# QuickSpecs

## **Overview**

## **HPE Networking Instant On Access Points AP25**

Ultra-high-speed performance for high-density small businesses.

Perfect for gaming, boutique hotels, tech start-ups and professional offices.

The rise of the remote and hybrid workplace has placed increased pressure on business networks. Existing Wi-Fi infrastructure is struggling to support the explosion of devices and bandwidth hungry applications — all contributing to spotty video calls and sluggish download speeds.

The HPE Networking Instant On AP25, a 4x4 Wi-Fi 6 access point, is designed to meet the increasing volume of connected devices. Delivering superior performance, coverage, and speed at a competitive price, the AP25 is the perfect access point for small and growing businesses.

The Wi-Fi Certified 6TM AP25 delivers faster Wi-Fi speeds, greater capacity, and reduced latency between access points and devices for a superior Wi-Fi experience. AP25 improves efficiency and reduces congestion for networks with many connected devices, making it ideal for high-density environments. And with 4x the capacity of 802.11ac access points, the AP25 provides exceptional user experience, allowing businesses to serve more customers with higher speed and less congestion.

Features of the AP25 include orthogonal frequency-division multiple access (OFDMA), multi-user MIMO and target wake time (TWT). With up to 4 spatial streams (4SS) and 160MHz channel bandwidth (HE160), the AP25 provides groundbreaking wireless capabilities for businesses looking to boost performance and future-proof their networks.



**HPE Networking Instant On Access Points AP25** 



## **Overview**

## **Key Features**

- Ultra-fast 802.11ax, 4x4:4
- 2.5 Gigabit Ethernet uplink port
- 160MHz client bandwidth support
- Mesh backhaul operating at 160MHz1
- Wi-Fi CERTIFIED 6TM (Wi-Fi 6)
- MU-MIMO performance
- Smart mesh Wi-Fi support
- Integrated Bluetooth
- Easy-to-use web and mobile app for setup and management
- Secure guest Wi-Fi with simple setup

## Standard Features

#### Next-Generation 802.11ax Wi-Fi Features

AP25 is a Wi-Fi CERTIFIED 6TM (Wi-Fi 6) access point that brings higher capacity, efficiency, and performance to small and growing businesses with dense deployments. With a maximum aggregate data rate of 5.3 Gbps, AP25 access points deliver the speed and reliability small businesses need.

## 2.5g Ethernet Uplink Port And 160mhz Client Bandwidth Support

Availability of 2.5G uplink port and wider channel bandwidth delivers faster Wi-Fi speeds for activities like high-def video streaming and gaming.

## 160mhz Client Bandwidth Support

With 160MHz bandwidth support in 11ax, HE160 mode delivers higher performance with 160MHz supported clients. The mesh performance can be doubled with the 160MHz bandwidth support on 5GHz backhaul.

## Orthogonal Frequency-Division Multiple Access (OFDMA)

Allows access points (APs) to handle multiple Wi-Fi 6-capable clients on each channel simultaneously — regardless of device or traffic type. This improves efficiency by boosting overall capacity while reducing latency.

## Target Wake Time (TWT)

Ideal for devices that communicate infrequently, TWT establishes a schedule for clients to communicate with an AP. This helps reduce power consumption, extending battery life.

## Multiuser, Multiple Input, Multiple Output (MU-MIMO)

AP25 supports MIMO, allowing service to multiple clients (Wi-Fi 5 and Wi-Fi 6) at the same time.

#### 1024-Quadrature Amplitude Modulation (1024-QAM)

Enables a 25% data increase over 256 QAM, improving throughput to access points and devices.

## Trusted Platform Module (TPM)

All HPE Networking Instant On access points have an installed TPM for secure storage of credentials, keys, and boot codes.

## **Basic Service Set Coloring (BSS Coloring)**

Allows the network to assign a "color" tag to a channel and reduce the threshold for interference. Network performance is improved because APs on the same channel can be closer together and still transmit at the same time.

## HPE Aruba Networking Advanced Cellular Coexistence (ACC)

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.

