

**AT A GLANCE** 

# WHY UPGRADE TO WI-FI 6 AND 6E ACCESS POINTS?

Can your Wi-Fi network support your hybrid workforce, latency-sensitive applications, and growing number of IoT devices – efficiently and securely? Be prepared to meet the ever-increasing demands for bandwidth and high performance with Wi-Fi 6 certified Aruba 5xx Series Access Points (APs) and Wi-Fi 6E certified Aruba 6xx Series APs. Wi-Fi certification is designed to distinguish products and networks that meet the highest standards for security and interoperability to deliver exceptional user experience and wireless stability.

With Aruba's Wi-Fi 6 and 6E APs, enterprises large and small can deliver seamless and secure connectivity to respond to the growth in bandwidth-hungry applications, client and IoT devices, and the cloud.

#### Wi-Fi 6 Advancements

Wi-Fi 6 capabilities increase throughput capacity of the Aruba 5xx Series by up to three times that of 3xx Series Access Points (802.11ac Wave 2). They also deliver greater multi-user efficiencies with enhanced MU-MIMO and OFDMA and stronger security with WPA3 and Enhanced Open for improved cryptographic strength and simpler deployment. Organizations can take full advantage of IoT with longer battery life for IoT devices using the Target Wake Time (TWT) capability and a 20 MHz, low-power, low-bandwidth operating mode for devices.

Unique to Aruba, the 5xx Series APs include AI-powered RF optimization, zero downtime, and live software upgrades for uninterrupted, reliable performance. In addition, Bluetooth 5 and integrated 802.15.4/Zigbee protocols and extensible USB port support provide a secure, powerful platform to harness the power of IoT. Air Slice capabilities deliver SLA-grade application assurance to meet or exceed user expectations.

## Wi-Fi 6E Extends Wi-Fi 6 Capabilities to the 6 GHz Band

By leveraging the 6 GHz band, Aruba 6xx Series Campus APs deliver peak performance and far greater capacity with less interference than previous generations of Wi-Fi. With up to 1200 MHz of brand-new spectrum and ultra-wide channels,



# **KEY BENEFITS**

- **Greater speed, wider channels:** Wi-Fi 6 increases throughput by up to 3x. Wi-Fi 6E is even faster with up to1200 MHz of additional capacity and more 80/160 MHz channels for video, imaging, and other high bandwidth apps.
- Ultimate efficiency: Built on 802.11ax standards, 5xx Series APs and 6xx Series APs include features such as OFDMA, bidirectional MU-MMO, and Target Wake Time
- IoT and location-ready: Provide support for Zigbee, Bluetooth 5, and third-party USB devices to simplify the deployment and management of IoT services and provide location-aware visualization in Aruba Central.
- Simple and secure access: Protect the network with stronger encryption and authentication, secure credentials/keys storage, and user and IoT access policy enforcement firewalls.
- No channel interference: Ultra tri-band filtering in Aruba Wi-Fi 6E APs eliminates channel interference between the 5 GHz and 6 GHz bands to maximize available spectrum.

capacity is increased by up to 3x – so you can meet growing demand due to bandwidth-hungry video, increasing numbers of client and IoT devices, and growth in cloud. Unique to Aruba, the 6xx Series includes ultra tri-band filtering to enable enterprises to take full advantage of the high end of the 5 GHz band and the lower end of the 6 GHz band without experiencing interference or sacrificing channels. Dual ethernet ports eliminate coverage gaps, provide greater resiliency, and deliver fast, secure connectivity.

Aruba offers a full portfolio of Wi-Fi 6 and 6E APs to meet the wide range of enterprise needs, including:

## Aruba's Wi-Fi 6 Portfolio

- 500 Series Indoors: ideal for medium-density offices, schools, or retail spaces
- **510 Series Indoors:** mid-range solution for campus deployments
- 530 Series Indoors: for high-density mobile and IoT
- 550 Series Indoors: extreme-density mobile-first and IoT environments
- **560/560EX Series:** small form for mid-range outdoor and hazardous locations

- 570/570EX Series: for extreme-density outdoor and hazardous locations
- **500H Series Remote AP:** for an in-office environment for hospitality, branch, and remote workers

# Aruba's Wi-Fi 6E AP Portfolio

- **630 Series Indoors:** tri-band radio support with up to 1200 MHz additional capacity for enterprises that need more wireless capacity and wider channels to grow.
- 650 Series Indoors: our most powerful AP designed with 7.8 Gbps maximum throughput across 2.4 GHz,
  5 GHz, and 6 GHz bands to support business needs and future growth.

