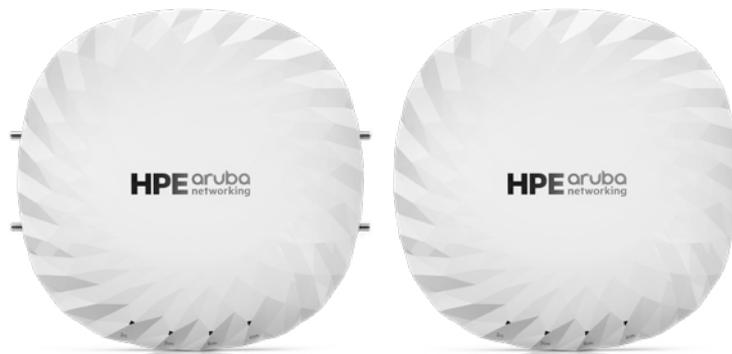


# HPE Aruba Networking 730 Series Campus Access Points

Fast, resilient, high density, and secure Wi-Fi 7 connectivity



## Key features

- Wi-Fi 7 (802.11be) brings multi-link operation (MLO) for channel aggregation and 4K QAM for higher throughput and lower latency
- Unlocks the 6 GHz band to more than double the available capacity
- Comprehensive tri-band coverage across 2.4 GHz, 5 GHz, and 6 GHz to deliver 9.3 Gbps maximum tri-band aggregate data rate
- Capable of up to 14.4 Gbps maximum aggregate data rate using optional dual 5 GHz and 6 GHz radio modes<sup>1</sup>
- Up to three 320 MHz channels in 6 GHz support low-latency, bandwidth-hungry applications like high-definition video and augmented reality/virtual reality applications
- Patented Ultra Tri-Band (UTB) filtering enables 5 GHz and 6 GHz to operate without restrictions or interference

<sup>1</sup>Feature available in a future software release.

For enterprises looking for to deliver secure, high-performance Wi-Fi to users and IoT devices today and in the future, HPE Aruba Networking 730 Series Campus APs extend beyond the Wi-Fi 7 standard to maximize 6 GHz capacity by up to 30%, connect 2X the IoT devices, strengthen security across wired and wireless, and enable highly accurate location-aware capabilities. Unique to HPE Aruba Networking, the 730 Series APs includes Ultra Tri-Band (UTB) filtering and dual 5 Gbps Ethernet ports to eliminate coverage gaps, provide greater resiliency, and deliver fast, secure connectivity. Intelligent automation, AI insights, and

unified infrastructure management, provided by HPE Aruba Networking Wireless Operating System (AOS-10) and HPE Aruba Networking Central, help drive efficient IT operations.

## More capacity and wider channels

The HPE Aruba Networking 730 Series Campus APs are designed to take advantage of the 6 GHz band via three dedicated radios, which translates into far greater speeds, wider channels for multi-gigabit traffic, and less interference. It delivers up to 9.3 Gbps

Band	Channel bandwidth	Peak data rate
6 GHz	320 MHz	5.8 Gbps
5 GHz	160 MHz	2.9 Gbps
2.4 GHz	20 MHz 40MHz	344 Mbps 688 Mbps
<b>Total using 2.4 GHz with 20 MHz</b>		9.0 Gbps
<b>Total using 2.4 GHz with 40 MHz</b>		9.3 Gbps
<b>Total using dual 6 GHz (no 2.4 GHz)<sup>1</sup></b>		14.4 Gbps

**Key features (continued)**

- High availability with dual 5 Gbps ports for redundant Ethernet and power.
- The built in GNSS receiver, barometric pressure sensor, and intelligent software enable APs to self-locate and act as reference points for accurate indoor location measurements
- MACsec support<sup>1</sup> extends wired Ethernet protection to the AP

maximum tri-band aggregate data rate, using three 2x2 MIMO radios (2.4 GHz, 5 GHz, and 6 GHz).

