HPE FlexFabric 7900 Switch Series

Key features

• Nonblocking and lossless Clos architecture
• Large Layer 2 scaling with TRILL and IRF
• VXLAN support for virtualized and cloud deployments
• SDN-enabled with OpenFlow 1.3 support
• High 10GbE, 40GbE, and 100GbE density across 9.6 Tbps switch fabric

Product overview

The HPE FlexFabric 7900 Switch Series is the next generation compact modular data center core switch designed to support virtualized data centers and evolutionary needs of private and public clouds deployments.

The 7900 delivers unprecedented levels of performance, buffering, scale, and availability with high-density 10GbE, 40GbE, and 100GbE interfaces using only a fraction of the footprint used by traditional chassis. The switch supports full Layer 2 and 3 features along with advanced data center features including TRILL, IRF, VXLAN, and open standards-based programmability with OpenFlow support.

Features and benefits

Product architecture

• Modern scalable system architecture
  Provides nonblocking, 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; supports
enhanced serviceability functions
• In-Service Software Upgrade (ISSU)
  Provides IRF based upgrade of the entire fabric for seamless and non-disruptive maintenance

Performance
• High-performance fully distributed architecture
  Delivers up to 9.6 Tbps switching capacity and 5.94 Bpps throughput with nonblocking
wirespeed performance
• High-density 1/10GbE, 40GbE, and 100GbE interface connectivity
  Offers up to 10 interface module slots to scale up to 120 40GbE or 20 100GbE or 480 10GbE
or 240 1/10GbE interface or a combination
• Low latency and consistent performance
  Under 5 microsecond latency (64-byte packets) and consistent performance for broad range
of applications typical of a data center including mixed traffic loads of real-time, multicast, and
storage traffic
• Distributed scalable fabric architecture
  Integrated fabric and management modules to deliver more than 1 Tb per slot bandwidth

Data center optimized
• Virtual Extensible LAN (VXLAN)
  VXLAN Routing/Bridging to provide wire-rate support to build overlay networks enabling
virtual machine mobility and cloud deployments
• Scalable Layer 2 fabric functionality
  Builds flexible, resilient, and scalable Layer 2 fabrics with TRILL and IRF
• Ethernet Virtual Interconnect (EVI)
  Is an Hewlett Packard Enterprise Virtual Application Network innovation that provides a Layer 2
extension across the data center to simplify the interconnectivity of geographically disperse data
centers
• Front-to-back airflow design
  Accommodates deployment in data centers utilizing hot-cold aisles

Resiliency and high availability
• Intelligent Resilient Fabric (IRF)
  Creates virtual resilient switching fabrics, where two switches perform as a single L2 switch
and L3 router; servers or switches can be attached using standard LACP for automatic load
balancing and high availability there by eliminating the need for complex protocols and
simplifying network operations
• Redundant/load-sharing fabrics, management, fan assemblies, and power supplies increase
total performance and power availability while providing hitless, stateful failover
• Hot-swappable modules
  Allows replacement of modules without any impact on other modules
• Graceful restart
  Allows routers to indicate to others their capability to maintain a routing table during a temporary
shutdown, which significantly reduces convergence times upon recovery; supports OSPF, BGP,
and IS-IS
• Virtual Router Redundancy Protocol (VRRP)
  Allows groups of two routers to dynamically back each other up to create highly available routed environments

• Device Link Detection Protocol (DLDP)
  Monitors link connectivity and shuts down ports at both ends if unidirectional traffic is detected, preventing loops in STP-based networks

• IEEE 802.3ad Link Aggregation Control Protocol (LACP)
  Supports up to 1024 trunk groups and up to 16 members per trunk; supports static or dynamic groups and a user-selectable hashing algorithm

• Mid-plane free chassis design
  Delivers increased system reliability and optimal airflow as the chassis has no mid-plane and line cards connect directly to the onboard fabric card

• Bidirectional Forwarding Detection (BFD)
  Ultrafast sub second protocol convergence with standards based failure detection which enables link connectivity monitoring and reduces network convergence time for RIP, OSPF, BGP, IS-IS, and VRRP

**Layer 2 switching**

• VLAN
  Supports up to 4,094 port-based or IEEE 802.1Q-based VLANs

• Port mirroring
  Duplicates port traffic (ingress and egress) to a local or remote monitoring port; supports four mirroring groups, with an unlimited number of ports per group

• Port isolation
  Increases security by isolating ports within a VLAN while still allowing them to communicate with other VLANs

• Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping
  Controls and manages the flooding of multicast packets in a Layer 2 network

