Overview

HPE Aruba Networking 630 Series Campus Access Points

Fast, resilient, and secure Wi-Fi 6E connectivity

For enterprises who need more wireless capacity and wider channels, HPE Aruba Networking 630 Series Campus Access Points are designed to take advantage of the 6 GHz band via three dedicated radios. By using the 6 GHz band, capacity is more than doubled – so you can meet growing demand due to bandwidth-hungry video, increasing numbers of client and IoT devices and growth in cloud. Unique to HPE Aruba Networking, the HPE Aruba Networking 630 Series Campus Access Points includes ultra tri-band filtering and dual 2.5 Gbps ethernet ports to eliminate coverage gaps, provide greater resiliency, and deliver fast, secure connectivity

HPE Aruba Networking 630 Series Campus Access Points

Key Features

- 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 3.9 Gbps maximum aggregate data rate.
- Up to seven 160 MHz channels in 6 GHz support low-latency, bandwidth-hungry applications like high-definition video and augmented reality/virtual reality applications.
- Unique ultra-triband filtering enables 5 GHz and 6 GHz to operate without restrictions or interference.
- High availability with 2.5 Gbps dual ethernets port for hitless failover of ethernet and power.
- Built in GPS receivers and intelligent software enable APs to self-locate and act as reference points for accurate indoor location measurements.
- Offered as optional eco-friendly 5-packs

Standard Features

More Capacity and Wider Channels

The HPE Aruba Networking 630 Series Campus Access Points are designed to take advantage of the 6 GHz band, which translates into far greater speeds, wider channels for multi-gigabit traffic, and less interference. It delivers 3.9 Gbps maximum aggregate data rates Tri-radio, 2x2:2 MIMO in all three bands (3.9 Gbps aggregate peak).

Band	Channel Size	Maximum throughput
6GHz	160MHz	2.4Gbps
5GHz	80MHz	1.2Gbps
2.4GHz	20MHz	3.9 Gbps

Advantages of 6GHz

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 artificial 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

The HPE Aruba Networking 630 Series Campus 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. The 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 630 Series Campus Access Points include HPE Aruba Networking's 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 the 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 take full use of available spectrum without
creating coverage gaps or islands.

Business Continuity

The Series 630 APs provide high availability with two HPE Smart Rate ethernet ports for hitless failover for both data and power. Configurable to 1 or 2.5 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 630 Series Campus Access Points are set up to automatically update regulatory rules once 6E regulations have been approved and certified.

Extend the Benefits of Wi-Fi 6

The HPE Aruba Networking 630 Series Campus Access Points are based on the 802.11ax standard, which means that all its efficiency and security enhancements are also available on the 6 GHz band. Features include Orthogonal frequency-division multiple access (OFDMA), bi-directional multi-user MIMO as well as other capabilities built into HPE Aruba Networking's Wi-Fi 6 access points.

Advantages of OFDMA

This capability allows HPE Aruba Networking's 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.

Standard Features

Wi-Fi Optimization

Client optimization

HPE Aruba Networking's patented AI-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.

Automated Wi-Fi radio frequency management

To optimize the user experience and provide greater stability, Aruba AirMatch allows organization 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.

Application Assurance

With Air Slice, organizations can provide application assurance to their users that goes beyond the traditional capabilities of airtime fairness. After the SLAs are configured, Air Slice monitors network usage, automatically allocates radio resources, and dynamically adjusts radio resources as new users connect and applications sessions begin or end.

HPE Aruba Networking Advanced Cellular Coexistence (ACC)

Unique to HPE Aruba Networking, 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.

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 6E APs and update switching and power at a later if needed based on their actual usage. D

APS as an IoT Platform

The HPE Aruba Networking 630 Series Campus Access Points includes 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 allows organizations to leverage the HPE Aruba Networking 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 airtime contention with other clients, which is ideal for IoT.

HPE Aruba Networking Secure Infrastructure

The HPE Aruba Networking 630 Series Campus Access Points includes build-security capabilities such as:

WPA3 and Enhanced Open

Support for stronger encryption and authentication is provided via the latest version of WPA for enterpriseprotected networks. Enhanced Open offers seamless new protection for users connecting to open networks where each session is automatically encrypted to protect user passwords and data on guest networks.

