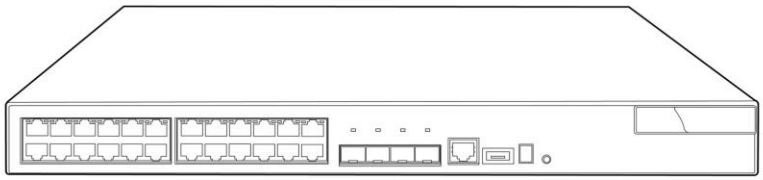
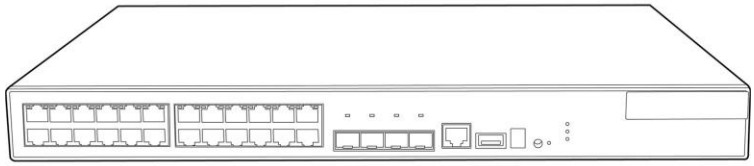
Overview

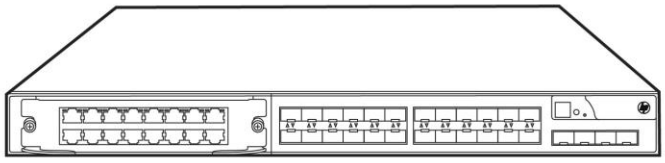
HP 5800 Switch Series



HP 5800-24G-PoE+ Switch

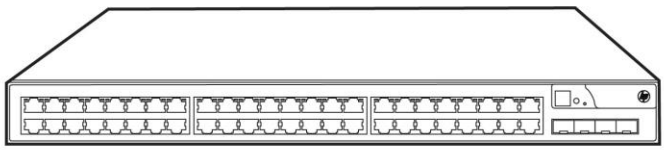


HP 5800-24G Switch

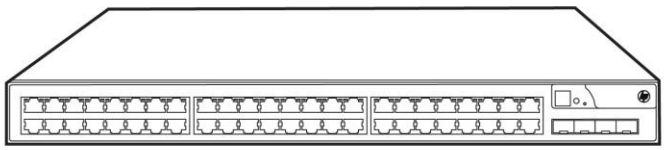


HP 5800-24G-SFP Switch

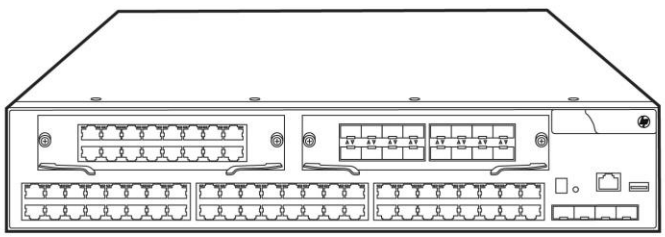
Overview



HP 5800-48G-PoE Switch

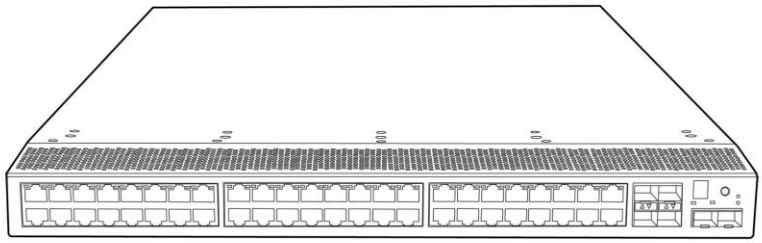


HP 5800-48G Switch



HP 5800-48G Switch with 2 Slots

Overview



HP 5800AF-48G Switch

Models

HP 5800-24G-PoE+ Switch	JC099B
HP 5800-24G Switch	JC100B
HP 5800-24G-SFP Switch	JC103B
HP 5800-48G-PoE Switch	JC104B
HP 5800-48G Switch	JC105B
HP 5800-48G Switch with 2 Slots	JC101B
HP 5800AF-48G Switch	JG225B

Key features

- For enterprise edge, distribution, data center
- Cut-through design with low latency
- Support for up to 84 ports
- OAA module for flexible deployment
- Redundant, hot-swappable power supplies, fans

Product overview

HP 5800 series switches offer an unmatched combination of Gigabit and 10-Gigabit Ethernet port density, high-availability architecture, and full Layer 2 and Layer 3 dual-stack IPv4 and IPv6 capabilities. In addition to wire-speed line-rate performance on all ports, the switches include patented Intelligent Resilient Framework (IRF) technology and Rapid Ring Protection Protocol (RRPP), which allow local or geographically distributed HP 5800 switches to be interconnected for higher resiliency and performance. Available in PoE and non-PoE models as well as 1 RU and 2 RU form factor configurations, HP 5800 switches are built on open standards and include an open application architecture (OAA) module slot that enables flexible deployment options for new services. These versatile switches are ideal for use in the network core of buildings or departments, or as high-performance switches in the convergence layer or network edge of enterprise campus networks.

Features and benefits

Quality of Service (QoS)

- **Powerful QoS feature**
  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, or remark; supports the following congestion actions: strict priority (SP) queuing, weighted round robin (WRR), weighted fair queuing (WFQ), weighted random early discard (WRED), weighted deficit round robin (WDRR), and SP+WDRR
- **Integrated network services**

Overview

with support for open application architecture (OAA) modules, extends and integrates application capability into the network

- **Ring Resiliency Protection Protocol** (RRPP)
  provides fast recovery for ring Ethernet-based topology; provides consistent application performance for applications such as VoIP

Management

- **Remote configuration and management**
  is available through a secure Web browser or a command-line interface (CLI)
- **IEEE 802.1AB LLDP discovery**
  advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications
- **USB support**:
  - **File copy**
    allows users to copy switch files to and from a USB flash drive
- **DHCP options**:
  - DNS Relay and SMTP Redirection
  - DHCP: Server (RFC 2131), Client, and Option-82 Relay (RFC 3046)
- **sFlow**
  provides scalable, ASIC-based network monitoring and accounting; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes
- **SNMPv1, v2c, and v3**
  facilitate centralized discovery, monitoring, and secure management of networking devices
- **Network Time Protocol** (NTP)
  synchronizes timekeeping among distributed time servers and clients; keeps consistent timekeeping among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time

Connectivity

- **High-density port connectivity**
  supports up to 84 1-Gigabit ports per unit (612 per stack)
- **Auto-MDIX**
  automatically adjusts for straight-through or crossover cables on all 10/100 ports
- **Jumbo frames**
  on Gigabit Ethernet and 10-Gigabit ports, jumbo frames of 9k size allow high-performance remote backup and disaster-recovery services
- **IEEE 802.3af Power over Ethernet (PoE)**
  provides up to 15.4 W per port to IEEE 802.3af-compliant PoE-powered devices such as IP phones, wireless access points, and security cameras
- **IEEE 802.3at Power over Ethernet (PoE+) support**
  simplifies deployment and dramatically reduces installation costs by helping to eliminate the time and cost involved in supplying local power at each access point location
- **IPv6 native support**
  - **IPv6 host**
    enables switches to be managed and deployed at the IPv6 network's edge
  - **Dual stack (IPv4/IPv6)**
    transitions from IPv4 to IPv6, supporting connectivity for both protocols
  - **MLD snooping**
    forwards IPv6 multicast traffic to the appropriate interface
  - **IPv6 ACL/QoS**
    supports ACL and QoS for IPv6 network traffic, preventing traffic flooding
  - **IPv6 routing**

Overview

supports IPv6 static routes and IPv6 versions of RIP, OSPF, IS-IS, and BGP routing protocols

