Data sheet



HPE Aruba Networking 740 Series Campus Access Points

Rightsized Wi-Fi 7 for high-capacity, secure wireless connectivity

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 MIMO radios (2x2:2.4 GHz + 4x4:5 GHz + 4x4:6 GHz), provide tri-band coverage across 2.4 GHz, 5 GHz, and 6 GHz to deliver 9 Gbps maximum tri-band aggregate data rate

— IoT-ready platform with integrated Bluetooth and 802.15.4/Zigbee radios

— Fast wired connectivity with 5GbE port

— AI-powered dynamic power save mode helps reduce energy use

The HPE Aruba Networking 740 Series Campus Access Points are rightsized Wi-Fi 7 access points designed to deliver high-capacity and secure Wi-Fi connectivity ideal for a wide range of indoor use cases. Leveraging the latest Wi-Fi 7 standard, these access points enhance security across both wired and wireless networks, support IoT devices, and provide accurate location-aware capabilities. HPE Aruba Networking Central helps drive efficient operations and provides AI-automation and machine learning (ML) insights for fine-tuned wireless connectivity across diverse environments.

Future-proof with the HPE Aruba Networking 740 Series Campus Access Points that deliver up to 9 Gbps maximum tri-band aggregate data rate and go beyond the standard with built-in flexible IoT radio that supports Bluetooth or 802.15.4/Zigbee, a fast 5GbE wired port, and AI-powered dynamic power save mode that helps reduce energy consumption. Like all the HPE Aruba Networking access points, this series is Wi-Fi certified and includes a limited lifetime warranty for investment protection.

AI-driven Wi-Fi 7

Managing Wi-Fi 7 access points is easier with HPE Aruba Networking Central that provides intelligent automation, AI insights, and unified infrastructure management. HPE Aruba Networking access points work in tandem with the HPE Aruba Networking Central network management system to securely orchestrate users, apps, and IoT connections. HPE Aruba Networking Central provides observability that extends to third-party devices and management of campus wired and wireless assets, powered by purpose-built AI. The HPE Aruba Networking 740 Series Campus Access Points is supported by HPE Aruba Networking Central running HPE Aruba Networking Wireless Operating System (OS 10).

Table 1. Channel bandwidth and peak data rate

Band	Channel bandwidth	Peak data rate
6 GHz, 4x4 MIMO	160 MHz	5.76 Gbps
5 GHz, 4x4 MIMO	80 MHz	2.88 Gbps
2.4 GHz, 2x2 MIMO	20 MHz	344 Mbps
Combined total	n/a	8.98 Gbps

More capacity

The HPE Aruba Networking 740 Series Campus Access Points are designed to take advantage of every bit of available spectrum using three dedicated radios, which translates into high speeds, wider channels for multi-gigabit traffic, and less interference. Supporting up to 160 MHz wide channels, the series delivers up to 9 Gbps maximum tri-band aggregate data rate, using up to 4x4 MIMO radios (2x2: 2.4 GHz, 4x4: 5 GHz, and 4x4: 6 GHz).

Powerful 4x4 MIMO radios

The HPE Aruba Networking 740 Series Campus Access Points can sustain 3- and 4-spatial stream data rates with supported clients. It also supports 4-spatial stream MU-MIMO with two 2SS client devices and adds MIMO redundancy when using 2SS client devices to increase the likelihood of 2SS rates versus slower 1SS data rate.

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, 4096 QAM (4K QAM) modulation for higher peak data rates, and spectrum puncturing to avoid interference or incumbent users of the 6 GHz band. The Wi-Fi 7 standard also includes optional support for wide 320 MHz channels, which are supported on the HPE Aruba Networking 750 Series Campus Access Points and the HPE Aruba Networking 730 Series Campus Access Points.

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. The HPE Aruba Networking 740 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 740 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 740 Series Campus Access Points are set up to automatically update regulatory rules once Wi-Fi 7 regulations have been approved and certified.

