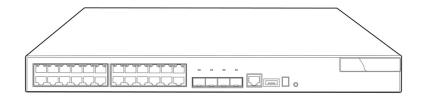
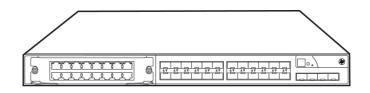
## Overview



HP 5800-24G-PoE+ Switch



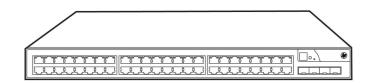
HP 5800-24G Switch



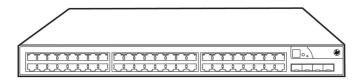
HP 5800-24G-SFP Switch



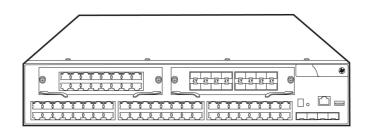
## Overview



HP 5800-48G-PoE Switch



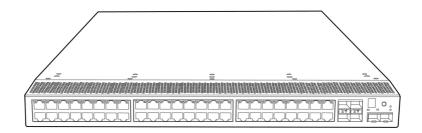
HP 5800-48G Switch



HP 5800-48G Switch with 2 Slots



### Overview



HP 5800AF-48G Switch

V	od	e	S		
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HP 5800-24G-PoE+ Switch	JC099A
HP 5800-24G Switch	JC100A
HP 5800-24G-SFP Switch	JC103A
HP 5800-48G-PoE Switch	JC104A
HP 5800-48G Switch	JC105A
HP 5800-48G Switch with 2 Slots	JC101A
HP 5800AF-48G Switch	JG225A

## **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



### Overview

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
  with support for open application architecture (OAA) modules, extends and integrates application capability into the network
   Disc Descliption or Descent on Proceeding Processing Processing
- 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

- USB support:
  - File copy

allows users to copy switch files to and from a USB flash drive

- DHCP options:
  - O DNS Relay and SMTP Redirection
  - O 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)



### Overview

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 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 (JG225A) 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
  - $\circ~$  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



### Overview

- **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
- 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 modia speed, supports statis routes. PID and PIDv2
- 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
- virtual Router Redundancy Protocol (VRRP) 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



### Overview

### 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 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
   halps provent ID specifing attacks: filters packats on a s
  - 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**



### Overview

- 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**

- 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

• Lifetime warranty

for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)†

• 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

the warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller and HP Survivable Branch Communication zl Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at: www.hp.com/networking/warranty.



## 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 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	JC100A See Configuration Note:1, 3
<ul> <li>PDU Cable NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	JC100A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC100A#B2C
HP 5800-24G-PoE Switch 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	JC099A See Configuration Note:1, 3
<ul> <li>PDU Cable NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	JC099A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC099A#B2C
HP 5800-24G-SFP Switch 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	JC103A See Configuration Note:1, 4
HP 5800-48G Switch	JC105A



Configuration		
<ul> <li>48 RJ-45 autoser</li> <li>1 extended mode</li> <li>4 fixed 1000/100</li> <li>min=0 \ max=4 S</li> <li>Power Supply inco</li> <li>1U- Height</li> </ul>	000 SFP+ ports iFP+ Transceivers	See Configuration Note:1, 3
PDU Cable NA/MEX/TW, • C15 PDU Jumper	/JP Cord (NA/MEX/TW/JP)	JC105A#B2B
PDU Cable ROW • C15 PDU Jumper	Cord (ROW)	JC105A#B2C
HP 5800AF-48G Switch 48 RJ-45 autoser 6 fixed 1000/100 min=0 \ max=6 S Must select min 7 Must select min 7 1U- Height	nsing 10/100/1000 ports DOO SFP+ ports SFP+ Transceivers 1 Power Supply	JG225A See Configuration Note:1
HP 5800-48G-PoE Swite 48 RJ-45 autoser 1 extended mode 4 fixed 1000/100 min=0 \ max=4 S Power Supply inc 1U - Height	nsing 10/100/1000 ports ule slot 000 SFP+ ports SFP+ Transceivers	JC104A See Configuration Note:1, 3
PDU Cable NA/MEX/TW, • C15 PDU Jumper	/JP Cord (NA/MEX/TW/JP)	JC104A#B2B
PDU Cable ROW • C15 PDU Jumper	Cord (ROW)	JC104A#B2C
HP 5800-48G Switch wi 48 RJ-45 autoser 2 extended modu 4 fixed 1000 SFP min=0 \ max=4 S Must select min 1 2U - Height	nsing 10/100/1000 ports ule slot ? ports SFP Transceivers	JC101A See Configuration Note:4
Configuration Rules		
Note 1	The following Transceivers install into this switch: HP X130 10G SFP+ LC SR Transceiver HP X130 10G SFP+ LC LRM Transceiver	JD092B JD093B



HP X130 10G SFP+ LC LR Transceiver

JD094B

Configuration		
	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.	