Performance

- **Hardware-based wire-speed access control lists (ACLs)**
  feature-rich ACL implementation (TCAM-based) helps provide high levels of security and ease of administration without impacting network performance
- **Unique versatile architecture**
  supports the best of both fixed-port and modular configurations

Resiliency and high availability

- **Data center–optimized design**
  the HP 5800AF-48G Switch (JG225B) supports front-to-back/back-to-front airflow for hot/cold aisles, rear rack mounts, and redundant hot-swappable AC or DC power and fans

Manageability

- **Full-featured console**
  provides complete control of the switch with a familiar command-line interface (CLI)
- **Web interface**
  allows configuration of the switch from any Web browser on the network
- **RMON and sFlow**
  provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **Multiple configuration files**
  allow multiple configuration files to be stored to a flash image
- **Troubleshooting**
  - **Ingress and egress port monitoring**
    enable network problem solving
  - **Traceroute and ping**
    enable testing of network connectivity
  - **Virtual cable tests**
    provide visibility to cable problems

Layer 2 switching

- **GARP VLAN Registration Protocol**:
  allows automatic learning and dynamic assignment of VLANs
- **32K MAC addresses**
  provide access to many Layer 2 devices
- **4,094 port-based VLANs**
  provide security between workgroups
- **IEEE 802.1ad QinQ and Selective QinQ**
  increase the scalability of an Ethernet network by providing a hierarchical structure; connect multiple LANs on a high-speed campus or metro network
- **Gigabit Ethernet port aggregation**
  allows grouping of ports to increase overall data throughput to a remote device
- **10 GbE port aggregation**
  allows grouping of ports to increase overall data throughput to a remote device
- **Spanning Tree/MSTP, RSTP, and STP Root Guard**
  prevent network loops
- **IPFIX/sFlow**
  allows traffic sampling

Overview

- **Spanning Tree Protocols** (STP, MSTP, and RSTP) **and STP root guard**
  helps prevent network loops; up to 32 MSTP instances available

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
- **Dynamic Host Configuration Protocol** (DHCP)
  simplifies the management of large IP networks and supports client and server; DHCP Relay enables DHCP operation across subnets

Layer 3 routing

- **Layer 3 IPv4 routing**
  provides routing of IPv4 at media speed; supports static routes, RIP and RIPv2, OSPF, IS-IS, and BGP
- **RIP and RIPng support**
  provides complete support of RIP for both IPv4 and IPv6
- **OSPF and OSPFv3 support**
  provides complete support of OSPF for both IPv4 and IPv6
- **IS-IS and IS-ISv6 support**
  provides complete support of IS-IS for both IPv4 and IPv6
- **Layer 3 IPv6 routing**
  provides routing of IPv6 at media speed; supports static routes, RIPng, OSPFv3, IS-ISv6, and BGP4+
- **Bidirectional Forwarding Detection** (BFD)
  enables link connectivity monitoring and reduces network convergence time for RIP, OSPF, BGP, IS-IS, VRRP, MPLS, and IRF
- **Virtual Router Redundancy Protocol** (VRRP) **and VRRP Extended**
  allow quick failover of router ports
- **Policy-based routing**
  makes routing decisions based on policies set by the network administrator
- **IGMPv1, v2, and v3**
  allow individual hosts to be registered on a particular VLAN
- **PIM-SSM, PIM-DM, and PIM-SM** (for IPv4 and IPv6)
  support IP Multicast address management and inhibition of DoS attacks
- **Equal-Cost Multipath** (ECMP)
  enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth
- **NEW MPLS support**
  provides extended support of MPLS, including MPLS VPNs and MPLS Traffic Engineering (MPLS TE)
- **NEW VPLS support**
  provides extended support of VPLS for data center to data center communication at Layer 2; provides support of hierarchical VPLS for scalability

Security

- **Unicast Reverse Path Forwarding** (URPF)
  allows normal packets to be forwarded correctly, but discards the attaching packet due to lack of reverse path route or incorrect inbound interface; prevents source spoofing and distributed attacks; supports distributed UFPF
- **Defense-in-depth security**
  provides integrated and distributed security enforcement that can be managed from a central location, such as the HP Intelligent Management Center (IMC)
- **Advanced processor queuing mechanism**

Overview

helps prevent denial-of-service (DoS) attacks, while DHCP snooping helps ensure that devices can only receive an IP address from a legitimate DHCP server on the network

- **IEEE 802.1X-based dynamic delivery of QoS, ACLs, and VLANs**
  allows complete control over user network access
- **Guest VLAN**
  similar to IEEE 802.1X, it provides a browser-based environment to authenticated clients
- **Port isolation**
  secures and adds privacy, and prevents malicious attackers from obtaining user information
- **MAC-based authentication**
  allows or denies access to the switch based on client MAC address
- **HTTPS management**
  provides secure Web management
- **Multi-Customer Edge** (MCE)**-Multicast Virtual Routing and Forwarding** (MVRF)
  provide MPLS Edge router support
- **Public Key Infrastructure** (PKI)
  is used to control access
- **RADIUS/HWTACACS**
  eases switch management security administration by using a password authentication server
- **Secure Shell** (SSHv2)
  encrypts all transmitted data for secure, remote CLI access over IP networks
- **IP Source Guard**
  helps prevent IP spoofing attacks; filters packets on a per-port basis, which prevents illegal packets from being forwarded
- **Access control lists** (ACLs)
  helps provide high levels of security and ease of administration; 6k ingress entries and 1k egress entries (IPv4 and IPv6)

Convergence

- **Voice VLAN**
  automatically assigns VLAN and priority for IP phones, simplifying network configuration and maintenance
- **Internet Group Management Protocol** (IGMP)
  is used by IP hosts to establish and maintain multicast groups; supports v1, v2, and v3; utilizes Any-Source Multicast (ASM) or Source-Specific Multicast (SSM) to manage IPv4 multicast networks
- **Protocol Independent Multicast** (PIM)
  is used for IPv4 and IPv6 multicast applications; supports PIM Dense Mode (DM), Sparse Mode (SM), and Source-Specific Mode (SSM)
- **LLDP-MED** (Media Endpoint Discovery)
  is a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones

Monitor and diagnostics

- **Port mirroring**
  enables traffic on a port to be simultaneously sent to a network analyzer for monitoring
- **OAM** (IEEE 802.3ah)
  operational, administration and maintenance (OAM) management capabilities detects data link layer problems that occurred in the "last mile"; monitors the status of the link between the two devices
- **CFD** (IEEE 802.1ag)
  connectivity fault detection (CFD) provides a Layer 2 link OAM mechanism used for link connectivity detection and fault locating

Additional information

Overview

- **HP Intelligent Resilient Framework** (IRF)
  - Creates virtual resilient switching fabrics, where two or more switches perform as a single Layer 2 switch and Layer 3 router
  - Switches do not have to be co-located and can be part of a disaster-recovery system
  - Servers or switches can be attached using standard LACP for automatic load balancing and high availability
  - Simplifies network operation by eliminating the complexity of Spanning Tree Protocol, ECMP, or VRRP
- **OAA modules**
  support wireless network management and high-performance security applications; leverage network infrastructure investment
- **Green IT and power**
  use the latest advances in silicon development, shut off unused ports, and use variable-speed fans to improve energy efficiency
- **Higher scalability with IRF**
  simplifies the architecture of server access networks and reduces cost and complexity; up to nine 5800 Switches can be combined to deliver unmatched scalability of virtualized access layer switches and flatter, two-tier FlexFabric networks

