

HPE Aruba Networking 650 Series Campus Access Points



What's new

- Flagship Wi-Fi 6E access points provide tri-band coverage across 2.4 GHz, 5 GHz, and 6 GHz to deliver up to 7.8 Gbps combined aggregate data rate.
- 4x4 MIMO radios to deliver peak performance and increased capacity using multi-user (MU-MIMO) and orthogonal frequency-division multiple access (OFDMA) (uplink and downlink for both).
- Patented ultra tri-band (UTB) filtering enhances the use of 5 GHz and 6 GHz bands.
- High availability with dual 5 Gbps wired

Overview

The HPE Aruba Networking 650 Series Campus Access Points are our flagship Wi-Fi 6E access points that take advantage of the 6 GHz band for greater capacity, wider channels and interference-free spectrum. Designed to meet the demands of bandwidth-hungry video, a growing numbers of client and IoT devices, and the growth of cloud services, these high-performance Wi-Fi 6E access points provide comprehensive tri-band coverage across 2.4 GHz, 5 GHz, and 6 GHz to deliver up to 7.8 Gbps combined aggregate data rate.

The 650 Series access points includes ultra tri-band filtering to help minimize channel interference and dual configurable 5 Gbps Ethernet ports to mitigate coverage gaps, provide greater resiliency, and deliver fast, secure connectivity. Up to seven 160MHz channels in 6 GHz support low-latency, bandwidth-hungry applications such as high-definition video

ports for redundant Ethernet and power.

- Built-in GPS receivers and intelligent software enable APs to self-locate and act as reference points for more accurate indoor location measurements.
- [1] Internet of Things (IoT) ready with support for Bluetooth Low Energy (BLE) and Zigbee.

and AR/VR applications. The 650 Series access points include a limited lifetime warranty.

Features

Flagship Wi-Fi 6E Performance

The HPE Aruba Networking 650 Series Campus Access Points, based on the 802.11ax standard, take advantage of the 6 GHz band through three 4x4 MIMO radios (2.4 GHz, 5 GHz, and 6 GHz), deliver up to 7.8 Gbps maximum tri-band aggregate data rate.

Provides high availability with two 5 GbE ports for hitless failover for both data and power, allowing these dual ports to provide business continuity for mission critical applications with flexibility to support speeds of 1, 2.5, or 5 Gbps (or 100 Mbps).

Enhanced wireless experience with HPE Aruba Networking ClientMatch technology removes sticky client issues by steering a client to the AP where it receives one of the best radio signals.

Patented UTB filtering enables enterprises to take advantage of the high end of 5 GHz with the lower end of 6 GHz without creating coverage gaps or islands.

Offers precision locationing with the support of FTM 802.11mc for precision distance ranging and built-in GPS receivers for high-accuracy indoor location measurements.

Boost Security

The HPE Aruba Networking 650 Series Campus Access Points offer enhanced security with Dynamic Segmentation to remove the time-consuming and error-prone task of managing complex and static VLANs, ACLs, and subnets by dynamically assigning policies and keeping traffic protected and separated.

Offers stronger encryption and authentication with WPA3, protected credentials/keys storage for guest access with Enhanced Open, and user and IoT access policy enforcement firewalls (PEF).

Simplifies policy enforcement by using the PEF to encapsulate all traffic from the AP to the gateway (or mobility controller) for end-to-end encryption and inspection.

For enhanced device assurance, our APs include an installed Trusted Platform Module (TPM) for protected storage of credentials and keys, and boot code.

AI-powered Cloud Management and Flexible Deployment

The HPE Aruba Networking 650 Series Campus Access Points can operate as standalone access points or with a gateway for greater scalability, security, and manageability.

HPE Aruba Networking Central is an AI-powered solution that simplifies IT operations, improves agility, and reduces costs by unifying management of campus, branch, remote, data center, and IoT networks from one dashboard.

Zero Touch Provisioning provides ease of implementation in branch offices and remote sites, without on-site technical expertise.

