

HPE Networking Comware Switch Series 5900



What's new

- Introducing a new TAA-compliant top-of-rack switch with 48 × 1G Base-T, 4 × 10G SFP+, and 2 × 40G QSFP+ ports for secure and compliant deployments
- HPE Intelligent Resilient Fabric (IRF) technology provides greater resilience and scalability
- Cut-through with low-latency and varying wire speed performance
- Rich feature sets with IPv4 and IPv6 support Layer 2, Layer 3, and quality of service (QoS) / access control list (ACL) features.
- OpenFlow™ and NETCONF™ for automating manual tasks and improving service delivery
- Dual, redundant hot-pluggable power supplies with reversible airflow help reduce power consumption

Overview

The HPE Networking Comware Switch Series 5900 are high-density, low-latency top-of-rack (ToR) switches suited for deployment at the access layer and management network of medium-sized and large enterprise data centers.

To meet the increased demand for virtualization, scalability, and programmability, these switches provide high-performance switching with low latency and a user-friendly operating system (OS) Comware v7. HPE Intelligent Resilient Fabric (IRF) helps create simpler, flatter, and more agile networks by combining multiple physical switches into a logical device. Network and security features, coupled with dual, redundant hot-swappable power supplies, provide investment protection, reliability, and availability, and allow advanced chassis power management. These switches also provide network visibility through multi-vendor network management with HPE Intelligent Management Center (IMC).

Features

Low latency and multiple wire-speed for demanding applications in the data center environment

The HPE Networking Comware Switch Series 5900 provides multiple wirespeed 10/100/1000BASE-T and 1/10/40G fiber ports for high-performance and flexible deployments.

All ports support full L2/L3 features, IPv4/IPv6 dual stack, OpenFlow™, and NETCONF™ for high scalability and software-defined network (SDN) support.

HPE Intelligent Resilient Fabric (IRF) stacking enables uninterrupted L2 switching and L3 forwarding, reducing operational complexity.

High-Performance data center switching

The HPE Networking Comware Switch Series 5900 delivers 336 Gbps switching capacity for demanding applications.

It supports up to 250 Mpps throughput for data-intensive environments.

With low latency (under 1.5 µs for 10GbE), this switch series delivers increased network throughput. It also includes two 40GbE QSFP+ ports for blazing-fast uplinks.

It supports zero touch provisioning (ZTP) eliminating human errors and accelerating ROI.

Simplicity and lower TCO

The HPE Networking Comware Switch Series 5900 simplifies switch management by up to 88% with multi-unit IRF. [1]

Dual, redundant hot-swappable power supplies with reversible airflow (front-to-back/back-to-front) reduce power consumption.

It supports centralized configuration, compliance and policy management, monitoring, and troubleshooting with HPE Intelligent Management Center (IMC) for a consistent network management experience.

All operating system (OS) features are included with a single license per switch—no hidden costs.

All switch ports are active and ready to use without need for activation licenses.

Business agility and resilience

The HPE Networking Comware Switch Series 5900 achieves IRF convergence in less than 50 milliseconds (ms) for faster application response times.

It provides in-service software update (ISSU) for high availability with modular updates accomplished without downtime.

All switch ports are active and ready to use without need for activation licenses.

Automate tedious tasks with SDN and reclaim wasted resources.

Technical specifications	HPE Networking Comware Switch Series 5900
Power consumption	Maximum: 96W (Dual AC) Idle: 70W (Dual AC)
Heat dissipation	327.6 BTU/hr (345.63 kJ/hr)
Input voltage	Rated AC input voltage: 100–240 VAC Rated VDC input voltage range: 48–60 VDC (depending on power supply chosen)
Ports	48 x 10/100/1000BASE-T ports 4 x 1000/10000 SFP+ ports 2 x QSFP+ 40GbE ports 1 x RJ-45 console port 1 x Mini-USB port 1 x USB Type-A port 2 x Out-of-band management ports (one SFP GbE port and one copper port)
Latency	1 GE < 5 µs, 10 GE < 3 µs and 40 GE <1,2 µs (64-byte packets)
Routing/switching capacity	336Gbps
Switching capacity	336 Gbps
Stacking capabilities	IRF 9-members
Throughput	Up to 250 Mpps (64-byte packets)
Memory and processor	Flash: 1 GB Packet buffer size: 8 MB, 2 GB SDRAM
Power supply	2 power supply slots 1 minimum power supply required (ordered separately)
Management features	HPE Intelligent Management Center (IMC) Command-line interface (CLI) Out-of-band management SNMP manager Telnet FTP
Operating temperature	23°F to 113°F (-5°C to 45°C)
Warranty	Limited lifetime warranty. See the warranty duration.