Warranty and support

- **Limited Lifetime warranty**
  advance hardware replacement with next-business-day delivery (available in most countries). See www.hp.com/networking/warrantysummary for duration details.
- **Electronic and telephone support**
  limited electronic and telephone support is available from HP; to reach our support centers, refer to: www.hp.com/networking/contact-support; for details on the duration of support provided with your product purchase, refer to: www.hp.com/networking/warrantysummary
- **Software releases**
  to find software for your product, refer to: www.hp.com/networking/support; for details on the software releases available with your product purchase, refer to: www.hp.com/networking/warrantysummary

Configuration

Build To Order:

BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

Standard Switch Chassis

HP 5800-24G Switch — JC100B
- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3

PDU Cable NA/MEX/TW/JP — JC100B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC100B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JC100B#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-24G-PoE Switch — JC099B
- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3

PDU Cable NA/MEX/TW/JP — JC099B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC099B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JC099B#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-24G-SFP Switch — JC103B
- 24 100/1000 SFP ports

See Configuration Note:1, 4

Configuration

- min=0 \ max=24 SFP Transceivers
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Must select min 1 Power Supply
- 1U - Height

HP 5800-48G Switch — JC105B

- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration Note:1, 3
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U- Height

PDU Cable NA/MEX/TW/JP — JC105B#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC105B#B2C

- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JC105B#B2E

- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800AF-48G Switch — JG225B

- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration Note:1
- 6 fixed 1000/10000 SFP+ ports
- min=0 \ max=6 SFP+ Transceivers
- Must select min 1 Power Supply
- Must select min 2 Fan Trays
- 1U- Height

HP 5800-48G-PoE Switch — JC104B

- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration Note:1, 3
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP — JC104B#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Configuration

PDU Cable ROW JC104B#B2C

- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord JC104B#B2E

- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-48G Switch with 2 Slots JC101B

See Configuration Note:4

- 48 RJ-45 autosensing 10/100/1000 ports
- 2 extended module slot
- 4 fixed 1000 SFP ports
- min=0 \ max=4 SFP Transceivers
- Must select min 1 Power Supply
- 2U - Height

Configuration Rules

Note 1 The following Transceivers install into this switch:

HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C

Note 3 Localization required on orders without #B2B, #B2C or #B2E options.

Note 4 The following Transceivers install into this Switch:

HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Note 7 #B2E is Offered only NA, Mexico, Taiwan, and Japan.

Configuration

Box Level Integration CTO Models

CTO Solution Sku

HP 58xx CTO Switch Solution — JG478A
- SSP trigger sku

CTO Base Sku

HP 5800-24G Switch — JC100B
- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3, 6,10, 11

PDU Cable NA/MEX/TW/JP — JC100B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC100B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JC100B#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-24G-PoE Switch — JC099B
- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3, 6,10, 11

PDU Cable NA/MEX/TW/JP — JC099B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC099B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JC099B#B2E

Configuration

- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-24G-SFP Switch JC103B
- 24 100/1000 SFP ports
- min=0 \ max=24 SFP Transceivers
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Must select min 1 Power Supply
- 1U - Height

See Configuration Note:1, 4, 5,10

HP 5800-48G Switch JC105B
- 48 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U- Height

See Configuration Note:1, 3, 6,10, 11

PDU Cable NA/MEX/TW/JP JC105B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW JC105B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord JC105B#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800AF-48G Switch JG225B
- 48 RJ-45 autosensing 10/100/1000 ports
- 6 fixed 1000/10000 SFP+ ports (min=0 \ max=6 SFP+ Transceivers)
- Must select min 1 Power Supply
- Must select min 2 Fan Trays
- 1U - Height

See Configuration Note:1, 8, 10

HP 5800-48G-PoE Switch JC104B
- 48 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3, 6,10, 11

PDU Cable NA/MEX/TW/JP JC104B#B2B

Configuration

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

C15 PDU ROW JC104B#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord JC104B#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5800-48G Switch with 2 Slots JC101B
See Configuration Note:4, 5,10
- 48 RJ-45 autosensing 10/100/1000 ports
- 2 extended module slot
- 4 fixed 1000 SFP ports
- min=0 \ max=4 SFP Transceivers
- Must select min 1 Power Supply
- 2U - Height

Configuration Rules

Note 1 The following Transceivers install into this switch: (Use #0D1 or #B01 if switch is CTO) If Applicable -

HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C

Note 3 Localization required on orders without #B2B, #B2C or #B2E options.

Note 4 The following Transceivers install into this Switch: (Use #0D1 if switch is CTO) If Applicable -

HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC FX Transceiver	JD102B

Configuration

HP X110 100M SFP LC LX Transceiver	JD120B
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Note 5 If this Switch is selected at least one of these Power Supply with #0D1 is required:

HP 5500 150WAC Power Supply	JD362A
HP 5800 300W AC Power Supply	JC087A
HP 5800 750W AC Power Supply	JC089A

Note 6 If this Switch is selected, Then a Minimum of one of the following must be included:
1. 1 factory integrated accessory per switch. See Menu below, option must be ether #0D1 or #B01.
or
2. A Factory Express Service. (For Watson and CLIC Only: See Factory Express Tab on Menu)

Note 8 If this Switch is selected at least one of these Power Supply with #0D1 is required:
JC680A - HP A58x0AF 650W AC Power Supply
JC681A - HP 58x0AF 650W DC Power Supply

Note 9 B2E is Offered only in . NA, Mexico, Taiwan, and Japan.

Note 10 If the Switch Chassis is to be Box Level Factory Integrated (CTO), Then the #0D1 is required on the Switch Chassis and integrated to the JG478A - HP 58xx CTO Enablement. (Min 1/Max 1 Switch per SSP)

Note 11 If this Switch is selected, Then a Minimum of 1 factory integrated accessory, OR Factory Service, must be ordered and integrated to CTO chassis. See Menu below, option must have a #0D1 to be integrated to the CTO Chassis.

Rack Level Integration CTO Models

Standard Switch Chassis

HP 5800-24G Switch — JC100B
See Configuration Note:1, 3, 10

- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP — JC100B#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC100B#B2C

- C15 PDU Jumper Cord (ROW)

HP 5800-24G-PoE Switch — JC099B

Configuration

- 24 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3, 10

PDU Cable NA/MEX/TW/JP — JC099B#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC099B#B2C

- C15 PDU Jumper Cord (ROW)

HP 5800-24G-SFP Switch — JC103B

- 24 100/1000 SFP ports
- min=0 \ max=24 SFP Transceivers
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Must select min 1 Power Supply
- 1U - Height

See Configuration Note:1, 4, 10

HP 5800-48G Switch — JC105B

- 48 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U- Height

See Configuration Note:1, 3, 10

PDU Cable NA/MEX/TW/JP — JC105B#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JC105B#B2C

- C15 PDU Jumper Cord (ROW)

HP 5800AF-48G Switch — JG225B

- 48 RJ-45 autosensing 10/100/1000 ports
- 6 fixed 1000/10000 SFP+ ports (min=0 \ max=6 SFP+ Transceivers)
- Must select min 1 Power Supply
- Must select min 2 Fan Trays
- 1U - Height

See Configuration Note:1, 10

Configuration

HP 5800-48G-PoE Switch JC104B
- 48 RJ-45 autosensing 10/100/1000 ports
- 1 extended module slot
- 4 fixed 1000/10000 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power Supply included
- 1U - Height

See Configuration Note:1, 3, 10

PDU Cable NA/MEX/TW/JP JC104B#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW JC104B#B2C
- C15 PDU Jumper Cord (ROW)

HP 5800-48G Switch with 2 Slots JC101B
- 48 RJ-45 autosensing 10/100/1000 ports
- 2 extended module slot
- 4 fixed 1000 SFP ports
- min=0 \ max=4 SFP Transceivers
- Must select min 1 Power Supply
- 2U - Height

See Configuration Note:4, 10

Configuration Rules:

Note 1 The following Transceivers install into this switch:

HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C

Note 3 Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See Localization Menu)
REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power Cable option on the Switches/Routers.

