

HPE FlexFabric 5900 Switch Series



What's new

- High-density, high-performance Top-of-Rack (ToR) switch that bridges the gap between legacy and modern networks with 48 x 10/100/1000Mbps RJ-45 ports, 4 x 1/10 SFP+ ports, and 2 x 40 QFSP+ ports.
- 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 QoS /ACL features.
- OpenFlow and NETCONF for automating

Overview

The HPE FlexFabric 5900 Switch Series 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 user friendly OS (Comware v7). Intelligent Resilient Fabric (IRF) helps in simpler, flatter, and 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.

manual tasks and improving service delivery.

- Dual, redundant hot-pluggable power supplies with reversible airflow help reduce power consumption.

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 Datacenter Environment

The HPE FlexFabric 5900 Switch Series provides multiple wire-speed of 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.

Intelligent Resilient Fabric (IRF) stacking enables uninterrupted L2 switching and L3 forwarding to reduce operational complexity.

High-Performance Data Center Switching

The HPE FlexFabric 5900 Switch Series delivers 336Gbps switching capacity for some of the most demanding applications.

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

With low latency (under a 1.5s 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 by removing human errors and automatically setting up network devices, leading to accelerated RoI.

Simplicity and Lower TCO

The HPE FlexFabric 5900 Switch Series simplifies switch management by up to 88% with multi-unit HPE Intelligent Resilient Fabric (IRF).

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) to provide a consistent network manageability experience.

There are no extra hidden costs with simple one license per switch for all OS features.

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

Business Agility and Resilience

The HPE FlexFabric 5900 Switch Series delivers IRF < 50 msec convergence time [1], allowing faster application response times.

It provides In Service Software Update (ISSU) enabling high availability with modular updates accomplished without any 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 FlexFabric 5900 Switch Series

Differentiator	The HPE 5900 Switch Series is a family of high-density, ultra-low-latency, top-of-rack (ToR) switches, ideally suited for deployment at the server access layer in large enterprise data centers.
Ports	(48) 10/100/1000, 1000/10000 SFP+, or 1/10GbE RJ-45 ports (4) QSFP+ 40-GbE ports, maximum (4) additional 1000/10000 SFP+ ports on selected models
Memory and processor	512 MB flash Packet buffer size: 9 MB 2 GB SDRAM
Latency	<1.2µs refer to QuickSpecs for model details
Throughput	250Mpps Maximum, depending on model and configuration
Routing/switching capacity	336Gbps
Switching capacity	336Gbps
Stacking capabilities	IRF 9 switches
Management features	IMC - Intelligent Management Center Command-line interface Out-of-band management SNMP manager Telnet FTP
Input voltage	-48 to -60 VDC, depending on the model
Operating humidity range	10 to 90% (noncondensing)
Power consumption	Up to 175W, depending on the model
Heat dissipation	UP to 597 BTU/hr, depending on the model

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



For additional technical information, available models and options, please reference the [QuickSpecs](#)

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

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

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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.
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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](#).

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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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