## **Box Level Integration CTO Models**

### **CTO Solution Sku**

<ul> <li>HP 58xx CTO Switch Solution</li> <li>SSP trigger sku</li> </ul>	JG478A
CTO Base Sku	
HP 5800-24G Switch	JC100A



Configuration	
<ul> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>1 extended module slot</li> <li>4 fixed 1000/10000 SFP+ ports</li> <li>min=0 \ max=4 SFP+ Transceivers</li> <li>Power Supply included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 3, 6,10, 1
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC100A#B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC100A#B2C
HP 5800-24G-PoE Switch 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	JC099A See Configuratior Note:1, 3, 6,10, 1
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC099A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	JC099A#B2C
HP 5800-24G-SFP Switch 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	JC103A See Configuratior Note:1, 4, 5,10
HP 5800-48G Switch • 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	JC105A See Configuration Note:1, 3, 6,10, 1
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC105A#B2B

PDU Cable ROW

JC105A#B2C



## Configuration

• C15 PDU Jumper Cord (ROW)

## HP 5800 Switch Series

HP 5800AF-48G Switch • 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	JG225A See Configuration Note:1, 8, 10
HP 5800-48G-PoE Switch • 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	JC104A See Configuration Note:1, 3, 6,10, 11
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC104A#B2B
C15 PDU ROW • C15 PDU Jumper Cord (ROW)	JC104A#B2C
HP 5800-48G Switch with 2 Slots 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	JC101A See Configuration Note:4, 5,10

### **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	



Configuration		
	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
	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 # or 2. A Factory Express Service. (For Watson and CLIC Only: See Factory Express Tab on I	
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 req Chassis and integrated to the JG478A - HP 58xx CTO Enablement. (Min 1/Max 1 Switch	
Note 11	If this Switch is selected, Then a Minimum of 1 factory integrated accessory, OR Factory ordered and integrated to CTO chassis. See Menu below, option must have a #0D1 to CTO Chassis.	



## Configuration

## **Rack Level Integration CTO Models**

### **Standard Switch Chassis**

HP 5800-24G Switch 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	JC100A See Configuration Note:1, 3, 10
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC100A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC100A#B2C
HP 5800-24G-PoE Switch 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	JC099A See Configuration Note:1, 3, 10
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC099A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC099A#B2C
HP 5800-24G-SFP Switch 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	JC103A See Configuration Note:1, 4, 10
HP 5800-48G Switch	JC105A



Configuration	
<ul> <li>48 RJ-45 autosensing 10/100/1000 ports</li> <li>1 extended module slot</li> <li>4 fixed 1000/10000 SFP+ ports</li> <li>min=0 \ max=4 SFP+ Transceivers</li> <li>Power Supply included</li> <li>1U- Height</li> </ul>	See Configuration Note:1, 3, 10
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC105A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC105A#B2C
HP 5800AF-48G Switch • 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	JG225A See Configuration Note:1, 8, 10
HP 5800-48G-PoE Switch • 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	JC104A See Configuration Note:1, 3, 10
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JC104A#B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JC104A#B2C
HP 5800-48G Switch with 2 Slots 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	JC101A See Configuration Note:4, 10

### **Configuration Rules:**

Note 1

The following Transceivers install into this switch:



JD092B JD093B

JD094B

## Configuration HP X130 10G SFP+ LC SR Transceiver HP X130 10G SFP+ LC LRM Transceiver HP X130 10G SFP+ LC LR Transceiver HP X130 10G SEP+ LC ER 40km Transceiver

		JDOJAD
	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 (PD Menu)	
	REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C Cable option on the Switches/Routers.	should be the Defaulted Power
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 8	Switch Height is 2U if the JC682A - HP A58x0AF Bck(pwr)-Frt(ports) Fan Tra switch. REMARK: This only applies for CTO Rack Level Integration.	ay is ordered #0D1 with this
Note 10	If HP CTO Switch Chassis is selected for Rack Level Integration, Then the Sv #0D1) to the HP Rack.	witch needs to integrate (with

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

## Modules



### Configuration

### **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

<ul> <li>HP 5800 16-port SFP Module</li> <li>min=0 \ max=16 SFP Transceivers</li> </ul>	JC095A See Configuration Note:2
<ul> <li>HP 5800 4-port 10GbE SFP+ Module</li> <li>min=0 \ max=4 SFP and SFP + Transceivers</li> </ul>	JC091A See Configuration Note:1
<ul> <li>HP 5800 2-port 10GbE SFP+ Module</li> <li>min=0 \ max=2 SFP and SFP + Transceivers</li> </ul>	JC092B See Configuration Note:1
<ul><li>HP 5800 16-port Gig-T Module</li><li>No Transceivers</li></ul>	JC094A

