notes:** Most devices are PoE powered from switch so these are optional



## **Configuration Information**

## Accessories

	Snap-on Covers	
Rule#	Description	SKU
	HPE Aruba Networking AP-720-CVR-20 Access Point 20-pack White Non-Glossy Snap-On Covers	S4A27A
Notes:	Kit contains 20 optional snap-on covers	
	Other Accessories	
Rule#	Description	SKU
	HPE Aruba Networking AP-CBL-EXT10 10-pack CAT6A Ethernet Extension Cables	R8L34A
	10-pack Extension Cables	
	HPE Aruba Networking AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable	JY728A
	Drivers available on the Aruba Support Center	
	HPE Aruba Networking AP-MOD-SERU Micro-USB TTL3.3V to RJ45 RS232 AP Console Adapter	R6Q99A
	Module	
1	HPE Aruba Networking AP-MNT-MP10-AP Campus AP 10-Pack Mount Brace Spare Kit	SOJ39A
Notes:	This kit contains mount braces for 10 access points	
	Configuration Rules	
Rule#	Description	
1	Kit contains mounts for 10 access points	

<b>HPE Aruba Networking 720 Serie</b>	es Campus Access Points		
Feature comparison	HPE Aruba Networking 720 Series Campus Access Points	HPE Aruba Networking 730 Series Campus Access Points	
Number and type of radios	triple 2x2	triple 2x2	
Radio configuration options	2.4 GHz + 5 GHz + 6 GHz	2.4 GHz + 5 GHz + 6 GHz 5 GHz + 5 GHz + 6 GHz 5 GHz + 6 GHz + 6 GHz	
Maximum bandwidth and peak data rate in each band	2.4 GHz: EHT20 / 344 Mbps 5 GHz: EHT80 / 1.44 Gbps 6 GHz: EHT160 / 2.88 Gbps	2.4 GHz: EHT40 / 688 Mbps 5 GHz: EHT160 / 2.88 Gbps 6 GHz: EHT320 / 5.76 Gbps	
Peak aggregate data rate	4.7 Gbps	14.4 Gbps	
Peak aggregate data rate OFDMA	4.7 Gbps UL/DL, 37 RUs max	14.4 Gbps UL/DL, 37 RUs max	
MU-MIMO	UL/DL, up to 2 users	UL/DL, up to 2 users	
Maximum number of BSSIDs per radio	16	16	
Maximum number of associated devices per radio	512	512	
Spectrum band support	No U-NII-4	Full	
External antenna model	n/a	AP-734	
Ultra triband filtering	No	Yes	
Advanced IoT coexistence filtering (AIC)	No	Yes	
HPE Aruba Networking Advanced Cellular Coexistence filtering (ACC)	Yes	Yes	
Wi-Fi FTM support	802.11mc/802.11az	802.11mc/802.11az	
Integrated GNSS receiver	No	Yes	
Integrated sensors	No	Barometric pressure	
Integrated IoT radio	Single	Dual	
Bluetooth generation	5.4 with HADM	5.4 with HADM	
USB host interfaces	Single USB 2.0 / 5W	Dual USB 2.0 / 10W	
Wired network interfaces	Single 2.5 Gbps max	Dual 5 Gbps max	
MACsec support	No	Yes (EO)	
Secure boot	Yes	Yes	
TPM module	2.0	2.0	
Power supply options	POE	POE, DC (12V)	
Dual POE	NA	Failover	
Operating temperature range	0°C to +40°C	0°C to +50°C	
TAA compliant models available	No	Yes	