#### Low Density Parity Check (LDPC)

Delivers high-efficiency error correction for increased throughput.

#### Transmit Beamforming (TXBF)

Delivers increased signal reliability and range.

## The Instant On Differentiators

## The HPE Networking Instant On App

Manage everything through our official app on the device of your choice. Manage your network from anywhere, anytime — all from the palm of your hand.

## **Built-In Security Gateway/Firewall**

Stop unwanted people and bots from accessing the network. Leverage advanced features that do not require external gateways — or the complexity that comes with them. Quickly and easily swap it out with another AP in a single click, in case of gateway failure.

## Standard Features

The new Cloudflare integration provides private and fast web browsing. The 802.11k standard improves roaming performance helping clients connect to nearby APs quickly.

## **Better Together**

Instant On automatically detects and applies highest (critical) PoE priority to Instant On access points for uninterrupted power delivery and wireless network access. Wired and wireless voice traffic is prioritized with high QoS priority end-to-end for optimal voice performance.

## **Tailored User Experiences**

Customize guest Wi-Fi experience with logos, authentications, and rules of use. Set data usage per app. Limit duration of use. Use an external portal or service like Facebook Wi-Fi. Create open guest networks for quick and easy access. With the Instant On mobile app, you can apply bandwidth limits for your clients or your network for prioritizing certain primary networks.

## **Enterprise Grade Wi-Fi And Features**

Control channel and channel width to suit specific environments. Keep users happy as they move between spaces or meetings with a seamless handoff between APs. Protect users with the robust password-based authentication that WPA3/WPA2 wireless security standard provides. Instant On supports OWE for secure, open Wi-Fi network access at cafes, retail stores and restaurants.

## Site Inventory and Topology View

The site inventory view lists all the Instant On switches and access points on a single interface, and the topology view provides an intuitive structure of all Instant On devices deployed in a network — helping to quickly identify non-functioning devices and troubleshoot accordingly. Network issues can be easily diagnosed with connectivity tests like Ping and Traceroute.

#### Two-Factor Authentication (2FA)

As the number of security breaches continue to rise, 2FA has become an essential tool to mitigate risk against compromised login credentials. Two-Factor Authentication (2FA), provides an additional layer of authentication, prevents attackers from remotely accessing your network, and secures your customer information.

## **Multi-Site Management**

Manage multiple sites, multiple networks, distributed deployments, and multi-tenancy deployments with ease through our cloud-hosted web interface and mobile app. Create unique configurations, statistics, guest portals, and admin read/write for every site. Instant On allows three admin accounts per site, offering an option to lock accounts to prevent them from accidental deletion.

## **PPPoE and Static IP**

Instant On APs can act as routers and handle PPPoE configuration with VLAN support, and they can also act as a DHCP server, providing IP addresses to the wireless network. Assigning a static IP address on an access point allows users to use the same IP address regardless of where the access point is connected, making it easier to access its setup page for any configuration changes.

### **Smart Mesh**

Extend coverage to hard-to-reach spaces where Ethernet cabling may not exist. Set up a mesh network up in minutes through the app — indoors or out.

### 5-Star Voice and Video Quality

Keep users connected via softphones and mobile apps. Automatically detect and prioritize voice and video applications such as Skype, FaceTime, and WeChat that use SIP, SCCP and other popular protocols.

#### No Hidden Fees

All features are included in the price of the hardware — there are no recurring subscription or licensing fees. Expert-level support and industry-leading 2-year warranty are also included, along with chat support for the life of the product.