You can deploy models with internal antennas or connectorized models that support external antennas to meet a range of environments.

HPE Aruba Networking Wi-Fi 6E APs allow countries to take advantage of Wi-Fi 6E once it is approved in the country through automated notification and easy deployment of 6 GHz regulatory rules.

Energy Saving and IoT Ready

The HPE Aruba Networking 650 Series Campus Access Points can serve as flexible IoT platforms that bolster network security and provide coverage for a broad range of IoT devices without the need for network overlays. Integrated BLE and Zigbee support make it easier to deploy and manage IoT.

Advanced IoT Coexistence (AIC) feature uses built-in filtering to allow Wi-Fi and

BLE/Zigbee radios to operate at greater capacity without the impact of interference.

HPE Aruba Networking Central Client Insights uses deep packet inspection to provide additional context and behavioral information that help verify devices are receiving proper policy enforcement and continuously monitor for rogue devices.

AI-powered dynamic power save mode enables the HPE Aruba Networking 650 Series Campus Access Points to automatically wake up at a schedule when connectivity demand arises, reducing power demands and lowering the energy footprint to align with the organization's sustainability initiatives.

The target wake time (TWT) establishes a schedule for when clients need to communicate with an AP to help improve client power savings and reduce airtime contention.

Technical specifications

HPE Aruba Networking 650 Series Campus Access Points

Certifications

UL2043 plenum rating
Wi-Fi Alliance (WFA):
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, W-Fi Agile Multiband
Passpoint (release 2)
Bluetooth SIG
Ethernet Alliance (PoE, PD device, class 6)

Regulatory

The Wi-Fi 6E APs allow countries to take advantage of Wi-Fi 6E once it is approved in country via automated notification and easy deployment of 6 GHz regulatory rules.

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

Wi-Fi antenna

AP-654 supports external antennas.
AP-655 has internal antennas.

Connectivity, standard

Wi-Fi 6E (IEEE 802.11ax)

Mounting

A mounting bracket has been preinstalled on the back of the access point. This bracket is used to secure the access point to any of the mount kits (sold separately). For use with optional mounting kit, see the ordering guide.

Radio coverage

Indoor, tri-radio, 2.4 GHz, 5 GHz and 6 GHz (concurrent) 802.11ax 4x4 MIMO

Warranty

Limited lifetime warranty. See the warranty duration.

Product dimensions

260mm x 260mm x 56mm

Weight

1800g

[1] Bluetooth is a trademark owned by its proprietor and used by Hewlett Packard Enterprise under license. All third-party marks are property of their respective owners.



For additional technical information, available models and options, please reference the [QuickSpecs](#)

HPE Aruba Networking Services

HPE Aruba Networking services simplify and accelerate the network technology lifecycle, enabling your network to scale with better predictability and cost-effectiveness. Whether you operate your own network and need to improve your IT efficiencies, or you want to offload some of the burden, we have the services you need to reach your goals.

Learn more about what HPE Services - Aruba Networking has to offer at: <https://www.hpe.com/edge/services>

Support Services

Our support portfolio provides the essential support elements as well as proactive and preventive features to help you improve your team's productivity and get the most from your network. Our support customers benefit from faster issue resolution, simplified operations and efficiencies, and reduced network issues.

Professional Services

With deep intellectual capital and purpose-built tools, our team delivers a range of standard and custom professional services designed to accelerate your value from HPE Aruba Networking technology.

Project based services include: Annual subscription services include:

- Planning, audit, and assessment
- Architecture review and design
- Deployment, migration, and knowledge transfer
- Network optimization
- Intelligent Operations
- Customer Experience Management

Our [Education Services](#) allow your team to come up to speed quickly.

HPE GreenLake for Networking

Our NaaS solution, is part of the HPE GreenLake services family, and simplifies network operations, accelerates equipment handling, and increases the value of your HPE Aruba Networking solution. If you need expert guidance and automation-based operations for your team, please explore our NaaS approach through HPE GreenLake for Networking.

Make the right purchase decision.
Contact our presales specialists.

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