#### **Configuration Rules:**

Note 1	The following Transceivers install into this Module: (Use #0D1 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 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



## Configuration

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 Ap • No Transceivers	S	JD443A
HP 5800 ACM for 64-256 A • No Transceivers	ps	JD441A See Configuration Note:1
HP 5820 VPN Firewall Mod • No Transceivers	lule	JD255A See Configuration Note:1
Configuration Rules:		
Note 1	This Module install to the following switches only: JC101x - HP 5800-48G Switch with 2 Slots	
PoE Modules		
(JC101x and JG242x Switch	h Only ) System (std 0 // max 1) User Selection (min 0 // max 1) per chassis	
HP 5800 PoE Module • No Transceivers		JC097B
Transceivers		
SFP+ Transceivers		
HP X130 10G SFP+ LC SR T HP X130 10G SFP+ LC LRM		JD092B JD093B



## Configuration

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

(JG225A only) System (std 0 // max 2) User Selection (min 1 // max 2) per switch

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
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JD362A#B2C
HP 5500 150WDC Power Supply	JD366A See Configuration Note:1, 3
HP 5800 300W AC Power Supply	JC087A



## Configuration

Configuration		
		See Configuration Note:1, 2, 4
PDU Cable NA/MEX/TW/J • C15 PDU Jumper C		JC087A#B2B
PDU Cable ROW • C15 PDU Jumper C	ord (ROW)	JC087A#B2C
HP 5800 300W DC Power	Supply	JC090A See Configuration Note:1, 4
HP 5800 750W AC PoE Pc	ower Supply	JC089A See Configuration Note:1, 2, 4
PDU Cable NA/MEX/TW/J • C15 PDU Jumper C		JC089A#B2B
PDU Cable ROW • C15 PDU Jumper C	ord (ROW)	JC089A#B2C
HP A58x0AF 650W AC Por • includes 1 x c13, 6		JC680A See Configuration Note:1, 2, 6
PDU Cable NA/MEX/TW/J		JC680A#B2B
<ul> <li>C15 PDU Jumper C</li> <li>PDU Cable ROW</li> <li>C15 PDU Jumper C</li> </ul>		JC680A#B2C
HP 58x0AF 650W DC Pow	ver Supply	JC681A 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 (PDI Power	Cord) (See Localization

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



## Configuration

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 JG225A 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)

## **Switch Options**

### **Fan Trays**

(JG225A only) System (std 0 // max 2) User Selection (min 2 // max 2) per switch

HP 58x0AF Bck(p	pwr)-Frt(ports) Fan Tray	JC682A See Configuration Note:1
HP 58x0AF Frt(ports)-Bck(pwr) Fan Tray		JC683A See Configuration Note:1
Configuration Ru	ules:	
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	A860JL
	See Configuration Note:2



## Configuration

## Configuration Rules:

Note 1	This Spare Fan is only supported on switches JC101A and JG242A.
Note 2	This Spare Fan is only supported on switches JC099A, JC100A, JC103A, JC104A, JC105A, JG254A, JG255A, JG256A, JG257A and JG258A.

### **Opacity Shield Kit**

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

HP 5800-24G / -48G PoE • Supported on JG25	JG560A	
HP 58xx 2-slot Switch Op • Supported on JG24	JG561A	
HP 5800-24G-SFP Opcty 9 • Supported on JG25		JG562A
HP 5800-24G / -48G Opct • Supported on JG25	-	JG563A
Tamper Evidence Labels		
HP 12mm x 60mm Tmpr-Evidence (30) Lbl • Supported on JG560A, JG561A, JG562A or JG563A		JG585A
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

## Configuration

<ul> <li>Height = 1U</li> <li>includes 1 x c13</li> </ul>	See Configuration Note:2, 4
HP RPS1600 Redundant Power System <ul> <li>Height = 1U</li> <li>includes 1 x c13, 1600w and Power Supply port</li> </ul>	JG136A See Configuration Note:2, 3, 5
HP RPS1600 1600W AC Power Supply <ul> <li>Installs into JG136A only</li> </ul>	JG137A See Configuration Note:1, 3

### **Configuration Rules:**

Note 1	If this power supply is selected, The JG136A - HP A-RPS1600 Redundant Power System onsite.	must be on order or
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 JC105A and JC100A.	
Note 5	This power supply only supported on switches JC099A, JC101A, JC103A, JC104A.	
Options for the HP RPS 800 and 1600 External RPS Power Supplies		
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