To further increase the wireless capacity, the 2.4 GHz radio can be reconfigured to deliver an optional dual-5 GHz or dual-6 GHz mode, which further increases the maximum aggregate data rate to 14.4 Gbps in dual 6 GHz mode.<sup>1</sup>

**Wi-Fi 7 standard**

The new [Wi-Fi 7](#) standard (802.11be) extends the capabilities of Wi-Fi 6E, including the use of the 6 GHz band. New capabilities include wide 320 MHz bandwidth channels, multi-link operation (MLO) for channel aggregation across different bands and failover, and 4096 QAM (4K QAM) for higher peak data rates.

**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. With up to three 320 MHz channels or seven 160 MHz channels, Wi-Fi 7 can better support low-latency, bandwidth hungry applications like high-definition video and artificial reality/virtual reality applications. Only Wi-Fi 6E or 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 AP-735 Campus APs 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 APs. The AP-734 connectorized models will typically operate as Standard Power access points but may also be allowed to operate as Low Power Indoor devices in some countries.

**Less interference**

HPE Aruba Networking 730 Series Campus APs include HPE Aruba Networking's patented Ultra Tri-band filtering, which enables enterprises to take advantage of the high end of 5 GHz with the lower end of 6 GHz without experiencing interference.

Since there is only 50 MHz between 5 GHz and 6 GHz, without advanced filtering, enterprises would likely experience problems between the bands and would therefore be limited in the number of channels available. By applying advanced filtering capabilities, enterprises can fully utilize the available spectrum without creating coverage gaps or islands.

**Business continuity**

The HPE Aruba Networking 730 Series Campus APs provide high availability with two HPE Smart Rate Ethernet ports for hitless failover for both data and power. Configurable to 1, 2.5, or 5 Gbps, these dual ports provide business continuity for mission critical applications.

**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 730 Series Campus APs 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 730 Series Campus APs 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 etc. are fully supported on all HPE Aruba Networking Wi-Fi 6E and Wi-Fi 7 access points as well.

**Advantages of OFDMA**

This capability allows HPE Aruba Networking APs 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 via smaller sub-carriers or resource units (RUs), which means that clients are sharing a channel and not competing for airtime and bandwidth.

**Wi-Fi optimization****Client optimization**

The patented AI- powered HPE Aruba Networking ClientMatch technology

<sup>1</sup>Feature available in a future software release.



**The HPE Aruba Networking 730 Series Campus APs include a built-in GPS receiver, barometric pressure sensor, and intelligent software to allow them to automatically locate themselves accurately within the universal framework of latitude and longitude.**

eliminates sticky client issues by steering a client to the AP where it receives the best radio signal. Client Match steers traffic from the noisy 2.4 GHz band to the preferred 5 GHz or GHz band depending on client capabilities. ClientMatch also dynamically steers traffic to load balance APs 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)**

Unique Advanced Cellular Coexistence 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.

#### **Dynamic power save mode**

APs 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 APs continuously monitor and report hardware energy usage. Unlike other vendor's access points, HPE Aruba Networking APs 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 APs and update switching and power at a later if needed based on their actual usage.

## **Self-locating access points**

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

As part of HPE Aruba Networking's 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 APs 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 730 Series APs supports FTM 802.11az for sub 1 meter accuracy, has a GNSS receiver built-in for high accuracy indoor location measurements, and a built-in barometric sensor for altitude locationing within multi-story buildings.

## **Access points as flexible and secure IoT platform**

By combining IoT radios with a zero-trust network framework, the HPE Aruba Networking 730 Series Campus APs can serve as flexible IoT platforms that bolster network security, provide coverage for broad range of IoT devices, and eliminate the need for network overlays just for IoT devices.