### Hardware variants

HPE Aruba Networking AP-725: Internal antenna models

### Wi-Fi Radio Specifications

- Access point type: Indoor, tri radio, 2.4 GHz, 5 GHz and 6 GHz (concurrent) 802.11be 2x2 MIMO
- 2.4 GHz radio: Two spatial stream Single User (SU) MIMO for up to 344 Mbps wireless data rate with 2SS EHT20 802.11be client devices
- 5 GHz radio: Two spatial stream SU MIMO for up to 1.44 Gbps wireless data rate with 2SS EHT80 802.11be client devices
- 6 GHz radio: Two spatial stream SU MIMO for up to 2.88 Gbps wireless data rate with 2SS EHT160 802.11be client devices
- MU-MIMO (downlink, uplink) is supported on all radios
- 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-2
  - 5.470 to 5.725 GHz U-NII-2E
  - 5.725 to 5.850 GHz U-NII-3/ISM
  - 5.925 to 6.425 GHz U-NII-5
  - 6.425 to 6.525 GHz U-NII-6
  - 6.525 to 6.875 GHz U-NII-7
  - 6.875 to 7.125 GHz U-NII-8
- Available bands and channels: Dependent on configured regulatory domain (country)
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum in the 5 GHz band
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11ax/be: OFDMA with up to 37 resource units
- Supported modulation types:
  - 802.11b: BPSK, QPSK, CCK
  - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM and 256-QAM (proprietary extension)
  - 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM and 1024-QAM (proprietary extension)
  - 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, and 1024-QAM
  - 802.11be: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, and 4096-QAM
- 802.11n high throughput (HT) support: HT20/40
- 802.11ac very high throughput (VHT) support: VHT20/40/80
- 802.11ax high efficiency (HE) support: HE20/40/80/160
- 802.11be extreme high throughput (EHT) support: EHT20/40/80/160
- 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 300 (MCS0 to MCS15, HT20 to HT40)
  - 802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2, VHT20 to VHT80); 1,083 with 1024-QAM (MCS10 and MCS11, proprietary extension)
  - 802.11ax: 7.3 to 2,402 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE160)
  - 802.11be: 7.3 to 2,882 (MCSO to MCS13, NSS = 1 to 2, EHT20 to EHT160)
- 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

- Per radio/band (2.4 GHz/5 GHz/6 GHz): +21 dBm (18 dBm per chain)
   Notes: Conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain.
- HPE Aruba Networking Advanced Cellular Coexistence helps minimize 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 beamforming (TxBF) for increased signal reliability and range
- 802.11ax Target Wait Time (TWT) to support low-power client devices
- 802.11mc/802.11az Fine Timing Measurement (FTM) for precision distance ranging

#### Wi-Fi Antennas

Integrated downtilt omni-directional antennas for 2x2 MIMO with peak antenna gain of 5.1 dBi in 2.4 GHz, 5.4 dBi in 5 GHz and 5.4 dBi in 6 GHz. Built-in antennas are optimized for horizontal ceiling-mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30° to 40°.

• Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 3.8 dBi in 2.4 GHz, 4.7 dBi in 5 GHz, and 4.9 dBi in 6 GHz.

### Other Interfaces and Features

- E0: Ethernet wired network port (RJ-45)
  - Auto-sensing link speed (100/1000/2500BASE-T) and MDI/MDIX
  - PoE-PD: 48Vdc (nominal) 802.3af/at PoE (class 3 or higher)
  - 802.3az Energy Efficient Ethernet (EEE)
- U0: USB 2.0 host interface (Type A connector)
  - Capable of sourcing up to 1A/5W to an attached device
- Flexible integrated IoT radio that can be configured for BLE or 802.15.4/Zigbee operation:
  - BLE: BT5.4 with up to 10 dBm transmit power (class 1) and -104 dBm receive sensitivity (125 kbps)
  - IEEE 802.15.4/Zigbee: up to 10 dBm transmit power and -101 dBm receive sensitivity (250 kbps)
  - Two integrated omnidirectional antennas with roughly 30° to 40° downtilt and peak gains of 3.6 dBi and 5.0 dBi
- Built-in TPM for enhanced device assurance.
- Visual indicators (four multicolor LEDs): for system (1x) and radio (3x) status
- Reset button: factory reset, LED mode control (normal/off)
- Serial console interface (proprietary, micro-B USB physical jack)
- Kensington security slot
- Automatic thermal shutdown and recovery function

### Power sources and power consumption

- The access point supports Power over Ethernet (PoE) on port E0.
- Power sources are sold separately
- When powered by 802.3at (class 4) PoE, the access point will operate without restrictions.
- When powered by 802.3af (class 3) PoE with the IPM feature disabled, the access point will disable the USB port and reduce the max transmit power by 3 dB on all radios.
- With IPM enabled, the access point will start up in unrestricted mode but may dynamically apply restrictions depending on the available power budget and actual consumption. The feature restrictions and order in which these get applied are configurable.
- Maximum (worst case) power consumption (without/with USB devices attached): 17.1W/22.8W.
- This assumes that up to 5W is supplied to the attached USB devices.
- Maximum (worst-case) power consumption in idle mode: 7.0W/12.5W.

Maximum (worst-case) power consumption in deep-sleep mode: 3.5W.

### Mounting details

A mounting bracket is preinstalled on the back of the access point. This bracket is used to secure the access point to any of the mount kits (sold separately); see the Configuration Information section in this document for details.