Extends the benefits of Wi-Fi 6
The HPE Aruba Networking 740 Series Campus Access Points are based on the 802.11be standard, which means that all their 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, and so on, are fully supported on HPE Aruba Networking Wi-Fi 6E and Wi-Fi 7 access points as well.

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.

Flexible operation and simplified deployment

Our unified access points can operate as stand-alone access points or with a gateway for greater scalability, security, and manageability. HPE Aruba Networking access points can be managed by AI-powered HPE Aruba Networking Central that provides a single pane of glass for overseeing every aspect of wired and wireless LANs, WANs, and SD-WAN. AI-powered analytics, end-to-end orchestration and automation, and advanced security features are built natively into the solution.

Zero touch provisioning
With HPE Aruba Networking Central, onboarding, configuring, and provisioning are simpler and require no manual CLI configuration or maintenance windows. 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.

Simplified, flexible consumption
The HPE Aruba Networking 740 Series Campus Access Points require HPE Aruba Networking Central subscription-based licenses, which are purchased on a per-device basis for access points. Licenses are available in 1-, 3-, 5-, 7-, and 10-year increments, making it easy to align requirements for AIOps, security, and other desired management features. HPE Aruba Networking Wireless Operating System (OS-10) is included in the subscription. Learn more about HPE Aruba Networking Central.

HPE Aruba Networking Wireless Operating System

Cloud-native HPE Aruba Networking Wireless Operating System (OS-10) is the distributed network operating system working with HPE Aruba Networking Central that acts as the control layer for HPE Aruba Networking access points and gateways. With its flexible architecture, IT can deliver reliable and secure wireless connectivity for small offices, midsized branches, large campus environments, and remote workers.

Wi-Fi optimization

Client optimization
The patented AI-powered HPE Aruba Networking Central ClientMatch technology helps reduce 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. It also dynamically steers traffic to load balance access points to improve the user experience.

Automated Wi-Fi radio frequency management
To help 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.

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

AI-powered 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 Power over Ethernet (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 time 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 and Bluetooth. This makes it easier and faster to develop location-aware services to support use cases such as wayfinding, asset tracking, and proximity marketing.

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.

Access points as flexible and secure IoT platform

By combining the IoT radio with a zero-trust network framework, the HPE Aruba Networking 740 Series Campus Access Points can serve as flexible IoT platforms that bolster network security, provide coverage for a broad range of IoT devices, and reduce the need for network overlays just for IoT devices.

The HPE Aruba Networking 740 Series Campus Access Points includes an integrated Bluetooth 5.4 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. There is also a USB 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 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.

AI client insights
AI-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 provides interoperability for easier installations and operations, and certified solutions are available to help digital transformation and extend the capabilities of network infrastructure.

Security built-in

The HPE Aruba Networking 740 Series Campus Access Points include security capabilities such as:

WPA3 and Enhanced Open
Support for stronger encryption and authentication is provided through 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 TPM for secure storage of credentials and keys, and boot code.

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 enable 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 access points (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.

Summary: 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 740 Series Campus Access Points offer a rightsized solution for high performance, high-capacity, and secure Wi-Fi 7 connectivity for campus networks. Supported by HPE Aruba Networking Central, this series helps deliver an AI-powered, security-first network.

Table 2. Feature comparison

Features	HPE Aruba Networking 740 Series Campus Access Points	HPE Aruba Networking 750 Series Campus Access Points
Number and type of radios	2x2: 2.4 GHz, 4x4: 5 GHz, and 4x4: 6 GHz	Triple 4x4
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: EHT80/2.88 Gbps 6 GHz: EHT160/5.76 Gbps	2.4 GHz: EHT40/1.4 Gbps 5 GHz: EHT160/5.76 Gbps 6 GHz: EHT320/11.5 Gbps
Peak aggregate data rate	8.98 Gbps	28.8 Gbps
OFDMA	UL/DL, 37 RUs maximum	UL/DL, 37 RUs maximum
MU-MIMO	UL/DL, up to 2 users	UL/DL, up to 4 users
Maximum number of BSSIDs per radio	16	16
Maximum number of associated devices per radio	400	400
Spectrum band support	No U-NII-4	Full
External antenna model	No	AP-754
Ultra tri-band filtering	No	Yes
Advanced IoT coexistence filtering (AIC)	No	Yes
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 2.0/10W	Dual USB 2.0/10W
Wired network interfaces	Single 5 Gbps maximum	Dual 10 Gbps maximum
MACsec support	No	Yes (E0)
Secure boot	Yes	Yes
TPM module	Yes: 2.0	Yes: 2.0
Power supply options	PoE	PoE, DC (12V)
Dual PoE	NA	Failover, combine
Operating temperature range	0°C to +40°C	0°C to +50°C
TAA compliant models available	No	Yes