The 730 Series includes two integrated Bluetooth 6 and 802.15.4 radios for Zigbee support to simplify deploying and managing IoT-based location services, asset tracking services, security solutions and IoT sensors. There are also two USB-port extensions to provide IoT connectivity to a wider range of devices. These IoT capabilities allows organizations to leverage the APs 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 AP. This helps improve client power savings and reduces

<sup>1</sup>Feature available in a future software release.



airtime contention with other clients, which is ideal for IoT.

HPE Aruba Networking ClearPass Policy Manager.

### **Streamline IoT operations**

HPE Aruba Networking [Central IoT Operations](#) is a service available for APs running HPE Aruba Networking Wireless Operating System AOS-10 managed by HPE Aruba Networking Central 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.

### **MACsec<sup>1</sup>**

MACsec support extends wired Ethernet encryption to the AP using the 5 Gbps port.

### **Trusted Platform Module (TPM)**

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

### **AI Client Insights**

ML-based classification of all clients and IoT devices via 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.

### **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.

### **Technology partnerships**

A broad ecosystem of [technology partners](#) provide interoperability for easier installations and operations and certified solutions is available to help digital transformation and extend capabilities of network infrastructure.

### **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 is automatically correlated to identify potential threats, thereby strengthening network security and improving incident response processes by reducing false positives.

## **Security built-in**

The 730 Series APs 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.

### **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.

### **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. This capability requires

## **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

<sup>1</sup>Feature available in a future software release.



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.

### **Optimize with AOS-10**

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 access points 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, AOS-10 provides the WLAN management and control to deliver greater scalability, security, and AI-powered optimization. Using AOS-10 together with cloud-based Central for management and orchestration reduces processing required by the on-site gateways to manage clients and access points. Enterprises can then optimize gateway deployments with fewer gateways in very large environments with thousands of APs and devices.

### **Flexible operation and management**

Our unified APs can operate as standalone access points or with a gateway for greater scalability, security, and manageability. APs 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 APs can be managed using cloud-based 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.

### **Simplified, flexible consumption**

The 730 Series APs require HPE Networking Aruba 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 AIOps, security, and other desired management features. AOS-10 is included in the subscription. [Learn more about Central.](#)

### **Summary**

HPE Aruba Networking 730 Series Campus APs extend beyond the Wi-Fi 7 standard to maximize 6 GHz capacity by up to 30%, connect 2X the IoT devices, strengthen security across wired and wireless and enable highly accurate location aware capabilities. Unique to HPE Aruba Networking, the AOS-10 based 730 Series APs include Ultra Tri-Band (UTB) filtering and dual 5 Gbps Ethernet ports to eliminate coverage gaps, provide greater resiliency, and deliver fast, secure connectivity.



## Technical specifications

### Hardware variants

- HPE Aruba Networking AP-734: External antenna models
- HPE Aruba Networking AP-735: Internal antenna models

### Wi-Fi radio specifications

- AP type: Indoor, tri radio, 2.4GHz, 5GHz and 6GHz (concurrent) 802.11be 2x2 MIMO
- 2.4 GHz radio: Two spatial stream Single User (SU) MIMO for up to 688 Mbps wireless data rate with 2SS EHT40 802.11be client devices
- 5 GHz radio: Two spatial stream Single User (SU) MIMO for up to 2.9 Gbps wireless data rate with 2SS EHT160 802.11be client devices
- 6 GHz radio: Two spatial stream Single User (SU) MIMO for up to 5.8 Gbps wireless data rate with 2SS EHT320 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
  - 5.850 to 5.895 GHz U-NII-4
  - 5.925 to 6.425 GHz U-NII-5
  - 6.425 to 6.525 GHz U-NII-6<sup>2</sup>
  - 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: Orthogonal frequency-division multiple access (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: VHT20/40/80/160
- 802.11ax high efficiency (HE) support: HE20/40/80/160
- 802.11be extreme high throughput (EHT) support: EHT20/40/80/160/320
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
  - 802.11n: 6.5 to 300 (MCS0 to MCS15, HT20 to HT40), 400 with 256-QAM (proprietary extension)
  - 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 5,765 (MCS0 to MCS13, NSS = 1 to 2, EHT20 to EHT320)
- 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.
- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks
- Ultra Tri-Band (UTB) enables ultimate flexibility in 5 GHz and 6 GHz channel selection without performance degradation
- 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/az Fine Timing Measurement (FTM) for precision distance ranging

