

HPE Aruba Networking 600R Series Remote Access Points QuickSpecs

**Wi-Fi 6E access points with wired connectivity —
ideal for mission-critical remote work and small
branches**

HPE Aruba Networking 600R Series Remote Access Points enable IT teams to deliver a seamless and secure user experience to remote workers and small branch environments. The remote access points are based on Wi-Fi 6E, achieving a combined maximum 3.6 Gbps data rate (using 5 GHz and 6 GHz bands) and increasing capacity by up to 1200 MHz with more 160 MHz channels to better support ever increasing Wi-Fi demands, especially for latency sensitive, high bandwidth video communications. They can also take advantage of an optional cellular module for high-speed backup or primary connectivity.

Overview



HPE Aruba Networking 600R Series Remote Access Points

Key Features

- Unlocks the 6 GHz band for up to triple the capacity of previous generations.
 - Delivers up to 3.6 Gbps combined peak data rate (when using 5 GHz + 6 GHz operation).
 - Cellular module provides backup connectivity and higher resiliency.
-

Standard Features

Home Office/Small Office Use

IT teams are tasked with ensuring a secure and reliable experience for a highly distributed workforce that is accessing data center and cloud-based applications over consumer broadband and cellular connections that are outside IT's control and visibility. With HPE Aruba Networking 600R Series Remote Access Points, 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.

IT benefits from a unified approach that enables staff to configure, troubleshoot, and optimize network performance across campus, branch, and remote work environments. Built in SD-WAN intelligent route and tunnel orchestration and policy-based routing drives operational efficiencies and optimizes network performance. Comprehensive WAN health dashboards assist in troubleshooting problems quickly and boosting user satisfaction.

Wi-Fi 6E for Faster Speeds

600R series access points 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 when configured for concurrent 5 GHz and 6 GHz operation.

Wi-Fi 6E provides up to 1200 MHz of additional unlicensed spectrum 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/virtual reality applications. Only Wi-Fi 6E 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 600R Series Remote Access Points 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.

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 600R Series Remote Access Points are set up to automatically update regulatory rules once Wi-Fi 6E regulations have been approved and certified.

Extends the Benefits of Wi-Fi 6

HPE Aruba Networking 600R Series Remote Access Points 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 access points as well.

Standard Features

Dual Radio/Tri-Band Architecture

HPE Aruba Networking 600R Series Remote Access Points 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 up to 3x 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 cloud.

These remote access points 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). They include a cellular add-on module for backhaul and/or backup connectivity.

Ease of Deployment and Maintenance

With HPE Aruba Networking Central, onboarding, configuring, and provisioning are simpler and require no manual CLI configuration or maintenance windows. Once the access point is plugged in, the device connects and receives its running configuration from the cloud using zero touch provisioning, which allows remote workers and small offices to onboard and configure wireless connectivity without any on-site IT support. To avoid downtime or loss of service caused by upgrades, HPE Aruba Networking Central offers Live Upgrade functionality to reduce maintenance windows and ensure continuous wireless operations. In addition, HPE Aruba Networking 600R Series Remote access points are offered in a number of bundles that combine an access point variant, a desk stand, power adapter, and North American or European power cord. This eliminates packaging and transport waste and helps organizations meet sustainability goals.

Wi-Fi

Wi-Fi 6 CERTIFIED™ for 6 GHz

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

RF optimization

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

Advanced Cellular Coexistence

Built-in filtering automatically minimizes the impact of interference from cellular networks, distributed antenna systems (DAS), and commercial small cell or femtocell equipment.

Indoor Location Aware

HPE Aruba Networking 600R Series Remote Access Points include embedded GPS receivers and fine time measurement to accurately auto-locate themselves. They also support Open Locate, an emerging standard that allows access points to share their location over the air and through cloud-based APIs.

Standard Features

IoT ready

HPE Aruba Networking 600R Series Remote Access Points 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 access points 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 access point. This helps improve client power savings and reduces airtime contention with other clients, which is ideal for IoT.

Security

Remote work increases the attack surface in an organization. With HPE Aruba Networking Central, HPE Aruba Networking 600R Series Remote Access Points are better protected using new, sophisticated security models such as Zero Trust and Secure Access Service Edge (SASE). A fundamental concept of both Zero Trust and SASE security frameworks is identity-based access control that grants least-privilege access for a device or user, restricting them from accessing resources not required to complete their tasks.

AI 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 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 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.

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 6 (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.

Standard Features

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.

Standards Based Technologies

HPE Aruba Networking 600R Series Remote Access Points 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

Summary

HPE Aruba Networking 600R Series Remote Access Points are designed to make remote work better and provide seamless connectivity for small branches by taking advantage of the 6 GHz band. With Wi-Fi 6E coverage, IT can better support work-from-home employees using high-bandwidth, low-latency applications such as video conferencing, telehealth, high-definition video, and AR/VR. For greater reliability, a cellular module can be added for high-speed backup connectivity.

