



# HPE FLEXFABRIC 12900E SWITCH SERIES

## Modular Ethernet Switches



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### WHAT'S NEW

- Introducing Type X modules that offer application telemetry support, automation capabilities with HPE IMC Orchestrator and Analyzer and up to 16K multicast group support.
- Small form-factor 1- and 2-slot chassis for next-generation fabric needs and modular 1RU line cards with support for HPE FlexFabric 59xx Switch modules.
- High-density 100GbE as well as support for 100GbE MACsec.

### OVERVIEW

The HPE FlexFabric 12900E Switch Series is a next-generation modular data center core switch designed to support virtualized data centers and the evolving needs of private and public cloud deployments. It offers unprecedented levels of performance, buffering, scale, and availability with high-density GbE, 10GbE, 40GbE and 100GbE connectivity. The switch series includes 1-, 2-, 4-, 8- and 16-slot chassis. Ready for software-defined networking (SDN), the HPE FlexFabric 12900E Switch supports a full Layer 2 and 3 feature set as well as advanced data center features to build resilient scalable fabrics and deliver outstanding convergence times.

- Support for full internet routing tables when using "HF" line cards.

## FEATURES

### Modern, Scalable and Distributed Architecture

The HPE FlexFabric 12900E Switch Series provides non-blocking, lossless Clos architecture with VOQs and large buffers with the flexibility and scalability for future growth.

Distributed architecture with separation of data and control planes delivers enhanced fault tolerance and facilitates continuous operation and zero service disruption during planned or unplanned control-plane events.

Advanced Comware modular operating system brings native high stability, independent process monitoring, and restart through the modular design and multiple processes of Hewlett Packard Enterprise Comware v7 software; enhanced serviceability functions are supported.

In-Service Software Upgrade (ISSU) provides an upgrade of the entire chassis, or an individual task or process, with zero packet loss.

### High-Performance Switch Series with Broad Interface Options

The HPE FlexFabric 12900E Switch Series lets you build Layer 2 and Layer 3 fabrics which are flexible, resilient, and scalable with VxLAN support and sub-second convergence times.

High-density 1GbE, 10GbE, 40GbE and 100GbE interface connectivity with up to 16 interface module slots scales up to 768 1GbE/10GbE, 768 40GbE ports and 576 100GbE ports.

Distributed scalable fabric architecture offers up to six fabric modules delivering more than 43.2 Tbps per slot bandwidth.

### Optimized for the Next-Generation Data Center

The HPE FlexFabric 12900E Switch Series let you build Layer 2 fabrics which are flexible, resilient, and scalable with VxLAN, TRILL and/or Hewlett Packard Enterprise IRF.

Type X modules that offer automation capabilities with HPE IMC Orchestrator and Analyzer, streaming telemetry support with Precision Timing Protocol (PTP) and up to 16K multicast group support.

Enhanced HPE Multitenant Device Context (MDC) for multi-tenancy giving you the ability to virtualize a physical switch into multiple logical device.

Network and storage convergence with support for Fiber Channel over Ethernet (FCoE) and Data Center Bridging (DCB) protocols includes IEEE 802.1Qaz Data Center Bridging Exchange (DCBX), Enhanced Transmission Selection (ETS), and IEEE 802.1Qbb Priority Flow Control (PFC).

### Enterprise-Class Availability and Resiliency with Broad Layer 2 and Layers 3 Feature Set

Intelligent Resilient Fabric (IRF) creates virtual resilient switching fabrics where two HPE FlexFabric 12900E Switch Series perform as a single Layer 2 switch and Layer 3 router that can be attached using standard LACP for automatic load balancing and high availability.

The switch series offers hot-swappable modules and redundant load-sharing fabrics, management, power and high-speed fan assemblies which provides you with optimum network performance and availability while simplifying your network operations.



Comprehensive switching, routing and service provider feature set with full IPv4/IPv6, ACLs, QoS, MPLS/VPLS and multicast capabilities is offered.

## Technical specifications

## HPE FlexFabric 12900E Switch Series

<b>Differentiator</b>	HPE FlexFabric 12900E Switch Series is the next generation modular data center core switch designed to support virtualized data centers and evolution needs of private and public clouds deployments.
<b>Ports</b>	16 I/O module slots, maximum Supports a maximum of 768 40GbE, 768 10GbE, 1/10GbE copper, 1/10GbE fiber, 1GbE fiber, or 10/100/1000 ports, or 576 100GbE ports, or a combination
<b>Throughput</b>	92.1 Bpps Maximum, depending on model and configuration
<b>Switching capacity</b>	184 Tbps Maximum, depending on model and configuration
<b>Stacking capabilities</b>	IRF 2 switches
<b>Management features</b>	IMC - Intelligent Management Center Command-line interface Out-of-band management (serial RS-232C) SNMP manager Telnet Terminal interface (serial RS-232C) Modem interface IEEE 802.3 Ethernet MIB Ethernet interface MIB
<b>Input voltage</b>	-48 to -60 VDC, depending on model and configuration



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

## HPE POINTNEXT SERVICES

[HPE Pointnext Services](#) brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

### Operational Services from HPE Pointnext Services

[HPE Pointnext Tech Care](#) provides fast access to product-specific experts, an AI-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

[HPE Pointnext Complete Care](#) is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

**HPE Integration and Performance Services** help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

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- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- Greenlake Management Services
- Retire and sanitize
- IT Training and personal development

### Other related services

[HPE Education Services](#) delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

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

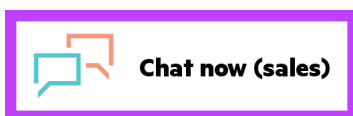
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