Configuration

Note 4 The following Transceivers install into this Switch:

HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Note 10 If HP CTO Switch Chassis is selected for Rack Level Integration, Then the Switch needs to integrate (with #0D1) to the HP Rack.

Enter the following menu selections as integrated to the CTO Model X server above if order is factory built.

Modules

Ethernet Modules

(JC101x, JG242x, Switch Only) System (std 0 // max 2) User Selection (min 0 // max 2) per chassis

(JC100x, JC099x, JC103x, JC105x, JC104x, JG254x, JG255x, JG256x, JG257x, JG258x, Switch Only) System (std 0 // max 1) User Selection (min 0 // max 1) per chassis

HP 5800 16-port SFP Module — JC095A
- min=0 \ max=16 SFP Transceivers

See Configuration Note:2

HP 5800 4-port 10GbE SFP+ Module — JC091A
- min=0 \ max=4 SFP and SFP + Transceivers

See Configuration Note:1

HP 5800 2-port 10GbE SFP+ Module — JC092B
- min=0 \ max=2 SFP and SFP + Transceivers

See Configuration Note:1

HP 5800 16-port Gig-T Module — JC094A
- No Transceivers

Configuration Rules:

Note 1 The following Transceivers install into this Module: (Use #0D1 if switch is CTO) If Applicable -

Configuration

HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C

Note 2 The following Transceivers install into this Module: (Use #0D1 if switch is CTO) If Applicable -

HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Access Control Modules

(JC101x and JG242x Switch Only) System (std 0 // max 1) User Selection (min 0 // max 1) per chassis

HP 5800 ACM for 32-64 Aps JD443A

- No Transceivers

HP 5800 ACM for 64-256 Aps JD441A

- No Transceivers

See Configuration Note:1

HP 5820 VPN Firewall Module JD255A

- No Transceivers

See Configuration Note:1

Configuration Rules:

Configuration

Note 1 This Module install to the following switches only:
JC101x - HP 5800-48G Switch with 2 Slots

PoE Modules

(JC101x and JG242x Switch Only) System (std 0 // max 1) User Selection (min 0 // max 1) per chassis

HP 5800 PoE Module	JC097B

- No Transceivers

Transceivers

SFP+ Transceivers

HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X240 10G SFP+ SFP+ 0.65m DAC Cable	JD095C#B01
HP X240 10G SFP+ SFP+ 1.2m DAC Cable	JD096C#B01
HP X240 10G SFP+ SFP+ 3m DAC Cable	JD097C#B01
HP X240 10G SFP+ SFP+ 5m DAC Cable	JG081C#B01

SFP Transceivers

HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X110 100M SFP LC BX 10-U Transceiver	JD100A
HP X110 100M SFP LC BX 10-D Transceiver	JD101A
HP X120 1G SFP LC LH40 1550nm XCVR	JD062A
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X125 1G SFP LC LH40 1310nm XCVR	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Internal Power Supplies

(JC103x and JG256x Only) System (std 0 // max 2) User Selection (min 1 // max 2) per switch

(JC101x and JG242x Only) System (std 0 // max 2) User Selection (min 1 // max 2) per switch

(JG225B only) System (std 0 // max 2) User Selection (min 1 // max 2) per switch

Configuration

HP 5500 150WAC Power Supply	JD362A See Configuration Note:1, 2, 3
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JD362A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JD362A#B2C
HP 5500 150WDC Power Supply	JD366A See Configuration Note:1, 3
HP 5800 300W AC Power Supply	JC087A See Configuration Note:1, 2, 4
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC087A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JC087A#B2C
HP 5800 300W DC Power Supply	JC090A See Configuration Note:1, 4
HP 5800 750W AC PoE Power Supply	JC089A See Configuration Note:1, 2, 4
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC089A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JC089A#B2C
HP A58x0AF 650W AC Power Supply • includes 1 x c13, 650w	JC680A See Configuration Note:1, 2, 6
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC680A#B2B
PDU Cable ROW	JC680A#B2C

Configuration

- C15 PDU Jumper Cord (ROW)

HP 58x0AF 650W DC Power Supply — JC681A
See Configuration Note:1, 6

HP A58x0AF 300W AC Power Supply — JG900A
- includes 1 x c13, 300w

See Configuration Note:1, 2, 6

PDU Cable NA/MEX/TW/JP — JG900A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JG900A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch/Router to Wall Power Cord — JG900A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP A58x0AF 300W DC Power Supply — JG901A
See Configuration Note:1, 6

Configuration Rules:

Note 1 If 2 power supplies are selected then they must be the same Sku number.

Note 2 Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See Localization Menu)
REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power Cable option on the Switches/Routers.

Note 3 This power supply only supported on JC103x and JG256x Only.

Note 4 This power supply only supported on JC101x and JG242x Only.

Note 6 This power supply only supported on JG225B Only.

Remarks:

Drop down under power supply should offer the following options and results:
Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)
Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)

NOTE* Switch JG225B should default selection of Power Supply as JC680A but allow selection of JG900A, JG901A, and JC681A.

Switch Options

Fan Trays

(JG225B only) System (std 0 // max 2) User Selection (min 2 // max 2) per switch

Configuration

HP 58x0AF Bck(pwr)-Frt(ports) Fan Tray JC682A
See Configuration Note:1

HP 58x0AF Frt(ports)-Bck(pwr) Fan Tray JC683A
See Configuration Note:1

Configuration Rules:

Note 1 Fan Trays cannot be mixed in the same switch enclosure

Remark: Watson Blue Text:
If there is any empty space below the switch in a rack when using Back to Front Fan Trays, JC682A, the rack will receive an Air Plenum kit that takes up 1U of additional space in the rack. The Air Plenum kit is not required on fully configured racks. This only applies for CTO Rack Level Integration. The Air Plenum Kit is a non-saleable SKU, and is brought in automatically for CTO Factory Rack Level Integration.

Fan Options

HP 5800 2RU Spare Fan Assembly JC096A
See Configuration Note:1

HP 5800 1RU Spare Fan Assembly JC098A
See Configuration Note:2

Configuration Rules:

Note 1 This Spare Fan is only supported on switches JC101B and JG242B.

Note 2 This Spare Fan is only supported on switches JC099B, JC100B, JC103B, JC104B, JC105B, JG254B, JG255B, JG256B, JG257B and JG258B.

Opacity Shield Kit

System (std 0 // max 1) User Selection (min 0 // max 1)

HP 5800-24G / -48G PoE Opcty Shld Kit JG560A
- Supported on JG254B, JG257B

HP 58xx 2-slot Switch Opcty Shld Kit JG561A
- Supported on JG242B

HP 5800-24G-SFP Opcty Shld Kit JG562A
- Supported on JG256B

HP 5800-24G / -48G Opcty Shld Kit JG563A
- Supported on JG255B, JG258B

Configuration

Tamper Evidence Labels

HP 12mm x 60mm Tmpr-Evidence (30) Lbl JG585A
- Supported on JG560A, JG561A, JG562A or JG563A

Remarks Each JG560A, JG561A, JG562A or JG563A would use 1 of JG585A.