### Wi-Fi antennas

- HPE Aruba Networking AP-734: Two sets of two (female) RP-SMA connectors for external antennas (A0 & A1 corresponding with radio chains 0 and 1 for the 2.4GHz and 5GHz radios, and B0 & B1 corresponding with radio chains 0 and 1 for the 6GHz radio). Worst-case internal loss between radio interface and external

<sup>2</sup> The U-NII-6 band is not supported when the AP-735 is configured for dual-6GHz mode



antenna connectors: 0.8dB in 2.4GHz, 1.2dB in 5GHz, and 1.2dB in 6GHz.

- HPE Aruba Networking AP-735: Integrated downtilt omni-directional antennas for 2x2 MIMO with peak antenna gain of 5.1dBi in 2.4 GHz, 5.5dBi in 5 GHz (5.2dBi in dual-5GHz mode) and 5.3dBi in 6GHz (5.2dBi in dual-6GHz mode). Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 to 40 degrees.

– Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 3.9dBi in 2.4 GHz, 4.1dBi in 5 GHz (2.5dBi in dual-5GHz mode) and 3.9dBi in 6 GHz (3.7dBi in dual-6GHz mode).

**Other interfaces and features**

- E0, E1: Two Ethernet wired network ports (RJ-45)
  - Auto-sensing link speed (100/1000/2500/5000BASE-T) and MDI/MDX
  - PoE-PD: 48Vdc (nominal) 802.3at/bt PoE (class 4 or higher)
  - 802.3az Energy Efficient Ethernet (EEE)

– Link aggregation (LACP) support between both network ports for redundancy and increased capacity

– MACsec support on E0 (802.1ae)

- DC power interface: 12Vdc (nominal, +/- 5%), accepts 2.1mm/5.5mm center-positive circular plug with 9.5mm length
- U0, U1: Two USB 2.0 host interface (Type A connector)

– Capable of sourcing up to 2A/10W to one or two attached devices

- Flexible dual IOT radio options: BLE 5.4 (w/HADM), plus either BLE 5.4 or 802.15.4/Zigbee:

– BLE: BT5.4 with up to 10dBm transmit power (class 1) and -105dBm receive sensitivity (125 kbps)

– IEEE 802.15.4/Zigbee: up to 10dBm transmit power and -100dBm receive sensitivity (250 kbps)

– Integrated omnidirectional antenna with roughly 30 to 40 degrees downtilt and peak gain of 4.7dBi (AP-734) or 5.1dBi (AP-735)

- GNSS L1 (1575.42 MHz) and L5 (1176.45 MHz) receiver supporting GPS, Galileo, GLONASS, and BeiDou signal

– Receive sensitivity: -160dBm (tracking)

– Integrated omnidirectional antenna with roughly 30 to 40 degrees downtilt and peak gain of 2.8dBi (AP-734) or 4.4dBi (AP-735)

- Integrated barometric pressure sensor to determine (relative) deployment altitude of the A
- Advanced IoT Coexistence (AIC) allows concurrent operation of multiple radios in the 2.4 GHz band
- Built-in Trusted Platform Module (TPM) for enhanced security and anti-counterfeiting
- Visual indicators (four multi-color 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

