HPE aruba networking

Data sheet

HPE Aruba Networking 560EX Series Hazardous Location Access Points

Entry-level Wi-Fi 6 (802.11ax) for outdoor and hazardous location environments

HPE

Weatherproof and temperature hardened, HPE Aruba Networking 560 Series Hazardous Location Access Points deliver cost-effective Wi-Fi 6 wireless connectivity in outdoor and environmentally challenging hazardous locations.

Purpose-built to survive in the harshest outdoor environments, the 560 series can 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 for any organization experiencing growing numbers of IoT and mobility requirements. With maximum aggregate on air data rate of 1.49 Gbps (HE80/HE20), they deliver the speed and reliability needed for most environments.

HPE Aruba Networking's advanced ClientMatch technology and an integrated Bluetooth beacon can help enable HPE Aruba Networking location services.

Incredible efficiency

The 560 series access points (APs) are designed to optimize user experience by maximizing Wi-Fi efficiency and dramatically reducing airtime contention between clients.

Features include Orthogonal frequency-division multiple access (OFDMA), bi-directional multi-user MIMO and cellular optimization. With up to 2 spatial streams, the 560 series provides reliable connectivity for most any application.

Advantages of OFDMA

OFDMA capability allows HPE Aruba Networking access points to handle multiple Wi-Fi 6 capable clients on each channel simultaneously, regardless of device or traffic type. Channel utilization is optimized by handling each transaction via smaller sub-carriers or resource units (RUs), which means that clients are sharing a channel yet not competing for airtime and bandwidth.

Multi-User MIMO (MU-MIMO)

560 series access points support downlink MU-MIMO just like Wi-Fi 5 (802.11ac Wave 2) access points. The added benefit is the ability to multiply the number of clients that can now send traffic, thus optimizing client-to-access point spatial stream diversity.

Wi-Fi 6 and MU-MIMO aware client optimization

HPE Aruba Networking's patented AI-powered ClientMatch technology eliminates sticky client issues by placing Wi-Fi 6 capable devices on the best available access point. Session metrics are used to steer mobile devices to the best AP based on available bandwidth, types of applications being used and traffic type — even as users roam.

HPE Aruba Networking Advanced Cellular Coexistence (ACC)

The ACC feature 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.

Intelligent Power Monitoring (IPM)

HPE Aruba Networking access points continuously monitor and report hardware energy consumption. They can also be configured to enable or disable capabilities based on available PoE power — ideal when wired switches have exhausted their power budget.

IoT platform capabilities

Like all HPE Aruba Networking Wi-Fi 6 access points, the 560 Series 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. This allows organizations to leverage the 560 series as an IoT platform, which eliminates the need for an overlay infrastructure and additional IT resources.

Target Wake Time (TWT)

Ideal for IoTs that communicate infrequently, TWT establishes a schedule for when clients need to communicate with an access point. This helps improve client power savings and reduces airtime contention with other clients.

HPE Aruba Networking secure infrastructure

The 560 series includes components of HPE Aruba Networking's zero trust security to help protect user authentication and wireless traffic. Select capabilities include:

WPA3 and Enhanced Open

Support for stronger encryption and authentication is provided via the latest version of WPA for enterprise protected networks.

Enhanced Open offers seamless protection for users connecting to open networks where each session is automatically encrypted to protect user passwords and data on guest networks.

WPA2-MPSK

MPSK enables simpler passkey management for WPA2 devices — should the Wi-Fi password on one device or device type change, no additional changes are needed for other devices.

VPN tunnels

In remote access point (RAP) and IAP-VPN deployments, the 560 Series can be used to establish a secure SSL/IPSec VPN tunnel to a Mobility Controller that is acting as a VPN concentrator.

Trusted Platform Module (TPM)

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

Simple and secure access

To simplify policy enforcement, the 560 series uses HPE Aruba Networking Policy Enforcement Firewall (PEF) feature to encapsulate all traffic from the access point to the Mobility Controller (or Gateway) for end-to-end encryption and inspection. Policies are applied based on user role, device type, applications, 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 560 series access point provides connectivity for a maximum of 256 associated clients per radio (512 in total). In real-world scenarios, the maximum recommended client density is dependent on environmental conditions.

Flexible operation and management

Our unified access points can operate as standalone access points or with a gateway for greater scalability, security, and manageability. access points can be deployed using zero touch provisioning — without on-site technical expertise — for ease of implementation in branch offices and for remote work.

HPE Aruba Networking access points can be managed using cloud-based or on-premises solutions for any campus, branch, or remote work environment.

HPE Aruba Networking Central provides a single pane of glass for overseeing every aspect of wired and wireless LANs, WANs, and VPNs. AI-powered analytics, end-to-end orchestration and automation, and advanced security features are built natively into the solution.

Additional Wi-Fi features

Each access point also includes the following standards-based technologies:

- **Transmit Beamforming (TxBF):** Increased signal reliability and range
- **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
- **802.11mc Fine Timing Measurement (FTM):** For precision distance ranging