#### **Overview**

# HPE Aruba Networking 600H Series Hospitality Access Points

#### High-performance Wi-Fi 6E APs with wired connectivity

HPE Aruba Networking 600H Series Hospitality Access Points (APs) deliver seamless, secure, high-performance wireless connectivity to mission critical hospitality, small branch, and remote work environments. The 600H Series delivers more wireless capacity and wider channels by taking advantage of **Wi-Fi 6E** and the 6 GHz band to more than double capacity to meet increasing demands of bandwidth-hungry video, growing numbers of client and IoT devices, and growth of cloud services.

The flexible compact form factor includes multi-gigabit and gigabit ports, PoE support, and integrated BLE and Zigbee, providing a range of connectivity options ideal for venues such as hotels, residence halls, and remote offices. The 600H Series includes a limited lifetime warranty for investment protection.



HPE Aruba Networking 600H Series Hospitality Access Points

Page 1

#### **Key Features**

- Ideal for hospitality, branch, and teleworker deployments.
- Flexible coverage across any two bands (2.4 GHz, 5 GHz, and 6 GHz) for up to 3.6 Gbps combined peak data rate.
- Up to seven 160MHz channels in 6 GHz support low-latency, bandwidth-hungry applications like high-definition video and AR/VR applications.
- Combines wireless and wired access in compact desktop or wall mount model that can be PoE powered.
- Convenient wired connectivity and support for PoE with fast 2.5 GbE uplink port, two 1 GbE ports, and two 1 GbE PSE ports capable of supplying up to total of 30W PoE.
- IoT-ready with support for Bluetooth 5 and Zigbee.

#### **Use cases**

# Hospitality

Delivering exceptional hotel guest or student residence hall experiences requires seamless Wi-Fi connectivity that is always on. The 600H Series can support hundreds of guest and student devices simultaneously without impacting Wi-Fi quality and optimizes the connection to the best available AP regardless of where the device is carried so users can roam without impact to performance. Critical applications can be prioritized so they can perform at their peak, without impacting the guest or staff experience. Desktop or wall mount configurations provide deployment flexibility with wired ports and integrated BLE5.0 and 802.15.4 (Zigbee) supporting a range of IoT devices.

#### Small branch and remote work

With the 600H Series managed by HPE Aruba Networking Central, IT can remotely deploy and centrally manage secure network connectivity for hundreds or even thousands of remote workers or small office employees to deliver an in-office experience—without need for a gateway. Remote workers can connect wireless clients (laptops, smartphones, tablets) as well as wired clients, such as VoIP phones, and access mission-critical applications reliably and securely via a 2.5 Gbps uplink/downlink Ethernet port, dedicated 1 Gbps uplink port, and three dedicated downlink ports.

## WI-FI 6E for faster speeds, more capacity

600H Series APs are designed to take advantage of Wi-Fi 6E and the 6GHz band, which translates into far greater speeds, wider channels for multi-gigabit traffic, and less interference. Its two 2x2 MIMO radios deliver a maximum combined data rate of up to 3.6 Gbps.

#### Advantages of 6 GHz

Wi-Fi 6E provides up to 1200 MHz in the 6 GHz band for higher throughput and improved application performance. With up to seven 160 MHz channels, Wi-Fi 6E can better support low-latency, bandwidth hungry applications like high-definition video and augmented reality and virtual reality applications. Only Wi-Fi 6E capable devices can use the 6 GHz band so there is no interference or slowdowns because legacy devices use the 5 GHz or 2.4 GHz bands. The 600H Series provides flexible coverage across any two bands (2.4 GHz, 5 GHz, and 6 GHz) to ensure that 6E and legacy devices are supported.

# **Device class support**

HPE Aruba Networking 600H Series APs 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), which is required for all outdoor and select indoor APs that transmit/operate at Standard Power.