Single PoE source	Class 5 (802.3bt)	Class 4 (802.3at)	Class 3 (802.3af)
<b>Power budget</b>	40W	25.5W	13.9W
<b>Power mode</b>	Unrestricted	Restricted	Staging support only, no radios will be enabled
<b>USB ports (both)</b>	Enabled	Disabled	Staging support only, no radios will be enabled
<b>Ethernet</b>	Both ports enabled	Both ports enabled	Staging support only, no radios will be enabled
<b>MIMO</b>	2x2	2x2	Staging support only, no radios will be enabled
<b>Max RF power reduction</b>	0 dB	0 dB	Staging support only, no radios will be enabled



### Power sources and power consumption

- The AP supports direct DC power and Power over Ethernet (PoE) on port E0 and/or E1
- When both DC and PoE power sources are available, DC power takes priority over PoE
- When PoE power is supplied to both Ethernet ports, either port can be configured as the active power source
- Inactive/standby PoE power sources can be used to deliver hitless failover
- Power sources are sold separately; see the HPE Aruba Networking 730 Series Ordering Guide for details
- When powered by DC or 802.3bt (class 5) PoE, the AP will operate without restrictions.
- When powered by 802.3at (class 4) PoE with the IPM feature disabled, the AP will disable the USB ports.
- Operating the AP with an 802.3af (class 3 or lower) POE source is not supported (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):
  - DC powered: 20W/31W.
  - PoE powered: 24W/36W.
- This assumes that up to 10W is supplied to the attached USB device(s).
- Maximum (worst-case) power consumption in idle mode: 8W/19W (DC) or 12W/24W (PoE).
- Maximum (worst-case) power consumption in deep-sleep mode: 1.5W (DC) or 2.0W (PoE).

### Mounting details

A mounting bracket has been pre-installed on the back of the AP. This bracket is used to secure the AP to any of the mount

kits (sold separately); see the HPE Aruba Networking 730 Series Campus APs Ordering Guide for details.

### Mechanical specifications

- Dimensions/weight (HPE Aruba Networking AP-735; unit without mount bracket):
  - 240mm (W) x 240mm (D) x 56mm (H)
  - 1440g
- Dimensions/weight (AP-735; shipping):
  - 271mm (W) x 258mm (D) x 89mm (H)
  - 1830g

### Environmental specifications

- Operating conditions
  - Temperature: 0C to +50C/+32F to +122F
  - 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: -25C to +55C/-13F to +131F
  - Relative humidity: 10% to 100%
  - ETS 300 019 class 1.2 environments
- Transportation conditions
  - Temperature: -40C to +70C/-40F to +158F
  - Relative humidity: up to 95%
  - ETS 300 019 class 2.3 environments

### Reliability

- Mean Time Between Failure (MTBF): 520 khrs (59 yrs) at +25C operating temperature

### General regulatory statements

HPE Aruba Networking WLAN Access Points (APs) 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 ensure they remain in compliance with the latest regulatory rules in the country of operation, and we will strive to ensure that the hardware and software capabilities of these products are maximized for each country.

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.

Please 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 via the host country's regulatory agencies for more.

### Regulatory compliance

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- UL/IEC/EN 60950
- IEC/EN 62368-1
- EN 60601-1-1, EN60601-1-2

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

### Regulatory model numbers

- HPE Aruba Networking AP-734 (all models): APIN0734
- HPE Aruba Networking AP-735 (all models): APIN0735



**Certifications**

- UL2043 plenum rating
- Wi-Fi Alliance (WFA):
  - Wi-Fi CERTIFIED a, b, g, n, ac, 6, 7
  - WPA, WPA2 and WPA3 – Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE)
  - WMM, WMM-PS, W-Fi Agile Multiband
  - Passpoint (release 2)
- Bluetooth SIG
- Ethernet Alliance (PoE, PD device, class 5)

**Warranty**

HPE Aruba Networking’s hardware limited lifetime warranty.

