

HPE Aruba Networking 580EX Series Hazardous Location Access Points

HPE Aruba Networking AP-585EX (US) Dual Radio 4x4 802.11ax Internal Omni Ants Unified HazLoc AP (R7T29A)



What's new

- Purpose-built to survive in one of the harshest outdoor environments with Hazardous Location Class 1 Division 2, and ATEX Zone 2, and IP66 rating for hazardous locations.
- Wi-Fi 6 capabilities to deliver multi-gigabit performance and speed with a maximum

Overview

HPE Aruba Networking 580EX Series Hazardous Location Access Points are weatherproofed and temperature hardened to support hazardous environments, including outdoor oil rigs, industrial manufacturing, and transportation sites. With Wi-Fi 6 capabilities, high power Bluetooth and 802.15.4/Zigbee radios, and maximum aggregate data rate of 2.97 Gbps, the 580EX Series delivers the speed and reliability needed for demanding Industrial IoT environments.



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- The AP supports for 5 Gbps multi-gigabit Ethernet ports and 802.3bt Class 6 power or AC power included, no need for add-on AC power adapters.
- Features high power Bluetooth [1] and 802.15.4/Zigbee support for Industrial IoT.
- Seamless connectivity with RF automation (AirMatch), client optimization (ClientMatch), and AIOps (AI Insights) for built-in configuration recommendations.

Purpose-built to survive one of the harshest outdoor environments, the 580EX Series withstands exposure to extreme high and low temperatures and persistent moisture, are fully sealed to keep out airborne contaminants, and include industrial surge protection. The 580EX Series offers flexible power and management options to meet the needs of diverse environments and can be deployed using existing mounts. The 580EX Series is Wi-Fi 6 certified and backed by a limited lifetime warranty.

Features

High-Performance Ruggedized Outdoor Wi-Fi 6 APs

HPE Aruba Networking 580EX Series Hazardous Location Access Points are designed for hazardous environments, including outdoor oil rigs, industrial manufacturing, and transportation sites and provide maximum aggregate data rate of 2.97 Gbps.

The AP includes options for 5G Ethernet, SFP+, and PSE out for flexible connectivity.

It improves efficiency and security with Wi-Fi 6 capabilities including MU-MIMO, OFDMA, WPA3, and Enhanced Open.

Dual redundant power/port failover and support for AC provide high availability with uninterrupted performance.

Enhanced wireless experience with HPE Aruba Networking ClientMatch technology removes sticky client issues by steering a client to the AP where it receives the best radio signal.

Weatherproof and Temperature Hardened

HPE Aruba Networking 580EX Series Hazardous Location Access Points meet the needs of hazardous locations with Class 1, Division 2, and ATEX Zone 2 certifications like outdoor oil rigs, industrial manufacturing, and transportation sites.

The APs are ruggedized and tested for -40C to +65C, including full sun deployments.

IP66 rated with industrial surge protection.

It can withstand extreme temperatures, persistent moisture and precipitation, and are fully sealed to keep out airborne contaminants.

Industrial IoT Ready

HPE Aruba Networking 580EX Series Hazardous Location Access Points can serve as IoT platforms that bolster network security and provide coverage for a range of IoT devices without the need for network overlays and include integrated, high-power antennas for increased performance and coverage.

The AP provides high-power Bluetooth and 802.15.4/Zigbee radios for increased IoT coverage.

The target wake time (TWT) improves battery life of IoT devices.

Intelligent Power Monitoring (IPM) feature provides ability to enable or disable capabilities based on available PoE power.

HPE Aruba Networking Central Client Insights uses deep packet inspection to provide additional context and behavioral information that help verify devices are receiving proper policy enforcement and continuously monitor for rogue devices.

Enhanced Security

The HPE Aruba Networking 580EX Series Hazardous Location Access Points offer enhanced security with Dynamic Segmentation to remove time-consuming, error-prone tasks of managing complex and static VLANs, ACLs and subnets by dynamically assigning policies and keeping traffic protected and separated.

The AP offers stronger encryption and authentication with WPA3, protected credentials/keys storage for guest access with Enhanced Open, and user and IoT access policy enforcement firewalls (PEF).

It simplifies policy enforcement by using the HPE Aruba Networking Policy Enforcement Firewall (PEF) to encapsulate all traffic from the AP to the gateway (or mobility controller) for end-to-end encryption and inspection.

