

HPE Aruba Networking 510 Series Campus Access Points

HPE Aruba Networking AP-514 (RW) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP (Q9H57A)



What's new

- Wi-Fi 6 AP that provides up to 2.69 Gbps maximum combined data rate.
- Support for OFDMA for enhanced multiuser efficiency, and WPA3 and Enhanced Open for greater security.
- IoT-ready with [1] Bluetooth 5 and Zigbee support.
- Fast wired connections with 2.5 Gbps Ethernet and 1 Gbps Ethernet ports.

Overview

The HPE Aruba Networking 510 Series Campus Access Points deliver Wi-Fi 6 coverage ideal for office spaces, training and meeting facilities, and hospitals. With 2.69 Gbps maximum combined data rate, multi-gigabit Ethernet for fast wired connectivity, and built-in IoT radio, the 510 series delivers reliable, high-performance Wi-Fi Wi-Fi CERTIFIED™ for medium density campus environments.

These APs can be deployed using Zero Touch Provisioning for ease of implementation at remote locations. It is Wi-Fi and supports 802.11ax features: OFDMA for multi-user efficiency, target wake time (TWT) to extend the battery life of connected IoT devices, and WPA3 and Enhanced



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- Client and RF optimization to match clients with one of the best available AP and reduce coverage gaps.
- Dynamic Segmentation and policy enforcement firewalls automatically enforce consistent policies across wired and wireless networks, enhancing user and device security.

Open for greater password and guest security. The 510 series includes a limited lifetime warranty.

Features

Wi-Fi 6 Performance Ideal for Campus Deployment

The HPE Aruba Networking 510 Series Campus Access Points deliver a maximum combined data rate of 2.69 Gbps with up to 4 spatial streams (4SS) and 160MHz channel bandwidth (VHT160).

The AP supports Wi-Fi 6 features such as OFDMA, bidirectional MU-MIMO, and target wait time (TWT) to drive improved efficiency. It handles multiple Wi-Fi 6 capable clients on each channel simultaneously, regardless of device or traffic type.

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 signal.

Fast wired connections with 2.5 Gbps Ethernet and 1 Gbps Ethernet ports.

Cloud Management and Ready for IoT

HPE Aruba Networking 510 Series Campus Access Points can be managed with HPE Aruba Networking Central, an Al-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.

The AP 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.

The target wake time (TWT) improves battery life of IoT devices.

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.

Simple and Secure Access

HPE Aruba Networking 510 Series Campus Access Points offer enhanced security with Dynamic Segmentation to remove the time-consuming and errorprone task of managing complex and static VLANs, ACLs, and subnets by dynamically assigning policies and keeping traffic protected and separated.

It 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).

WPA3 and Enhanced Open security increases enterprise-level security by providing stronger guest access protections without increasing complexity.

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

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Technical specifications

HPE Aruba Networking AP-514 (RW) Dual Radio 4x4/2x2 802.11ax External Antennas Unified Campus AP

Product Number	Q9H57A
Differentiator	Available everywhere except US, Israel, Japan and Egypt
Certifications	UL2043 plenum rating Bluetooth SIG Wi-Fi Alliance: Wi-Fi CERTIFIED a, b, g, n, ac, ax WPA, WPA2 and WPA3, Enterprise with CNSA option, Personal (SAE), Enhanced Open (OWE) WMM, WMM-PS, W-Fi Agile Multiband Passpoint (Release 2) Wi-Fi CERTIFIED Location™
Regulatory	FCC/ISED CE Marked RED Directive 2014/53/EU EMC Directive 2014/30/EU Low Voltage Directive 2014/35/EU UL/IEC/EN 62368-1 EN 60601-1-1, EN60601-1-2 Railway Certs (AP-515 Only): EN 50155:2017-Railway Applications EN 50121-1:2017-Railway EMC EN 50121-3-2-Railway EMC EN 50121-4:2016-Railway Immunity IEC 61373 ed2:2008-Railway Shock and Vibration
Wi-Fi antenna	Four RP-SMA connectors for external dual-band antennas.
Ports	E0: HPE Smart Rate port (RJ-45, maximum negotiated speed 2.5 Gbps) E1: 10/100/1000BASE-T Ethernet network interface (RJ-45) USB 2.0 host interface (Type A connector) Serial console interface (proprietary, micro-B USB physical jack)
Mounting	Pre-installed mounting bracket, for use with optional mounting kit. Optional mounting kits: AP-OUT-MNT-V1A: Outdoor Pole/Wall Long Mount Kit AP-270-MNT-H1: Outdoor AP Hanging or Tilt Install Mount Kit AP-270-MNT-H2: Outdoor Flush Wall or Ceiling Mount AP-270-MNT-H3: Outdoor AP Hanging or Dual-Tilt Install Mount Kit
Power consumption	Maximum (worst-case) power consumption: DC powered: 16.0W PoE powered (802.3af, IPM enabled): 13.5W PoE powered (802.3at/bt): 20.8W Maximum (worst-case) power consumption in idle mode: 12.6W (POE) or 9.7W
	(DC) Maximum (worst-case) power consumption in deep-sleep mode: 5.9W (POE) or 1.5W (DC)
Radio coverage	AP type: Indoor, dual radio, 5GHz 802.11ax 4x4 MIMO and 2.4 GHz 802.11ax 2x2 MIMO
Warranty	Limited lifetime warranty
Product dimensions (metric)	46 x 200 x 200 mm
Weight	810 g

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> [1] Bluetooth is a trademark owned by its proprietor and used by Hewlett Packard Enterprise under license. All thirdparty 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: arubanetworks.com/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 •
- Network optimization
- - Architecture review and design Intelligent Operations
- Deployment, migration, and knowledge transfer
- Customer Experience Management

Our Education Services allow your team to come up to speed quickly.

HPE GreenLake for Networking

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

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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.



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