License

HP WX5000 32 AP License Upgrade JD463A
See Configuration Note:1

Configuration Rules:

Note 1 If this license is selected, Then one of these modules should be selected or be on site:
JD443A - HP A5800 Access Controller Module for 32-64 Aps
JD441A - HP A5800 Access Controller Module for 64-256 Aps

External Redundant Power Supplies

HP RPS 800 Redundant Power Supply JD183A
See Configuration Note:2, 4
- Height = 1U
- includes 1 x c13

HP RPS1600 Redundant Power System JG136A
See Configuration Note:2, 3, 5
- Height = 1U
- includes 1 x c13, 1600w and Power Supply port

HP RPS1600 1600W AC Power Supply JG137A
See Configuration Note:1, 3
- Installs into JG136A only

Configuration Rules:

Note 1 If this power supply is selected, The JG136A - HP A-RPS1600 Redundant Power System must be on order or onsite.

Note 2 Localization required.

Note 3 Each switch will only support 1 JG136A and 1 JG137A Power supply systems.

Note 4 This power supply only supported on switches JC105B and JC100B.

Note 5 This power supply only supported on switches JC099B, JC101B, JC103B, JC104B.

Options for the HP RPS 800 and 1600 External RPS Power Supplies

Configuration

HP X290 1000 A JD5 2m RPS Cable	JD187A See Configuration Note:3
HP X290 1000 A JD5 Non-PoE 2m RPS Cable	JD188A See Configuration Note:2
HP X290 1000 B JD5 2m RPS Cable	JD189A See Configuration Note:4
HP X290 500/800 1m RPS Cable	JD190A See Configuration Note:1

Configuration Rules:

Note 1 This Cable is only supported on switches JC105B and JC100B when used with the RPS 800 (JD183A)

Note 2 This Cable is only supported on switch JC103B when used with the RPS 1600 (JG136A)

Note 3 This Cable is only supported on switches JC099B, JC101B, JC104B, and when used with the RPS 1600 (JG136A).

Note 4 This Cable is only supported on switches JC101B (Runing On Non-PoE mode), JC103B when used with the RPS 1600 (JG136A)

Remarks: These cables are used to connect the External Power System to Switch.

Technical Specifications

HP 5800-24G-PoE+ Switch (JC099B)

Ports	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	1 extended module slot	
	4 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.3(w) x 16.8(d) x 1.71(h) in (43.94 x 42.67 x 4.34 cm) (1U height)
	Weight	17.64 lb (8 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 4 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 155 Mpps
	Routing/Switching capacity	208 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 47.5 dB, High-speed fan: 52.4 dB
Electrical characteristics	**Maximum heat dissipation**	2968 BTU/hr (3131.24 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Services	Refer to the HP website at: www.hp.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 HP sales office.

HP 5800-24G Switch (JC100B)

Ports	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	1 extended module slot	
	4 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 14.35(d) x 1.72(h) in (44.0 x 36.45 x 4.36 cm) (1U height)
	Weight	13.23 lb (6 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 4 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 155 Mpps
	Routing/Switching capacity	208 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 42.3 dB, High-speed fan: 52.9 dB
Electrical characteristics	**Maximum heat dissipation**	358 BTU/hr (377.69 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet;	

Technical Specifications

	HTTPS; RMON1; FTP	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 5800-24G-SFP Switch with 1 Interface Slot (JC103B)

Ports	24 SFP fixed Gigabit Ethernet SFP ports	
	1 extended module slot	
	4 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
Power supplies	2 power supply slots 1 minimum power supplies required (ordered separately)	
Physical characteristics	**Dimensions**	17.32(w) x 16.81(d) x 1.72(h) in (44.0 x 42.7 x 4.36 cm) (1U height)
	Weight	18.74 lb (8.5 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 8 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 155 Mpps
	Routing/Switching capacity	208 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 49.6 dB, High-speed fan: 58.1 dB
Electrical characteristics	**Maximum heat dissipation**	498 BTU/hr (525.39 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	DC voltage	–48 VDC to –60 VDC
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and	EN 61000-4-11; IEC 61000-4-11

Technical Specifications

	interruptions	
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Notes	Customer must order a power supply, as the device does not come with a PSU. At least one JD362A or JD366A is required.	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 5800-48G-PoE+ Switch with 1 Interface Slot (JC104B)

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	1 extended module slot	
	4 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 16.81(d) x 1.72(h) in (44.0 x 42.7 x 4.36 cm) (1U height)
	Weight	18.74 lb (8.5 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 8 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 190 Mpps
	Routing/Switching capacity	256 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 50.5 dB, High-speed fan: 57.9 dB
Electrical characteristics	**Maximum heat dissipation**	3320 BTU/hr (3502.6 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5

Technical Specifications

	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 5800-48G Switch with 1 Interface Slot (JC105B)

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	1 extended module slot	
	4 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 14.45(d) x 1.72(h) in (44.0 x 36.7 x 4.36 cm) (1U height)
	Weight	14.33 lb (6.5 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 8 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 190 Mpps
	Routing/Switching capacity	256 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 45.3 dB, High-speed fan: 56.5 dB
Electrical characteristics	**Maximum heat dissipation**	557 BTU/hr (587.64 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3

Technical Specifications

	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 5800-48G Switch with 2 Slots (JC101B)

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	2 extended module slots	
	1 open module slot	
	4 SFP fixed Gigabit Ethernet SFP ports	
	1 RJ-45 serial console port	
Power supplies	2 power supply slots 1 minimum power supplies required (ordered separately)	
Physical characteristics	**Dimensions**	17.32(w) x 18.31(d) x 3.39(h) in (44.0 x 46.5 x 8.61 cm) (2U height)
	Weight	39.7 lb (18.0 kg)
Memory and processor	2048 MB SDRAM; Packet buffer size: 8 MB, 512 MB flash	
Performance	**Latency**	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	up to 211 Mpps
	Routing/Switching capacity	284 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 54 dB, High-speed fan: 58.5 dB
Electrical characteristics	**Maximum heat dissipation**	6278 BTU/hr (6623.29 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	DC Voltage	300 W DC: –48 VDC to –60 VDC; 750 W DC: –54 VDC to –57 VDC
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-	

Technical Specifications

	3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Notes	Customer must order power supply, as the device does not come with a PSU. At least one JC087A/JC090A/JC089A is required.	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 5800AF-48G Switch (JG225B)

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	6 fixed 1000/10000 SFP+ ports	
	1 RJ-45 serial console port	
	1 RJ-45 out-of-band management port	
	1 USB 2.0	
Power supplies	2 power supply slots 1 minimum power supply required (ordered separately)	
Fan tray	2 fan tray slots The customer must order fan trays, as fan trays are not included with the switch. This system requires two same-direction airflow fan trays to function properly. The system should not be operated with only one fan tray for more than 24 hours. The system should not be operated without a fan tray more than two minutes. The system should not be operated outside of the temperature range of 32°F (0°C) to 113°F (45°C). Failure to comply with these operating requirements may void the product warranty.	
Physical characteristics	**Dimensions**	17.32(w) x 25.98(d) x 1.72(h) in (43.99 x 65.99 x 4.37 cm) (1U height)
	Weight	22.05 lb (10 kg), Fully loaded
Memory and processor	2048 MB flash; Packet buffer size: 8 MB, 512 MB SDRAM	
Performance	**Latency**	< 5 µs (64-byte packets)
	Throughput	up to 161 Mpps
	Routing/Switching capacity	216 Gbps
	Routing table size	16000 entries
	MAC address table size	32000 entries