HP X290 500/800 1m RPS Cable

JD190A See Configuration Note:1

JD189A See Configuration Note:4

### **Configuration Rules:**

Note 1

hp

This Cable is only supported on switches JC105A and JC100A when used with the RPS 800 (JD183A)



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Configuration	
Note 2	This Cable is only supported on switch JC103A when used with the RPS 1600 (JG136A)
Note 3	This Cable is only supported on switches JC099A, JC101A, JC104A, and when used with the RPS 1600 (JG136A).
Note 4	This Cable is only supported on switches JC101A (Runing On Non-PoE mode), JC103A 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 (JC099A)

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+ j	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	1024 MB SDRAM, 512 MB f	lash; packet buffer size: 4 MB
Performance	Latency	4.02 μs (Store and Forward) (64-byte packets)
	Throughput	155 million pps
	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
	Frequency	50/60 Hz
Safety		afety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J;
Emissions	-	ss A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3- 95 +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



## **Technical Specifications**

	Flicker	EN 61000-3-3, IEC 61000-3-3			
Management	IMC - Intelligent Managem HTTPS; RMON1; FTP	ent Center; command-line interface; Web browser; SNMP Manager; Telnet;			
Services	3-year, 4-hour onsite, 13x	5 coverage for hardware (UV882E)			
	-	7 coverage for hardware (UV885E)			
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV888E)				
	3-year, 24x7 SW phone support, software updates (UV891E)				
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR565E)				
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR566E)				
	4-year, 4-hour onsite, 13x5 coverage for hardware (UV883E)				
	4-year, 4-hour onsite, 24x7 coverage for hardware (UV886E)				
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV889E) 4-year, 24x7 SW phone support, software updates (UV892E)				
		5 coverage for hardware (UV884E)			
	-	7 coverage for hardware (UV887E)			
	-	7 coverage for hardware, 24x7 software phone (UV890E)			
	-	pport, software updates (UV893E)			
	3 Yr 6 hr Call-to-Repair Onsite (UW969E)				
	4 Yr 6 hr Call-to-Repair Onsite (UW970E)				
	5 Yr 6 hr Call-to-Repair Onsite (UW971E)				
	1-year, 6 hour Call-To-Repair Onsite for hardware (HR568E)				
	1-year, 24x7 software phone support, software updates (HR567E)				
	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS650E)				
	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS651E)				
	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS652E)				
	3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS653E)				
	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS654E)				
	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS655E)				
	5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS656E)				
	5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS657E)				
	Refer to the HP website at: <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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 (JC10	)0A)				
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)			



## **Technical Specifications**

Memory and processor	1024 MB SDRAM, 512 MB flash; packet buffer size: 4 MB	
Performance	Latency	4.02 μs (Store and Forward) (64-byte packets)
	Throughput	155 million pps
	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	100-120-240 VAC
	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	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UV882E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UV885E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV888E)</li> <li>3-year, 24x7 SW phone support, software updates (UV891E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR565E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR566E)</li> <li>Installation with minimum configuration, system-based pricing (UW451E)</li> </ul>	



## **Technical Specifications**

4-year, 4-hour onsite, 13x5 coverage for hardware (UV883E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UV886E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV889E)
4-year, 24x7 SW phone support, software updates (UV892E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UV884E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UV887E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV890E)
5-year, 24x7 SW phone support, software updates (UV893E)
3 Yr 6 hr Call-to-Repair Onsite (UW969E)
4 Yr 6 hr Call-to-Repair Onsite (UW970E)
5 Yr 6 hr Call-to-Repair Onsite (UW971E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR568E)
1-year, 24x7 software phone support, software updates (HR567E)
1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS650E)
1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS651E)
3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS652E)
3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS653E)
4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS654E)
4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS655E)
5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS656E)
5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS657E)
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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 (JC103A)

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	1024 MB SDRAM, 512 MB f	lash; packet buffer size: 4 MB
Performance	Latency	4.02 μs (Store and Forward) (64-byte packets)
	Throughput	155 million pps
	Routing/Switching capacity	208 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	10% to 90%
	humidity	
	Acoustic	Low-speed fan: 49.6 dB, High-speed fan: 58.1 dB
<b>Electrical characteristics</b>	Maximum heat	498 BTU/hr (525.39 kJ/hr)
	dissipation	
	Voltage	100-120/200-240 VAC
	DC voltage	–48 VDC to –60 VDC
	Frequency	50/60 Hz
Safety		Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J;
Emissions		iss A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3- 95 +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 Managem HTTPS; RMON1; FTP	ent Center; command-line interface; Web browser; SNMP Manager; Telnet;
Notes	Customer must order a po JD366A is required.	wer supply, as the device does not come with a PSU. At least one JD362A or
Services	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UV882E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UV885E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV888E)</li> <li>3-year, 24x7 SW phone support, software updates (UV891E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR565E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR566E)</li> <li>Installation with minimum configuration, system-based pricing (UW451E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UV883E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UV883E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UV886E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV889E)</li> <li>4-year, 24x7 SW phone support, software updates (UV892E)</li> </ul>	
	5-year, 4-hour onsite, 13x	5 coverage for hardware (UV884E)