Configuration Information

BTO Models

605R Remote Access Points

| Rule # | Description | SKU |
|--------|---|------------|
| 1, 7 | HPE Aruba Networking AP-605R (RW) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | R8N09A |
| | HPE Aruba Networking AP-605R (RW) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point NoLoc – No Power Cord | R8N09A#AC3 |
| 2, 7 | HPE Aruba Networking AP-605R (US) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | R8N10A |
| | HPE Aruba Networking AP-605R-US Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc – No Power Cord | R8N10A#AC3 |
| 3, 7 | HPE Aruba Networking AP-605R (IL) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | R8N07A |
| | HPE Aruba Networking AP-605R-IL Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc – No Power Cord | R8N07A#AC3 |
| 4, 7 | HPE Aruba Networking AP-605R (JP) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | R8N08A |
| | HPE Aruba Networking AP-605R-JP Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc – No Power Cord | R8N08A#AC3 |
| 5, 7 | HPE Aruba Networking AP-605R (EG) Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | R8N06A |
| | HPE Aruba Networking AP-605R-EG Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc – No Power Cord | R8N06A#AC3 |
| 7, 9 | HPE Aruba Networking AP-605R (ID) Dual Radio Tri Band 2x2 802.11ax Wi-Fi 6E Remote Access Point – Includes AC power adapter & cord | S5E04A |
| | HPE Aruba Networking AP-605R (ID) Dual Radio Tri Band 2x2 802.11ax Wi-Fi 6E Remote AP EU en – Indonesia | S5E04A#ABB |
| | HPE Aruba Networking AP-605R (ID) Dual Radio Tri Band 2x2 802.11ax Wi-Fi 6E Remote AP No Loc – No Power Cord | S5E04A#AC3 |

605R TAA Remote Access Points

| Rule# | Description | SKU |
|-------|--|--------|
| 1, 7 | HPE Aruba Networking AP-605R (RW) Dual Radio Tri Band 2x2 Wi-Fi 6E TAA Remote Access Point – Includes AC power adapter & cord | R8N14A |

Configuration Information

| | | |
|------|--|------------|
| | HPE Aruba Networking AP-605R (RW) TAA Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point NoLoc | R8N14A#AC3 |
| | – No Power Cord | |
| 2, 7 | HPE Aruba Networking AP-605R (USF1) TAA Dual Radio Tri Band 2x2 Wi-Fi 6E Remote Access Point | R8N15A |
| | – Includes AC power adapter & cord | |
| | HPE Aruba Networking AP-605R-USF1 TAA Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc | R8N15A#AC3 |
| | – No Power Cord | |
| 3, 7 | HPE Aruba Networking AP-605R (ILF1) Dual Radio Tri Band 2x2 Wi-Fi 6E TAA Remote Access Point | R8N12A |
| | – Includes AC power adapter & cord | |
| | HPE Aruba Networking AP-605R-ILF1 TAA Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc | R8N12A#AC3 |
| | – No Power Cord | |
| 4, 7 | HPE Aruba Networking AP-605R-JPF1 Wi-Fi 6E Dual-radio Tri-band 2x2 TAA-compliant Remote Access Point | R8N13A |
| | – Includes AC power adapter & cord | |
| | HPE Aruba Networking AP-605R-JPF1 TAA Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc | R8N13A#AC3 |
| | – No Power Cord | |
| 5, 7 | HPE Aruba Networking AP-605R (EGF1) Dual Radio Tri Band 2x2 Wi-Fi 6E TAA Remote Access Point | R8N11A |
| | – Includes AC power adapter & cord | |
| | HPE Aruba Networking AP-605R-EGF1 TAA Dual Radio Tri-band 2x2 Wi-Fi 6E Remote Access Point NoLoc | R8N11A#AC3 |
| | – No Power Cord | |

605R12 Remote Access Points

| Rule# | Description | SKU |
|-------|--|--------|
| 6 | HPE Aruba Networking AP-605R12-EU Wi-Fi 6E CAT12 LTE Dual-radio Tri-band 2x2 Remote AP | R8N19A |
| | – Includes AC power adapter (with Europe AC cord) | |
| 2 | HPE Aruba Networking AP-605R12 (US) Dual Radio Tri Band 2x2 Wi-Fi 6E CAT12 LTE Remote AP | R8N20A |
| | – Includes AC power adapter (with North America AC cord) | |