### **Mechanical specifications**

- Dimensions/weight (HPE Aruba Networking AP-725; unit without mount bracket):
  - 200 mm (W) x 200 mm (D) x 48 mm (H)
  - 910g
- Dimensions/weight (AP-725; shipping):
  - 267 mm (W) x 251 mm (D) x 83 mm (H)
  - 1290g

### **Environmental specifications**

- Operating conditions
  - Temperature: 0°C to +40°C/+32°F to +104°F
  - Relative humidity: 5% to 95%
  - ETS 300 019 class 3.2 environments
  - Access point is plenum-rated for use in air-handling spaces
- Storage conditions
  - Temperature:  $-25^{\circ}$ C to  $+55^{\circ}$ C/ $-13^{\circ}$ F to  $+131^{\circ}$ F
  - Relative humidity: 10% to 100%
  - ETS 300 019 class 1.2 environments
- Transportation conditions
  - Temperature:  $-40^{\circ}$ C to  $+70^{\circ}$ C/ $-40^{\circ}$ F to  $+158^{\circ}$ F
  - Relative humidity: up to 95%
  - ETS 300 019 class 2.3 environments

### Reliability

Mean time between failure (MTBF): 1720 khrs (197 years) at +25°C operating temperature (AP-725)

### General regulatory statements

HPE Aruba Networking WLAN access points comply with all regulatory rules that apply in the country they are configured for. In most countries these products may not be allowed to enable all available radios and channels, and various restrictions may apply (RF transmit power levels, radar detection, etc.). HPE Aruba Networking will continue to upgrade the software and regulatory restrictions that apply to these products to help ensure they remain in compliance with the latest regulatory rules in the country of operation. However, this does not imply a promise or commitment to enable all radios in all countries where we ship these products, and/or enabling all deployment scenarios (indoor/outdoor for example) that they can be configured for.

Consult your HPE Aruba Networking representative to confirm the latest regulatory status for each product in the country of operation and any anticipated future enhancements or other changes, as well as check the regulatory rules through the host country's regulatory agencies for more.

### Regulatory compliance

- FCC/ISED
- CE marked
- Low voltage directive 2014/35/EU
- UL/IEC/EN 62368-1
- EN60601-1-2

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

### **Regulatory Model Numbers**

HPE Aruba Networking AP-725 (all models): APIN0725

### Certifications

- UL2043 plenum rating
- Wi-Fi Alliance (WFA):
  - Wi-Fi CERTIFIED a, b, g, n, ac, 6, 7
  - WPA2 and WPA3 (Enterprise, Personal), Enhanced Open (OWE)
  - WMM, W-Fi Agile Multiband
- Bluetooth SIG
- Ethernet Alliance (PoE, PD device, class 4)

### Warranty

HPE Aruba Networking hardware limited lifetime warranty.

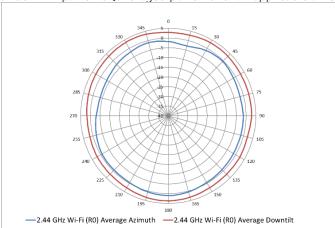
### Minimum operating system software versions

HPE Aruba Networking Wireless Operating System AOS 10.7.2.0

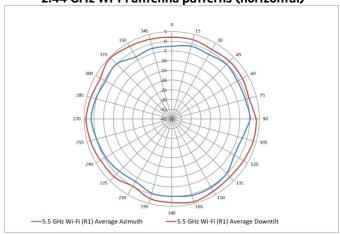
transmit chain2.4 GHz, 802.11b1 Mbps18.011 Mbps18.02.4 GHz, 802.11g6 Mbps18.054 Mbps16.02.4 GHz, 802.11n HT20	Receiver sensitivity (dBm) per receive chain  -96.0 -88.0  -93.5 -74.5
1 Mbps 18.0 11 Mbps 18.0 <b>2.4 GHz, 802.11g</b> 6 Mbps 18.0 54 Mbps 16.0 <b>2.4 GHz, 802.11n HT20</b>	-88.0 -93.5 -74.5
11 Mbps 18.0  2.4 GHz, 802.11g  6 Mbps 18.0  54 Mbps 16.0  2.4 GHz, 802.11n HT20	-88.0 -93.5 -74.5
2.4 GHz, 802.11g 6 Mbps 18.0 54 Mbps 16.0 2.4 GHz, 802.11n HT20	-93.5 -74.5
6 Mbps 18.0 54 Mbps 16.0 <b>2.4 GHz, 802.11n HT20</b>	-74.5 -92.5
54 Mbps 16.0 <b>2.4 GHz, 802.11n HT20</b>	-74.5 -92.5
2.4 GHz, 802.11n HT20	-92.5
MCS0 18.0	77.0
MCS7 16.0	-73.0
2.4 GHz, 802.11 ax HE20	
MCS0 18.0	-93.5
MCS11 13.0	-63.5
2.4 GHz, 802.11 be EHT20	
MCS0 18.0	-93.5
MCS13 12.0	-56.5
5 GHz, 802.11a	
6 Mbps 18.0	-94.5
54 Mbps 18.0	-76.0
5 GHz, 802.11n HT20/HT40	
MCSO 18.0/18.0	-92.5/-91.5
MCS7 16.0/16.0	-74.5/-72.5
5 GHz, 802.11 ac VHT20/VHT40/VHT80	
MCSO 18.0/18.0/18.0	-92.5/-89.0/-86.0
MCS9 14.0/14.0/14.0	-70.0/-67.0/-64.0
5 GHz, 802.11 ax HE20/HE40/HE80	
MCSO 18.0/18.0/18.0	-94.0/-92.5/-89.5
MCS11 12.0/12.0/12.0	-63.5/-62.0/-59.0
5 GHz, 802.11 be EHT20/EHT40/EHT80	
MCSO 18.0/18.0/18.0	-94.5/-92.5/-89.5
MCS13 12.0/12.0/12.0	-57.0/-55.5/-53.0
6 GHz, 802.11 ax HE20/HE40/HE80/HE160	
MCSO 18.0/18.0/18.0/	/18.0 -94.0/-92.5/-89.5/-86.5
MCS11 12.0/12.0/12.0/	/12.0
6 GHz, 802.11 be EHT20/EHT40/EHT80/EHT160	
MCSO 18.0/18.0/18.0/	/18.0
MCS13 12.0/12.0/12.0/	/12.0