[1] <https://networktest.com/hpirf/hpirf1.pdf>

SKU comparison

	HPE Networking Comware Switch 48-Port 1GBaseT 4XG 2QSFP+ 5901AF (JL864A)	HPE Networking Comware Switch 48p 10/100/1000BASE-T 4p SFP+ 10G 2p QSFP+ 40G TAA 5901AF (S3Q88A)
Differentiator	Non-TAA model	TAA certified
Power consumption	96 W (Dual AC)	Maximum: 96W (Dual AC) Idle: 70W (Dual AC)
Heat dissipation	327.6 BTU/hr (345.63 kJ/hr)	327.6 BTU/hr (345.63 kJ/hr)
Input voltage	100 to 240 VAC V rated -48 VDC to -60 VDC V rated (Depending on power supply chosen)	Rated AC input voltage: 100–240 VAC Rated VDC input voltage range: 48–60 VDC (depending on power supply chosen)
Ports	(48) autosensing 10/100/1000 ports, Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only, (4) fixed 1000/10000 SFP+ ports, (2) QSFP+ 40GbE ports	48 x 10/100/1000BASE-T ports 4 x 1000/10000 SFP+ ports 2 x QSFP+ 40GbE ports 1 x RJ-45 console port 1 x Mini-USB port 1 x USB Type-A port 2 x Out-of-band management ports (one SFP GbE port and one copper port)
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Operating temperature	23°F to 113°F (-5°C to 45°C)	23°F to 113°F (-5°C to 45°C)
Warranty	Limited lifetime warranty. See the warranty duration.	Limited lifetime warranty. See the warranty duration.

Related Options

The following options are available for these series:

- HPE Networking 58x0AF 650W AC Power Supply
- HPE Networking A58x0AF 300W AC Power Supply
- HPE Networking A58x0AF 300W DC Power Supply
- HPE Networking Comware X240 40G QSFP+ QSFP+ 1m Direct Attach Copper Cable
- HPE Networking Comware X240 40G QSFP+ QSFP+ 3m Direct Attach Copper Cable
- HPE Networking Comware X240 40G QSFP+ QSFP+ 5m Direct Attach Copper Cable
- HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable
- HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable
- HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable
- HPE Networking X2A0 10G SFP+ to SFP+ 7m Active Optical Cable
- HPE Networking X2A0 10G SFP+ to SFP+ 10m Active Optical Cable
- HPE Networking X2A0 10G SFP+ to SFP+ 20m Active Optical Cable
- HPE Networking X2A0 40G QSFP+ to QSFP+ 7m Active Optical Cable
- HPE Networking X2A0 40G QSFP+ to QSFP+ 10m Active Optical Cable
- HPE Networking X2A0 40G QSFP+ to QSFP+ 20m Active Optical Cable
- HPE Networking X120 1G SFP LC BX 10-D Transceiver
- HPE Networking X120 1G SFP LC BX 10-U Transceiver
- HPE Networking X120 1G SFP LC LH100 Transceiver
- HPE Networking X120 1G SFP LC LX Transceiver
- HPE Networking X120 1G SFP LC SX Transceiver
- HPE Networking X120 1G SFP RJ45 T Transceiver
- HPE Networking X130 10G SFP+ LC BiDi 10km-Downlink Transceiver
- HPE Networking X130 10G SFP+ LC BiDi 10km-Uplink Transceiver
- HPE Networking X130 10G SFP+ LC BiDi 40km-Downlink Transceiver
- HPE Networking X130 10G SFP+ LC BiDi 40km-Uplink Transceiver
- HPE Networking X130 10G SFP+ LC ER 40km Transceiver
- HPE Networking X130 10G SFP+ LC LH 80km Transceiver
- HPE Networking X130 10G SFP+ LC LR Transceiver
- HPE Networking X130 10G SFP+ LC SR Transceiver
- HPE Networking X140 40G QSFP+ CSR4 300m Transceiver
- HPE Networking X140 40G QSFP+ LC BiDi 100m MM Transceiver
- HPE Networking X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver
- HPE Networking X140 40G QSFP+ LC LR4L 2km SM Transceiver
- HPE Networking X140 40G QSFP+ MPO SR4 Transceiver
- HPE Networking X240 10G SFP+ 7m DAC Cable
- HPE Networking X240 10G SFP+ SFP+ 0.65m DAC Cable
- HPE Networking X240 10G SFP+ SFP+ 1.2m DAC Cable
- HPE Networking X240 10G SFP+ SFP+ 3m DAC Cable
- HPE Networking X240 10G SFP+ SFP+ 5m DAC Cable

- HPE Networking X361 150W 48-60VDC to 12VDC Power Supply
- HPE Networking X361 150W 100-240VAC to 12VDC Power Supply

Related Services

The following services are available for these series:

- HPE Aruba Networking Foundational Care 1Y 4HR Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 1Y 4HR Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 1Y CTR 6-Hour 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 1Y NBD Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 1Y NBD Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y 4HR Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y 4HR Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y 4HR Onsite CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y CTR 6-Hour 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y CTR 6-Hour CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y NBD Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y NBD Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 3Y NBD Onsite CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y 4HR Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y 4HR Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y 4HR Onsite CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y CTR 6-Hour 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y CTR 6-Hour CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y NBD Exch 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y NBD Onsite 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Foundational Care 5Y NBD Onsite CDMR 59xxAF 48 2QSFP Switch SVC
- HPE Aruba Networking Networks 5810 5800 Series Switch Installation SVC
- HPE Aruba Networking Switch Startup SVC

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

Advisory & Professional services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Support services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- **HPE Complete Care Service:** a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- **HPE Tech Care Service:** the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE GreenLake

[HPE GreenLake edge-to-cloud platform](#) is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

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

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

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.

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