Configuration Rules

| Rule# | Description |
|-------|---|
| 1 | Available everywhere except US, Puerto Rico, Israel, Japan and Egypt. |
| 2 | Available in US and Puerto Rico only |
| 3 | Available in Israel only |
| 4 | Available in Japan only |
| 5 | Available in Egypt only |
| 6 | Available in European Union only |

Configuration Information

- 7 Localization for Wall Power Cord required (refer to HPN Localization Menu)
- 8 Available everywhere except US, Israel, Japan, and Egypt. Partners must have an SOT (Cross border agreement).
- 9 Available in Indonesia only. Partners must have an SOT (Cross border agreement).
- Notes:**
- OCA Only: Required Custom Choice (Min1/Max1)
Drop down under power supply should offer the following options and results:
No Power Cord - AC3 Option
 - OCA Only Model Selection Form - HPE Offering > HPE Aruba Networking > Access Points > Hospitality / Remote: HPE Aruba Networking 600R Series RAPs

Modules

Cellular Radio Module

| Rule# | Description | SKU |
|-------|---|--------|
| | HPE Aruba Networking AP-605CM12 CAT12 LTE Cellular Module | R8N34A |

Power Options

| Rule# | Description | SKU |
|-------|---|--------|
| | HPE Aruba Networking AP-AC2-48C 48 V/50 W AC/DC Desktop Style Power Adapter with 1.35/3.5mm Connector | R3K01A |
| | – Add AC power cord | |

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

Accessories

Other Accessories

Std (Min 0 // max 99) User Selection (min 0 // max 99)

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

Configuration Information

Software

Central

Cloud Services / Access Point Foundation Subscriptions

| | | |
|------|---|----------|
| 2, 8 | HPE Aruba Networking Central AP Foundation 1-year Subscription E-STU | Q9Y58AAE |
| 2, 8 | HPE Aruba Networking Central AP Foundation 3 year Subscription E-STU | Q9Y59AAE |
| 2, 8 | HPE Aruba Networking Central AP Foundation 5 year Subscription E-STU | Q9Y60AAE |
| 2, 8 | HPE Aruba Networking Central AP Foundation 7 year Subscription E-STU | Q9Y61AAE |
| 2, 8 | HPE Aruba Networking Central AP Foundation 10 year Subscription E-STU | Q9Y62AAE |

Cloud Services / Access Point Advanced Subscriptions

| | | |
|------|---|----------|
| 2, 8 | HPE Aruba Networking Central AP Advanced 1 year Subscription E-STU | Q9Y63AAE |
| 2, 8 | HPE Aruba Networking Central AP Advanced 3 year Subscription E-STU | Q9Y64AAE |
| 2, 8 | HPE Aruba Networking Central AP Advanced 5 year Subscription E-STU | Q9Y65AAE |
| 2, 8 | HPE Aruba Networking Central AP Advanced 7 year Subscription E-STU | Q9Y66AAE |
| 2, 8 | HPE Aruba Networking Central AP Advanced 10 year Subscription E-STU | Q9Y67AAE |

On-Prem Services / Access Point Foundation Subscriptions

| | | |
|------|---|----------|
| 3, 8 | HPE Aruba Networking Central on Prem AP Foundation 1 year Subscription E-STU | R6U63AAE |
| 3, 8 | HPE Aruba Networking Central on Prem AP Foundation 3 year Subscription E-STU | R6U64AAE |
| 3, 8 | HPE Aruba Networking Central on Prem AP Foundation 5 year Subscription E-STU | R6U65AAE |
| 3, 8 | HPE Aruba Networking Central on Prem AP Foundation 7 year Subscription E-STU | R6U66AAE |
| 3, 8 | HPE Aruba Networking Central on Prem AP Foundation 10 year Subscription E-STU | R6U67AAE |

Configuration Rules

| Rule # | Description | SKU |
|--------|---|--------|
| 2 | Add the Central Cloud SKUs to the Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services | |
| 3 | Add the Central On-Prem SKUs to the Catalog as Standalone: HPE Aruba Networking > Network Management > Central > On-Prem Services | |
| 6 | Add the Central FedRAMP Service SKUs to the Catalog as Standalone: HPE Aruba Networking > Network Management > Central > FedRAMP | |
| 8 | For OCA: When configuring the following AP 10-Pack, selection condition for this subscription should be 0 (default) or 10 | |
| | HPE Aruba Networking AP-503 (RW) 10-Pack Dual Radio 2x2:2 Wi-Fi 6 Campus Access Point | S1E83A |
| | HPE Aruba Networking AP-503 (US) 10-Pack Dual Radio 2x2:2 Wi-Fi 6 Campus Access Point | S1E84A |

