

HPE Aruba Networking 5400R z12 Switch Series

HPE Aruba Networking 5412R z12 Switch (J9822A)



What's new

- Powerful HPE Aruba Layer 3 modular switch series with VSF stacking, low latency, resiliency and Dynamic Segmentation for a better mobile-first campus experience.
- HPE Aruba Networking ClearPass Policy Manager, HPE Aruba Networking AirWave and HPE Aruba Networking Central support.
- HPE Smart Rate for high speed multi gigabit bandwidth and PoE+ power.
- Scalable line rate 40GbE for wireless traffic

Overview

The HPE Aruba Networking 5400R z12 Switch Series brings enterprise-class resiliency and innovative flexibility to mobile-first networks. This advanced Layer 3 modular switch provides scalable aggregation with HPE Smart Rate multi-gigabit ports for high-speed 802.11ac devices, Dynamic Segmentation, Virtual Switching Framework (VSF) stacking technology, hitless failover, line rate 40GbE, robust QoS and security and requires no software licensing. The 5400R z12 series is easy to deploy and manage with advanced security and network management tools like HPE Aruba Networking ClearPass Policy Manager, HPE Aruba Networking AirWave and cloud-based HPE Aruba Networking Central.

aggregation.

- Fast Software Upgrade for 5400R z12 series VSF stack minimizes downtime.
- Ready for the software defined network with REST APIs and OpenFlow support.

Features

Power and Innovation For Your Digital Workplace

The 5400R z12 Switch Series is an industry-leading mobile campus access solution with HPE Smart Rate multi-gigabit ports for high-speed connectivity for the latest 802.11ac devices. It brings enterprise-class resiliency and true flexibility, security and scalability to mobile campus networks.

Based on the 6th generation ProVision ASIC, the 5400R z12 series has a high-speed, high-capacity architecture with 2 Tbps crossbar switching fabric with low 2.1 latency and built-in programmable and easy to use REST API interface; provides configuration automation for Mobile-first campus networks.

Flexible connectivity options with 6- or 12- slot compact chassis, support for line rate 40GbE uplinks, up to 96 line rate 10GbE ports (SFP+ and 10GBASE-T), 1GbE and up to 288 ports of PoE+ with internal power supplies.

Optimized for the digital workplace with unified management and security tools such as ClearPass Policy Manager, Airwave and Central. Provides optimal configuration automatically when connected to HPE Aruba Networking access points for PoE priority, VLAN configuration, and rogue AP containment.

License free software with advanced Layer 2 and 3 feature set including IPv6, IPv4 BGP, policy based routing, VRRP, OSPF, Tunnel Node and robust QoS.

Resiliency and High Availability at the Edge

The 5400R z12 series using the sixth generation ProVision ASIC delivers wire-speed classification and policy enforcement. This hardware-based control of access and traffic allows protection, detection and response to network threats with no network performance degradation.

Uninterrupted switching and routing for improved support of applications such as unified communications and enhanced L3 high availability.

Supports virtual router redundancy protocol (VRRP) allowing groups of two routers to dynamically back each other up to create highly available router environments in both IPv4 and IPv6 networks.

Redundant management and power systems enhance system availability and continuity of operations. Hot-swappable modules and optional redundant power supply provides uninterrupted power and allows swapping of modules with no impact on the network availability.

Virtual Switching Framework (VSF) virtualizes up to two physical switches into one logical device for simpler, flatter, more agile networks. Fast Software Upgrade minimizes downtime during upgrade on 5400R z12 series VSF stack.

Robust Security and Dynamic Quality of Service (QoS)

The HPE Aruba Networking 5400R z12 Switch Series includes a robust set of security and quality of services features to build a network that meets ever-changing corporate policies and compliances.

Flexible authentication options include 802.1X, MAC and Web delivering greater policy-driven application security. Industry standard MACsec provides link-level encryption security between two points using copper or fiber links (available on select modules only).

Advanced distributed denial of service (DDoS) protection, such as DHCP Snooping, IP Source Guard, and ARP Protection, and flexible traffic controls, such as policy-based routing, QoS, and ACLs, manage end-to-end application priorities.

Powerful multilevel-access security controls, such as varying security management login, RADIUS/TACACS+, and SSH for safe control change management access. Defend the edge of your IPv6 network with DHCPv6 Protection and Dynamic IPv6 Lockdown.

Tunnel Node to transport network traffic to HPE Aruba Networking controller with authentication and network policies applied and enforced at the controller.



Simplify with Integrated Wired/Wireless Management

The 5400R z12 series supports HPE Aruba Networking ClearPass Policy Manager for unified and consistent policy between wired and wireless users and simplifies implementation and management of guest login, user onboarding, network access, security, QoS, and other network policies.

Supports HPE Aruba Networking AirWave to provide common platform for Zero-Touch Provisioning management, and monitoring for wired and wireless network devices.

RMON, XRMON and sFlow provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events.

HPE Aruba Networking Central cloud-based management platform offers simple, secure, and cost effective way to manage switches.

Supports both cloud-based Central and on-premise AirWave with the same hardware ensuring change of management platform without ripping and replacing switching infrastructure.



Technical specifications

HPE Aruba Networking 5412R zl2 Switch

Product Number	J9822A
Differentiator	Ultra-flexible 12-slot campus access switch ready to be built out. This configuration comes with a 12-slot 5400R chassis, one (1) J9827A management module, and one (1) J9832A fan tray. The configuration does not include a power supply. Power supplies must be ordered separately.
Ports	(12) open module slots Supports a maximum of 288 autosensing 10/100/1000 ports or 288 SFP ports or 96 SFP+ ports or 96 HPE Smart Rate Multi-Gigabit or 24 40GbE ports, or a combination
Memory and processor	Freescall P2020 dual core @ 1.2 GHz 16 MB flash 1 GB SD Card 4 GB DDR3 SODIMM
Latency	1000 Mb Latency: < 2.8 μ s 10 Gbps Latency: < 1.8 μ s 40 Gbps Latency: < 1.5 μ s
Throughput	up to 1142.8 Mpps
Routing/switching capacity	1920 Gbps
Switch fabric speed	2030 Gbps
Management features	HPE Aruba Networking AirWave Network Management HPE Aruba Networking Central IMC - Intelligent Management Center Command-line interface Web browser Configuration menu Out-of-band management (RJ-45 Ethernet) SNMP manager Out-of-band management (serial RS-232C or micro USB)
Input voltage	100 - 127 / 200 - 240 VAC, rated
Heat dissipation	4900 BTU/hr (5169.5 kJ/hr)
Product dimensions	44.45 x 45.09 x 30.73 cm
Weight	17.28 kg



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.
Contact our presales specialists.

