# QuickSpecs

#### Overview

# **HPE Aruba Networking 570EX Series Hazardous Location Access Points**

#### High-performance Wi-Fi 6 (802.11ax) for outdoor and hazardous location environments

In outdoor and environmentally challenging locations such as oil rigs, mining facilities, and industrial plants, networks need to be protected from extreme temperatures, flammable gases or vapors, and dust concentrations. With Class 1 Division 2 and ATEX Zone 2 certifications, the 570EX Series Access Points deliver reliable Wi-Fi 6 performance to the most extreme environments.

The 570EX delivers 4x4:4SS MU-MIMO capability, HPE Aruba Networking ClientMatch and integrated Bluetooth to enable HPE Aruba Networking location services. Purpose-built to survive in the harshest industrial outdoor environments, 570EX Series APs withstand exposure to extreme high and low temperatures, persistent moisture and precipitation, and are fully sealed to keep out airborne contaminants. All electrical interfaces include industrial strength surge protection.

HPE Aruba Networking Wi-Fi 6 access points provide high-performance connectivity in dense mobile and IoT environments. With maximum aggregate on air data rates of 3 Gbps (HE80/HE40), the 570EX Series APs deliver the speed and reliability needed for demanding environments.



HPE Aruba Networking 570EX Series Hazardous Location Access Points

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## **Standard Features**

## **Incredible Efficiency**

The 570EX Series APs are designed to optimize user experience by maximizing Wi-Fi efficiency and dramatically reducing airtime contention between clients.

Read the **Multi-User 802.11ax white paper** for further information.

## Advantages of OFDMA

This capability allows HPE Aruba Networking Wi-Fi 6 APs to handle multiple Wi-Fi 6 enabled client simultaneously on a single radio

Channel utilization is optimized by handling each transaction by matching allocated bandwidth in a channel to the offered user load. These sub divisions of the channel are referred to as Resource Units (RU).

# Aruba AirSlice<sup>™</sup> for Extended OFDMA Assurance

Initially, APs in controller-less mode (Instant) can provide SLA- grade performance by allocating RUs to specific traffic types. By combining HPE Aruba Networking's Policy Enforcement Firewall (PEF) and Layer 7 deep packet inspection (DPI) to identify user roles and applications, the APs will dynamically allocate the bandwidth needed. Non-Wi-Fi 6 clients can also benefit.

#### Multi-User MIMO (MU-MIMO)

The 570EX Series APs support downlink MU-MIMO similar to Wi-Fi 5 (802.11ac Wave 2) APs. With the introduction OFDMA in Wi-Fi 6 the overhead for this capability is reduced and MU-MIMO effectiveness is substantially improved for large client counts.

## Wi-Fi 6 and MU-MIMO aware client optimization

HPE Aruba Networking's patented Al-powered ClientMatch technology ensures that all clients are attached to their best-serving access point. Session metrics, network metrics, applications, client type, are used to identify and maintain best connection.

## HPE Aruba Networking Advanced Cellular Coexistence (ACC)

This features uses built-in filtering to automatically minimize the impact of interference of high-power cellular base stations, in building distributed antenna systems as well as small cell and femtocell equipment.

#### **Intelligent Power Monitoring (IPM)**

HPE Aruba Networking APs continuously monitor and report hardware energy consumption. Aps can be configured to enable or disable capabilities based on the available PoE power – ideal when wired switches have exhausted their power budget.

#### **Green AP energy efficiency**

HPE Aruba Networking Wi-Fi 6 Aps utilize Al-powered analytics to automatically transition in and out of a sleep mode.

#### IoT Platform Capabilities

HPE Aruba Networking Wi-Fi 6 Aps include 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. This allow organizations to leverage the 570EX Series as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources.

#### Target Wake Time (TWT)

Ideal for IoTs solutions that communicate infrequently, this Wi-Fi 6 capability allows IoT devices to use 802.11ax protocol. TWT coordinates with client devices to allow them to sleep for extended periods use shorter wake times to communicate before returning to sleep. This substantially extends the useful operating life of Wi-Fi 6 based battery powered sensors.

### **HPE Aruba Networking Secure Infrastructure**

The HPE Aruba Networking 570EX Series is an integral part of HPE Aruba Networking's zero trust security approach to help protect user authentication and wireless traffic.