### **Technical Specifications**

5-year, 4-hour onsite, 24x7 coverage for hardware (UV887E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV890E) 5-year, 24x7 SW phone support, software updates (UV893E) 3 Yr 6 hr Call-to-Repair Onsite (UW969E) 4 Yr 6 hr Call-to-Repair Onsite (UW970E) 5 Yr 6 hr Call-to-Repair Onsite (UW971E) 1-year, 24x7 software phone support, software updates (HR567E) 1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS650E) 1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS651E) 3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS652E) 3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS653E) 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS654E) 4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS655E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS656E) 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS657E) 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 5800-48G-PoE+ Switch with 1 Interface Slot (JC104A)

HP sales office.

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BA 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+ p	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	1024 MB SDRAM, 512 MB f	lash; packet buffer size: 8 MB
Performance	Latency	4.02 μs (Store and Forward) (64-byte packets)
	Throughput	190 million pps
	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



## **Technical Specifications**

Electrical characteristics	Maximum heat dissipation	3320 BTU/hr (3502.6 kJ/hr)
	Voltage	100-120/200-240 VAC
	Frequency	50/60 Hz
Safety		Gafety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J;
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 Managem Manager; Telnet; HTTPS; F	ent Center; command-line interface; Web browser; SNMP RMON1; FTP
Services	Manager; Tetnet; H1TPS; RMUN1; FTP 3-year, 4-hour onsite, 13x5 coverage for hardware (HQ063E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (HQ067E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (HQ067E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR569E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR570E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ068E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ068E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ069E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ069E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ074E) 5-year, 4-hour onsite, 13x5 coverage for hardware (HQ071E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ072E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ072E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ072E) 5-year, 24x7 SW phone support, software updates (HQ075E) 3 Yr 6 hr Call-to-Repair Onsite (HQ065E) 4 Yr 6 hr Call-to-Repair Onsite (HQ070E) 5 Yr 6 hr Call-to-Repair Onsite (HQ072E) 5 Yr 6 hr Call-to-Repair Onsite (HQ073E) 1 -year, 24x7 software phone support, software updates (HR573E) 1 -year, 24x7 software phone support, software updates (HR573E) 1 -year, 4-hour onsite, 24x7 coverage for hardware (HR573E) 1 -year, 4-hour onsite, 24x7 coverage for hardware (HR573E) 1 -year, 4-hour onsite, 24x7 coverage for hardware (HR572E) 1 -year, 4-hour onsite, 24	



## **Technical Specifications**

1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS666E)

1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS667E)

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 (JC105A)

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	1024 MB SDRAM, 512 MB flash; packet buffer size: 8 MB	
Performance	Latency	4.02 μs (Store and Forward) (64-byte packets)
	Throughput	190 million pps
	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
<b>Electrical characteristics</b>	Maximum heat	557 BTU/hr (587.64 kJ/hr)
	dissipation	
	Voltage	100-120/200-240 VAC
	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



### **HP 5800 Switch Series**

## **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 Manago HTTPS; RMON1; FTP	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; Telnet; HTTPS; RMON1; FTP		
Services	3-year, 4-hour onsite, 2 3-year, 4-hour onsite, 2 3-year, 24x7 SW phone 1-year, post-warranty, 1-year, post-warranty, Installation with minimu 4-year, 4-hour onsite, 2 4-year, 4-hour onsite, 2 4-year, 4-hour onsite, 2 4-year, 24x7 SW phone 5-year, 4-hour onsite, 2 5-year, 4-hour onsite, 2 5-year, 4-hour onsite, 2 5-year, 4-hour onsite, 2 5-year, 24x7 SW phone 3 Yr 6 hr Call-to-Repair 4 Yr 6 hr Call-to-Repair 5 Yr 6 hr Call-to-Repair 1-year, 24x7 software p 1-year, 24x7 software p 1-year, 24x7 software p (HS666E) 1-year, 24x7 software p Refer to the HP website	3-year, 4-hour onsite, 13x5 coverage for hardware (HQ063E) 3-year, 4-hour onsite, 24x7 coverage for hardware (HQ064E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (HQ067E) 3-year, 24x7 SW phone support, software updates (HQ066E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR569E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR570E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (HQ068E) 4-year, 4-hour onsite, 24x7 coverage for hardware (HQ068E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (HQ076E) 4-year, 24x7 SW phone support, software updates (HQ074E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ071E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ071E) 5-year, 4-hour onsite, 24x7 coverage for hardware (HQ072E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (HQ077E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (HQ077E) 5-year, 24x7 SW phone support, software updates (HQ075E) 3 Yr 6 hr Call-to-Repair Onsite (HQ065E) 4 Yr 6 hr Call-to-Repair Onsite (HQ073E) 1-year, 24x7 software phone support, software updates (HR573E) 1-year, 24x7 software phone support, software updates (HR573E) 1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS666E) 1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS667E) 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 5800-48G Switch with 2 Slots (JC101A)