## **Configuration Information**

## **BTO Base Models**

AP25

Rule #	Description	SKU
	HPE Networking Instant On AP25 (US) 4x4 Wi-Fi 6 Indoor Access Point	R9B27A
	HPE Networking Instant On AP25 (RW) 4x4 Wi-Fi 6 Indoor Access Point	R9B28A
<b>Notes:</b>	Available everywhere except US, Israel, Japan and Egypt.	
	HPE Networking Instant On AP25 (JP) 4x4 Wi-Fi 6 Indoor Access Point	R9B29A
	HPE Networking Instant On AP25 (EG) 4x4 Wi-Fi 6 Indoor Access Point	R9B30A
	HPE Networking Instant On AP25 (IL) 4x4 Wi-Fi 6 Indoor Access Point	R9B31A
*	HPE Networking Instant On AP25 (RW1) 4x4 Wi-Fi 6 Indoor Access Point	SOG24A

**Notes:** 

- PoE Powered with the choice to select an optional power adapter
- OCA Only Model Selection Form HPE Aruba Networking > Instant On > Wireless Access Points: Indoor AP25
- \*RW1 SKUs are SKUs for the Rest of the World (RW) limited to countries where Country of Origin constraints exist. RW and RW1 SKUs are exclusive

## **Power Options**

For AP25 Std (Min 0 // max 1) User Selection (min 0 // max 1)

Rule # **Description** SKU Aruba Instant On 30W 802.3at PoE Midspan Injector R9M77A 1 Aruba Instant On 12V/18W Power Adaptor US EU R9M78A • Includes power cord with US and EU plugs

Aruba Instant On 12V/18W Power Adaptor RW

R9M79A Includes power cord with Rest-of-World plugs

**Configuration Rules** 

#### Rule# **Description**

If this Power Supply is selected, bring in (Min 1 // Max 1) Localized power cord based on the HPE Networking Aruba Wireless Power Cord Table.

Notes: Most devices are PoE powered from switch so these are optional.

### Accessories

For AP25 Std (Min 0 // max 1) User Selection (min 0 // max 1)

SKU Rule# Description HPE Networking Instant On AP25 Flush Mount Sleeve R9B36A

Notes: OCA Display Note - AP25 ships with 1 mount for wall and ceiling; add this additional mount for aesthetic design.

Spares

## **Mount Kits**

For AP25 Std (Min 0 // max 99) User Selection (min 0 // max 99)

Rule# **Description SKU** AP-220-MNT-C1 2x Ceiling Grid Rail Adapter for Basic Flat Rails Mount Kit JW044A

AP-220-MNT-C1 AP Mount Kit for AP-103 Single Gang Wall Box Mount Adapter

Q9U25A AP-MNT-W4 White Low Profile Basic AP Flat Surface Mount Kit

AP-MNT-W4 Low Profile Basic AP Mount Kit

## **Configuration Rules**

Rule# **Description** 

OCA Display Note - AP25 Unit ships with two mounting brackets, one for the ceiling mount and one Notes:

for the wall mount



## **Configuration Information**

## **BTO Base Models**

#### **AP25 Bundle**

Rule # Description SKU

HPE Networking Instant On AP25 with 12V/18W Power Adaptor (JP) Bundle R9B35A

• Includes 12V Power Adapter with US Power Plug

HPE Networking Instant On AP25 with 12V/18W Power Adaptor (US) Bundle R9B32A

Includes 12V Power Adapter with US Power Plug

HPE Networking Instant On AP25 with 12V/18W Power Adaptor (EU) Bundle R9B33A

• Includes 12V Power Adapter with EU Power Plug

1, 2, 6 HPE Networking Instant On AP25 with 12V/18W Power Adaptor (WW) Bundle R9B34A

Includes 12V Power Adapter with Localized Power Plug

HPE Networking Instant On AP25 with 12V/18W Power Adaptor Worldwide Bundle No Loc R9B34A#AC3

No Localization Selected

1, 2, 7, HPE Networking Instant On AP25 (RW1) 4x4 Wi-Fi 6 Indoor Bundle

S0G22A

• Includes 12V Power Adapter with Localized Power Plug

Aruba Instant On AP25 (RW1) 4x4 Wi-Fi 6 Indoor Bundle No Loc SOG22A#AC3

• No Localization Selected

## **Configuration Rules**

## Rule # Description

1 If this Access Point is selected, bring in (Min 1 // Max 1) Localized Wall Power Cord Option based on the HPN Localization Menu.

