

HPE Aruba Networking CX 5420 Switch Series

HPE Aruba Networking CX 5420 6-slot Switch (S0U59A)



What's new

- Powerful, modular, intelligent Layer 3 switch chassis with BGP, VSX, and OSPF with robust quality of service (QoS).
- Flexibility with 6 half-width modules that allow growth when needed and support for port diversity in a condensed 4RU chassis with redundant MM and PSU.
- High performance switching with up to 960 Gbps using 714 Mpps, built-in high availability with HPE Aruba Networking Virtual Switching Extension (VSX) Live

Overview

The HPE Aruba Networking CX 5420 Switch Series is an intelligent, flexible and modular Layer 3 switch chassis created for today's enterprise small and medium campus, branch enterprise networks with built-in MACsec hardware capability, analytics and automation. CX 5420 switch chassis is part of the CX switching portfolio that provides an enterprise-class access layer solution that is easy-to-deploy, simple, secure and resilient. By combining a modern, fully programmable OS with HPE Aruba Networking Network Analytics Engine (NAE), the CX 5420 Series provides industry leading monitoring and troubleshooting capabilities across the network.

A powerful Gen7 ASIC architecture delivers performance and extensive



Upgrade and Always-On PoE.

- Simplified operations with the common HPE Aruba Networking CX Switch Operating System (AOS-CX) used across the CX portfolio delivering a more consistent, more efficient operator experience.
- Easy to manage and simplify configurations with HPE Aruba Networking Central, HPE Aruba Networking Switch Multi-Edit Software, with easy-to-use web GUI or industry-standard CLI.
- Automated, unified role-based policies for users, Internet of Things (IoT) and devices with HPE Aruba Networking Dynamic Segmentation and intelligent monitoring, visibility, and remediation with NAE.

feature support with flexible programmability for the tomorrow applications. This advanced modular 4U chassis switch offers up to 960Gbps with low latency, 6 half-width line card slots, VSX Live Upgrade, and HPE Smart Rate 10GbE up to 90W Class-8 PoE with BGP/OSFP/PIM support.

Features

Future-ready with Superior Performance

The HPE Aruba Networking CX 5420 Switch Series use the latest Gen7 ASICs, delivering very low latency, increased packet buffering, and adaptive power consumption. All switching and routing are wirespeed to meet the demands of bandwidthintensive applications today and in the future.

The CX 5420 switch is a compact 6 slot (4 RU) supporting a choice of line cards and redundant, halfwidth management modules that seamlessly supports Wi-Fi 6 and IoT with Smart Rate multi-gigabit and 90W PoE ports.

High availability with HPE Aruba Networking Virtual Switching Extension (VSX) Live Upgrade provides high availability, nondisruptive fast upgrades and simplified management, supporting redundant power supplies and N+1 redundant fans.

The series provides security-first networking with MACsec [1] capable line card modules delivering the enterprise-grade performance and security needs for small and medium campus, branch enterprise networks.

Simplified Operations and Management

The HPE Aruba Networking CX 5420 Switch Series is based on HPE Aruba Networking CX Switch Operating System (AOS-CX), a modern, databasedriven operating system that automates and simplifies many critical and complex network tasks.

The CX 5420 switch delivers unparalleled visibility with built-in analytics for real-time monitoring and troubleshooting to help fix problems faster. The HPE Aruba Networking Network Analytics Engine (NAE) automatically interrogates and analyzes events that can impact network health.

REST APIs, Python and CLIbased agents for advanced telemetry, automation to easily identify, troubleshoot network, system, application and security related issues. The Time Series Database (TSDB) stores configuration and operational state data, making it available to resolve network issues quickly.

HPE Aruba Networking Switch Multi-Edit Software introduces automation that allows for rapid network-wide changes, and achieves policy conformance post network updates. Intelligent capabilities include search, edit, validation (including conformance checking), deployment, and audit features.

HPE Aruba Networking CX Mobile App simplifies connecting, stacking and managing CX 5420 switches. Switch information can be imported into HPE Aruba Networking Switch Multi-Edit Software for simplified configuration management and to continuously validate conformance of configurations in the network.

Secure and Scalable Segmentation

The HPE Aruba Networking CX 5420 Switch Series supports HPE Aruba Networking Dynamic Segmentation that automatically applies and enforces user, device, and application-aware policies on wired and wireless infrastructures.

Automated device profiling, role-based access control, and Layer 7 firewall features deliver enhanced visibility and performance for a better overall experience for both IT and end-users alike.

Dynamic Segmentation provides scale and flexibility in network design by allowing the stretching of VLANs and subnets across the entire network with VXLAN overlay fabric which use Group Based Policy tagging to transport source role.

Extended-Edge VTEP (EE VTEP) static VXLAN supports EE VTEP persona.



Enable flexible L2 Fabric design with scale and consistent architecture with support of Group-Based-Policy and role-to-role security enforcement.

Technical specifications

HPE Aruba Networking CX 5420 6-slot Switch

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|-----------------------|---|
| Product Number | S0U59A |
| Differentiator | Advanced Layer 3 modular chassis with support for port diversity 1G/SR2.5/SR5/SR10/SFP/SFP+(LRM)/SFP28 in a condensed 4RU chassis with redundant MM and PSU, and high-power PoE switches for access, small core and aggregation deployments |
| Ports | 6-line card slots up to 160 Gb/s forwarding per slot |
| Memory and processor | 16GB DDR4 SODIMM with ECC, 32GB eMMC Flash memory. 64MB shared packet buffer memory shared dynamically among ports |
| Latency | 2.5 micro sec |
| Throughput | 714 Mpps |
| Switching capacity | 960 Gbps (480 Gbps in + 480 Gbps out) |
| PoE capability | Industry standard IEEE 802.3bt High Power PoE support provides up to 90W of Class 8 PoE power per port to support the latest APs and IoT devices |
| Management features | HPE Aruba Networking Central Network Management HPE Aruba Networking Switch Multi-Edit Software Command-line interface SNMP v2c/v3 RMON |
| Power supply name | Supports 4 field replaceable and hot-swappable power supply slots |
| Input voltage | 100-127/200-240VAC |
| Operating temperature | 32°F to 113°F (0°C to 45°C), up to 5,000 feet Derate 1°C every 1,000 feet from 5,000 feet to 10,000 feet |
| Power consumption | 1600W @ 200-240Vac, 1000W @ 100-127Vac |

[1] Hardware is MACsec capable. Software support available in future releases.



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
- Architecture review and design
- Deployment, migration, and knowledge transfer
- Network optimization
- Intelligent Operations
- 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.

Make the right purchase decision.
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