Technical specifications

Specifications for the HPE Aruba Networking 740 Series Campus Access Points are preliminary and subject to change.

Hardware variants

— HPE Aruba Networking AP-745: Internal antenna

Wi-Fi radio specifications

— AP type: Indoor, tri-radio, 2x2: 2.4 GHz, 4x4: 5 GHz, and 4x4: 6 GHz

— 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: Four spatial stream SU MIMO for up to 2.88 Gbps wireless data rate with 4SS EHT80 802.11be client devices

— 6 GHz radio: Four spatial stream SU MIMO for up to 5.76 Gbps wireless data rate with 4SS 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 the configured regulatory domain (country)

— Dynamic frequency selection (DFS) optimizes the use of available RF spectrum in the 5 GHz band

— 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/be: OFDMA with up to 37 RU

— 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 600 (MCS0 to MCS15, HT20 to HT40)–802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4, VHT20 to VHT80)–802.11ax: 7.3 to 4,804 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE160)–802.11be: 7.3 to 5,765 (MCS0 to MCS13, NSS = 1 to 4, 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)

  • Note: Conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain

— ACC removes 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 TWT to support low-power client devices

— 802.11mc/az FTM for precision distance ranging

Wi-Fi antennas

— Integrated downtilt omnidirectional antennas for 4x4 (2x2 on 2.4 GHz) MIMO with peak antenna gain of 5.9 dBi in 2.4 GHz, 5.8 dBi in 5 GHz, and 5.9 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°.

  • Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 4.2 dBi in 2.4 GHz, 4.2 dBi in 5 GHz, and 4.1 dBi in 6 GHz.

— Final antenna gain pending regulatory certification completion

Other interfaces and features

— E0: Ethernet wired network port (RJ-45)

  • Auto-sensing link speed (100/1000/2500/5000BASE-T) and MDI/MDIX

  • PoE-PD: 48 VDC (nominal) 802.3af/at/bt 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 2A/10W to an attached device

— Flexible integrated IoT radio that can be configured for BLE or 802.15.4/Zigbee:

  • 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)

  • Integrated omnidirectional antenna with roughly 30° to 40° downtilt and peak gain of 3.6 dBi or 5.0 dBi

— Built-in TPM for enhanced security and anti-counterfeiting

— 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) (AP-CBL-SERU)

— Kensington security slot

— Automatic thermal shutdown and recovery function

Power sources and power consumption

— Power sources are sold separately

— When powered by 802.3bt (class 6) PoE, the AP will operate without restrictions

— Operating the AP with a single 802.3af (class 3 or lower) PoE source is not supported, regardless of IPM status (except for AP staging)

— With IPM enabled, the AP 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): 25.7/36.8W (PoE)

— Maximum (worst case) power consumption in idle mode (without/with USB devices attached): 6.8/17.9W

— Maximum (worst case) power consumption in deep sleep mode: 3.2W (PoE)

Mounting details

A mounting bracket has been 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).