WPA2-MPSK

MPSK enables simpler passkey management for WPA2 devices – should the Wi-Fi password on one device or device type change, no additional changes are needed for other devices. This capability requires ClearPass Policy Manager

Standard Features

Simple and Secure Access

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

Seamless Handoffs to Cellular

Built on the technical foundations of Passpoint® and Wi-Fi Calling, 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.

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 or on premises solutions for any campus, branch, or remote work environment. As the management and orchestration console for HPE Aruba Networking ESP (Edge Services Platform), 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

Summary

HPE Aruba Networking 630 Series Campus Access Points are designed to take advantage of the 6 GHz band using three radios for comprehensive tri-band coverage to meet the growing demands of Wi-Fi due to increased use of video, growth in client and IoT devices, and expanded use of cloud. With a maximum aggregate 3.9 Gbps data rate for higher throughput and faster speeds for indoor use, the HPE Aruba Networking 630 Series Campus Access Points delivers added capacity, wider channels, hitless failover, and less interference between the 5 GHz and 6 GHz bands.

Configuration Information

BTO Models

Rule #	Description	SKU
Notes:	OCA Only Model Selection Form HPE Offering > HPE Aruba Networking > Wireless > Access Points > Campus: HPE Aruba Networking 630 Series Campus Access Points	
	AP-634 External Antenna Campus Access Points	
	HPE Aruba Networking AP-634 (RW) Tri-radio 2x2:2 Wi-Fi 6E External Antennas Campus AP	S1G49A
	HPE Aruba Networking AP-634 (US) Tri-radio 2x2:2 Wi-Fi 6E External Antennas Campus AP	S1G50A
	AP-634 External Antenna Campus Access Points – TAA Models	
	HPE Aruba Networking AP-634 (RWF1) Tri-radio 2x2:2 Wi-Fi 6E External Antennas TAA Campus AP	S1G51A
	HPE Aruba Networking AP-634 (USF1) Tri-radio 2x2:2 Wi-Fi 6E External Antennas TAA Campus AP	S1G52A
Notes:	– Add Mount Kit, Antenna(s) – Regulatory Considerations for AP-634 ○ The AP-634 will only be offered in countries where there's an existing or clear and defined path to allow operation of 6GHz radios with external connectorized antennas, either as a Low-Power Indoor (LPI) or Standard Power (SP) product. Please contact your HPE Aruba Networking representative to confirm (existing or planned) availability for the country where the AP will be deployed. ○ Also, 6GHz support on AP-634 will only be enabled in AOS/Instant 8.12 and AOS 10.7.	
	635 Internal Antenna Access Points	
	Aruba AP-635 (EG) Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J24A
	Aruba AP-635 (IL) Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J25A
	Aruba AP-635 (JP) Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J26A
7	Aruba AP-635 (RW) Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J27A
8	Aruba AP-635 (US) Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J28A
	635 Internal Antenna Access Points - TAA Models	
	Aruba AP-635 (EG) TAA Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J29A
	Aruba AP-635 (IL) TAA Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J30A
	Aruba AP-635 (JP) TAA Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J31A
	Aruba AP-635 (RW) TAA Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J32A
	Aruba AP-635 (US) TAA Tri-radio 2x2:2 802.11ax Wi-Fi 6E Internal Antennas Campus AP	R7J33A
	Configuration Rules	
Rule#	**Description**	**SKU**
7	If the ordered qty of this AP is greater than or equal to 5, then the default will be the following Eco-Friendly 5-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs	
	HPE Aruba Networking AP-635 (RW) Tri Radio 2x2 Wi-Fi 6E Internal Antennas 5-pack Campus Access Point	S3J35A
	Display **Notes:** If ordering greater than or equal to qty5 of this AP, consider ordering the Eco-Friendly 5-Packs(S1J35A). Please revert back to single pack if individual sale is desired.	
8	If the ordered qty of this AP is greater than or equal to 5, then the default will be the following Eco-Friendly 5-Pack(s) with the remainder as individual packs. Allow user to change the full quantity easily back to individual packs;	
	HPE Aruba Networking AP-635 (US) Tri Radio 2x2 Wi-Fi 6E Internal Antennas 5-pack Campus Access Point	S3J36A
	Display **Notes:** If ordering greater than or equal to qty5 of this AP, consider ordering the Eco-Friendly 5-Packs(S1J36A). Please revert back to single pack if individual sale is desired.	
Notes:	Add Mount Kit	