#### 6 GHz global readiness

While the need for more Wi-Fi capacity is recognized across the globe, countries are approaching the 6 GHz band differently. HPE Aruba Networking 600H Series APs are set up to automatically update regulatory rules after Wi-Fi 6E regulations have been approved and certified.

### Extends the benefits of Wi-Fi 6

HPE Aruba Networking 600H Series APs are based on the 802.11ax (Wi-Fi 6) 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 the HPE Aruba Networking Wi-Fi 6E APs as well.

# **Advantages of OFDMA**

This capability allows HPE Aruba Networking APs to handle multiple 802.11ax 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.

# Dual radio/tri-band architecture

HPE Aruba Networking 600H Series APs use a unique dual-radio, tri-band architecture to unlock the 6 GHz band with its faster speeds, wider channels, and less interference. Adding support for the 6 GHz band to the traditional 2.4 GHz and 5 GHz bands provides more than double the available wireless capacity—so small offices/home offices can meet growing demand due to bandwidth-hungry video, increasing numbers of client and IoT devices, and growth in the cloud. These APs feature two radios that can be automatically tuned to any two of the three available spectrum bands for Wi-Fi (2.4 GHz, 5 GHz, 6 GHz).

# Simplified deployment and operations

HPE Aruba Networking APs can operate as standalone APs 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 or on premises solutions for any campus, branch, or remote work environment. With HPE Aruba

Networking Central, onboarding, configuring, and provisioning are simpler and require no manual CLI configuration or maintenance windows. After the AP is plugged in, the device connects and receives its running configuration from the cloud using Zero Touch Provisioning, which allows remote workers and offices to onboard and configure wireless connectivity without any on-site IT support. Central 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. See the Central Ordering Guide **here**.

## Versatile installation options

The HPE Aruba Networking 600H Series Hospitality APs can be deployed as a wall-mount or on the desktop. For desktop deployments, the HPE Aruba Networking 600H Series Hospitality APs are offered in bundles that combine an AP, a desk stand, power adapter, and North American or European power cord.

#### **Key Wi-Fi features**

#### Wi-Fi 6E certified™ for 6 GHz

HPE Aruba Networking 600H Series Hospitality APS are fully Wi-Fi CERTIFIED™ to meet all the requirements for Wi-Fi 6E (802.11ax) for greater efficiency including OFDMA, MU-MIMO, and Target Wake Time to extend the battery life of devices.

## **Client optimization**

HPE Aruba Networking's patented Al-powered ClientMatch technology 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 6 GHz band depending on client capabilities. ClientMatch also dynamically steers traffic. to load balance APs to improve the

user experience.

#### RF optimization

ML-based radio frequency optimization known as AirMatch dynamically adjusts resources such as power to optimize coverage and eliminate coverage gaps.

# **HPE Aruba Networking Advanced**

Cellular Coexistence

Unique Advanced Cellular Coexistence (ACC) 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.

## **Self-locating APs**

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

The 605H Series APs include built-in GPS receivers and intelligent software to allow them to automatically locate themselves accurately within the universal framework

of latitude and longitude. 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.

#### IoT Ready

HPE Aruba Networking 600H Series Hospitality APs include an integrated Bluetooth 5 and 802.15.4 radio for Zigbee support to simplify deploying and managing IoT-based location services, asset tracking services, security solutions, and IoT sensors. There is also a USB-port extension to provide IoT connectivity to a wider range of devices. These IoT capabilities allow organizations to leverage our APs as an IoT transport, 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 airtime contention with other clients, which is ideal for IoT.

The Advanced IoT Coexistence (AIC) feature uses built-in filtering to allow Wi-Fi and BLE/Zigbee radios to operate at maximum capacity without the impact of interference.

## **Intelligent Power Monitoring (IPM)**

For better insights into energy consumption, our APs continuously monitor and report hardware energy usage. Unlike other vendor's APs, our 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 6E APs and update switching and power at a later if needed based on their actual usage.