Mechanical specifications

— AP-745 Unit without Mounting Brace Dimensions

- 240 mm (W) x 240 mm (D) x 57 mm (H)
  Weight: 1.3 kg
- AP-745 Single-Pack Dimension: 252 mm x 267 mm x 86.9 mm
  Weight: 1.7 kg
- AP-745 Multi-Pack (5-Pack) Dimension: 462 mm x 269 mm x 296mm
  Weight: 9.6 kg

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
- AP is plenum rated for use in air-handling spaces
- Storage conditions
- Temperature: –25°C to +55°C/ –13°F to +131°F
- Relative humidity: 10% to 100% –ETS 300 019 class 1.2 environments

— Transportation conditions

- Temperature: –40°C to +70°C/ –40°F to +158°F
- Relative humidity: up to 95%
- ETS 300 019 class 2.3 environments

— Reliability

- MTBF: 964,054 hr (Telcordia SR-332, Issue 3, @ 25°C, Ground Benign, Controlled)

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, and so on). Hewlett Packard Enterprise continues 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 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 information.

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 representative.

Regulatory model numbers
— HPE Aruba Networking AP-745 (all models): APIN0745

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, Wi-Fi agile multiband

— Bluetooth SIG

— Ethernet Alliance (PoE, PD device, class 6)

Warranty
HPE Aruba Networking hardware limited lifetime warranty

Minimum operating system software versions
HPE Aruba Networking Wireless Operating System (OS-10.8)