Configuration Information

Mount Accessories

AP Mount Kits

For 630 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Rule #	Description	SKU
	AP-MNT-A Campus AP mount bracket kit (individual) type A: suspended ceiling rail flat 9/16	R3J15A
*	HPE Aruba Networking AP-MNT-MP10-A Campus AP 10-Pack 9/16 Flat Ceiling Rail Mount Bracket Kit	JZ370A
	AP-MNT-B Campus AP mount bracket kit (individual) type B: suspended ceiling rail flat 15/16	R3J16A
*	HPE Aruba Networking AP-MNT-MP10-B Campus AP 10-Pack 15/16 Flat Ceiling Rail Mount Bracket Kit	Q9G69A
*	HPE Aruba Networking AP-MNT-MP10-B1 Campus AP 10-Pack 15/16 Adj Flat Ceiling Rail Mount Bracket Kit	R6T34A
	AP-MNT-C Campus AP mount bracket kit (individual) type C: suspended ceiling rail profile 9/16	R3J17A
*	HPE Aruba Networking AP-MNT-MP10-C Campus AP 10-Pack Profile 9/16 Ceiling Rail Mount Bracket Kit	Q9G70A
	AP-MNT-D Campus AP mount bracket kit (individual) type D: solid surface	R3J18A
*	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	Q9G71A
	AP-MNT-E Campus AP mount bracket kit (individual) type E: wall-box	R3J19A
*	HPE Aruba Networking AP-MNT-MP10-E Campus AP 10-Pack Wall-box Mount Bracket Kit	R1C72A
	HPE Aruba Networking AP-MNT-U Campus Access Point Type U Universal Mount Bracket Kit	S4K79A
*	HPE Aruba Networking AP-MNT-MP10-U Campus AP Universal Mount Bracket Kit (10-pack)	S0J40A
*	AP-MNT-MP10-X Campus AP mount adapter kit (10-pack)	R3T20A

Configuration Rules

Rule #	Description

Notes:

- *Kit contains mounts for 10 access points
- Access Points do not include a Mount. Qty 1 Mount kits should be selected.

Antennas

Antennas

For AP-634 Std (Min 0 // max 1) User Selection (min 0 // max 1)

1	HPE Aruba Networking AP-ANT-311 Direct-Mount RP-SMA Tri-Band 1x1 Omni Dipole Antenna	S1F79A
1	HPE Aruba Networking AP-ANT-312 Direct-Mount RP-SMA Tri-Band 1x1 Low-Profile Omni Dipole Antenna	S1F80A
1	HPE Aruba Networking AP-ANT-313 Cabled RP-SMA Tri-Band 1x1 Omni Dipole Antenna	S1F81A
3	HPE Aruba Networking AP-ANT-340 Cabled RP-SMA Tri-Band 4x4 Downtilt Omni Ceiling Antenna	S1F82A
3	HPE Aruba Networking AP-ANT-345 Cabled RP-SMA Tri-Band 4x4 Medium Gain Directional Panel Antenna	S1F83A
3	HPE Aruba Networking AP-ANT-348 Cabled RP-SMA Tri-Band 4x4 High Gain Directional Panel Antenna	S1F84A
2	HPE Aruba Networking AP-ANT-320 Cabled RP-SMA Tri-Band 2x2 Downtilt Omni Ceiling Antenna	S1F85A
2	HPE Aruba Networking AP-ANT-325 Cabled RP-SMA Tri-Band 2x2 Medium Gain Directional Panel Antenna	S1F86A
2	HPE Aruba Networking AP-ANT-328 Cabled RP-SMA Tri-Band 2x2 High Gain Directional Panel Antenna	S1F87A

Configuration Rules

Rule#	Description	SKU
1	Must select Qty 0 or Qty 4	
2	Must select Qty 0 or Qty 2	
3	Must select Qty 0 or Qty 1	

Notes:

- AP-ANT-311, and AP-ANT-312 are usually direct connect to the chassis
- AP-ANT-345, AP-ANT-348, AP-ANT-325 and AP-ANT-328 ship with hardware for flush mount to a flat surface
- AP-634 has two sets of 2x RPSMA female connectors, with 2.4GHz and 5GHz on one set and 6GHz on the other. All antennas are tri-band to avoid confusion.