**Minimum operating system software versions**

- HPE Aruba Networking Wireless Operating System AOS 10.7.0.0

**RF performance table**

Band, rate	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
<b>2.4 GHz, 802.11b</b>		
1Mbps	18.0	-96.0
11Mbps	18.0	-88.0
<b>2.4 GHz, 802.11g</b>		
6Mbps	18.0	-93.0
54Mbps	17.0	-74.0
<b>2.4 GHz, 802.11n HT20</b>		
MCS0	18.0	-93.0
MCS7	16.0	-74.0
<b>2.4 GHz, 802.11ax HE20</b>		
MCS0	18.0	-93.0
MCS11	14.0	-62.0
<b>2.4 GHz, 802.11be EHT20</b>		
MCS0	18.0	-93.0
MCS13	12.0	-58.0
<b>5 GHz, 802.11a</b>		
6Mbps	18.0	-92.0
54Mbps	16.0	-73.0



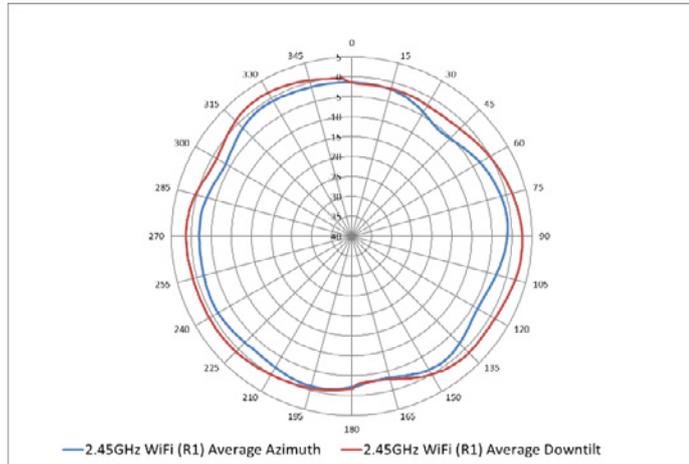
Band, rate	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
<b>5 GHz, 802.11n HT20/HT40</b>		
MCS0	18.0/18.0	-90.0/-89.0
MCS7	16.0/16.0	-73.0/-70.0
<b>5 GHz, 802.11ac VHT20/VHT40/VHT80/VHT160</b>		
MCS0	18.0/18.0/18.0/18.0	-90.0/-89.0/-86.0/-83.0
MCS9	14.0/14.0/14.0/14.0	-66.0/-63.0/-60.0/-57.0
<b>5 GHz, 802.11ax HE20/HE40/HE80/HE160</b>		
MCS0	18.0/18.0/18.0/18.0	-92.0/-89.0/-86.0/-83.0
MCS11	14.0/14.0/14.0/14.0	-61.0/-59.0/-56.0/-53.0
<b>5 GHz, 802.11be EHT20/EHT40/EHT80/EHT160</b>		
MCS0	18.0/18.0/18.0/18.0	-92.0/-89.0/-86.0/-83.0
MCS13	12.0/12.0/12.0/12.0	-56.0/-53.0/-49.0/-46.0
<b>6 GHz, 802.11ax HE20/HE40/HE80/HE160</b>		
MCS0	18.0/18.0/18.0/18.0	-90.0/-89.0/-86.0/-83.0
MCS11	14.0/14.0/14.0/14.0	-59.0/-58.0/-56.0/-54.0
<b>6 GHz, 802.11be EHT20/EHT40/EHT80/EHT160/EHT320</b>		
MCS0	18.0/18.0/18.0/18.0/18.0	-90.0/-89.0/-86.0/-83.0/-80.0
MCS13	12.0/12.0/12.0/12.0/12.0	-53.0/-52.0/-50.0/-47.0/-44.0