#### WPA3 and Enhanced Open

With the introduction of WPA3 and Enhanced Open, a Wi-Fi 6 certified client will never send unencrypted traffic over the air. Even with an open authenticated network, Enhanced Open still provides strong encryption over the air.

#### Standard Features

In all Wi-Fi 6 user sessions, each user is uniquely encrypted and if they disconnect and reconnect, the encryption changes from session to session.

#### **WPA2-MPSK**

MPSK enables simpler passkey management for WPA2 devices – should the Wi-Fi password on one device change, no additional changes are needed for other devices. This feature is enabled when networks are deployed with ClearPass Policy Manager.

#### **VPN Tunnels**

In Remote AP (RAP) and IAP-VPN deployments, the HPE Aruba Networking 570EX Series can be used to establish a secure SSL/IPSec VPN tunnel to a Mobility Controller that is configured as a VPN concentrator.

#### **Trusted Platform Module (TPM)**

For enhanced device assurance, all HPE Aruba Networking APs have an installed TPM for secure storage of credentials, keys and boot code.

## Simple and Secure Access

To simplify policy enforcement, the HPE Aruba Networking 570EX Series uses HPE Aruba Networking's policy enforcement firewall (PEF) features to encapsulate all traffic from the AP to the mobility controller (gateway) for end-to-end encryption and inspection. Policies are applied based on context including: user role, device—type, application, and location. This reduces the manual configuration of SSIDs, VLANs, and ACLs. PEF also serves as the underlying technology for **dynamic segmentation**.

## **High-Density Connectivity**

Each 570EX Series AP provide connectivity for a maximum of 512 associated clients per radio (1024 total).

## Flexible Operation and Management

A unique feature of HPE Aruba Networking APs is the ability to operate in either controller less or controller-based mode.

#### Controller-less (Instant) Mode

In controller-less mode, one AP serves as a virtual controller for the entire network. Learn more about Instant mode in this **technology brief**.

#### **Mobility Controller Mode**

For optimized network performance, roaming and security, APs tunnel all traffic to a mobility controller for central management of traffic forwarding, segmentation, encryption, and policy enforcement. Learn more in the **HPE Aruba Networking OS datasheet.** 

#### **Management Options**

Available management solution include HPE Aruba Networking Central, cloud based, or Aruba AirWave, a multi-vendor, on-premises, management solution.

For large installations across multiple sites, HPE Aruba Networking APs can be shipped and activated with Zero Touch Provisioning through HPE Aruba Networking Central or Airwave. This reduces deployment time, centralizes configuration, and provide inventory visibility.

#### **Additional Wi-Fi Features**

- Transmit Beamforming (TxBF): increased signal reliability and range
- Passpoint Release 2: seamless cellular-to-Wi-Fi carryover for guests
- Dynamic Frequency Selection (DFS): optimized use of available RF spectrum
- Maximal Ratio Combining (MRC): improved receiver performance for multi antenna access points
- Cyclic Delay/Shift Diversity (CDD/CSD): enable use of multiple transmit antennas
- Space-Time Block Coding (STBC): increased connection robustness
- Low-Density Parity Check (LDPC): high-performance error detection and correction coding for enhanced receiver performance

# **Configuration Information**

**Build To Order: BTO** is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

#### **BTO Models**

Remarks	Description	SKU
	570EX Unified Outdoor Access Points	
	Aruba AP-575EX (RW) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Omni Antenna Outdoor HazLoc AP	R4W33A
	Aruba AP-575EX (US) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Omni Antenna Outdoor HazLoc AP	R4W34A
	Aruba AP-575EX (EG) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Omni Antenna Outdoor Hazloc AP	R4W30A
	Aruba AP-575EX (IL) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Omni Antenna Outdoor HazLoc AP	R4W31A
	Aruba AP-575EX (JP) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Omni Antenna Outdoor HazLoc AP	R4W32A
	Aruba AP-577EX (RW) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Directional Ant Outdoor HazLoc AP	R4W38A
	Aruba AP-577EX (US) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Directional Ant Outdoor HazLoc AP	R4W39A
	Aruba AP-577EX (EG) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Directional Ant Outdoor HazLoc AP	R4W35A
	Aruba AP-577EX (IL) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Directional Ant Outdoor HazLoc AP	R4W36A
	Aruba AP-577EX (JP) 802.11ax Dual 2x2:2/4x4:4 Radio Internal Directional Ant Outdoor HazLoc AP	R4W37A
Notes:	OCA Only Model Selection Form - HPE Aruba Networking > Wireless > Access Points > Outdoor / Rugged: HPE Aruba Networking 570EX Series Access Points	