Technical Specifications

Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%
	Acoustic	Low-speed fan: 60.1 dB, High-speed fan: 69.9 dB
Electrical characteristics	**Maximum heat dissipation**	426 BTU/hr (449.43 kJ/hr)
	Voltage	100 - 120 / 200 - 240 VAC, rated (depending on power supply chosen)
	DC Voltage	650W DC: -36 VDC to -72 VDC
	Frequency	50/60 Hz
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance	
Emissions	VCCI Class A; EN 55022 Class A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	
Immunity	**Generic**	ETSI EN 300 386 V1.3.3
	EN	EN 55024:1998+ A1:2001 + A2:2003
	ESD	EN 61000-4-2; IEC 61000-4-2
	Radiated	EN 61000-4-3; IEC 61000-4-3
	EFT/Burst	EN 61000-4-4; IEC 61000-4-4
	Surge	EN 61000-4-5; IEC 61000-4-5
	Conducted	EN 61000-4-6; IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8; EN 61000-4-8
	Voltage dips and interruptions	EN 61000-4-11; IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Notes	The customer must order a power supply, as the device does not come with a PSU. At least one JC680A or JC681A is required.	
Services	Refer to the HP website at: www.hp.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 HP sales office.	

Standards and protocols (applies to all products in series)

General protocols

IEEE 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation Control Protocol (LACP)
IEEE 802.3ae 10-Gigabit Ethernet
RFC 4022 MIB for TCP
RFC 4251 SSHv6 Architecture
RFC 4252 SSHv6 Authentication
RFC 4253 SSHv6 Transport Layer
RFC 4254 SSHv6 Connection
RFC 4293 MIB for IP
RFC 4419 Key Exchange for SSH
RFC 4443 ICMPv6
RFC 4541 IGMP & MLD Snooping Switch
RFC 4861 IPv6 Neighbor Discovery
RFC 4862 IPv6 Stateless Address Auto-configuration

MIBs

Technical Specifications

IEEE 802.3af Power over Ethernet
IEEE 802.3at
IEEE 802.3x Flow Control
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 925 Multi-LAN Address Resolution
RFC 951 BOOTP
RFC 1058 RIPv1
RFC 1350 TFTP Protocol (revision 2)
RFC 1519 CIDR
RFC 1542 BOOTP Extensions
RFC 1812 IPv4 Routing
RFC 2131 DHCP
RFC 2236 IGMP Snooping
RFC 2370 OSPF Opaque LSA Option
RFC 2385 TCP MD5 Authentication for BGPv4
RFC 2453 RIPv2
RFC 2475 Architecture for Differentiated Services
RFC 2597 Assured Forwarding PHB Group
RFC 3046 DHCP Relay Agent Information Option
RFC 3209 RSVP-TE Extensions to RSVP for LSP Tunnels
RFC 3576 Ext to RADIUS (CoA only)
RFC 3584 Coexistence between Version 1 and Version 2 of the Internet-standard Network Management Framework
RFC 3623 Graceful OSPF Restart
RFC 3768 VRRP
RFC 4090 Fast Reroute Extensions to RSVP-TE for LSP Tunnels
RFC 4291 IP Version 6 Addressing Architecture
RFC 4675 RADIUS VLAN & Priority
RFC 4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling

IP multicast
RFC 2934 Protocol Independent Multicast MIB for IPv4
RFC 3376 IGMPv3 (host joins only)
RFC 3618 Multicast Source Discovery Protocol (MSDP)
RFC 3973 Draft 2 PIM Dense Mode
RFC 4601 PIM Sparse Mode

IPv6
RFC 2080 RIPng for IPv6
RFC 2460 IPv6 Specification
RFC 2710 Multicast Listener Discovery (MLD) for IPv6
RFC 2740 OSPFv3 for IPv6
RFC 2925 Remote Operations MIB (Ping only)
RFC 3019 MLDv1 MIB
RFC 3162 RADIUS and IPv6
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1657 BGP-4 MIB
RFC 1724 RIPv2 MIB
RFC 1850 OSPFv2 MIB
RFC 2011 SNMPv2 MIB for IP
RFC 2013 SNMPv2 MIB for UDP
RFC 2233 Interface MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2452 IPV6-TCP-MIB
RFC 2454 IPV6-UDP-MIB
RFC 2465 IPv6 MIB
RFC 2466 ICMPv6 MIB
RFC 2571 SNMP Framework MIB
RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-MIB
RFC 2787 VRRP MIB
RFC 2819 RMON MIB
RFC 2925 Ping MIB
RFC 3414 SNMP-User based-SM MIB
RFC 3415 SNMP-View based-ACM MIB
RFC 3418 MIB for SNMPv3
RFC 3621 Power Ethernet MIB
RFC 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)
LLDP-EXT-DOT1-MIB
LLDP-EXT-DOT3-MIB
LLDP-MIB

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3176 sFlow
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

OSPF
RFC 2328 OSPFv2
RFC 3101 OSPF NSSA

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS (client only)
RFC 2866 RADIUS Accounting
Access Control Lists (ACLs)
Secure Sockets Layer (SSL)

RFC 3315 DHCPv6 (client and relay)
RFC 3315 DHCPv6 (client only)
RFC 3810 MLDv2 (host joins only)

SSHv2 Secure Shell

Accessories

HP 5800 Switch Series accessories

Transceivers	
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X120 1G SFP RJ45 T Transceiver	JD089B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
HP X110 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LRM Transceiver	JD093B
HP X130 10G SFP+ LC LR Transceiver	JD094B
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A
HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C
HP X240 10G SFP+ SFP+ 7m Direct Attach Copper Cable	JC784C
Cables	
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A
Power Supply	
HP RPS 800 Redundant Power Supply	JD183A
HP RPS1600 Redundant Power System	JG136A
HP RPS1600 1600W AC Power Supply	JG137A
HP 5800-24G-PoE+ Switch	JC099B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A
HP 5800 1RU Spare Fan Assembly	JC098A
HP 5800-24G Switch	JC100B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A

Accessories

HP 5800 1RU Spare Fan Assembly	JC098A
HP 5800-48G-PoE+ Switch with 2 Interface Slots	JC101B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A
HP 5800 300W AC Power Supply	JC087A
HP 5800 750W AC Power Supply	JC089A
HP 5800 300W DC Power Supply	JC090A
HP 5800 PoE Module	JC097B
HP 5800 2RU Spare Fan Assembly	JC096A
HP 5820 VPN Firewall Module	JD255A
HP 5800-24G-SFP Switch with 1 Interface Slot	JC103B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A
HP 5500 150WAC Power Supply	JD362A
HP 5500 150WDC Power Supply	JD366A
HP 5800 1RU Spare Fan Assembly	JC098A
HP 5800-48G-PoE+ Switch with 1 Interface Slot	JC104B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A
HP 5800 1RU Spare Fan Assembly	JC098A
HP 5800-48G Switch with 1 Interface Slot	JC105B
HP 5800 4-port 10GbE SFP+ Module	JC091A
HP 5800 2-port 10GbE SFP+ Module	JC092B
HP 5800 16-port Gig-T Module	JC094A
HP 5800 16-port SFP Module	JC095A
HP 5800 1RU Spare Fan Assembly	JC098A
HP 5800AF-48G Switch	JG225B
HP 58x0AF 650W AC Power Supply	JC680A
HP 58x0AF 650W DC Power Supply	JC681A
HP 58x0AF Back (power side) to Front (port side) Airflow Fan Tray	JC682A
HP 58x0AF Front (port side) to Back (power side) Airflow Fan Tray	JC683A

Accessory Product Details

NOTE: Details are not available for all accessories. The following specifications were available at the time of publication.

HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A) A small form-factor pluggable SFP Gigabit LH40 transceiver that provides a full duplex Gigabit solution up to 40km on a single-mode fiber.	**Ports**	1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)	
	Connectivity	Connector type	LC
		Wavelength	1310 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 40km distance	
		Fiber type	Single Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A) A small form-factor pluggable (SFP) Gigabit LH40 transceiver that provides a full-duplex Gigabit solution up to 40 km on a single mode fiber.	**Ports**	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)	
	Connectivity	Connector type	LC
		Wavelength	1550 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 40km distance	
		Fiber type	Single Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X125 1G SFP LC LH70	**Ports**	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)	
	Connectivity	**Connector type**	LC

Accessory Product Details

Transceiver (JD063B) A small form-factor pluggable (SFP) Gigabit LH70 transceiver that provides a full-duplex Gigabit solution up to 70km on a single-mode fiber.	**Physical characteristics**	**Wavelength**	1550 nm
		Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	**Power consumption typical**	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 70km	
		Fiber type	Single Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X120 1G SFP LC SX Transceiver (JD118B) A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber.	**Ports**	1 LC 1000BASE-SX port	
	Connectivity	**Connector type**	LC
		Wavelength	850 nm
	Physical characteristics	**Dimensions**	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	**Power consumption typical**	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • FDDI Grade distance = 220m • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by standard	
		Cable length	up to 550m
		Fiber type	Multi Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X120 1G SFP LC LX Transceiver (JD119B) A small form-factor pluggable (SFP) Gigabig LX transceiver that provides a full duplex Gigabit solution up to 550m on MMF or 10Km on	**Ports**	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)	
	Connectivity	**Connector type**	LC
		Wavelength	1300 nm
	Physical characteristics	**Dimensions**	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	**Power consumption typical**	0.8 W

Accessory Product Details

SMF		**Power consumption maximum**	1.0 W
	Cabling	Cable type: Either single mode or multimode; Maximum distance: • 550m for Multimode • 10km for Singlemode	
		Fiber type	Both
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP X125 1G SFP RJ45 T Transceiver (JD089B) A small form factor pluggable (SFP) Gigabit 1000Base-T transceiver that provides a full duplex Gigabit solution up to 100m on a Cat-5+ cable.	**Ports**	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)	
	Connectivity	**Connector type**	RJ-45
	Physical characteristics	**Dimensions**	2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)
		Full configuration weight	0.07 lb. (0.03 kg)
	Electrical characteristics	**Power consumption typical**	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T; Maximum distance: • 100m	
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP

		sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um

Accessory Product Details

		• Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.

Accessory Product Details

			• Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services		Refer to the HP website at www.hp.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 HP sales office.
HP RPS1600 Redundant Power System (JG136A)	**Ports**		8 redundant power supply ports Restrictions: two -56V/25A DC(PoE); six -56V/8A DC(non-PoE)
	Physical characteristics	**Dimensions**	15.63(d) x 17.32(w) x 1.74(h) in. (39.7 x 44 x 4.42 cm)
		Weight	14.11 lb. (6.4 kg)
		Full configuration weight	16.75 lb. (7.6 kg)
	Environment	**Operating temperature**	14°F to 122°F (-10°C to 50°C)
		Operating relative humidity	5% to 95%
		Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Nonoperating/Storage relative humidity	5% to 95%
		Altitude	up to 13,123 ft. (4 km)
		Acoustic	Pressure: 53 dB; ISO 7779, ISO 9296
	Electrical characteristics	**Voltage**	100-120/200-240 VAC
		Current	30/60 A
		Idle power	38 W
		Maximum power rating	3550 W
		RPS power	3200 W
		PoE power	2800 W
		RPS	-55 V
		PoE	-55 V
		Frequency	50/60 Hz
		Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. With one RPS1600 Power Supply, the PRS1600 Redundant Power System can provide 1600W power output; With two PRS1600 Power Supplies, the output power is 3200W.
	Safety		CE Labeled; UL 60950-1; IEC 60950-1; ICES-003; FCC Part 15, Subpart B; EU RoHS Compliant; EN 60950-1/A11; C-Tick; VCCI Class A; ROHS Compliance; EN 300386
	Services		Refer to the HP website at: www.hp.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 HP sales office.
HP RPS1600 1600W AC Power Supply (JG137A)	**Physical characteristics**	**Dimensions**	8.19(d) x 4.96(w) x 1.63(h) in. (20.8 x 12.6 x 4.15 cm)
		Weight	3.02 lb. (1.37 kg)
	Environment	**Operating temperature**	14°F to 122°F (-10°C to 50°C)
		Operating relative humidity	5% to 95%
		Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Nonoperating/Storage relative humidity	5% to 95%
	Electrical characteristics	**Voltage**	100-120/200-240 VAC
		Current	15/30 A
		Maximum power rating	1600 W
		Frequency	50/60 Hz
		Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP A5820 VPN Firewall Module (JD255A)

Ports	2 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)	
	2 dual-personality ports; auto-sensing 10/100/1000Base-T or SFP	
	1 RJ-45 serial console port	
	1 Compact Flash port	
Physical characteristics	**Dimensions**	9.84(d) x 9.84(w) x 14.45(h) in. (25 x 25 x 36.7 cm)
	Weight	7.72 lb. (3.5 kg)
Environment	**Operating temperature**	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, noncondensing
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP	
Features	Performance - 6.5Gbps Firewall Throughput - 1.8M Concurrent connection - 50K New connection per second - Max 20480 security policies - 2Gbps 3DES/AES VPN Throughput - 5000 IPSec tunnel - 4K VLAN Firewall operation mode	

Accessory Product Details

- Routing mode
- Transparent mode
- Hybrid mode

AAA service
- Local Authentication
- Standard Radius
- HWTACACS+
- RADIUS domain Authentication

ASPF
- General TCP / UDP application
- FTP/SMTP/HTTP/RTSP/H323 Protocol State Detection
- SIP/MGCP/QQ/MSN Protocol State Detection
- Java/ActiveX Blocking and Detection
- Port mapping
- Support for the fragmented packets

Virtualization
- 256 Virtual Firewall
- 4 default Security Zone
- Max 256 Security Zone

NAT
- NAPT
- PAT
- NAT Server
- Port mapping
- Bidirectional NAT
- Static NAT

Network Security
- Add blacklist by hand or automatically
- IP+MAC Binding
- ARP Reverse Query
- ARP Cheat Check
- Management ports closed by default

DDOS
- DNS Query Flood
- SYN Flood
- Auto start TCP Proxy when Detect SYN Flood
- ICMP Flood
- UDP Flood
- IP Spoofing
- SQL injection filter

L2TP VPN
- LNS,LAC
- L2TP Multi-instance

GRE
- GRE tunneling protocol

IPSec
- AH/ESP
- ESP
- Transport/tunnel
- NAT traversal
- Strategy template

IKE
- DH
- Pre-share Key authentication-method
- Support aggressive mode and main exchange mode
- IKE DPD, PKI / CA