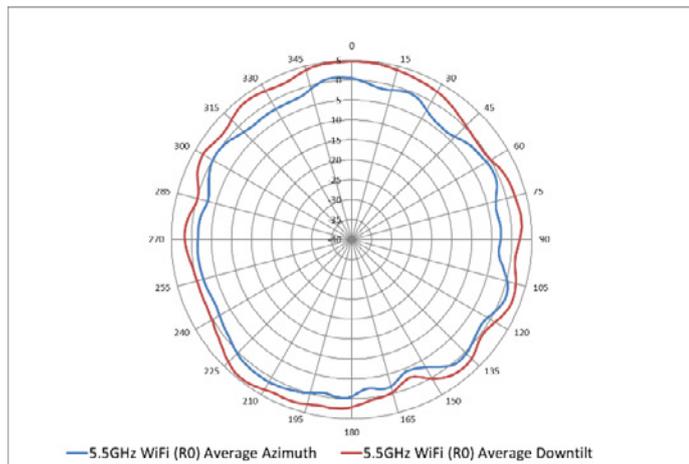
## Antenna patterns AP-735

### Horizontal planes (top view)

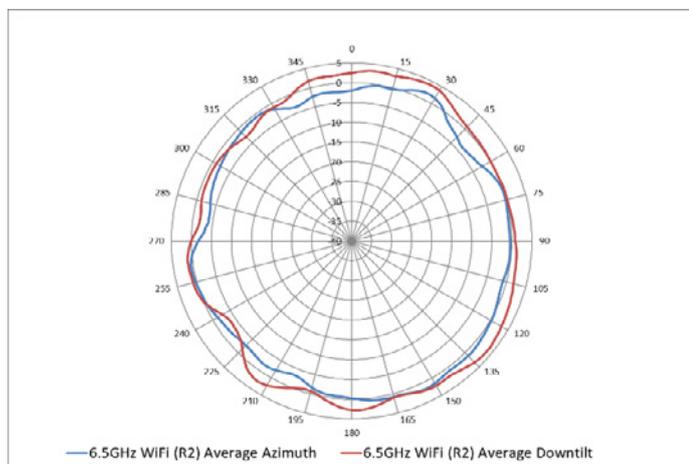
Showing both azimuth (0 degrees) and 30 degrees downtilt patterns (averaged patterns for all applicable antennas)