## **Mounting Accessories**

#### **AP Mount Kits**

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

Aruba AP-OUT-MNT-V1A Outdoor AP Long Arm Pole/Wall Mounting Bracket

Aruba AP-270-MNT-V2 Outdoor AP Short Arm Pole/Wall Mounting Bracket

JW053A

Aruba AP-270-MNT-H1 Outdoor AP Hanging or One-Way Tilt Pole/Wall Mounting Bracket

JW054A

Aruba AP-270-MNT-H2 Outdoor AP Flush Wall Mounting Bracket

JW055A

Aruba AP-270-MNT-H3 Outdoor AP Hanging or Dual-Tilt Pole/Wall Mounting Bracket

R6W11A

#### Notes: For 575EX:

- V1A bracket most often used for pole mount.
- V2 bracket most often used for wall mount.
- H1 bracket most often used for hanging from inclined or horizontal structure.
- The AP-575EX chassis does not ship with bracket

#### For 577EX:

- H1 bracket most often with AP-577EX for mounting to a wall. Allows chassis tilt.
- V1A and V2 brackets can be used but will result in the AP-577EX pointing down.
- The AP-577EX chassis does not ship with bracket.

#### **Power Options**

Remarks	Description	SKU
	PoE Power Options	
	Std (Min 0 // max 1) User Selection (min 0 // max 1)	
	Aruba PD-9001GO-NA 30W 802.3at PoE+ 10/100/1000 Otdr Surge Prot NA Power Cord Mdspan Injector	JW700A
	Aruba PD-9001GO-INTL 30W 802.3at PoE+ 10/100/1000 Outdoor Surge Prot Intl Power Cord Injector	JW701A
	Aruba PD-9001GO-DC 30W 802.3at PoE+ 10/100/1000 12-24V DC in Outdoor Surge Prot Midspan Injector	JW630A
1	AP-POE-ATSR 1-Port Smart Rate 802.3at 30W midspan injector	R6P67A
	AP-POE-BTSR 1-Port Smart Rate 802.3bt 60W midspan injector	R1C73A
	PD-9501-5GCO-AC 60W 802.3bt Smart Rate Outdoor Surge Protection Midspan Injector	R7T40A

# **Configuration Information**

PD-9501-5GCO-DC 60W 802.3bt Smart Rate Outdoor Surge Protection Midspan Injector

R7T41A

#### **Configuration Rules**

If this Power Injector is selected, bring in (Min 1 // Max 1) Localized power cord based on the HPE Aruba Networking Localization Menu

#### Notes:

- Indoor Injector provides no surge protection
- Indoor injector requires indoor AC power cordx|x|
- AP-57XEX may be powered by PoE Only
- Power Cord for JW630A R7T40A, R7T41A should be provided by installer
- The listed power injectors are not HazLoc certified and must be located outside of classified areas
- R7T40A and R7T41A do not include a power cord, power cord must be constructed by installer using the included power connector parts and assembled per the user guide by a cerified installer

#### **Power Injector Mounts**

For 574, 575, 577 Std (Min 0 // max 1) User Selection (min 0 // max 1) Aruba PD-MOUNT-OD Outdoor PoE Midspan Injectors Pole/Mast Mount Kit

JW620A

Q8N47A

Q8N48A

**Notes:** This is optional but recommended for outdoor injectors

#### Accessories

#### Spare Items

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

**Notes:** Spares of items that are shipped with the AP-570EX chassis.

Outdoor AP Covers and Glands 1-pk M25/5-pk M20 Cover/2-pk M16 Cover/5-pk M20 Gland/2-pk

Ground Kit

**Notes:** This is a collection of extra covers and cabling glands, replicating what is in the shipping box

Outdoor AP Metric to Standard M20 to 1/2 inch NPT 5-pk Thread Adapter

Notes: This is a thread adapter normally used to allow direct interface for 1/2" NPT conduit