2 Drop down under Included Power Adapter should offer the following selections:

No Localization - #AC3 Option

6 Available everywhere except US, Japan and European Union.

7 Available in India only

8 RW1 SKUs are SKUs for the Rest of the World (RW) limited to countries where Country of Origin constraints exist. RW and RW1 SKUs are exclusive

**Notes:** OCA Only Model Selection Form - HPE Aruba Networking > Instant On > Wireless Access Points: Indoor AP25 Bundles

## Accessories

## **Options**

For AP25 Std (Min 0 // max 1) User Selection (min 0 // max 1)

Rule # Description
HPE Networking Instant On AP25 Flush Mount Sleeve R9B36A

**Notes:** OCA Display Note - AP25 ships with 1 mount for wall and ceiling; add this additional mount for aesthetic design.

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## **Technical Specifications**

#### In the Box

- HPE Networking Instant On AP25 Indoor Access Point
- HPE Networking Instant On AP25 Quick Start Guide
- Combined ceiling and wall rail mount clip
- Ethernet cable

#### **Radios**

- Dual radio for simultaneous dual-band operation
- 5 GHz 802.11ax 4x4 MIMO for up to 4.8 Gbps wireless data rate, with Multi User MIMO support (Wi-Fi 6)
- 2.4 GHz 802.11ax 2x2 MIMO for up to 574 Mbps wireless data rate (Wi-Fi 6)

## Maximum (Aggregate, Conducted Total) Transmit Power (Limited By Local Regulatory Requirements)

- 5GHz band: +24dBm (+18dBm per chain, 6dB MIMO gain)
- 2.4Ghz band: +21dBm (+18dBm per chain, 3dB MIMO gain)

## **Interfaces**

- Uplink 2.5 Gigabit Ethernet port, with PoE-in support (802.3at)
- DC power connector (12V) Bluetooth Low Energy (BLE) radio LED status indicators (2) Reset/LED control button Kensington security slot

## **Physical Specifications**

- 200mm x 200mm x 45mm, excluding mount accessories
- Weight: 775g

## **Power**

- Power over Ethernet (POE): 802.3at (class 4)
- Max power consumption (worst-case): 20.1W (PoE), 15.9W (DC)
- DC power (12V)

Notes: Power sources are sold separately unless you purchase the bundle SKU which comes with power options.

#### **Antennas**

• Down-tilt omni-directional antennas for 2x2 MIMO with peak antenna gain of 3.77 dBi in 2.4GHz and 4x4 MIMO with peak antenna gain of 4.55 dBi in 5GHz (of the effective, combined pattern for both antennas in each band)

## **Mounting**

- The access point ships with a white mount clip that can attach to both walls and ceilings
- Mounts that match the design of the APs can be purchased separately

## **Environmental & Reliability**

- Operating temperature: 0° C to +40° C (+32° F to +104° F)
- MTBF: 670khrs (76yrs) at +25° C

## **Industry Certifications**

- EN 60601-1-1 and EN 60601-1-2 (for deployment in medical environments)
- Wi-Fi Alliance certified (WFA) 802.11ax with (Wi-Fi 6), WPA2, WPA3

## **Management Options**

- Instant On mobile application (Android & iOS)
- Cloud Portal: Portal.ArubalnstantOn.com



## **Technical Specifications**

## **Warranty & Support**

HPE Networking Instant On 2-year\* warranty includes 24X7 phone support for the first 90 days and chat support for the
entire warranty period. Community support is available for the life of the product. Foundation Care provides extended
support for APs. The SKUs are HK1Y0E (3 years) and H30GZE (5 years).

## **Summary of Changes**

Date	<b>Version History</b>	Action	Description of Change
04-Dec-2023	Version 6	Changed	Series name was updated.
07-Aug-2023	Version 5	Changed	Configuration Information section was updated.
10-Jul-2023	Version 4	Changed	Configuration Information section was updated.
20-Mar-2023	Version 3	Changed	Configuration Information section was updated.
07-Nov-2022	Version 2	Changed	Configuration Information section was updated.
02-May-2022	Version 1	New	New QuickSpecs

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