• Spanning Tree Protocol (STP)
  Supports standard IEEE 802.1D STP; IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence; and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

**Layer 3 routing**

• Open shortest path first (OSPF)
  Delivers faster convergence; uses this link-state routing Interior Gateway Protocol (IGP), which supports ECMP, NSSA, and MD5 authentication for increased security and graceful restart for faster failure recovery

• Intermediate system to intermediate system (IS-IS)
  Uses a path vector IGP, which is defined by the ISO organization for IS-IS routing and extended by IETF RFC 1195 to operate in both TCP/IP and the OSI reference model (Integrated IS-IS)

• Border Gateway Protocol 4 (BGP-4)
  Delivers an implementation of the Exterior Gateway Protocol (EGP) utilizing path vectors; uses TCP for enhanced reliability for the route discovery process; reduces bandwidth consumption by advertising only incremental updates; supports extensive policies for increased flexibility; scales to very large networks
• Dual IP stack
  Maintains separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design

• Multiprotocol Label Switching (MPLS) Layer 3 VPN
  Allows Layer 3 VPNs across a provider network; uses MP-BGP to establish private routes for increased security; supports RFC 2547bis multiple autonomous system VPNs for added flexibility

• Equal-Cost Multipath (ECMP)
  Enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth

• IP performance optimization
  Provides a set of tools to improve the performance of IPv4 networks; includes directed broadcasts, customization of TCP parameters, support of ICNP error packets, and extensive display capabilities

• Unicast Reverse Path Forwarding (uRPF)
  Limits erroneous or malicious traffic in accordance with RFC 3074

• BGP+
  Extends BGP-4 to support Multiprotocol BGP (MBGP), including support for IPv6 addressing

• IPv6 tunneling
  Allows a smooth transition from IPv4 to IPv6 by encapsulating IPv6 traffic over an existing IPv4 infrastructure

• IS-IS for IPv6
  Extends IS-IS to support IPv6 addressing

• OSPFv3
  Provides OSPF support for IPv6

• Static IPv4 routing
  Provides simple manually configured IPv4 routing

• Routing Information Protocol (RIP)
  Uses a distance vector algorithm with UDP packets for route determination; supports RIPv1 and RIPv2 routing; includes loop protection

• RIPng
  Extends RIPv2 to support IPv6 addressing

• Static IPv6 routing
  Provides simple manually configured IPv6 routing

**Quality of Service (QoS)**

• IEEE 802.1p prioritization
  Delivers data to devices based on the priority and type of traffic

• Flexible classification
  Creates traffic classes based on access control lists (ACLs), IEEE 802.1p precedence, IP, and DSCP or Type of Service (ToS) precedence; supports filter, redirect, mirror, remark, and logging
• Bandwidth shaping
  – Port-based rate limiting
    Provides per-port ingress-/egress-enforced increased bandwidth
  – Classifier-based rate limiting
    Uses an access control list (ACL) to enforce increased bandwidth for ingress traffic on each port
  – Reduced bandwidth
    Provides per-port, per-queue egress-based reduced bandwidth
• Broad QoS feature set
  Provides support for Strict Priority Queuing (SP), Weighted Fair Queuing (WFQ), Weighted Deficit Round Robin (WDRR), SP+WDRR together, configurable buffers, Explicit Congestion Notification (ECN), and Weighted Random Early Detection (WRED)
• Traffic policing
  Supports Committed Access Rate (CAR) and line rate

Layer 3 services
• Address Resolution Protocol (ARP)
  Determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network
• User Datagram Protocol (UDP) helper
  Redirects UDP broadcasts to specific IP subnets to prevent server spoofing
• Dynamic Host Configuration Protocol (DHCP)
  Simplifies the management of large IP networks and supports client and server; DHCP Relay enables DHCP operation across subnets

Management
• Management interface control
  Enables or disables each of the following interfaces depending on security preferences: console port, telnet port, or reset button
• Industry-standard CLI with a hierarchical structure
  Reduces training time and expenses, and increases productivity in multivendor installations
• SNMPv1, v2, and v3
  Provide complete support of SNMP; provide full support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption
• sFlow® (RFC 3176)
  Provides scalable ASIC-based wirespeed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes
• Remote monitoring (RMON)
  Uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group
• Debug and sampler utility
  Supports ping and traceroute for both IPv4 and IPv6
• Network Time Protocol (NTP)
Synchronizes timekeeping among distributed time servers and clients, keeps timekeeping consistent among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time

• Network Quality Analyzer (NQA)
Analyzes network performance and service quality by sending test packets, and provides network performance and service quality parameters such as jitter, TCP, or FTP connection delays and file transfer rates; allows a network manager to determine overall network performance and to diagnose and locate network congestion points or failures

• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications

**Connectivity**

• Jumbo frames
Allows high-performance backups and disaster-recovery systems with a maximum frame size of 12288 bytes

• Loopback
Supports internal loopback testing for maintenance purposes and an increase in availability; loopback detection protects against incorrect cabling or network configurations and can be enabled on a per-port or per-VLAN basis for added flexibility

• Monitor link
Collects statistics on performance and errors on physical links, increasing system availability

• Packet storm protection
Protects against unknown broadcast, unknown multicast, or unicast storms with user-defined thresholds

• Flow control
Provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations

**Security**

• Access control list (ACL)
Supports powerful ACLs for both IPv4 and IPv6; filters traffic to prevent unauthorized users from accessing the network, or controls network traffic to save resources; rules can either deny or permit traffic to be forwarded; rules can be based on Layer 2 header or Layer 3 protocol header; rules can be set to operate on specific dates or times

• Remote Authentication Dial-In User Service (RADIUS)
Eases switch security access administration by using a password authentication server

• Secure shell (SSHv2)
Uses external servers to securely log in to a remote device; with authentication and encryption, it protects against IP spoofing and plain-text password interception; increases the security of Secure FTP (SFTP) transfers

• DHCP snooping
Helps ensure that DHCP clients receive IP addresses from authorized DHCP servers and maintain a list of DHCP entries for trusted ports; prevents reception of fake IP addresses and reduces ARP attacks, improving security
• IP Source Guard
Filters packets on a per-port basis, which prevents illegal packets from being forwarded

• ARP attack protection
Protects against attacks that use a large number of ARP requests, using a host-specific, user-selectable threshold

Multicast support
• Internet Group Management Protocol (IGMP)
Utilizes Any-Source Multicast (ASM) or Source-Specific Multicast (SSM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3

• Protocol Independent Multicast (PIM)
Defines modes of multicasting to allow one-to-many and many-to-many transmission of information; PIM Dense Mode (DM), Sparse Mode (SM), and Source-Specific Mode (SSM) are supported

Warranty and support
• 1-year Warranty:
See [hpe.com/networking/warrantysummary](http://hpe.com/networking/warrantysummary) for warranty and support information included with your product purchase

• Software releases:
To find software for your product, refer to [hpe.com/networking/support](http://hpe.com/networking/support); for details on the software releases available with your product purchase, refer to [hpe.com/networking/warrantysummary](http://hpe.com/networking/warrantysummary)

### HPE FlexFabric 7900 Switch Series

#### Specifications

| I/O ports and slots | 4 I/O module slots
| Supports a maximum of 48 40GbE ports or 192 10GbE ports or 96 1/10GbE ports, or 8 100GbE ports, or a combination |
| 10 I/O module slots
| Supports a maximum of 120 40GbE ports or 480 10GbE ports or 240 1/10GbE ports, or 20 100GbE ports, or a combination |

| Power supplies | 2 power supply slots
| 1 minimum power supply required (ordered separately) |
| 4 power supply slots
| 1 minimum power supply required (ordered separately) |

| Fan tray | 2 fan tray slots
| JG684A for Front to Back airflow OR JG839A for Back to Front airflow |
| 2 fan tray slots
| JG843A for Front to Back airflow OR JG844A for Back to Front airflow |
### Specifications (continued)

#### Physical characteristics

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<tr>
<th>Characteristic</th>
<th>HPE FlexFabric 7904 Switch Chassis (JG682A)</th>
<th>HPE FlexFabric 7910 Switch Chassis (JG841A)</th>
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<tr>
<td>Dimensions</td>
<td>17.32(w) x 28.35(d) x 3.47(h) in. (44 x 72 x 8.81 cm) (2U height)</td>
<td>17.32(w) x 29.92(d) x 8.66(h) in. (43.99 x 76 x 22 cm) (5U height)</td>
</tr>
<tr>
<td>Weight</td>
<td>39.46 lb (17.9 kg) chassis only (no fan tray or power supplies)</td>
<td>63.49 lb (28.8 kg) chassis only (no fan tray or power supplies)</td>
</tr>
<tr>
<td>Full configuration weight</td>
<td>87.7 lb (39.78 kg)</td>
<td>156.97 lb (71.2 kg)</td>
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#### Memory and processor

| Module                          | Dual Core MIPS64 @ 1.2 GHz, 512 MB flash, 4 GB DDR2 SDRAM | Dual Core MIPS64 @ 1.0 GHz, 1 GB flash, 8 GB DDR2 SDRAM |