**Software** 

#### Central

Cloud Services / Acc	cess Point Foun	ndation Subscri	ptions
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	·	
2, 8	HPE Aruba Networking Central AP Foundation 1 year Subscription E-STU	Q9Y58AAE
2, 8	HPE Aruba Networking Central AP Foundation 3 year Subscription E-STU	Q9Y59AAE
2, 8	HPE Aruba Networking Central AP Foundation 5 year Subscription E-STU	Q9Y60AAE
2, 8	HPE Aruba Networking Central AP Foundation 7 year Subscription E-STU	Q9Y61AAE
2, 8	HPE Aruba Networking Central AP Foundation 10 year Subscription E-STU	Q9Y62AAE
	Cloud Services / Access Point Advanced Subscriptions	
2, 8	HPE Aruba Networking Central AP Advanced 1 year Subscription E-STU	Q9Y63AAE
2, 8	HPE Aruba Networking Central AP Advanced 3 year Subscription E-STU	Q9Y64AAE
2, 8	HPE Aruba Networking Central AP Advanced 5 year Subscription E-STU	Q9Y65AAE
2, 8	HPE Aruba Networking Central AP Advanced 7 year Subscription E-STU	Q9Y66AAE
2, 8	HPE Aruba Networking Central AP Advanced 10 year Subscription E-STU	Q9Y67AAE
	On-Prem Services / Access Point Foundation Subscriptions	
3, 8	HPE Aruba Networking Central on Prem AP Foundation 1 year Subscription E-STU	R6U63AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 3 year Subscription E-STU	R6U64AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 5 year Subscription E-STU	R6U65AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 7 year Subscription E-STU	R6U66AAE
3, 8	HPE Aruba Networking Central on Prem AP Foundation 10 year Subscription E-STU	R6U67AAE

# **Configuration Information**

	On-Prem Services / Access Point Foundation Government Subscriptions	
3	Aruba COP AP Foundation 1 year Government Subscription E-STU	S1P56AAE
3	Aruba COP AP Foundation 3 year Government Subscription E-STU	S1P57AAE
3	Aruba COP AP Foundation 5 year Government Subscription E-STU	S1P58AAE
3	Aruba COP AP Foundation 7 year Government Subscription E-STU	S1P59AAE
3	Aruba COP AP Foundation 10 year Government Subscription E-STU	S1P60AAE
	FedRAMP Services / Access Point Advanced Subscriptions	
6, 8	Aruba Central AP Advanced 1yr Subscription Government E-STU	R8K84AAE
6, 8	Aruba Central AP Advanced 3yr Subscription Government E-STU	R8K85AAE
6, 8	Aruba Central AP Advanced 5yr Subscription Government E-STU	R8K86AAE
6, 8	Aruba Central AP Advanced 7yr SubscriptionGovernment E-STU	R8K87AAE
6, 8	Aruba Central AP Advanced 10yr Subscription Government E-STU	R8K88AAE
	Configuration Rules	
Rule#	Description	SKU
2	Add the Central Cloud Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > Cloud Services	
3	Add the Central On-Prem Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > On-Prem Services	
6	Add the Central FedRAMP Service Skus to the HPE Aruba Networking Catalog as Standalone: HPE Aruba Networking > Network Management > Central > FedRAMP	
8	For OCA: When configuring the following AP 10-Pack, selection condition for this Subscription should be 0(default) or 10	
	HPE Aruba Networking AP-503 (RW) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack Campus Access Point	S1E83A
	HPE Aruba Networking AP-503 (US) Dual Radio 2x2 802.11ax Wi-Fi 6 10-pack Campus Access Point	S1E84A
As-a-Se	ervice	
	Cloud Services / Access Point Foundation Subscriptions	
7	HPE Aruba Networking Central AP Foundation 1 year Subscription SaaS	Q9Y58AAS
7	HPE Aruba Networking Central AP Foundation 3 year Subscription SaaS	Q9Y59AAS
7	HPE Aruba Networking Central AP Foundation 5 year Subscription SaaS	Q9Y60AAS
7	HPE Aruba Networking Central AP Foundation 7 year Subscription SaaS	Q9Y61AAS
7	HPE Aruba Networking Central AP Foundation 10 year Subscription SaaS	Q9Y62AAS
	Cloud Services / Access Point Advanced Subscriptions	
7	HPE Aruba Networking Central AP Advanced 1 year Subscription SaaS	Q9Y63AAS
7	HPE Aruba Networking Central AP Advanced 3 year Subscription SaaS	Q9Y64AAS
7	HPE Aruba Networking Central AP Advanced 5 year Subscription SaaS	Q9Y65AAS
7	HPE Aruba Networking Central AP Advanced 7 year Subscription SaaS	Q9Y66AAS
7	HPE Aruba Networking Central AP Advanced 10 year Subscription SaaS	Q9Y67AAS
	Configuration Rules	
Rule#	Description	SKU
7	For IRIS reference only. No action required for OCX and Clic	