Configuration Information

Antenna Mount Kits

For AP-634 Series Std (Min 0 // max 2) User Selection (min 0 // max 2)

1	HPE Aruba Networking AP-ANT-MNT-U Universal AZ/EL Adjustable Antenna Pole Wall Mount Kit	S1J09A

Configuration Rules

Rule#	Description	SKU
1	Only compatible with S1F83A, S1F84A, S1F86A and S1F87A	

Power Options

Power Options

For 630 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Rule #	Description	SKU
1	AP-AC2-12B 12V/48W AC/DC desktop style power adapter with 2.1/5.5mm connector	R3K00A
	• Add AC power cord	
1	AP-POE-ATSR 1-Port Smart Rate 802.3at 30W midspan injector	R6P67A
	• Add AC power cord	
	• USB port disabled (when IPM is disabled)	
1	AP-POE-BTSR 1-Port Smart Rate 802.3bt 60W midspan injector	R1C73A
	• Add AC power cord	
1	HPE Aruba Networking AP-POE-BT10 1-port 10G 60W Midspan 802.3bt PoE Injector	S3J26A
	• Add AC power cord	

Configuration Rules

Rule #	Description
1	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 Menu
Notes:	Most devices are PoE powered from switch so these are optional

Accessories

Snap-on Covers

For 630 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Rule #	Description	SKU
	Aruba AP-635-CVR-20 20-pack White Non-glossy Snap-on Covers for AP-635	R7J34A
Notes:	– Kit contains covers for 20 access points	
	– Kit contains 20 optional snap-on covers	

Other Accessories

For 630 Series Std (Min 0 // max 99) User Selection (min 0 // max 99)

Rule #	Description	SKU
	Aruba AP-CBL-EXT10 10-pack CAT6A Ethernet Extension Cables	R8L34A
Notes:	10-pack Extension Cables	
	AP-CBL-SERU Micro-USB TTL3.3V to USB2.0 AP Console Adapter Cable	JY728A
Notes:	Drivers available on the HPE Aruba Networking Support Center	
	AP-MOD-SERU Micro-USB TTL3.3V to RJ45 RS232 AP Console Adapter Module	R6Q99A
	Aruba AP-USB-ZB External USB based Dongle with Zigbee and BLE for AP	R2X45A
Notes:	Single USB dongle	
	Aruba AP-USB-ZB 10-pk External USB based Dongle with Zigbee and BLE for AP	R2Y09A
Notes:	10-pack USB dongle	
	Aruba AP-USB-ZB 50-pk External USB based Dongle with Zigbee and BLE for AP	R2Y10A
Notes:	50-pack USB dongle	
	Aruba USB LTE Modem for use with Access Points and Gateways	R8F34A
	Aruba USB Extender Cable Kit for use with Aruba USB LTE Modem	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
	FedRAMP Services / Access Point Advanced Subscriptions	
6, 8	Aruba Central AP Advanced 1yr Subscription Government E-STU	R8K84AAE
6, 8	Aruba Central AP Advanced 3yr Subscription Government E-STU	R8K85AAE
6, 8	Aruba Central AP Advanced 5yr Subscription Government E-STU	R8K86AAE
6, 8	Aruba Central AP Advanced 7yr SubscriptionGovernment E-STU	R8K87AAE
6, 8	Aruba Central AP Advanced 10yr Subscription Government E-STU	R8K88AAE
	Configuration Rules	
Rule #	**Description**	**SKU**
2	Add the Central Cloud Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services	
3	Add the Central On-Prem Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > On-Prem Services	
6	Add the Central FedRAMP Service Skus to the HPE Aruba Networking 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) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack Campus Access Point	S1E83A
	HPE Aruba Networking AP-503 (US) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack 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

