

Aruba AP-555 (RW) Dual Radio 8x8:8 / 4x4:4 802.11ax Internal Antennas Unified Campus AP (JZ356A)



What's new

- Al-powered wireless RF and client connectivity optimization.
- Dual-radio (8x8 + 4x4 MIMO) 802.11ax AP with up-and downlink OFDMA and Multi-User MIMO (MU-MIMO).
- Optional tri-radio mode with two 5GHz and one 2.4GHz radio (all 4x4 MIMO).
- Aruba's unique Smart PoE allows for the use of existing switching infrastructure to power up APs.

Overview

The Aruba 550 Series Campus Access Points with IEEE 802.11ax technology are designed to deliver extreme performance access for mobile and IoT devices in environments where device density is very high. The Aruba 550 Series uses 802.11ax features to efficiently and simultaneously serve multiple clients and traffic types in dense environments, increasing data rates for both individual device and overall system. The 550 Series supports maximum data rates of 4.8Gbps in the 5GHz band and 1,150Mbps in the 2.4GHz band (for an aggregate peak data rate of 5.95Gbps). Each AP

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- Maximum data rates of 4.8Gbps in the 5GHz band and 1,150Mbps in the 2.4GHz band (for an aggregate peak data rate of 5.95Gbps).
- Supports all mandatory and several optional 802.11ax features, and the full 37 OFDMA Resource Units (RUs) with up to 1,024 associated client devices per radio.

supports up to 1024 associated client devices per radio, making the high-end 802.11ax 550 Series APs ideal for extreme high-density environments, such as large public venues, higher education, hotels and enterprise offices.

Features

Unsurpassed Performance

The Aruba 550 Series Campus Access Points with 802.11ax technology efficiently and simultaneously serves multiple clients, increasing data rates for both individual devices and as an overall system.

Multi-user transmission with downlink and uplink Orthogonal Frequency Division Multiple Access (OFDMA) increases user data rates and reduces latency, especially for large numbers of devices with short frames or low data-rate requirements, such as voice and IoT devices.

Multi-user capability with downlink multi-user MIMO improves network capacity by allowing multiple devices to transmit simultaneously.

The Aruba ClientMatch technology will automatically attempt to group 802.11ax capable devices onto available AP radios with equivalent capabilities, so that the performance benefits of OFDMA are maximized. This means increased network performance and a boost in network capacity.

In the optional tri-radio operating mode, the 5GHz radio is split up into two independent 4x4 MIMO radios with up to four spatial streams each. This enables even higher numbers of simultaneously connected client devices.

Smart Power Management

The Aruba 550 Series Campus Access Points includes Aruba Intelligent Power Monitoring (IPM) which allows for a gradual upgrade of switching by allowing the APs to operate if there is not enough Power over Ethernet (PoE) power.

This feature enables the AP to continuously monitor and report its actual power consumption and optionally make autonomous decisions to disable certain capabilities based on the amount of power available to the unit.

Aruba's Smart PoE allows the existing infrastructure to power up APs. Smart PoE enables to configure two PoE ports to either aggregate their power (more power available) or use one as a redundant PoE power.

As higher-performance 802.11ax access points drive more power consumption, Aruba NetInsight Green AP feature allows the 550 series access points to draw less power when it's not being used, such as evenings when the buildings are empty.

IoT and Location Ready

The Aruba 550 Series Campus Access Points provides unique benefits for IoT devices from dedicated channels in OFDMA allowing for simultaneous transmission of IoT connections with Iow latency, to power saving options with Target Wake Time (TWT) to saves battery life.

The 550 series supports an integrated Bluetooth Low-Energy (BLE) and Zigbee radio, as well as a USB port for increased flexibility, providing better security and reliable connectivity for IoT devices and for implementing location services.



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Technical specifications

Aruba AP-555 (RW) Dual Radio 8x8:8 / 4x4:4 802.11ax Internal Antennas Unified Campus AP

Product Number	JZ356A
Differentiator	Dual-radio (8x8 and 4x4 MIMO) IEEE 802.11ax access point with up-and downlink OFDMA and Multi-User MIMO (MU-MIMO) with optional tri-radio mode. For use in extreme-density mobile and IoT deployments, delivering very high performance and throughput while simultaneously serving multiple clients and prioritizing different types of traffic. Integrated internal antennas. This SKU is for rest-of-world countries not given a specific regulatory domain.
Input voltage	IEEE 802.3bt (class 5) or 802.3at PoE, or direct DC power (via optional power supply)
Wi-Fi antenna	Mix of integrated downtilt omni-directional horizontally and vertically polarized antenna elements. Peak antenna gain of 4.3dBi (4x4 MIMO in 2.4GHz), and peak antenna gain of 5.8dBi (8x8 MIMO in 5GHz). In tri-radio mode, the peak gain of the antennas for each of the 4x4 5GHz radios is 5.5dBi (radio 0L, lower half of 5GHz) and 5.6dBi (radio 0U, upper half of 5GHz).
Ports	(2) HPE SmartRate RJ-45 port (maximum negotiated speed 5Gbps)
Mounting	Mounting bracket has been pre-installed on the back of the AP. This bracket is used to secure the AP to any of the Aruba mount kits (sold separately).
Power consumption	POE powered (802.3bt or dual 802.3at): 38.2W POE powered (802.3at, IPM enabled): 25.1W DC powered: 38.5W; maximum (worst case)
Radio coverage	Dual-radio (8x8 and 4x4 MIMO) IEEE 802.11ax AP with up-and downlink OFDMA and Multi-User MIMO (MU-MIMO). Optional tri-radio mode with two 5GHz and one 2.4GHz radio (all 4x4 MIMO) Maximum data rates of 4.8Gbps in the 5GHz band and 1,150Mbps in the 2.4GHz band (for an aggregate peak data rate of 5.95Gbps).
Warranty	Aruba limited lifetime hardware warranty. See https://www.arubanetworks.com/support-services/product-warranties/ https://www.arubanetworks.com/support-services/product-warranties/
Product dimensions (metric)	58 x 260 x 260 mm
Weight	1.57 kg



For additional technical information, available models and options, please reference the QuickSpecs

Aruba Global Services

Aruba Global Services simplifies and accelerates 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 Aruba Global Services has to offer at: arubanetworks.com/services/



Support Services from Aruba

Support services reduce complexity and increase your team's productivity, ensuring you keep pace with technology advances and software releases, and obtain break-fix support required to keep your network running. Access to premium services means you have the right help at the right time.

Professional Services from Aruba

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 Aruba technology.

QuickStart Services include:

- Planning, audit and assessment
- Intelligent Operations
- Architecture review and design

Proactive Engineering Services include:

- Customer Experience Management
- Deployment, migration, and knowledge transfer
- Network optimization

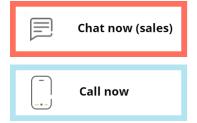
Our Education Services allow your team to come up to speed quickly.

Aruba Network as-a-Service (NaaS)

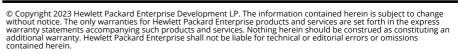
Our NaaS solution, Aruba Managed Connectivity Services, part of the HPE GreenLake services family, simplifies network operations, accelerates equipment handling, and increases the value of your Aruba network. If you need expert guidance and automation-based operations for your team, please explore the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

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

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.