For enhanced device assurance, the HPE Aruba Networking 580EX Series Hazardous Location Access Points include an installed Trusted Platform Module (TPM) for protected storage of credentials, keys, and boot code.

Technical specifications

HPE Aruba Networking AP-585EX (US) Dual Radio 4x4 802.11ax Internal Omni Ants Unified HazLoc AP

Product Number	R7T29A
Differentiator	Available in US only
Certifications	Wi-Fi Alliance Bluetooth SIG Ethernet Alliance (E0, PoE PD device, Class 6; E2, PoE PSE device, Class 3) Class 1 Div 2 ATEX Zone 2 IECEx
Input voltage	AC power interface: 110-240V (requires AP-AC-MLX power connector BT)
Regulatory	FCC/ISED CE Marked RED Directive 2014/53/EU EMC Directive 2014/30/EU Low Voltage Directive 2014/35/EU IEC 60950-22 UL/IEC/EN 62368-1 IEC/EN60601-1-2 EN 50155 EN IEC 60079-0 EN IEC 60079-7 IEC 60079-7 IEC 60079-7 CSA C22.2 No.213-17 UL 121201 UL 50E
Wi-Fi antenna	AP-585EX models: Built-in omni-directional antennas (H and V polarized): 5 GHz 4.5dBi uncorrelated avg (5.8dBi peak), 2.4 GHz 3.0dBi uncorrelated avg (4.4dBi peak), BLE Antenna 4.8dBi peak
Power consumption	The AP supports direct AC power and Power over Ethernet (802.3bt PoE; on port EO only). When both AC and PoE power sources are available, AC power takes priority over PoE. Power sources are sold separately. Maximum (worst-case) power consumption: AC powered: 71W (802.3af/at*). PoE powered (802.3bt Class 6): 49.5W (802.3af PSE only). PoE powered (802.3bt Class 5): 35.5W (no PSE) PoE powered (802.3at, IPM disabled): 25.5W (2 chains @ 2.4 GHz, 2 chains @ 5 GHz, no PSE). Maximum (worst-case) power consumption in idle mode: 9.2W (PoE) or 10.8W (AC). Maximum (worst-case) power consumption in deep-sleep mode: 3.0W (PoE) or 4.4W (AC). NOTE: *With IPM enabled, the AP will adjust power requirements to meet requirements, and will reduce power as necessary according to the established IPM policy.

Radio coverage	AP type: Outdoor Hardened, Wi-Fi 6 dual radio, 5 GHz and 2.4 GHz 802.11ax 4x4 MIMO. 5GHz radio: Four spatial stream Single User (SU) MIMO for up to 2.4Gbps wireless data rate with individual 4SS HE80 (or 2SS HE160) 802.11ax client devices, or with four 1SS or two 2SS HE80 802.11ax MU-MIMO capable client devices simultaneously. 2.4GHz radio: Four spatial stream Single User (SU) MIMO for up to 1,150Mbps wireless data rate with individual 4SS HE40 802.11ax client devices or with two 2SS HE40 802.11ax MU-MIMO capable client devices simultaneously.
Warranty	Limited lifetime warranty. See the warranty duration.
Product dimensions (metric)	32 x 32.4 x 31.3 cm (H x W x D)
Weight	5.24 kg

^[1] Bluetooth is a trademark owned by its proprietor and used by Hewlett Packard Enterprise under license. All third-party marks are property of their respective owners.

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

HPE Aruba Networking Services

HPE Aruba Networking services simplify and accelerate 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 HPE Services -Aruba Networking has to offer at: https://www.hpe.com/edge/services

Support Services

Our support portfolio provides the essential support elements as well as proactive and preventive features to help you improve your team's productivity and get the most from your network. Our support customers benefit from faster issue resolution, simplified operations and efficiencies, and reduced network issues.

Professional Services

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 HPE Aruba Networking technology.

Project based services include: **Annual subscription services include:**

- Planning, audit, and assessment Network optimization
- Architecture review and design •
- Intelligent Operations
- Deployment, migration, and knowledge transfer
- Customer Experience Management

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

HPE GreenLake for Networking

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

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

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

Image may differ from the actual product PSN1014652520BOEN, March, 2025.