# **Key Security Features**

#### Al Client Insights

ML-based classification of all clients 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 Ul-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. wireless data is 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.

## **WPA3 and Enhanced Open**

As part of Wi-Fi 6E (802.11ax), WPA3 ensures stronger encryption and authentication while Enhanced Open offers protection for users connecting to open networks by automatically encrypting each session to protect user passwords and data on guest networks. In addition, 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.

#### **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 requires ClearPass Policy Manager.

## **VPN Tunnels**

In Remote AP (RAP) and IAP-VPN deployments, the HPE Aruba Networking 600H Series can be used to establish a secure SSL/IPsec VPN tunnel to a Gateway or Mobility Controller that is acting as a VPN concentrator.

# 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.

# Simple and Secure Access

To simplify policy enforcement, the 600H Series uses the Policy Enforcement Firewall (PEF) to encapsulate all traffic from the AP to the Mobility Controller (or gateway) for end-to-end encryption and inspection. Policies are applied based on user role, device type, applications, and location. This reduces the manual configuration of SSIDs, VLANs and ACLs. PEF also serves as the underlying technology for Dynamic Segmentation.

# **Configuration Information**

**Build To Order:** BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

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Remarks	Description	SKU
	AP-605H Hospitality Access Points	
Notes:	Add Mount Kit (not included)	
6	HPE Aruba Networking AP-605H (EG) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Hospitality AP	SOB57A
3	HPE Aruba Networking AP-605H (IL) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Hospitality AP	SOB58A
4	HPE Aruba Networking AP-605H (JP) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Hospitality AP	SOB59A
1,9	HPE Aruba Networking AP-605H (RW) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Hospitality AP	SOB60A
2,10	HPE Aruba Networking AP-605H (US) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Hospitality AP	SOB62A
	AP-605H 10-Pack Eco-Friendly Hospitality Access Point Bundle	
Notes:	Add mount kits (not included)	
1	HPE Aruba Networking AP-605H (RW) 10pk Dual Radio Tri Band 2x2:2 Wi-Fi 6E Hospitality Access Point	S1F95A
2	HPE Aruba Networking AP-605H (US) 10pk Dual Radio Tri Band 2x2:2 Wi-Fi 6E Hospitality Access Point	S1F96A
	AP-605H TAA Hospitality Access Points	
Notes:	Add Mount Kit (not included)	
8	HPE Aruba Networking AP-605H (RWF1) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB TAA Hospitality AP	SOB61A
2	HPE Aruba Networking AP-605H (USF1) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB TAA Hospitality AP	SOB63A
	AP-605HR Remote Access Points Bundle	
6	HPE Aruba Networking AP-605HR (EU) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Remote AP Bundle	SOB64A
Notes:	Contains AP-605H-RW, desk mount, power adapter and europlug power cord	
2	HPE Aruba Networking AP-605HR (US) 2-Radio 3-Band Wi-Fi 6E 2x2 1+4 ETH PSE USB Remote AP Bundle	SOB65A
Notes:	Contains AP-605H-RW, desk mount, power adapter and North American power cord	
	Configuration Rules	
Rule#	Description	SKU
1	Available everywhere except, US, Puerto Rico, Israel, Japan, India and Egypt.	
2	Available in US only	
3	Available in Israel only	
4	Available in Japan only	
5	Available in Egypt only	
6	Available in European Union only	
8	Available everywhere except, US, Puerto Rico, Israel, Japan and Egypt.	
9	If the ordered qty of this AP is greater than 10, then the default will be the following Eco-Friendly 10-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs;	
	HPE Aruba Networking AP-605H (RW) 10pk Dual Radio Tri Band 2x2:2 Wi-Fi 6E Hospitality Access Point	S1F95A
	Display Notes:	
	If ordering more than qty10 of this AP, consider ordering the Eco-Friendly 10-Packs(S1F95A). Please revert back to single pack if individual sale is desired.	