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



## **Technical Specifications**

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	-	ilash; packet buffer size: 8 MB
Performance	Latency	4.02 µs (Store and Forward) (64-byte packets)
	Throughput	211 million pps
	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
	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 61000-3- 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 Managem HTTPS; RMON1; FTP	ent Center; command-line interface; Web browser; SNMP Manager; Telnet;



### Technical Specifications

Notes	Customer must order power supply, as the device does not come with a PSU. At least one JC087A/JC090A/JC089A is required.		
Notes Services			
	Refer to the HP website at: <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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 St	witch (JG225A)		
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 2.0Power supplies2 power supply slots<br/>1 minimum power supply required (ordered separately)Fan tray2 fan tray slots<br/>The customer must order fan trays, as fan trays are not included with the switch. This system requires two<br/>same-direction airflow fan trays to function properly. The system should not be operated with only one<br/>fan tray for more than 24 hours. The system should not be operated without a fan tray more than two<br/>minutes. The system should not be operated outside of the temperature range of 32°F (0°C) to 113°F<br/>(45°C). Failure to comply with these operating requirements may void the product warranty.



**Technical Specifications** 

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	1024 MB flash, 512 MB SD	RAM; packet buffer size: 8 MB
Performance	Latency	< 5 µs (64-byte packets)
	Throughput	161 million pps
	Routing/Switching	216 Gbps
	capacity	
	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: 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
	DC Voltage	650W DC: -36 VDC to -72 VDC
	Frequency	50/60 Hz
Safety	-	Gafety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J;
Emissions		ss A; ICES-003 Class A; ANSI C63.4 2003; AS/NZS CISPR22 Class A; EN 61000-3- 95 +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 Managem HTTPS; RMON1; FTP	ent Center; command-line interface; Web browser; SNMP Manager; Telnet;
Notes	The customer must order a JC681A is required.	a power supply, as the device does not come with a PSU. At least one JC680A or



### **Technical Specifications**

#### 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 General protocols

(applies to all products in series)

IEEE 802.1 ag Service Layer OAM IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.10 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 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 4022 MIB for TCP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4253 SSHv6 Transport Layer RFC 4253 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

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



### **Technical Specifications**

### **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 RFC 3315 DHCPv6 (client and relay) RFC 3315 DHCPv6 (client only) RFC 3810 MLDv2 (host joins only) 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) SSHv2 Secure Shell

### Accessories

HP 5800 Switch Series	Modules	
accessories	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 GbE SFP Module	JC095A
	Transceivers	
	HP X124 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 X120 1G SFP LC BX 10-U Transceiver	JD098B
	HP X120 1G SFP LC BX 10-D Transceiver	JD099B
	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 SFP+ LC SR Transceiver	JD092B
	HP X130 SFP+ LC LRM Transceiver	JD093B
	HP X130 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 5800/5500 150W AC Power Supply	JD362A
	HP 5800/5500 150W DC Power Supply	JD366A
	HP 5800 300W AC Power Supply	JC087A
	HP 5800 300W DC Power Supply	JC090A
	HP 5800 750W AC PoE Power Supply	JC089A
	HP RPS 800 Redundant Power Supply	JD183A
	HP RPS1600 Redundant Power System	JG136A