#### Mounting and enclosure

| Mounting and enclosure          | Mounts in an EIA standard 19-inch rack or other equipment cabinet (hardware included); horizontal surface mounting only | Mounts in an EIA standard 19-inch rack or other equipment cabinet (hardware included); horizontal surface mounting only |

#### Performance

| Throughput                      | Up to 2.3 Bpps (64-byte packets) | Up to 5.8 Bpps (64-byte packets) |
| Switching capacity              | 3.8 Tbps                         | 9.6 Tbps                         |
| Routing table size              | 32768 entries (IPv4), 8192 entries (IPv6) | 32768 entries (IPv4), 8192 entries (IPv6) |
| MAC address table size          | 262144 entries                   | 262144 entries                   |

#### Reliability

| Availability                    | 99.999%                          | 99.999%                          |

#### Environment

| Operating temperature           | 32°F to 104°F (0°C to 40°C)       | 32°F to 104°F (0°C to 40°C)       |
| Operating relative humidity     | 10% to 95%, noncondensing         | 10% to 95%, noncondensing         |
| Nonoperating/Storage temperature| -40°F to 158°F (-40°C to 70°C)    | -40°F to 158°F (-40°C to 70°C)    |
| Nonoperating/Storage relative humidity | Up to 13.123 ft (4 km) | Up to 13.123 ft (4 km) |
| Altitude                        | Up to 13.123 ft (4 km)            | Low-speed fan: 47.9 dB, High-speed fan: 77.9 dB |
| Acoustic                        | Low-speed fan: 57.6 dB, High-speed fan: 73.3 dB | Front-to-back or back-to-front (determined by installed fans) |
| Airflow direction               | Front-to-back or back-to-front (determined by installed fans) | Front-to-back or back-to-front (determined by installed fans) |

#### Electrical characteristics

| AC voltage                      | 100–120/200–240 VAC              | 100–240 VAC                      |
| Current                         | 16/60 A                          | 13 A                             |
| Power output                    | 1800 W                           | 1800 W                           |
| Frequency                       | 50/60 Hz                         | 50/60 Hz                         |
| Notes                           | Based on a common power supply of 1800 W (AC) | Based on a common power supply of 1800 W (AC) |

#### Safety

| UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1; FDA 21 CFR Subchapter J; AS/NZS 60950-1; RoHS Compliance | EN 50581 | UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1; FDA 21 CFR Subchapter J; AS/NZS 60950-1; RoHS Compliance | EN 50581 |

#### Emissions

| VCCI Class A; EN 55022 Class A; CISPR 22 Class A; IEC/EN 61000-3-2; IEC/EN 61000-3-3; ICES-003 Class A; AS/NZS CISPR 22 Class A; FCC (CFR 47, Part 15) Class A; ETSI EN 300 386 | EN 50581 | VCCI Class A; EN 55022 Class A; CISPR 22 Class A; IEC/EN 61000-3-2; IEC/EN 61000-3-3; ICES-003 Class A; AS/NZS CISPR 22 Class A; FCC (CFR 47, Part 15) Class A; ETSI EN 300 386 |

#### Immunity

| Generic | EN 55024 | EN 55024 |

#### Management

| 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 | 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 |
## Specifications (continued)

### HPE FlexFabric 7904 Switch Chassis (JG682A)

#### Services

Refer to the Hewlett Packard Enterprise website at [hpe.com/networking/services](http://hpe.com/networking/services) for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

### HPE FlexFabric 7910 Switch Chassis (JG841A)

#### Services

Refer to the Hewlett Packard Enterprise website at [hpe.com/networking/services](http://hpe.com/networking/services) for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

### Standards and protocols

(applys to all products in series)

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<td>RFC 4277 Experience with the BGP-4 Protocol</td>
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#### Denial of service protection

- Automatic filtering of well-known denial-of-service packets
- CPU DoS Protection
- Rate Limiting by ACLs
- Multiple Software Images
  - SSHv1/SSHv2 Secure Shell

#### Device management

- RFC 1157 SNMPv1/v2c
- RFC 1305 NTPv3
- RFC 1902 (SNMPv2)
- RFC 2579 (SNMPv2 Text Conventions)
- RFC 2580 (SMIV2 Conformance)
- RFC 2819 (RMON Groups Alarm, Event, History, and Statistics only)
- HTTP, SSHv1, and Telnet
- Multiple Configuration Files
- Multiple Software Images
  - SSHv1/SSHv2 Secure Shell