## Wi-Fi Antenna Patterns AP-725 Horizontal planes (top view)

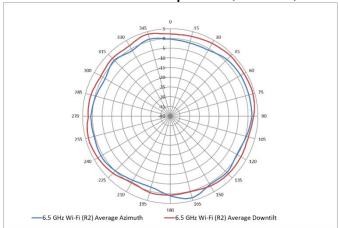
Showing both azimuth (0°) and 30° downtilt patterns (averaged patterns for all applicable antennas)



2.44 GHz Wi-Fi antenna patterns (horizontal)



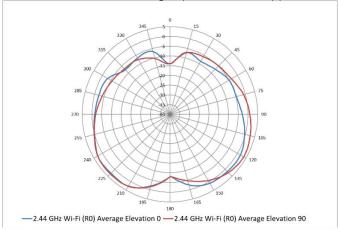
5.5 GHz Wi-Fi antenna patterns (horizontal)



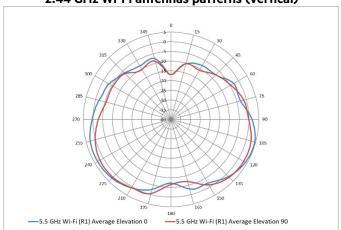
6.5 GHz Wi-Fi antenna patterns (horizontal)

### Vertical (elevation) planes (side view, access point facing down)

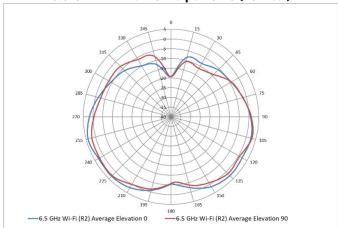
Showing side view with access point rotated 0° and 90° (averaged patterns for all applicable antennas)



### 2.44 GHz Wi-Fi antennas patterns (vertical)







6.5 GHz Wi-Fi antenna patterns (vertical)

## **Summary of Changes**

Date	Version History	Action	Description of Change
08-Sep-2025	Version 5	Changed	Trusted Platform Module (TPM) information was updated in Standard Features section.  Amount of associated client devices updated from 400 to 512 for Wi-Fi Radio Specifications in Technical Specifications section.
28-Jul-2025	Version 4	Changed	Update survey link.
14-Jul-2025	Version 3	Changed	Wi Fi Radio Specifications information for Supported frequency bands was updated from U-NII-62 to U-NII-6 in Technical Specifications section.
23-Jun-2025	Version 2	Changed	Standard Features: HPE Aruba Networking Wireless Operating System model was updated to AOS-10 in Al-powered Wi-Fi 7 and , Simplified, Flexible Consumption.  Configuration Information: BTO Models header was updated to Access Point Models in section.  Technical Specifications: Table and Wifi Radio Specifications updated maximum number of associated devices per radio from 512 to 400.  Mounting Details were updated. Mechanical specifications dimensions were updated from 46mm to 48mm. General regulatory statements content was updated to improve its writing.
02-Jun-2025	Version 1	New	New QuickSpecs

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