RF Performance Table		
Band, rate	**Maximum transmit power (dBm) per transmit chain**	**Receiver sensitivity (dBm) per receive chain**
2.4GHz, 802.11b		
1Mbps	18	-96
11Mbps	18	-88
2.4GHz, 802.11g		
6Mbps	18	-92
54Mbps	16	-74
2.4GHz, 802.11n HT20		
MCS0	18	-91
MCS7	16	-73.5
2.4GHz, 802.11ax HE20		
MCS0	18	-91
MCS11	14	-61
5GHz, 802.11a		
6Mbps	18	-88
54Mbps	16	-71.5
5GHz, 802.11n HT20/HT40		
MCS0	18/18	-88/-85
MCS7	15/15	-70/-67
5GHz, 802.11ac VHT20/VHT40/VHT80		
MCS0	18/18/18	-88.5/-85.5/82.5
MCS9	14/14/14	-64.5/-61.5/-58.5
5GHz, 802.11ax HE20/HE40/HE80/HE160		
MCS0	18/18/18	-88.5/-85.5/82.5
MCS11	14/14/14	-59/-56/-53
6 GHz, 802.11ax HE20/HE40/HE80/HE160		
MCS0	18/18/18/18	-90/-87/-84/-81
MCS11	14/14/14/14	-63.5/-60.5/-57.5/-54.5
MCS13	12/12/12/12	-56/-53/-50/-47

Hardware Variants

- AP-634: External antenna models
- AP-635: Internal antenna models Wi-Fi radio specifications

Wi-Fi Radio Specifications

- AP type: Indoor, tri radio, 2.4GHz, 5GHz and 6GHz (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
- 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 6GHz 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

Technical Specifications

  - 5.925 to 6.425 GHz U-NII-5
  - 6.425 to 6.525 GHz U-NII-6
  - 6.525 to 6.875 GHz U-NII-7
  - 6.875 to 7.125 GHz U-NII-8
- Available bands and channels: Dependent on configured regulatory domain (country)
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum in the 5 GHz band
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11ax: 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, 1024-QAM and 4096-QAM (proprietary extension)
- 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
  - 802.11ac: 6.5 to 867 (MCS0 to MCS9, NSS = 1 to 2, VHT20 to VHT80); 1,083 with 1024-QAM}
  - 802.11ax (2.4GHz): 3.6 to 574 (MCS0 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); 2,882 with 4096-QAM (MCS 12 and MCS13, proprietary extension)
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (aggregate, conducted total) transmit power (limited by local regulatory requirements):
  - Per radio/band (2.4 GHz/5 GHz/6 GHz): +21 dBm (18 dBm per chain)
  - **Notes:** conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain.
- Advanced Cellular Coexistence (ACC) minimizes the impact of interference from cellular networks
- Advanced IOT Coexistence (AIC) allows concurrent operation of multiple radios in the 2.4GHz band
- 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

Notes: *Full support for the UTB feature will be phased into the HPE Aruba Networking 630 Series Campus Access Points hardware; initial support will be limited

Technical Specifications

Wi-Fi Antennas

- AP-634: 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 antenna connectors: 1.0dB in 2.4GHz, 1.0dB in 5GHz and 1.0dB in 6GHz.
- AP-635: Integrated downtilt omni-directional antennas for 2x2 MIMO with peak antenna gain of 4.6 dBi in 2.4 GHz, 7.0 dBi in 5 GHz and 6.3 dBi in 6 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 to 40 degrees.
  - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the combined, average pattern is 2.9 dBi in 2.4 GHz, 4.9 dBi in 5 GHz and 4.3 dBi in 6 GHz.