As-a-Service

Cloud Services / Access Point Foundation Subscriptions

| | | |
|---|--|----------|
| 7 | HPE Aruba Networking Central AP Foundation 1 year Subscription SaaS | Q9Y58AAS |
| 7 | HPE Aruba Networking Central AP Foundation 3 year Subscription SaaS | Q9Y59AAS |
| 7 | HPE Aruba Networking Central AP Foundation 5 year Subscription SaaS | Q9Y60AAS |
| 7 | HPE Aruba Networking Central AP Foundation 7 year Subscription SaaS | Q9Y61AAS |
| 7 | HPE Aruba Networking Central AP Foundation 10 year Subscription SaaS | Q9Y62AAS |

Configuration Information

| Cloud Services / Access Point Advanced Subscriptions | | |
|--|--|----------|
| 7 | HPE Aruba Networking Central AP Advanced 1 year Subscription SaaS | Q9Y63AAS |
| 7 | HPE Aruba Networking Central AP Advanced 3 year Subscription SaaS | Q9Y64AAS |
| 7 | HPE Aruba Networking Central AP Advanced 5 year Subscription SaaS | Q9Y65AAS |
| 7 | HPE Aruba Networking Central AP Advanced 7 year Subscription SaaS | Q9Y66AAS |
| 7 | HPE Aruba Networking Central AP Advanced 10 year Subscription SaaS | Q9Y67AAS |

| Configuration Rules | | |
|---------------------|--|-----|
| Rule# | Description | SKU |
| 7 | For IRIS reference only. No action required for OCX and Clic | |

Technical Specifications

Hardware Variants

- AP-605R:
remote access point platform (desk mount, wired + wireless access), integrated antennas
- AP-605R12:
AP-605R with pre-installed AP-605CM12 CAT12 LTE radio module

Wi-Fi Radio Specifications

- AP type: Indoor, tri-radio, 2.4 GHz, 5 GHz and 6GHz (dual concurrent) 802.11ax 2x2 MIMO
- 2.4 GHz radio: Two spatial stream Single User (SU) MIMO for up to 574 Mbps wireless data rate with 2SS HE40 802.11ax client devices (287 Mbps for HE20)
- 5 GHz radio: Two spatial stream Single User (SU) MIMO for up to 1.2 Gbps wireless data rate with 2SS HE80 802.11ax client devices
- 6 GHz radio: Two spatial stream Single User (SU) MIMO for up to 2.4 Gbps 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 4 for the 6 GHz radio)
- Supported frequency bands (country-specific restrictions apply)* :
 - 2.400 to 2.4835 GHz ISM
 - 5.150 to 5.250 GHz U-NII-1
 - 5.250 to 5.350 GHz U-NII-2A
 - 5.470 to 5.725 GHz U-NII-2C
 - 5.725 to 5.850 GHz U-NII-3/ISM
 - 5.850 to 5.895 GHz U-NII-4
 - 5.925 to 6.425 GHz U-NII-5
 - 6.425 to 6.525 GHz U-NII-6
 - 6.525 to 6.875 GHz U-NII-7
 - 6.875 to 7.125 GHz U-NII-8
- Available bands and channels: Dependent on configured regulatory domain (country)
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum in the 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)

Technical Specifications

- 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 (2.4 GHz): 3.6 to 574 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE40)
- 802.11ax (5 GHz): 3.6 to 1,201 (MCS0 to MCS11, NSS = 1 to 2, HE20 to HE80)
- 802.11ax (6 GHz): 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 (2.4 GHz / 5 GHz / 6 GHz): +21 dBm (18dBm per chain)

Notes: Conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain.
- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance
- Space-time block coding (STBC) for increased range and improved reception
- Low-density parity check (LDPC) for high-efficiency error correction and increased throughput
- Transmit beam-forming (TxBF) for increased signal reliability and range
- 802.11ax Target Wait Time (TWT) to support low-power client devices
- 802.11mc Fine Timing Measurement (FTM) for precision distance ranging

Notes: When configured for concurrent operation in 5 GHz and 6 GHz (only), the U-NII-4 band will be disabled.

Wi-Fi Antennas

- AP-605R: Integrated omni-directional antennas for 2x2 MIMO with peak antenna gain of 5.5 dBi in 2.4 GHz, 5.5 dBi in 5 GHz and 5.5 dBi in 6GHz. Built-in antennas are optimized for horizontal desk mounted orientation of the access points:
 - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 4.4dBi in 2.4 GHz, 4.7dBi in 5 GHz and 4.7dBi in 6 GHz.