**2.45GHz Wi-Fi antenna patterns (horizontal)**



**5.5GHz Wi-Fi antenna patterns (horizontal)**

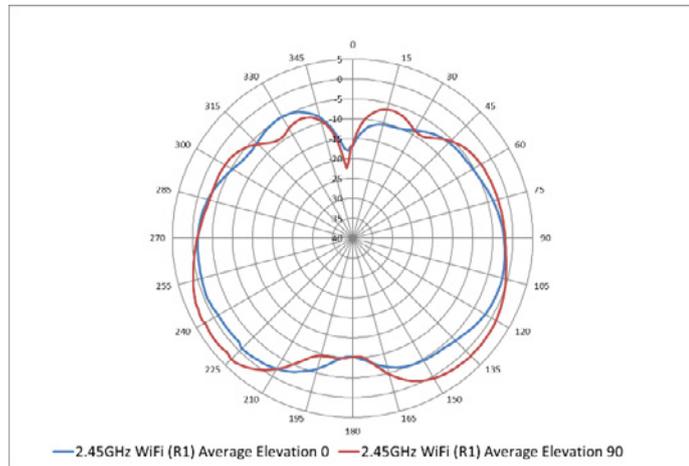


**6.5GHz Wi-Fi antenna patterns (horizontal)**

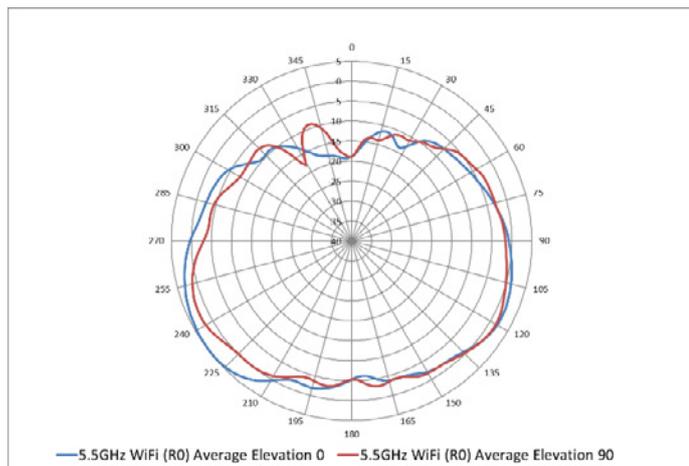


**Vertical (elevation) planes (side view,  
AP facing down)**

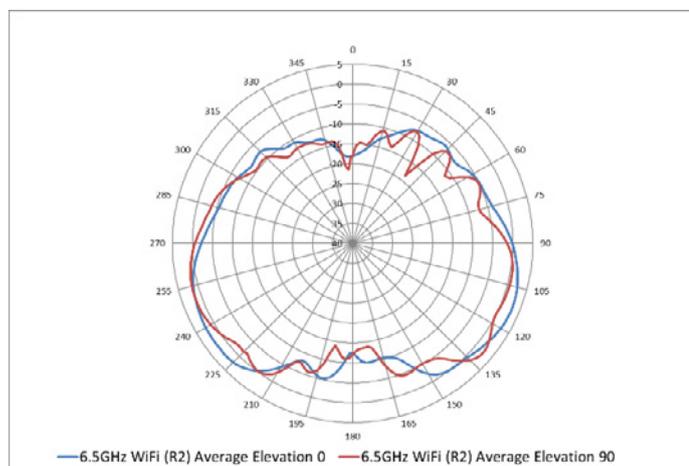
Showing side view with AP rotated 0 and 90 degrees (averaged patterns for all applicable antennas)



**2.45GHz Wi-Fi antennas patterns (vertical)**



**5.5GHz Wi-Fi antenna patterns (vertical)**



**6.5GHz Wi-Fi antennas patterns (vertical)**



## Ordering information

The 730 Series Campus APs will be orderable in July 2024.

### Part number Description

#### Internal antenna access points

S1G39A	HPE Aruba Networking AP-735 (EG) Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G40A	HPE Aruba Networking AP-735 (IL) Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G41A	HPE Aruba Networking AP-735 (JP) Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G42A	HPE Aruba Networking AP-735 (RW) Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G43A	HPE Aruba Networking AP-735 (US) Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP

#### Internal antenna access points — eco-friendly 5-packs

SOH12A	HPE Aruba Networking AP-735 (RW) Tri Radio 2x2 Wi-Fi 7 Internal Antennas 5-Pack Campus Access Point
SOH13A	HPE Aruba Networking AP-735 (US) Tri Radio 2x2 Wi-Fi 7 Internal Antennas 5-Pack Campus Access Point

#### External antenna access points

S1G32A	HPE Aruba Networking AP-734-RW Tri-radio 2x2:2 Wi-Fi 7 External Antennas Campus AP
S1G33A	HPE Aruba Networking AP-734-US Tri-radio 2x2:2 Wi-Fi 7 External Antennas Campus AP

#### Internal antenna access points — TAA models

S1G44A	HPE Aruba Networking AP-735 (EG) TAA Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G45A	HPE Aruba Networking AP-735 (IL) TAA Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G46A	HPE Aruba Networking AP-735 (JP) TAA Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G47A	HPE Aruba Networking AP-735 (RW) TAA Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP
S1G48A	HPE Aruba Networking AP-735 (US) TAA Tri-radio 2x2:2 802.11be Wi-Fi 7 Internal Antennas Campus AP

#### External antenna access points — TAA models

S1G37A	HPE Aruba Networking AP-734-RWF1 TAA Tri-radio 2x2:2 Wi-Fi 7 External Antennas Campus AP
S1G38A	HPE Aruba Networking AP-734-USF1 TAA Tri-radio 2x2:2 Wi-Fi 7 External Antennas Campus AP

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