Other interfaces and features

- E0, E1: Two Ethernet wired network ports (RJ-45)
  - Auto-sensing link speed (100/1000/2500BASE-T) and MDI/MDX - 2.5 Gbps speed complies with NBase-T and 802.3bz specifications
  - PoE-PD: 48Vdc (nominal) 802.3at/bt PoE (class 4 or higher) - 802.3az Energy Efficient Ethernet (EEE)
- DC power interface: 12Vdc (nominal, +/- 5%), accepts 2.1mm/5.5mm 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
- Bluetooth Low Energy (BLE5.0) and Zigbee (802.15.4) radio
  - BLE: up to 5 dBm transmit power (class 1) and -100 dBm receive sensitivity (125 kbps)
  - Zigbee: up to 5 dBm transmit power and -97 dBm receive sensitivity (250 kbps)
  - Integrated omnidirectional antenna with roughly 30 to 40 degrees downtilt and peak gain of 3.0 dBi
- 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

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 630 Series Campus Access Points 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 port.
- With IPM enabled, the AP will start up in unrestricted mode (regardless of power source) 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 a USB device attached):
  - DC powered: 20.7W/26.4W.
  - PoE powered: 23.8W/29.4W.
  - This assumes that up to 5W is supplied to the attached USB device
- Maximum (worst-case) power consumption in idle mode: 8.7W/14.2W (DC) or 11.7W/17.2W (PoE).
- Maximum (worst-case) power consumption in deep-sleep mode: 1.1W (DC) or 1.9W (PoE).

Technical Specifications

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 630 Series Campus Access Points Ordering Guide for details.

Mechanical specifications

- Dimensions/weight (AP-635; unit without mount bracket):
  - 220mm (W) x 220mm (D) x 51mm (H)
  - 1300g
- Dimensions/weight (AP-635; shipping):
  - 250mm (W) x 240mm (D) x 85mm (H)
  - 1650g

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 and transportation conditions
  - Temperature: -40C to +70C/-40F to +158F
  - Relative humidity: 10% to 100%
  - ETS 300 019 classes 1.2 (storage) and 2.3 (transportation) environments

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.

Reliability

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

Regulatory Model Numbers

- AP-634 (all models): APIN0634
- AP-635 (all models): APIN0635

Regulatory Considerations for AP-634

- The AP-634 will be offered in countries where there is an existing or clear and defined path to allow operation of 6 GHz radios with external connectorized antennas, either as a Low-Power Indoor (LPI) or Standard Power (SP) product. Please contact your HPE Aruba Networking representative to confirm (existing or planned) availability for the country where the AP will be deployed.

Technical Specifications

Certifications

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

Notes:

- *Targeting Q3CY21 for this certification
- **Zigbee Alliance

Warranty

- HPE Aruba Networking's hardware limited lifetime warranty

Minimum Operating System Software Versions

- AP-634 (excluding 6GHz support):
  - HPE Aruba Networking OS and HPE Aruba Networking InstantOS 8.11.2.0, HPE Aruba Networking OS 10.6.0.0
- AP-634 (including 6GHz support):
  - HPE Aruba Networking OS and HPE Aruba Networking InstantOS 8.12.0.0, HPE Aruba Networking OS 10.7.0.0
- AP-635:
  - HPE Aruba Networking OS and HPE Aruba Networking InstantOS 8.9.0.0, HPE Aruba Networking OS 10.4.0.0

Summary of Changes

Date	Version History	Action	Description of Change
19-Aug-2024	Version 9	Changed	Configuration Information section was updated.
01-Jul-2024	Version 8	Changed	Configuration Information section was updated.
04-Dec-2023	Version 7	Changed	Series name was updated.
07-Aug-2023	Version 6	Changed	Configuration Information and Technical Specifications sections were updated.
01-May-2023	Version 5	Changed	Configuration Information section was updated, new SKU was added.
05-Jul-2022	Version 4	Changed	Configuration Information section was updated, new SKUs were added.
07-Feb-2022	Version 3	Changed	Configuration Information section was updated.
06-Dec-2021	Version 2	Changed	Technical Specifications section was updated.
02-Aug-2021	Version 1	New	New QuickSpecs

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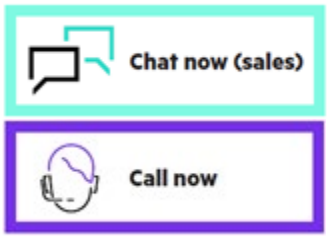

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