# **Configuration Information**

Aruba Networking AP Power Cord Table

10 If the ordered qty of this AP is greater than 10, then the default will be the following Eco-Friendly 10-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs: HPE Aruba Networking AP-605H (US) 10pk Dual Radio Tri Band 2x2:2 Wi-Fi 6E Hospitality Access Point S1F96A Display Notes: If ordering more than qty10 of this AP, consider ordering the Eco-Friendly 10-Packs(S1F96A). Please revert back to single pack if individual sale is desired. **Notes:** OCA Only Model Selection Form - HPE Offering > HPE Aruba Networking > Access Points > Hospitality / Remote: HPE Aruba Networking 600H Series Hospitality Access Points **Mount Accessories** HPE Aruba Networking 600H Series Mount kits For 605H Series Std (Min 0 // max 1) User Selection (min 1 // max 1) For 605HR Series Std (Min 0 // max 0) User Selection (min 0 // max 0) For S1F95A and S1F96A Std (0 or 10) User Selection (0 or 10) HPE Aruba Networking AP-600H-MNT1 Single Hang Wall-Box Mount Kit SOJ42A Metal mount bracket, for wall and (single-gang wiring) wall-box HPE Aruba Networking AP-600H-MNT2 Dual Hang Wall-Box Mount Kit SOJ43A Metal mount bracket, for wall and (dual-gang wiring) wall-box HPE Aruba Networking AP-500H-MNTD2 RJ45 Ethernet Jack Desk Mount SOJ41A Plastic desk stand (with integrated network port) **Power Options** Rule # Description SKU **Power Options** For 605H Series Std (Min 0 // max 1) User Selection (min 0 // max 1) For 605HR Series Std (Min 0 // max 0) User Selection (min 0 // max 0) For S1F95A and S1F96A Std (0 or 10) User Selection (0 or 10) **Notes:** Most devices are PoE powered from switch so these are optional HPE Aruba Networking AP-AC2-48C 48V/50W AC/DC Desktop Style Power Adapter with 1.35/3.5mm 1 R3K01A Connector 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, Unrestricted(AP-503H) HPE Aruba Networking AP-POE-ATSR 1-Port Smart Rate 802.3at 30W Midspan Injector R6P67A HPE Aruba Networking AP-POE-BTSR 1-Port Smart Rate 802.3bt 60W Midspan Injector R1C73A Add AC power cord, Unrestricted **Configuration Rules Description** SKU Rule# If this Power Supply is selected, bring in (Min 1 // Max 1) Localized power cord based on the HPE

# **Configuration Information**

**Other Accessories** 

Single USB dongle

# **Accessories**

**Notes:** 

**Notes:** 

**Notes:** 

For 605H Series Std (Min 0 // max 99) User Selection (min 0 // max 99)	
HPE Aruba Networking AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable	JY728A
Drivers available on the HPE Networking Support Portal	
HPE Aruba Networking AP-MOD-SERU Micro-USB TTL3.3V to RJ45 RS232 AP Console Adapter	R6Q99A
Module	
HPE Aruba Networking AP-CBL-ETH10 10-pk Short Ethernet Cable	JW072A
10-pack short 10cm male-to-male Ethernet patch cables	
HPE Aruba Networking AP-MC-SFP Media Converter Module for WLAN Access Points	R8F89A
HPE Aruba Networking AP-USB-ZB External USB based Dongle with Zigbee and BLE for AP	R2X45A

	HPE Aruba Networking AP-USB-ZB 10-pk External USB based Dongle with Zigbee and BLE for AP	R2Y09A
Notes:	10-pack USB dongle	

	HPE Aruba Networking AP-USB-2B 50-pk External USB based Dongle with Zigbee and BLE for AP	RZY10A
Notes:	50-pack USB dongle	

	HPE Aruba Networking USB LTE Modem for Access Points and Gateways	R8F34A
Motor	CAT12 LTE Modern	

noies:	CATT2 LTE Modelli	
	HPE Aruba Networking USB Extender Cable Kit for use with Aruba USB LTE Modem	R8G76A
	O ST. T. A. T.	