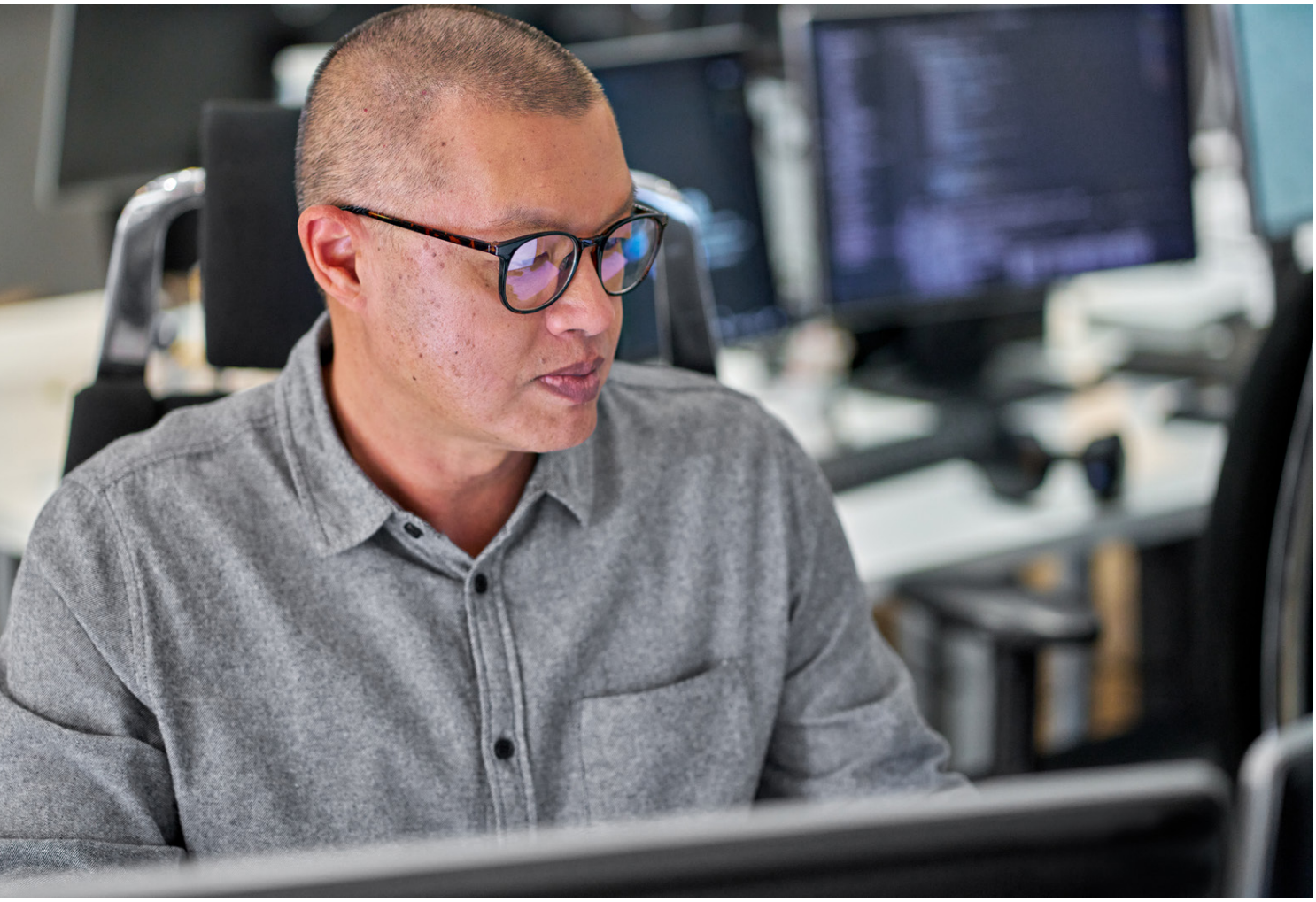


Table 3. RF performance table

TX performance	
Mode/ Data Rate	**20 MHz Bandwidth**
2.4 GHz Radios	
802.11b, all rates	18dBm
802.11g, 6Mbps	18dBm
802.11g, 54Mbps	18dBm
802.11n/ax/be, MCS0	18dBm
802.11n/ax/be, MCS7	16dBm
802.11ax/be, MCS9	14dBm
802.11ax/be, MCS11	12dBm
802.11be, MCS13	10dBm

Mode/ Data Rate	20 MHz Bandwidth	40 MHz Bandwidth	80 MHz Bandwidth
5GHz Radios			
802.11a, 6Mbps	18dBm	NA	NA
802.11a, 54Mbps	18dBm	NA	NA
802.11n/ac/ax/be, MCS0	18dBm	18dBm	18dBm
802.11n/ac/ax/be, MCS7	16dBm	16dBm	16dBm
802.11ac/ax/be, MCS9	14dBm	14dBm	14dBm
802.11ax/be, MCS11	12dBm	12dBm	12dBm
802.11be, MCS13	10dBm	10dBm	10dBm

Mode/ Data Rate	20 MHz Bandwidth	40 MHz Bandwidth	80 MHz Bandwidth	160 MHz Bandwidth
6GHz Radios				
802.11ax/be, MCS0	18dBm	18dBm	18dBm	18dBm
802.11ax/be, MCS9	14dBm	14dBm	14dBm	14dBm
802.11ax/be, MCS11	12dBm	12dBm	12dBm	12dBm
802.11be, MCS13	10dBm	10dBm	10dBm	10dBm

RX Performance	
Mode/ Data Rate	**20 MHz Bandwidth**
2.4 GHz Radios	
802.11b, 1Mbps	-95dBm
802.11b, 11Mbps	-87dBm
802.11g, 6Mbps	-91dBm
802.11g, 54Mbps	-73dBm
802.11n/ax/be, MCS0	-91dBm
802.11n/ax/be, MCS7	-72dBm
802.11ax/be, MCS9	-68dBm
802.11ax/be, MCS11	-61dBm
802.11be, MCS13	-55dBm

Table 3. RF performance table (continued)

Mode/ Data Rate	20 MHz Bandwidth	40 MHz Bandwidth	80 MHz Bandwidth
5GHz Radios			
802.11a, 6Mbps	-91dBm	NA	NA
802.11a, 54Mbps	-73dBm	NA	NA
802.11n/ac/ax/be, MCS0	-91dBm	-88dBm	-85dBm
802.11n/ac/ax/be, MCS7	-70dBm	-67dBm	-64dBm
802.11ac/ax/be, MCS9	-66dBm	-63dBm	-60dBm
802.11ax/be, MCS11	-61dBm	-58dBm	-55dBm
802.11be, MCS13	-53dBm	-50dBm	-47dBm

Mode/ Data Rate	20 MHz Bandwidth	40 MHz Bandwidth	80 MHz Bandwidth	160 MHz Bandwidth
6GHz Radios				
802.11ax/be, MCS0	-92dBm	-89dBm	-86dBm	-83dBm
802.11ax/be, MCS9	-68dBm	-65dBm	-62dBm	-59dBm
802.11ax/be, MCS11	-62dBm	-59dBm	-56dBm	-53dBm
802.11be, MCS13	-56dBm	-53dBm	-50dBm	-47dBm