## HPE Aruba Networking 570EX Series Specifications

- AP-575EX
  - Built in Omni Directional Antennas
  - 5 GHz Antennas 5dBi
  - 2.4GHz Antennas 3.4dBi
  - BLE/Zigbee: Integrated omnidirectional antenna and the peak gain of 6dBi
- AP-577EX
  - Built in 90°H x 90°V Directional Antennas
  - 5 GHz Antennas 5.6dBi
  - 2.4 GHz Antennas 6.8dBi
  - BLE/Zigbee: Integrated omnidirectional antennas with peak gain of 8.4dBi

#### **Dimensions and weight**

- Dimensions and weights exclude mount
- AP-575EX:
  - 24 (W) x 24 (D) x 27 cm (H)
  - 9.4 (W) x 9.4 (D) x 10.6 in (H)
  - 2.5 kg/5.6 lbs
- AP-577EX:
  - 23 (W) x 22 (D) x 14 cm (H)
  - 9.0 (W) x 8.7 (D) x 5.6 in (H)
  - 2.1 kg/4.6 lbs

## Mounting

- Optional mounting kits:
- AP-270-MNT-V1
- AP-270-MNT-V2
- AP-270-MNT-H1
- AP-270-MNT-H2

#### Regulatory Model Numbers

- AP-575EX: APEX0575
- AP-577EX: APEX0577

#### WI-FI Radio Specifications

- AP type: Outdoor Hardened, Wi-Fi 6 dual radio, 5 GHz 4x4 MIMO and 2.4 GHz 2x2 MIMO
- Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)
- 5 GHz:
  - Four spatial stream Single User (SU) MIMO for up to 4.8 Gbps wireless data rate to individual 4SS HE160 Wi-Fi 6 client device (max)
  - Two spatial stream Single User (SU) MIMO for up to 1.2 Gbps wireless data rate to individual 2SS HE80 Wi-Fi 6 client device (typical)
  - Four spatial stream Multi User (MU) MIMO for up to 4.8 Gbps wireless data rate to up to four 1SS or two 2SS HE160 Wi-Fi 6 DL-MU-MIMO capable client devices simultaneously (max)
  - Four spatial stream Multi User (MU) MIMO for up to 2.4 Gbps wireless data rate to up to four 1SS or two 2SS HE80 Wi-Fi 6 DL-MU-MIMO capable client devices simultaneously (typical)

#### • 2.4 GHz:

- Two spatial stream Single User (SU) MIMO for up to 575 Mbps wireless data rate to individual 2SS HE40 Wi-Fi 6 client device (max)
- Two spatial stream Single User (SU) MIMO for up to 287 Mbps wireless data rate to individual 2SS HE20 Wi-Fi 6 client device (typical)
- Two spatial stream Multi User (MU) MIMO for up to 575 Mbps wireless data rate to up to two 1SS HE40 Wi-Fi 6
   DL- MU-MIMO capable client devices simultaneously (max)