# **Standards Based Technologies**

- HPE Aruba Networking 600H Series Hospitality APs also include the following standards-based technologies:
- Transmit Beamforming to increase signal reliability and range
- Dynamic Frequency Selection (DFS) to optimize use of available RF spectrum
- Maximum Rate Combining (MRC) for improved receiver performance
- Cyclic Delay/Shift Diversity (CDD/CSD) to deliver greater downlink RF performance
- Space-Time Block Coding (STBC) to increase range and improve reception
- Low-Density Parity Check (LDPC) to provide high-efficiency error correction and improve throughput

# **Specifications**

#### Hardware variants

• AP-605H: Hospitality AP platform, integrated antennas

#### Wi-Fi radio specifications

- AP type: Indoor, tri-band, 2.4GHz, 5GHz and 6GHz (dual concurrent) 802.11ax 2x2 MIMO
- 2.4GHz radio: Two spatial stream Single User (SU) MIMO for up to 574Mbps wireless data rate with 2SS HE40 802.11ax client devices (287Mbps for HE20)
- 5GHz radio: Two spatial stream Single User (SU) MIMO for up to 1.2Gbps wireless data rate with 2SS HE80 802.11ax client devices
- 6GHz radio: Two spatial stream Single User (SU) MIMO for up to 2.4Gbps wireless data rate with 2SS HE160 802.11ax client devices
- Up to 512 associated client devices per radio, and up to 16 BSSIDs per radio (limited to 8 for the 6GHz radio)
- Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835GHz >ISM
  - 5.150 to 5.250GHz > U-NII-1
  - 5.250 to 5.350GHz > U-NII-2A
  - 5.470 to 5.725GHz > U-NII-2C
  - 5.725 to 5.850GHz > U-NII-3/ISM
  - 5.850 to 5.895GHz > U-NII-4
  - 5.925 to 6.425GHz > U-NII-5
  - 6.425 to 6.525GHz > U-NII-6
  - 6.525 to 6.875GHz > U-NII-7
  - 6.875 to 7.125GHz > 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 5GHz band
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11ax: Orthogonal frequency-division multiple access (OFDMA) with up to 8 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
- 802.11n 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
- 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 (2.4GHz): 3.6 to 574 (MCSO to MCS11, NSS = 1 to 2, HE20 to HE40)
- 802.11ax (5GHz): 3.6 to 1.201 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE80)
- 802.11ax (6GHz): 3.6 to 2,402 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE160)
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (aggregate, conducted total) transmit power (limited by local regulatory requirements):
  - Per radio/band (2.4GHz / 5GHz / 6GHz): +21 dBm (18dBm per chain)
  - Notes: conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain.
- Minimum configurable transmit power is –10dBm (conducted, per chain)
- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance
- Space-time block coding (STBC) for increased range and improved reception
- · Low-density parity check (LDPC) for high-efficiency error correction and increased throughput
- Transmit beamforming (TxBF) for increased signal reliability and range
- 802.11ax Target Wait Time (TWT) to support low-power client devices
- 802.11mc Fine Timing Measurement (FTM) for precision distance ranging

#### Wi-Fi antennas

- AP-605H: Integrated omni-directional antennas for 2x2 MIMO with peak antenna gain of 5.1dBi in 2.4GHz, 5.1dBi in 5GHz and 5.4dBi in 6GHz. The built-in antennas are optimized for vertical wall or desk mounted orientation of the AP.
  - Combining the patterns of each of the antennas of the MIMO radios, the peakgain of the combined, average pattern is 4.4dBi in 2.4GHz, 4.4dBi in 5GHz and 4.0dBi in 6 GHz