Accessory Product Details

Network Feature
- 802.1q VLAN
- 4K sub-interface
- Static and dynamic ARP
- Multicast, PIM
- IGMP v1/v2/v3

Routing
- RIP
- OSPF
- BGP
- Static Route
- policy Route

High Availability
- Active/Active mode
- Active/Passive mode
- Session Synchronization for Firewall

System management
- Web Management support IE/Firefox
- Command line interface (Console/Telnet/SSH)
- Classification Manager
- Unified management through iMC
- SNMPv1/v2c/v3

Administration
- Software Upgrades
- Configuration Backup and Restore

Logging/Monitoring
- Syslog
- Mini RMON
- NTP
- NAT/ASPF/firewall log stream(Binary log)

IPv6 Routing & Multicast
- RIPng
- OSPFv3
- BGP4+
- Static Route
- Policy Route
- PIM-SM/DM

IPv6 Security
- NAT-PT
- Manual tunnel
- IPV6 OVER ipv4 GRE tunnel
- 6to4 tunnel (RFC3056)
- ISATAP Tunnel
- IPv6 Packet Filter
- Radius
- NAT64

Services

Refer to the HP website at: www.hp.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 HP sales office.

Standards and protocols

IPv6

RFC 1981 IPv6 Path MTU Discovery
RFC 2460 IPv6 Specification
RFC 2465 Management Information Base for IP Version 6: Textual Conventions and General Group(partially support, only "IPv6 Interface
RFC 2405 The ESP DES-CBC Cipher Algorithm With Explicit IV
RFC 2406 IP Encapsulating Security Payload (ESP)
RFC 2410 The NULL Encryption Algorithm and Its Use With IPsec
RFC 2411 IP Security Document Roadmap

Accessory Product Details

Statistics table")
RFC 3484 Default Address Selection for IPv6
RFC 3513 IPv6 Addressing Architecture
RFC 3587 IPv6 Global Unicast Address Format
RFC 4007 IPv6 Scoped Address Architecture
RFC 4862 IPv6 Stateless Address Auto-configuration

Security
RFC 1321 The MD5 Message-Digest Algorithm
RFC 1334 PPP Authentication Protocols (PAP)
RFC 1994 PPP Challenge Handshake Authentication
Protocol (CHAP)
RFC 2104 Keyed-Hashing for Message Authentication
RFC 2138 RADIUS Authentication
RFC 2618 RADIUS Authentication Client MIB
RFC 2620 RADIUS Accounting Client MIB
RFC 2716 PPP EAP TLS Authentication Protocol
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support
RFC 2868 RADIUS Attributes for Tunnel Protocol Support
RFC 2869 RADIUS Extensions
draft-grant-tacacs-02 (TACACS)

VPN
RFC 1701 Generic Routing Encapsulation (GRE)
RFC 1702 Generic Routing Encapsulation over IPv4 networks.
RFC 1828 IP Authentication using Keyed MD5
RFC 1829 The ESP DES-CBC Transform
RFC 1853 IP in IP Tunneling
RFC 2085 HMAC-MD5 IP Authentication with Replay Prevention
RFC 2401 Security Architecture for the Internet Protocol
RFC 2402 IP Authentication Header
RFC 2403 The Use of HMAC-MD5-96 within ESP and AH
RFC 2404 The Use of HMAC-SHA-1-96 within ESP and AH
RFC 2451 The ESP CBC-Mode Cipher Algorithms
RFC 2473 Generic Packet Tunneling in IPv6 Specification
RFC 2529 Transmission of IPv6 over IPv4 Domains without Explicit Tunnels
RFC 2661 Layer Two Tunneling Protocol "L2TP"
RFC 2784 Generic Routing Encapsulation (GRE)
RFC 2868 RADIUS Attributes for Tunnel Protocol Support
RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers
RFC 3602 The AES-CBC Cipher Algorithm and Its Use with IPsec
RFC 4214 Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)

IKEv1
RFC 2407 The Internet IP Security Domain of Interpretation for ISAKMP
RFC 2408 Internet Security Association and Key Management Protocol (ISAKMP).
RFC 2409 The Internet Key Exchange (IKE)
RFC 2412 The OAKLEY Key Determination Protocol
RFC 3526 More Modular Exponential (MODP) Diffie-Hellman groups for Internet Key Exchange (IKE)
RFC 3706 A Traffic-Based Method of Detecting Dead Internet Key Exchange (IKE) Peers

PKI
RFC 2510 Internet X.509 Public Key Infrastructure Certificate Management Protocols
RFC 2511 Internet X.509 Certificate Request Message Format
RFC 3279 Algorithms and Identifiers for the Internet
X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
RFC 3280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
draft-nourse-scep-06:
PKCS#1
PKCS#10
PKCS#12
PKCS#7

Summary of Changes

Date	Version History	Action	Description of Change:
20- Apr-2015	From Version 28 to 29	Deleted	SKUs deleted from Transceivers: • JD098B • JD099B
		Changed	A to B Product Roll on the Switch Series , Technical Specifications updated Accessories Section updated
01-Dec-2014	From Version 27 to 28	Changed	Warranty and support updated
10-Jun-2014	From Version 26 to 27	Changed	Switch Options were revised in Configuration.
15-Apr-2014	From Version 25 to 26	Changed	Notes section for Box Level Integration CTO Models were revised in Configuration.
19-Mar-2014	From Version 24 to 25	Changed	Transceivers and Modules were revised.
16-Jan-2014	From Version 23 to 24	Removed	HP X240 10G SFP+ 7m DAC Cable was removed from Configuration.
17-Dec-2013	From Version 21 to 23	Changed	Configuration was revised and Configuration - AF Models was removed
11-Nov-2013	From Version 19 to 21	Changed	Configuration - AF Models notes and transceivers were revised.
15-Oct-2013	From Version 18 to 19	Changed	Configuration was revised.
19-Aug-2013	From Version 17 to 18	Changed	Configuration was revised.
05-Jul-2013	From Version 16 to 17	Added	Accessories: Added two options.
27-Jun-2013	From Version 15 to 16	Changed	Features and benefits and Standards and protocols were revised HP 5800 Access Controller Modules for 64-256 and 32-64 Access Points were removed
10-Jun-2013	From Version 14 to 15	Changed	Configuration Rules was revised throughout Configuration and Configuration - AF Models was added.
24-Apr-2013	From Version 13 to 14	Added	Overview: Added Images.
10-Apr-2013	From Version 12 to 13	Changed	Updated the Configuration section.
25-Mar-2013	From Version 11 to 12	Added	Overview: Added Build to Order section to the Features and benefits section.
24-Aug-2012	From Version 10 to 11	Changed	Updated the Features and Benefits, Introduction and Accessories sections.
20-Aug-2012	gust 20, 2012- From Version 9 to 10	Changed	Updated Accessories and Features and Benefits.
14-May-2012	From Version 8 to 9	Changed	Features and Benefits, Accessories, and the weight and dimensions for each spec were revised.
20-Apr-2012	From Version 7 to 8	Changed	Features and Benefits and Accessories were revised.
16-Nov-2011	From Version 6 to 7	Changed	Updated the Connectivity section of Features and

Summary of Changes

			Benefits.
26-Sep-2011	From Version 4 to 6	Added	New models were added.
24-May-2011	From Version 3 to 4	Changed	Accessories were revised.
17-Mar-2011	From Version 2 to 3	Changed	Monitors and Diagnostics was revised.
01-Feb-2011	From Version 1 to 2	Changed	Models and Accessories were revised.

To learn more, visit: www.hp.com/networking