- Two spatial stream Multi User (MU) MIMO for up to 287 Mbps wireless data rate to up to two 1SS HE20 Wi-Fi 6
   DL- MU-MIMO capable client devices simultaneously (typical)
- Support for up to 512 associated client devices per radio, and up to 16 BSSIDs per radio
- Supported frequency bands (country-specific restrictions apply):
  - 2.400 to 2.4835 GHz
  - 5.150 to 5.250 GHz
  - 5.250 to 5.350 GHz
  - 5.470 to 5.725 GHz
  - 5.725 to 5.850 GHz
  - 5.850 to 5.925 GHz
  - 5.825 to 5.875 GHz
- Available channels: Dependent on configured regulatory domain
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum (DSSS)
  - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11ax: Orthogonal frequency-division multiple access (OFDMA) with up to 16 resource units (RU)
- Supported modulation types:
  - 802.11b: BPSK, QPSK, CCK
  - 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM (proprietary extension)
  - 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024 QAM (proprietary extension)
  - 802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024 QAM
- 802.11n high-throughput (HT) support: HT 20/40
- 802.11ax high efficiency (HE) support: HE20/40/80/160
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
  - 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15, HT20 to HT40)
  - 802.11n (5GHz): 6.5 to 600 (MCS0 to MCS31, HT20 to HT40)
  - 802.11ac: (5 GHz): 6.5 to 3,467 (MCSO to MCS9, NSS = 1 to 4 for VHT20 to VHT160)
  - 802.11ax (2.4GHz): 3.6 to 574 (MCSO to MCS11, NSS = 1 to 2, HE2O to HE4O)
  - 802.11ax (5GHz): 3.6 to 4803 (MCS0 to MCS11, NSS = 1 to 4, HE20 to HE160)
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (conducted) transmit power (limited by local regulatory requirements):
  - 2.4 GHz band: +22 dBm per chain , +25dBm aggregate (2x2)
  - 5 GHz band: +22 dBm per chain, +28dBm aggregate (4x4)
  - Notes: conducted transmit power levels exclude antenna gain
- Maximum EIRP (limited by local regulatory requirements):
  - 2.4 GHz band:
    - o AP-575EX: 29.0 dBm EIRP
    - o AP-577EX: 34.4 dBm EIRP
  - 5 GHz band:
    - o AP-575EX: 32.6 dBm EIRP
    - o AP-577 EX: 36 dBm EIRP
- Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks
- Maximum ratio combining (MRC) for improved receiver performance
- Cyclic delay/shift diversity (CDD/CSD) to enable the use of multiple transmit antennas
- Short guard interval for 20-MHz, 40-MHz, 80-MHz and 160-MHz channels
- Space-time block coding (STBC) for increased range and improved reception
- Low-density parity check (LDPC) for high-efficiency error correction and increased throughput
- Transmit beam-forming (TxBF) for increased signal reliability and range

#### **Power**

- Maximum (worst-case) power consumption:
  - POE powered (dual ports): 32.0W
  - POE powered (single port, full function): 26.1W
- Maximum (worst-case) power consumption in idle mode: 14.0W (single POE) or 16.0W (dual POE)
- Maximum (worst-case) power consumption in deep-sleep mode: 2.9W (single POE) or 3.9W (dual POE)
- The AP supports Power over Ethernet (POE; on port EO and/or E1)
- When POE power is supplied to both Ethernet ports, the AP can be configured to combine or prioritize power sources
- Power sources are sold separately; see the ordering Information section below for details
- When powered by 1x 802.3at (class 4) POE and with the IPM feature disabled, the AP will disable the other Ethernet port. In the same configuration but with IPM enabled, the AP will start up in unrestricted mode, but may dynamically apply restrictions depending on the POE budget and actual power. The feature restrictions and order can be programmed.
- Operating the AP with single or dual 802.3af (class 3 or lower) POE source is not supported

#### **Additional interfaces**

- E0: HPE SmartRate port (RJ-45)
  - Auto-sensing link speed (100/1000/2500BASE-T) and MDI/MDX
  - 2.5Gbps speed complies with NBase-T and 802.3bz specifications
  - PoE-PD: 48Vdc (nominal) 802.3af/at/bt (Class 3 or higher)
  - 802.3az Energy Efficient Ethernet (EEE)
- E1: 10/100/1000BASE-T (RJ-45)
  - Auto-sensing link speed and MDI/MDX
  - 802.3az Energy Efficient Ethernet (EEE)
  - Link Aggregation (LACP) support between both network ports for redundancy and increased capacity
- Bluetooth 5 and 802.15.4 radio
  - 2.4 GHz
  - Bluetooth 5: up to 8dBm transmit power and -95dBm receive sensitivity
  - Zigbee: up to 8 dBm transmit power and -97dBm receive sensitivity
  - Up to 4dBm transmit power (class 2) and -91 dBm receive sensitivity
- Visual indicator (multi-color LED): For system and radio status
- Reset button: Factory reset (during device power up)
- USB-C console interface