#### General protocols

- IEEE 802.1ad Q-in-Q
- IEEE 802.1p Priority
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1w Rapid Configuration of Spanning Tree
- IEEE 802.1x PAE
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ac (VLAN Tagging Extension)
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ae 10-Gigabit Ethernet
- IEEE 802.3af 10-Gigabit Ethernet
- IEEE 802.3f Point-to-Point Fiber (EFM-F)
- IEEE 802.3b 40 and 100 Gigabit Ethernet Architecture
- IEEE 802.3x Flow Control
- IEEE 802.3z 1000BASE-X
- RFC 768 UDP
- RFC 783 TFTP Protocol (revision 2)
- RFC 791 IPv6
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 TELNET
- RFC 894 IP over Ethernet
- RFC 950 Internet Standard Subnetting
- RFC 1058 RIPv1
- RFC 1142 OSI IS-IS Inter-Domain Routing Protocol
- RFC 1195 OSI IS-IS for IP and Dual Environments
- RFC 1213 Management Information Base for Network Management of TCP/IP-based Internets
- RFC 1305 NTPv3
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1393 TRACEROUTE Using an IP Option
- RFC 1519 CIDR
- RFC 1531 Dynamic Host Configuration Protocol
- RFC 1533 DHCP Options and BOOTP Vendor Extensions
- RFC 1591 DNS (client only)
- RFC 1624 Incremental Internet Checksum
- RFC 1701 Generic Routing Encapsulation
- RFC 1721 RIP-2 Analysis
- RFC 1723 RIPv2
- RFC 1812 IPv4 Routing
- RFC 2082 RIP-2 MSD Authentication
- RFC 2091 Trigger RIP
- RFC 2131 DHCP
- RFC 2138 Remote Authentication Dial In User
- RFC 2784 Generic Routing Encapsulation (GRE)
- RFC 2865 Remote Authentication Dial in User Service (RADIUS)
- RFC 2966 Domain-wide Prefix Distribution with Two-Level IS-IS
- RFC 2973 IS-IS Mesh Groups
- RFC 3277 IS-IS Transient Blackhole Avoidance
- RFC 3567 Intermediate System to Intermediate System (IS-IS) Cryptographic Authentication
- RFC 3719 Recommendations for Interoperable Networks using Intermediate System to Intermediate System (IS-IS)
- RFC 3784 IS-IS TE support
- RFC 3786 Extending the Number of IS-IS LSP Fragments Beyond the 256 Limit
- RFC 3787 Recommendations for Interoperable IP Networks Using Intermediate System to Intermediate System (IS-IS)
- RFC 3847 Restart signaling for IS-IS
- RFC 4251 The Secure Shell (SSH) Protocol Architecture
- RFC 4486 Subcodes for BGP Cease Notification Message
### General protocols

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### MiBs

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- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 4601 PIM Sparse Mode
- RFC 4604 Using Internet Group Management Protocol Version 3 (IGMPv3) and Multicast Listener Discovery Protocol Version 2 (MLDV2) for Source-Specific Multicast
- RFC 4605 IGMP/MLD Proxying
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- **HPE X120 1 G SFP LC LX Transceiver (JD102B)**
- **HPE X120 1 G SFP LC BX 10-U Transceiver (JD103B)**
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- **HPE X120 1 G SFP LC LH40 1550 nm Transceiver (JD062A)**
- **HPE X125 1 G SFP LC LH70 1510 Transceiver (JD105B)**
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### Power supply

- **HPE FlexFabric 7900 1800 w AC Power Supply Unit (JG840A)**

### Mounting kit

- **HPE X421 Chassis Universal 4-post Rack Mounting Kit (JC665A)**

### HPE FlexFabric 7904 Switch Chassis (JG682A)

- **HPE FlexFabric 7904 Front (Port Side) to Back (Power Side) Airflow Fan Tray (JG684A)**
- **HPE FlexFabric 7904 Back (Power Side) to Front (Port Side) Airflow Fan Tray (JG685A)**

### HPE FlexFabric 7910 Switch Chassis (JG841A)

- **HPE FlexFabric 7910 7.2Tbps Fabric/Main Processing Unit (JG842A)**
- **HPE FlexFabric 7910 2.4Tbps Fabric/Main Processing Unit (JH001A)**
- **HPE FlexFabric 7910 Front (Port Side) to Back (Power Side) Airflow Fan Tray (JG843A)**
- **HPE FlexFabric 7910 Back (Power Side) to Front (Port Side) Airflow Fan Tray JG844A**
- **HPE FlexFabric 7910 Cable Management Frame (JH041A)**
- **HPE FlexFabric 7910 Bottom-Support Rails (JH042A)**

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