Other interfaces and features

- Uplink (E0): Ethernet wired network port (RJ-45)
 - Auto-sensing link speed (10/100/1000BASE-T) and MDI/MDX
 - 802.3az Energy Efficient Ethernet (EEE)
- Up-/downlink (E1): 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)
- Downlink (E1-E3): Ethernet wired network ports (RJ-45)
 - Auto-sensing link speed (10/100/1000BASE-T) and MDI/MDX
 - 802.3az Energy Efficient Ethernet (EEE)
 - E4: POE-PSE: 802.3 af POE output (15.4 W max)
- DC power interface
 - Circular: 48Vdc (nominal, +/- 5%), accepts 1.35mm/3.5mm center-positive circular plug with 9.5mm

Technical Specifications

length

- USB 2.0 host interface (Type A connector)
 - Capable of sourcing up to 1A / 5 W to an attached device
- Cellular radio module interface (accessible after removing the back cover)
 - Proprietary module interface, intended for 4G and 5G cellular radios
 - Capable of sourcing up to 7 W of power to such a module
- Bluetooth Low Energy (BLE5.0) and Zigbee (802.15.4) radio
 - BLE: up to 3dBm transmit power (class 1) and -100dBm receive sensitivity (125 kbps)
 - Zigbee: up to 3dBm transmit power and -95dBm receive sensitivity (250 kbps)
 - Integrated omnidirectional antenna with roughly 30 to 40 degrees downtilt and peak gain of 5.0dBi
- GNSS L1 (1575.42 MHz) receiver supporting GPS, Galileo, GLONASS and BeiDou signals
 - Receive sensitivity: -162dBm (tracking)
 - Integrated omnidirectional antenna with roughly 30 to 40 degrees downtilt and peak gain of 2.7dBi
- 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
- Backlit LCD status display with scroll button
 - AP and cellular module status, firmware versions, etc.
 - Key configuration info
 - Interface status (Ethernet, WLAN, USB, cellular)
 - Connected device info
- Visual system status indicator (multi-color LED)
- 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

Power Sources and Power Consumption

- The access point is powered using a compatible DC power source
 - The access point ships with a compatible 48 V/5 W DC power adapter
- Maximum (worst-case) power consumption: 40 W
 - Without cellular module and no power drawn from USB or E3 port (PSE): 14.5 W
 - Worst-case adder when sourcing 5 W to an attached USB device: 5.7 W
 - Worst-case adder when sourcing 15.4 W to an attached POE device: 16.0 W
 - Worst-case adder when using AP-605CM12 module: 3.8 W
- Maximum (worst-case) power consumption in idle mode: 4.9 W.
 - This assumes no power is supplied to any attached module or device

AP-605CM12 LTE Radio Module Specifications (optional or pre-installed)

- Global support for all major carriers
 - High speed CAT12 LTE connectivity:
 - FDD: Max 480 Mbps (DL)/150Mbps (UL)
 - TDD: Max 430 Mbps (DL)/90Mbps (UL)
-

Technical Specifications

Supported Bands:

- LTE FDD: B1/B2/B3/B4/B5/B7/B8/B9/B12/B13/B14/B17/B18/B19/B20/B21/B25/B26/B28/B30/B66
 - LTE TDD: B38/39/B40/B41
 - WCDMA: B1/B2/B3/B4/B5/B8/B9/B19
 - Carrier aggregation:
 - DL 2 CA: Inter-band CA/Intra-band CA
 - DL 3 CA: Inter-band CA/Intra-band CA
 - Antennas: main and directional, omnidirectional high-gain dipole antennas
 - Carrier certifications: Verizon, AT&T, T-Mobile, Sprint, Rogers, Telus, Vodafone, TIM, Deutsche Telekom, British Telecom, Telefónica, NTT DOCOMO, SoftBank, KDDI, Telstra
 - Max (worst-case) power consumption: 3.3 W
-

Mounting Details

The access points are intended to be desk mounted; the integrated antennas are optimized for that.

Mechanical Specifications

- Dimensions/weight (AP-605R; unit):
 - 225 mm (W) x 150 mm (D) x 40 mm (H)
 - 900g
 - Dimensions/weight (AP-605R12; unit, LTE antennas folded):
 - 225 mm (W) x 180 mm (D) x 67 mm (H)
 - 1080 g
 - Dimensions/weight (AP-605R; shipping):
 - 373 mm (W) x 309 mm (D) x 107 mm (H)
 - 1935 g
 - Dimensions/weight (AP-605R12; shipping):
 - 373 mm (W) x 309 mm (D) x 107 mm (H)
 - 2110 g
-

Environmental Specifications

- Operating conditions
 - Temperature: 0°C to +40°C/ +32°F to +104°F
 - Relative humidity: 5% to 95%
 - ETS 300 019 class 3.2 environments
 - Access points 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

Technical Specifications

- 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) at +25C ambient operating temperature:

- AP-605R: 697khrs (80yrs)
 - AP-605CM12: 4.5Mhrs (514yrs)
 - AP-605R12: 605khrs (69yrs)
-

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
- 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

- AP-605R Access Points (all models): APINR605
 - AP-605CM12 CAT12 LTE Module: APINCM12
-

Certifications

- Wi-Fi Alliance (WFA): Wi-Fi CERTIFIED a, b, g, n, ac
 - Wi-Fi CERTIFIED 6E (ax, 6 GHz)
 - WPA, WPA2 and WPA3 – Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE)
 - WMM, WMM-PS, Wi-Fi Agile Multiband
 - Bluetooth SIG
 - Ethernet Alliance (POE, PSE device, class 3)
-

Warranty

HPE Aruba Networking's hardware limited lifetime warranty.

Technical Specifications

Minimum Operating System Software

HPE Aruba Networking Wireless Operating System 10.5.0.0

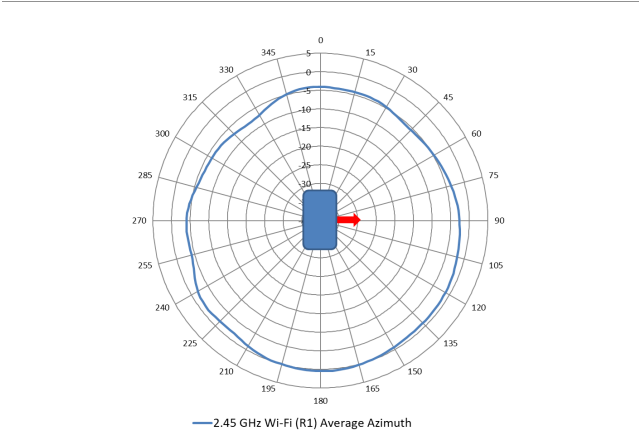
| RF Performance Table | | |
|---------------------------------------|--|---|
| Band, rate | Maximum transmit power (dBm) per transmit chain | Receiver sensitivity (dBm) per receive chain |
| 2.4 GHz, 802.11b | | |
| 1Mbps | 18.0 | -95.0 |
| 11Mbps | 18.0 | -88.0 |
| 2.4 GHz, 802.11g | | |
| 6Mbps | 18.0 | -93.0 |
| 54Mbps | 16.0 | -75.0 |
| 2.4 GHz, 802.11n HT20 | | |
| MCS0 | 18.0 | -92.0 |
| MCS7 | 16.0 | -73.0 |
| 2.4 GHz, 802.11ax HE20 | | |
| MCS0 | 18.0 | -91.0 |
| MCS11 | 12.0 | -61.0 |
| 5 GHz, 802.11a | | |
| 6Mbps | 18.0 | -92.0 |
| 54Mbps | 16.0 | -74.0 |
| 5 GHz, 802.11n HT20 / HT40 | | |
| MCS0 | 18.0 / 18.0 | -92.0 / -89.0 |
| MCS7 | 16.0 / 16.0 | -72.0 / -69.0 |
| 5 GHz, 802.11ac VHT20 / VHT40 / VHT80 | | |
| MCS0 | 18.0 / 18.0 / 18.0 | -92.0 / -89.0 / -86.0 |
| MCS9 | 14.0 / 14.0 / 14.0 | -67.0 / -64.0 / -61.0 |
| 5 GHz, 802.11ax HE20 / HE40 / HE80 | | |
| MCS0 | 18.0 / 18.0 / 18.0 | -91.0 / -89.0 / -86.0 |
| MCS11 | 12.0 / 12.0 / 12.0 | -61.0 / -58.0 / -54.0 |

Technical Specifications

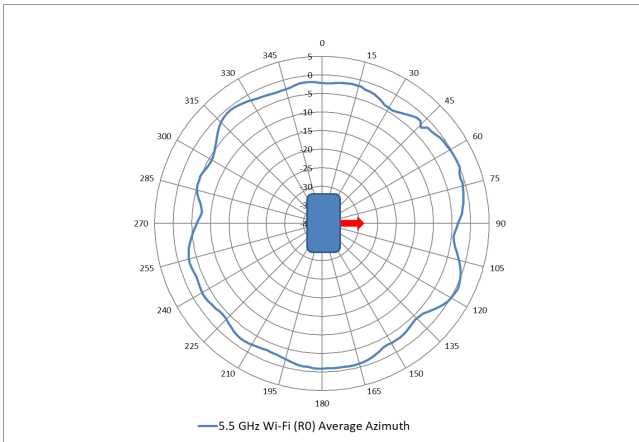
Antenna Patterns

Horizontal Planes (top view)