#### **Environmental**

- Operating:
  - Temperature:  $-40^{\circ}$  C to  $+65^{\circ}$  C ( $-40^{\circ}$  F to  $+149^{\circ}$  F)
  - Humidity: 5% to 93% non-condensing internal to chassis.
- Storage and transportation:
  - Temperature:  $-40^{\circ}$  C to  $+70^{\circ}$  C ( $-40^{\circ}$  F to  $+158^{\circ}$  F)
- Operating altitude: 3,000 m
- Water and dust: IP66/67
- Salt tolerance: tested to ASTM B117-07A salt spray 200hrs
- Wind survival: up to 165 Mph
- Shock and vibration: ETSI 300-19-2-4

#### Warranty

<u>Limited lifetime warranty</u>

### Minimum Operating System Software

HPE Aruba Networking OS and HPE Aruba Networking InstantOS 8.7.0.0

## Regulatory

- FCC/ISED
- CE Marked
- RED Directive 2014/53/EU
- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- UL/IEC/EN 60950
- EN 60601-1-1, EN60601-1-2
- For more country-specific regulatory information and approvals, please see your HPE Aruba Networking representative.

## **Certifications**

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance certified 802.11a/b/g/n
- Wi-Fi CERTIFIED™ 6 (802.11ax)
- Wi-Fi CERTIFIED™ ac (with Wave 2 features)
- Passpoint® (Release 2) with HPE Aruba Networking OS and Instant

RF Performance Table			
	Maximum transmit power (dBm) per	Receiver sensitivity (dBm) per	
	transmit chain	receive chain	
2.4 GHz, 802.11b			
1 Mbps	22	-97	
11 Mbps	22	-89	
2.4 GHz, 802.11g			
6 Mbps	22	-94	
54 Mbps	20	-76	
<b>2.4 GHz, 802.11n/ac HT20</b> MCS0	22	-93	
MCS8	19	-72	
2.4 GHz, 802.11ax HE20	17	-72	
	22	0.7	
MCS0 MCS11	22 17	-93 -62	
5 GHz, 802.11a	1/	UZ	
	22	-95	
6 Mbps			
54 Mbps	20	-76	
5GHz, 802.11n/ac HT20/VF		0/	
MCS0	22	-94	
MCS8	19	-72	
<b>5GHz, 802.11n/ac HT40/V</b> FMCS0	22	-92	
MCS9			
MC59 5GHz, 802.11ac VHT80	19	-68	
	22	00	
MCS0	22	-90	
MCS9	19	-65	
5GHz, 802.11ac VHT160			
MCS0	22	-84	
MCS9	19	-59	
5GHz, 802.11ax HE20			
MCS0	22	-94	
MCS11	17	-62	
5GHz, 802.11ax HE40	/		
MCS0	22	-91	
MCS11	17	-60	
5GHz, 802.11ax HE80			
MCS0	22	-87	
MCS11	17	-57	
5GHz, 802.11ax HE160			
MCS0	22	-85	
MCS11	17	-53	

**Notes:** Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.



# **Summary of Changes**

Date	<b>Version History</b>	Action	Description of Change
04-Dec-2023	Version 9	Changed	Series name was updated.
16-Oct-2023	Version 8	Changed	Configuration Information section was updated
07-Aug-2023	Version 7	Changed	Configuration Information section was updated
21-Nov-2022	Version 6	Changed	Configuration Information section was updated.
06-Dec-2021	Version 5	Changed	SKUs were added in Configuration Information section.
15-Mar-2021	Version 4	Changed	SKUs were added in Configuration Information section.
02-Nov-2020	Version 3	Changed	Configuration Information section was updated.
			New SKUs were added.
08-Sep-2020	Version 2	Changed	Configuration Information section was updated.
			New SKUs were added.
01-Jun-2020	Version 1	New	New QuickSpecs

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