## Other interfaces and features

- Uplink (E0): Ethernet wired network port (RJ-45)
  - Auto-sensing link speed (100/1000/2500BASE-T) and MDI/ MDX
  - 2.5Gbps speed complies with NBase-T and 802.3bz specifications
  - 802.3az Energy Efficient Ethernet (EEE)
  - POE-PD: 48Vdc (nominal) 802.3af/at/bt POE (class 3, 4 or 6)
- Downlink (E1-E4): Ethernet wired network ports (RJ-45)
  - Auto-sensing link speed (10/100/1000BASE-T) and MDI/ MDX
  - 802.3az Energy Efficient Ethernet (EEE)
  - E1&E2: POE-PSE: 802.3af/at POE output; dual 802.3af (both ports) or single 802.3at (E1 only); 30W max
- DC power interface
  - Circular: 48Vdc (nominal, +/-5%), accepts 1.35mm/3.5mm center-positive circular plug with 9.5mm length
  - USB 2.0 host interface (Type A connector) Capable of sourcing up to 1A / 5W to an attached device USB device can be physically secured with locking screw
- Bluetooth Low Energy (BLE5.0) and Zigbee (802.15.4) radio
  - BLE: up to 3dBm transmit power (class 1) and -98dBm receive sensitivity (125kbps)
  - Zigbee: up to 3dBm transmit power and -96dBm receive sensitivity (250kbps)
  - Integrated omnidirectional antenna with roughly 30 to 40 degrees down tilt and peak gain of 3.5dBi
- GNSS L1 (1575.42MHz) receiver supporting GPS, Galileo, GLONASS and BeiDou signals

- Receive sensitivity: -162dBm (tracking)
- Integrated omnidirectional antenna with roughly 30 to 40 degrees down tilt and peak gain of 4.5dBi
- Advanced IOT Coexistence (AIC) allows concurrent operation of multiple radios in the 2.4GHz band
- Built-in Trusted Platform Module (TPM 2.0) for enhanced security and anti-counterfeiting
- Visual system status indicators (LEDs):
  - Power/System status
  - Radio status
  - Local network port status (4x)
  - POE-PSE status (2x)
- Serial console interface (proprietary, micro-B USB physical jack)
- Reset button: factory reset, LED mode control (normal/off)
- Kensington security slot
- Automatic thermal shutdown and recovery function
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  - POE-PD: 48Vdc (nominal) 802.3af/at/bt POE (class 3, 4 or 6)
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## Power sources and power consumption

- The AP supports direct DC power and Power over Ethernet
- When both DC and POE power sources are available, DC power takes priority over POE
- Power sources are sold separately; see the 600H Series Ordering Guide for details
- The AP-605HR bundles include an AC-to-DC power adapter
- When powered by DC or 802.3bt (class 6) POE, the AP will operate without restrictions
  - When powered by 802.3at (class 4) POE and with the IPM feature disabled, the AP will disable the USB port (only) if POE-PSE is enabled, and support (802.3af) POE-PSE power on E1 only (no PSE on E2)
- When powered by 802.3af (class 3) POE with the IPM feature disabled, the AP will disable the USB port and POE-PSE capability.
  - With IPM enabled, the AP will start up without restrictions, but may dynamically apply additional restrictions depending on the POE budget and actual power consumption. The feature specific restrictions and order in which they are applied can be configured.
- Maximum (worst-case) power consumption (AP only / USB adder / POE PSE adder):
  - DC powered: 14.9W / 5.8W / 27.5W
  - POE powered: 13.9W / 5.8W / 30.1W
- Maximum (worst-case) power consumption in idle mode (AP only):
  - DC powered: 5.8W
  - POE powered: 5.9W
- Maximum (worst-case) power consumption in deep-sleep mode (AP only):
  - DC powered: 1.5W
  - POE powered: 1.4W

#### Mounting details

Using one of the (separate orderable) mount kits, the AP can be attached to a single or dual gang wall-box, directly to a wall, or desk mounted. See the 600H Series Ordering Guide for details.