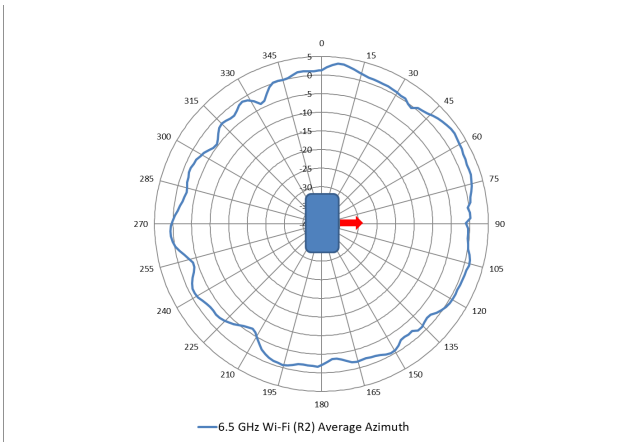
Showing azimuth (0°) patterns (averaged patterns for all applicable antennas)



2.45 GHz Wi-Fi antenna patterns (horizontal) for both 2.4 GHz + 5 GHz mode and 2.4 GHz + 6 GHz mode



5.5 GHz Wi-Fi antenna patterns (horizontal)

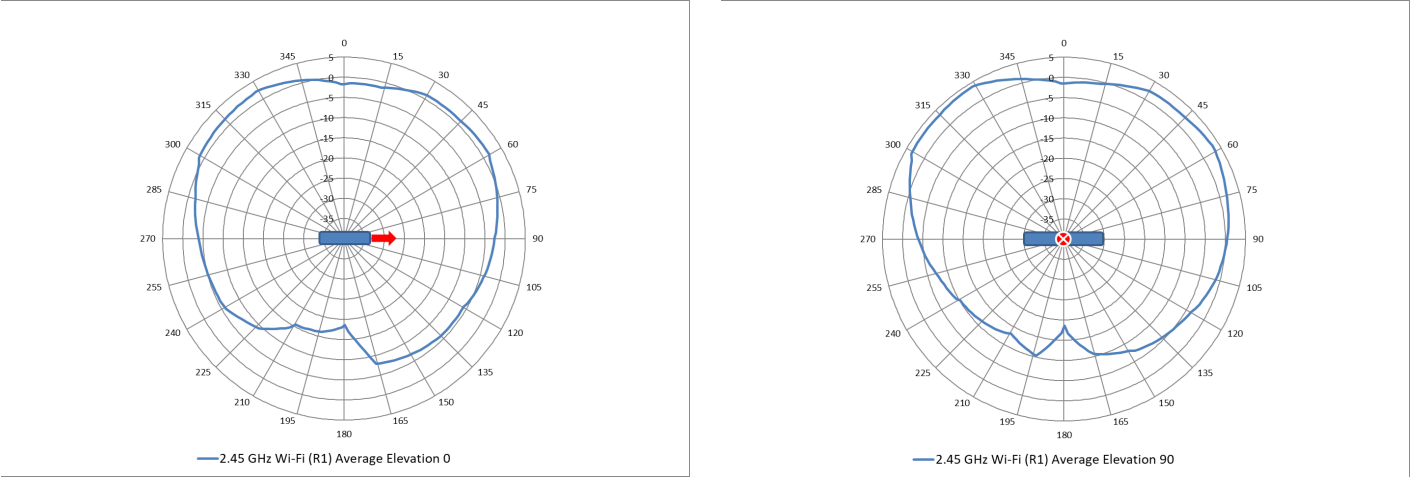


6.5 GHz Wi-Fi antenna patterns (horizontal)

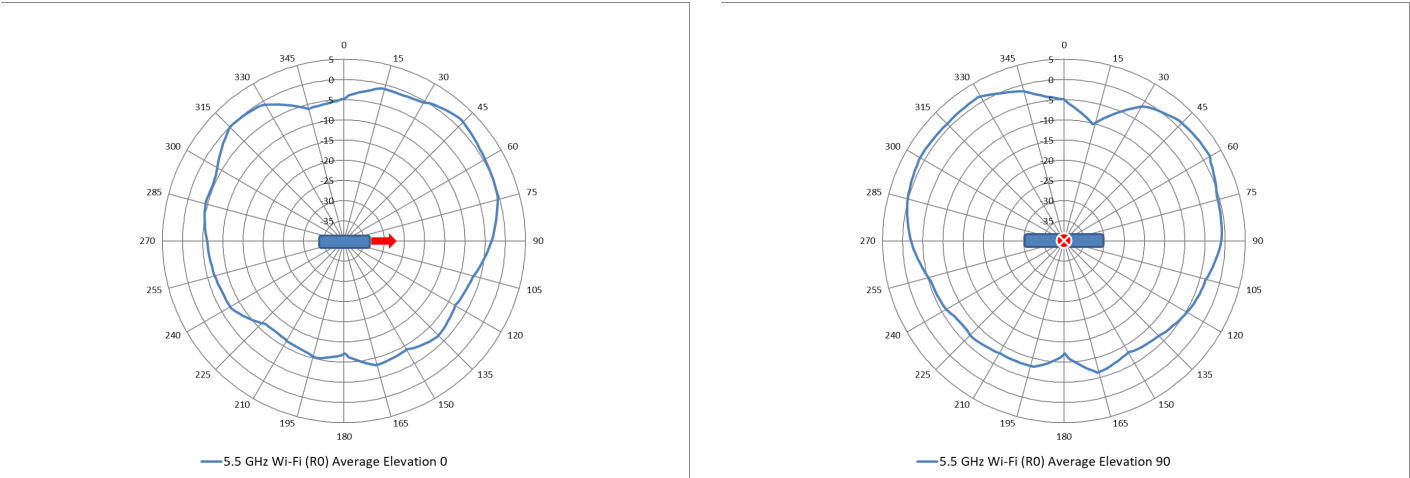
Technical Specifications

Vertical (elevation) Planes (side view, access point facing up)

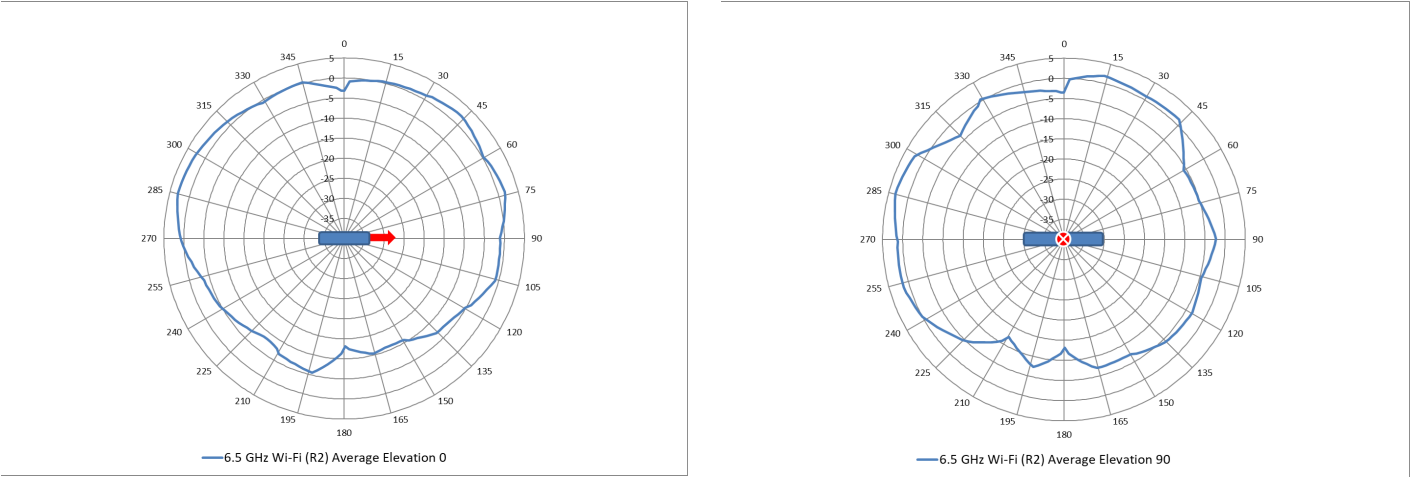
Showing side view with AP rotated 0° and 90° (averaged patterns for all applicable antennas)



2.45 GHz Wi-Fi antennas patterns (vertical) for both 2.4 GHz + 5 GHz mode and 2.4 GHz + 6 GHz mode



5.5 GHz Wi-Fi antenna patterns (vertical)



6.5 GHz Wi-Fi antennas patterns (vertical)

Summary of Changes

| Date | Version History | Action | Description of Change |
|-------------|---------------------------|---------|---|
| 03-Nov-2025 | Version 7 | Changed | Overview, Standard Features, and Configuration Information sections were updated. |
| 28-Jul-2025 | Version 6 | Changed | Update survey link. |
| 07-Apr-2025 | Version 5 | Changed | Overview, Standard Features, Configuration Information, and Technical Specifications sections were updated. |
| 16-Dec-2024 | Version 4 | Changed | Standard Features and Technical Specifications sections were updated. |
| 04-Dec-2023 | Version 3 | Changed | Series name was updated. |
| 07-Aug-2023 | Version 2 | Changed | Configuration Information section was updated. |
| 10-Jul-2023 | Version 1 | New | New QuickSpecs |

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