### **HP 5800 Switch Series**

## Accessories

HP RPS1600 1600W AC Power Supply	JG137A
EPS/RPS	
HP 5800 PoE Module	JC097B
Fan Tray	
HP 5800 2RU Spare Fan Assembly	JC096A
HP 5800 1RU Spare Fan Assembly	JC098A
Appliance	
HP 5820 VPN Firewall Module	JD255A
HP 5800-48G Switch with 2 Slots (JC101A)	
HP 5820 VPN Firewall Module	JD255A
HP 5800AF-48G Switch (JG225A)	
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	Ports	1   C 1000Base-I H port (po	IEEE standard exists for 1550 nm optics)
1310nm Transceiver	Connectivity	Connector type	
(JD061A)	connectivity	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
A small form-factor	-	Dimensions	cm)
pluggable SFP Gigabit LH4		Full configuration weight	0.04 lb. (0.02 kg)
transceiver that provides a full duplex Gigabit solutior		Power consumption typical	0.8 W
up to 40km on a single-		Power consumption	1.0 W
mode fiber.		maximum	
	Cabling	Cable type:	
		Single-mode fiber optic, co	mplying with ITU-T G.652;
		Maximum distance:	
		• 40km distance	
		Fiber type	Single Mode
	Services		www.hp.com/networking/services for details on
		•	ns and product numbers. For details about services
			area, please contact your local HP sales office.
HP X120 1G SFP LC LH40	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)	
1550nm Transceiver	Connectivity	Connector type	LC
(JD062A)		Wavelength	1550 nm
A small form-factor	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17
pluggable (SFP) Gigabit			cm)
LH40 transceiver that	Electrical characteristics	Full configuration weight	0.04 lb. (0.02 kg)
provides a full-duplex	Electrical characteristics	Power consumption typical Power consumption	0.8 W 1.0 W
Gigabit solution up to 40 km on a single mode fiber.		maximum	1.0 W
kill off a single mode fiber.	Cabling	Cable type:	
		Single-mode fiber optic, co	mplying with ITU-T G.652;
		Maximum distance:	
		• 40km distance	
		Fiber type	Single Mode
	Services		www.hp.com/networking/services for details on
		•	ns and product numbers. For details about services
		and response times in your	area, please contact your local HP sales office.



### **HP 5800 Switch Series**

Accessory Product Details				
HP X125 1G SFP LC LH70	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)		
Transceiver (JD063B)	Connectivity	Connector type	LC	
A small form-factor		Wavelength	1550 nm	
pluggable (SFP) Gigabit LH70 transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
provides a full-duplex		Full configuration weight	0.04 lb. (0.02 kg)	
Gigabit solution up to 70km on a single-mode fiber.	Electrical characteristics	Power consumption typical	0.8 W	
noci.		Power consumption maximum	1.0 W	
	Cabling	Cable type: Single-mode fiber optic, co	mplying with ITU-T G.652;	
		Maximum distance: • 70km		
		Fiber type	Single Mode	
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP sales office.	
HP X120 1G SFP LC SX	Ports	1 LC 1000BASE-SX port		
Transceiver (JD118B)	Connectivity	Connector type	LC	
A small form-factor		Wavelength	850 nm	
pluggable (SFP) Gigabit SX transceiver that provides a	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-duplex Gigabit solution		Full configuration weight	0.04 lb. (0.02 kg)	
up to 550m on a Multimode fiber.	Electrical characteristics	Power consumption typical	0.8 W	
		Power consumption maximum	1.0 W	
	Cabling	Maximum distance: • FDDI Grade distance = 220 • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by st		
		Cable length	up to 550m	
		Fiber type	Multi Mode	
	Services	Refer to the HP website at: the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP sales office.	



Accessory Product Details

Ports

HP X120 1G SFP LC LX

Transceiver (JD119B)

1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)

#### Connectivity **Connector type** LC Wavelength 1300 nm A small form-factor pluggable (SFP) Gigabig LX Physical characteristics Dimensions 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 transceiver that provides a cm) full duplex Gigabit solution Full configuration weight 0.04 lb. (0.02 kg) up to 550m on MMF or **Electrical characteristics Power consumption** 0.8 W 10Km on SMF typical **Power consumption** 1.0 W maximum Cabling Cable type: Either single mode or multimode; Maximum distance: • 550m for Multimode 10km for Singlemode Fiber type Both Refer to the HP website at: www.hp.com/networking/services for details on Services 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	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)	
<b>Transceiver</b> (JD089B)	Connectivity	Connector type	RJ-45
A small form factor bluggable (SFP) Gigabit	Physical characteristics	Dimensions	2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)
1000Base-T transceiver		Full configuration weight	0.07 lb. (0.03 kg)
that provides a full duplex Gigabit solution up to	Electrical characteristics	Power consumption typical	0.8 W
100m on a Cat-5+ cable.		Power consumption maximum	1.0 W
	Cabling		E or better recommended), 100 Ù differential 4- r (UTP) or shielded twisted pair (STP) balanced, ab 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 servic and response times in your area, please contact your local HP sales office.	