Wi-Fi antenna patterns AP-745 Horizontal planes (top view) Showing both azimuth (0 degrees) and 30 degrees downtilt patterns (averaged patterns for all applicable antennas)

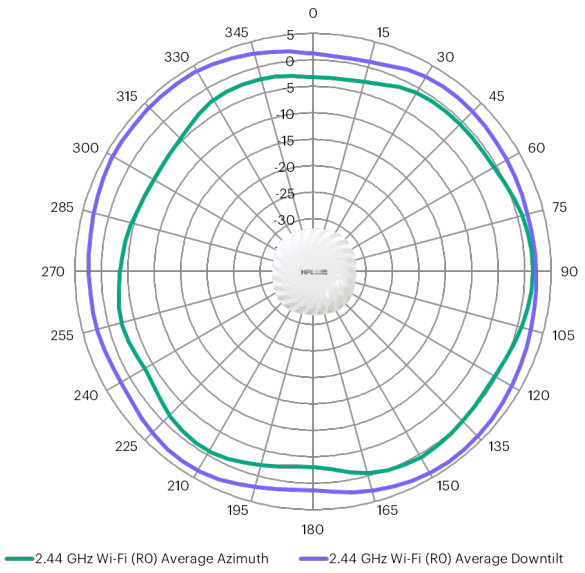


Figure 1. 2.44 GHz Wi-Fi antenna patterns (horizontal)

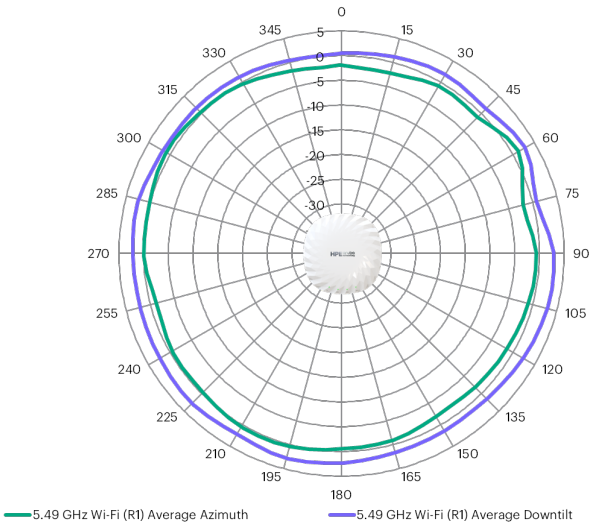


Figure 2. 5.49 GHz Wi-Fi antenna patterns (horizontal)

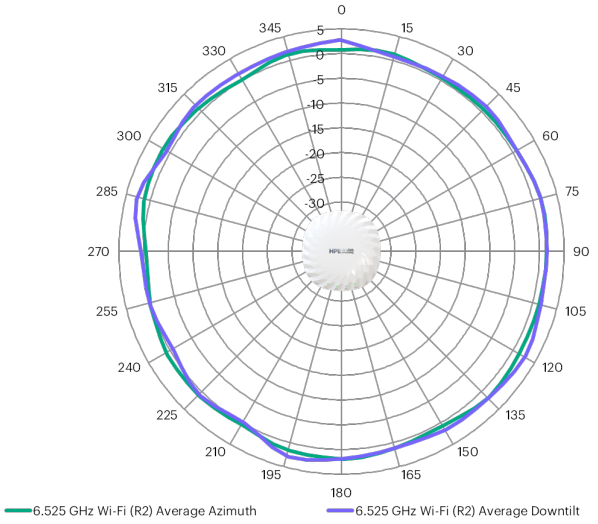


Figure 3. 6.525 GHz Wi-Fi antenna patterns (horizontal)