	AP-3xx (campus)	AP-5xx (campus)	AP-6xx (campus)
Wi-Fi generation	Wi-Fi 5 (802.11ax wave 2)	Wi-Fi 6 (802.11ax)	Wi-Fi 6E (802.11ax)
Bands supported	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz	2.4 GHz, 5 GHz, 6 GHz
Highest order modulation	256-QAM	1024-QAM	1024-QAM
Highest order of MIMO	4x4	8x8	4x4
Aggregate max	2.0 Gbps (dual band)	5.4 Gbps (dual band)	7.8Gbps (tri-band)
Peak per-chain conducted power	18dBm	18dBm	18dBm
Coverage/range	+++	+++	+++
Min/max SDRAM memory	512MB/512MB	1024MB/2048MB	2048MB
Min/max FLASH memory	128MB/128MB	128MB/256MB	4096MB
Integrated BLE	Yes (4.1)	Yes (5.0)	Yes (5.0)
Integrated Zigbee	No	Yes	Yes
USB port	Yes (except AP-303)	Yes	Yes
ТРМ	Yes (1.2)	Yes (2.0)	Yes (2.0)
ACC (cellular coexistence)	Yes	Yes	Yes
Limited Lifetime Warranty	Yes	Yes	Yes



#### WHY CHOOSE ARUBA WI-FI?

- Innovation: Proven Wi-Fi leadership and innovation for 15 years and the first vendor to certify its portfolio on Wi-Fi 6 and Wi-Fi 6E.
- **Unified:** Comprehensive Aruba ESP solution with unified network operations across all domains and locations, including the broadest IoT support.
- Automated: Powered by AlOps to deliver SLA-grade application assurance and optimize RF connectivity.
- Secure: Backed by robust security with role-based policy enforcement and IoT protection.
- Deploy the way you want: Deployment for on-prem or cloud management with optional gateway – all backed by a limited lifetime warranty.

# MANAGE ON PREM OR IN THE CLOUD

Available management solutions include Aruba Central (available in cloud-managed and on-premises options), as well as on-premises Aruba AirWave, which supports multi-vendor networks. For large installations across multiple sites, APs can be factory-shipped and activated with zero-touch provisioning using either solution – reducing deployment time, centralizing configuration, and simplifying inventory management. In addition, Aruba Central delivers several cloud-native services that further streamline network operations. Among these capabilities are built-in, Al-driven analytics and intelligent alerts, which provide network operators the actionable insights required to proactively monitor, troubleshoot, and optimize wireless network performance.

## **CUSTOMER FIRST, CUSTOMER LAST SUPPORT**

Partner with Aruba product experts to increase your team's productivity, keep pace with technology advances and software releases, and obtain break-fix support. We offer flexible options to meet your needs based on your wireless architecture. Our Foundation Care for Aruba support services include priority access to Aruba Technical Assistance Center (TAC) engineers 24x7x365, flexible hardware and onsite support options, and total coverage for Aruba products. Add Aruba Pro Care for fast access to Senior TAC Engineers, assigned as your single point of contact for your case, and reduce the time you spend on issues.

#### **BECOME AN EXPERT**

Aruba Education Services offers comprehensive training and certification programs from fundamental to advanced levels to give you the skills to fully utilize the power of Aruba Wi-Fi.

#### **NETWORK AS A SERVICE**

When your network needs exceed your network team's ability to meet expectations, consider Network-as-a-Service (NaaS) options from Aruba. HPE GreenLake for Aruba offers a pay-as-you-go flexibility and assured service delivery to address critical problems for organizations that need state-of-the-art network capabilities

Learn more at Aruba wireless access points and Wi-Fi 6 and Wi-Fi 6E.



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