#### **Mechanical specifications**

- Dimensions/weight (AP-605H; unit):
  - 105mm (W) x 40 mm (D) x 153 mm (H)
  - 500 g
- Dimensions/weight (AP-605H; shipping):
  - 145 mm (W) x 64 mm (D) x 210 mm (H)
  - 690 g

#### **Environmental specifications**

- Operating conditions
  - Temperature: OC to +40C / +32F to +104F
  - 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): 999 khrs. (114 yrs.) at +25C ambient operating temperature.

#### Regulatory compliance

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- IEC/EN 62368-1
- EN 60601-1-1, EN60601-1-2
- UL2043

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

# Regulatory model numbers

AP-605H APs (all models): APINH605

#### Certifications

- Wi-Fi Alliance (WFA):
  - Wi-Fi CERTIFIED a, b, g, n, ac
  - Wi-Fi CERTIFIED 6
  - WPA, WPA2 and WPA3 Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE)
  - WMM, WMM-PS, Wi-Fi Agile Multiband
  - Wi-Fi CERTIFIED Location TM
- Bluetooth SIG
- Ethernet Alliance (POE PD device, class 6 and POE PSE device, class 4)

#### Warranty

HPE Aruba Networking hardware limited lifetime warranty.

## Minimum operating system software versions

- HPE Aruba Networking Wireless Operating System 10.7.0.0 (AOS-10.7.0.0)
- HPE Aruba Networking Wireless Operating System 8.12.0.0 (AOS-8.12.0.0)
- HPE Aruba Networking Instant Operating System 8.12.0.0 (Instant-8.12.0.0)

#### Support

HPE Aruba Networking network devices (APs, switches, and gateways) that have an active HPE Aruba Networking Central SaaS subscription are fully supported and include:

- 24x7 priority technical support for troubleshooting
- Software updates and upgrades for HPE Aruba Networking Central and hardware products managed by HPE Aruba Networking Central

Learn more about our support services: <a href="https://networkingsupport.hpe.com">https://networkingsupport.hpe.com</a>

RF Performance Table			
	Maximum transmit power (dBm) per	Receiver sensitivity (dBm) per	
	transmit chain	receive chain	
2.4GHz, 802.11b			
1Mbps 18		-94.5	
11Mbps	18	-88.0	
2.4GHz, 802.11g			
6Mbps	18	-92	
54Mbps	16	-74.5	
2.4GHz, 802.11n HT20			
MCS0	18	-93	
MCS7	16	-74	
2.4GHz, 802.11ax HE20			
MCS0	18	-92	
MCS11	12	-62	
5GHz, 802.11a			
6Mbps	18	-91	
54Mbps	16	-73	
5GHz, 802.11n HT20 / HT40			
		-91 / -88.5	
MCS7	16/16	-71 / -69	
5GHz, 802.11ac VHT20	· · · · · · · · · · · · · · · · · · ·	,	
MCS0	18	-91	
MCS9	14	-67	
5GHz, 802.11ac VHT40			
MCS0	18	-88.5	
MCS9	14	-63	
5GHz, 802.11ac VHT80			
MCS0	18	-86	
MCS9	14	-60	
5GHz, 802.11ax HE20			
MCS0	18	-90	
MCS11	12	-60	
5GHz, 802.11ax HE40			
		-87.5	
MCS11	12	-57	
5GHz, 802.11ax HE80	1		
MCS0			
MCS11	12	-54.5	
6GHz, 802.11ax HE20/HE40/			
MCS0	18 / 18 / 18 / 18	-92 /-89.5/-86.5/ -83	
MCS11	12 / 12/ 12/ 12	-62 /-59 /-56.5/-53	

# **Summary of Changes**

Date	Version History	Action	Description of Change
04-Mar-2024	Version 2	Changed	Configuration Information section was updated.
05-Feb-2024	Version 1	New	New QuickSpecs

# Copyright

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