## Accessory Product Details

HP X120 1G SFP LC BX 10- U Transceiver (JD098B)	Ports	1 LC 1000BASE-BX10 port full only	(IEEE 802.3ah Type 1000BASE-BX10-U); Duplex:
	Connectivity	Connector type	LC
A small form-factor pluggable (SFP) Gigabit LX- BX10-U transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
provides a full duplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 10km on a single mode	Electrical characteristics	Power consumption typical	0.8 W
cable.		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 10km	
		Fiber type	Single Mode
	Notes	TX 1310nm RX 1490nm	
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP sales office.
HP X120 1G SFP LC BX 10- D Transceiver (JD099B)	Ports	1 LC 1000BASE-BX10 port ( full only	(IEEE 802.3ah Type 1000BASE-BX10-D); Duplex:
	Connectivity	Connector type	LC
A small form-factor pluggable (SFP) Gigabit LX- BX10-D transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		- 11	

pluggable (SFP) Gigabit LX- BX10-D transceiver that			cm)	
	provides a full duplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 10km on a single mode cable.	10km on a single mode	Electrical characteristics	Power consumption typical	0.8 W
	cable.		Power consumption maximum	1.0 W
		Cabling	Maximum distance: • Up to 10km	
			Fiber type	Single Mode
		Notes	TX 1490nm RX 1310nm	
		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.	



Accessory Product D	etails	
HP Premier Flex LC/LC Multi-mode OM4 2 fiber	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>1m Cable</b> (QK732A)		<ul> <li>Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> </ul>
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>2m Cable</b> (QK733A)		• Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating
		diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser)
		• Jacket Color: Blue
		<ul> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> </ul>
		<ul> <li>Boot Color: White</li> <li>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.</li> </ul>
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details about services the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product D	etails	
HP Premier Flex LC/LC Multi-mode OM4 2 fiber	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>5m Cable</b> (QK734A)		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> </ul>
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>15m Cable</b> (QK735A)		• Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating
		diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser)
		• Jacket Color: Blue
		<ul> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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.



Accessory Product D	etails	
HP Premier Flex LC/LC Multi-mode OM4 2 fiber	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>30m Cable</b> (QK736A)		• Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="www.hp.com/networking/services">www.hp.com/networking/services</a> 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	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
<b>50m Cable</b> (QK737A)		• Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating
		diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser)
		• Jacket Color: Blue
		<ul> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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.



accessory Product Details			
HP RPS1600 Redundant Power System (JG136A)	Ports	8 redundant power supply Restrictions: two -56V/25A	ports 1 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		C 60950-1; ICES-003; FCC Part 15, Subpart B; EU I-1/A11; C-Tick; VCCI Class A; ROHS Compliance; EN
ServicesRefer to the HP website at: www.hp.com/networking/s the service-level descriptions and product numbers. For and response times in your area, please contact your let		the service-level descriptio	ns and product numbers. For details about services



Accessory Product D	etails				
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%		
	<b>Electrical characteristics</b>	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	the service-level description	: www.hp.com/networking/services for details on ons and product numbers. For details about services ir area, please contact your local HP sales office.		
HP A5820 VPN Firewall M	odule (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 Manageme HTTPS; RMON1; FTP	anagement Center; command-line interface; Web browser; SNMP Manager; Telnet; P			
Features	Performance - 6.5Gbps Firewall Through - 1.8M Concurrent connecti - 50K New connection per s - Max 20480 security polici - 2Gbps 3DES/AES VPN Thr - 5000 IPSec tunnel	tion second cies			



### **HP 5800 Switch Series**

### Accessory Product Details

- 4K VLAN

- Firewall operation mode
- 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



### **Accessory Product Details**

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



### Accessory Product Details

Accessory Product De	etails		
	- Radius - NAT64		
Services	<ul> <li>NA164</li> <li>3-year, parts only, global next-day advance exchange (UZ914E)</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UZ915)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UZ918E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UZ922E)</li> <li>3-year, 24x7 SW phone support, software updates (UZ925E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UZ916E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UZ916E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UZ919E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UZ923E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UZ923E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UZ917E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UZ920E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UZ924E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UZ924E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UZ924E)</li> <li>5-year, 24x7 SW phone support, software updates (UZ927E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UZ928E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UZ930E)</li> <li>7 r 6 hr Call-to-Repair Onsite (UZ930E)</li> <li>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</li> </ul>		
	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 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 Client MIB RFC 2620 RADIUS Authentication Protocol RFC 2865 RADIUS Authentication RFC 2865 RADIUS Authentication RFC 2866 RADIUS Accounting RFC 2867 RADIUS Accounting RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support	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 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) <b>IKEv1</b> 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)	



### **HP 5800 Switch Series**

Accessory	Product	Details
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RFC 2868 RADIUS Attributes for Tunnel Protocol Support RFC 2869 RADIUS Extensions draft-grant-tacacs-02 (TACACS)	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
VPN RFC 1701 Generic Routing Encapsulation (GRE)	Dead Internet Key Exchange (IKE) Peers
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	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#12 PKCS#7

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