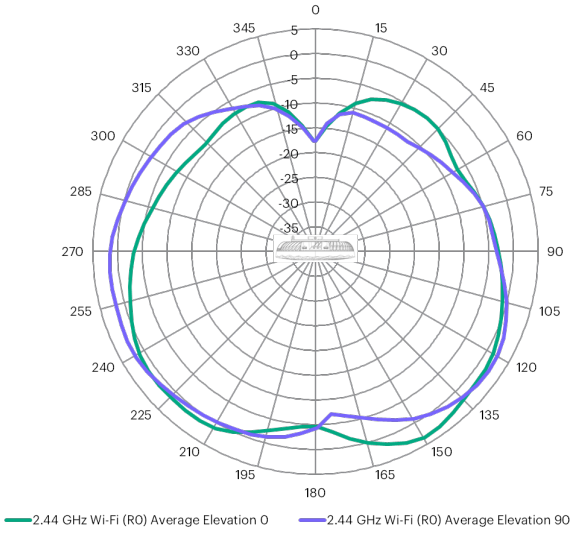


Figure 4. 2.44 GHz Wi-Fi antennas patterns (vertical)

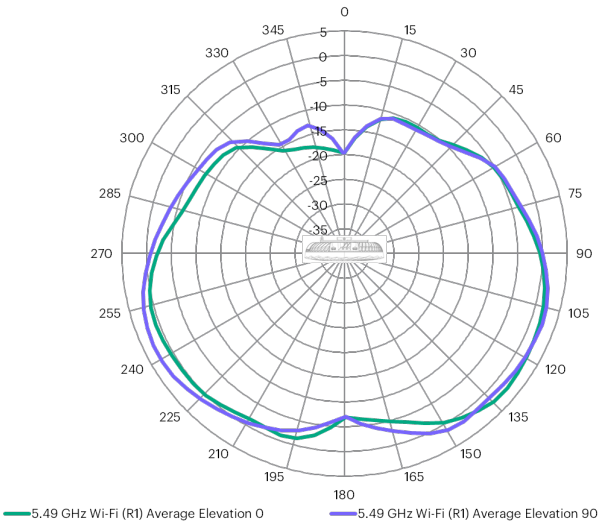


Figure 5. 5.49 GHz Wi-Fi antenna patterns (vertical)

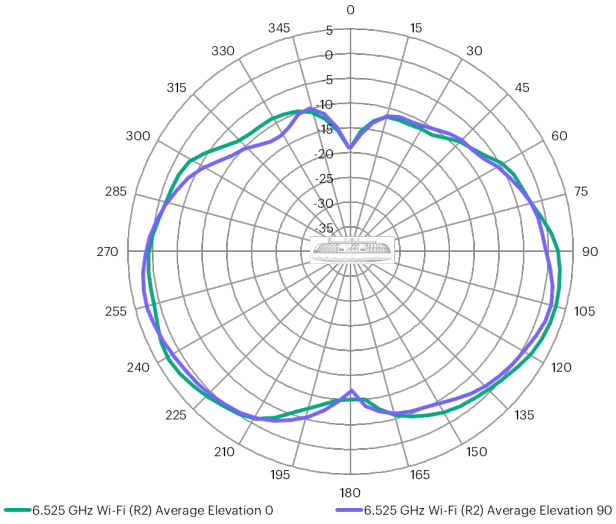


Figure 6. 6.525 GHz Wi-Fi antennas patterns (vertical)

Table 4. Ordering information

Part number	Description
Internal antenna access points	
S5Q94A	HPE Aruba Networking AP-745 (EG) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5Q95A	HPE Aruba Networking AP-745 (IL) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5Q96A	HPE Aruba Networking AP-745 (JP) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5Q97A	HPE Aruba Networking AP-745 (ID) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5Q98A	HPE Aruba Networking AP-745 (RW) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5Q99A	HPE Aruba Networking AP-745 (RW1) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5R01A	HPE Aruba Networking AP-745 (US) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas Campus Access Point
S5R00A	HPE Aruba Networking AP-745 (RW) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas 5pk Campus Access Point
S5R02A	HPE Aruba Networking AP-745 (US) Tri Radio 4x4/2x2 Wi-Fi 7 Internal Antennas 5pk Campus Access Point

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