



HP 5120 SI Switch Series



Key features

- Full wirespeed, multi-layer switching
- High reliability with redundancy
- Comprehensive security control policies
- Diversified quality of service (QoS) policies
- Excellent manageability

Product overview

The HP 5120 SI Switch Series comprises intelligent, fully managed Gigabit Ethernet switches that provide high performance, high port density, and simplified installation to improve the value of your network infrastructure investment. The 5120 SI series is enhanced for the access layer in enterprise networks that require Gigabit Ethernet to the desktop or at the distribution layer in metropolitan area networks (MANs). Wirespeed forwarding delivers more effective throughput and the bandwidth necessary for mission-critical data and high-speed communications. As part of their comprehensive security control, 5120 SI switches employ IEEE 802.1X authentication to identify users who attempt to access the network. These switches are highly reliable, providing redundancy while eliminating loops in the network. They also offer a range of management protocols to simplify network administration.

Features and benefits

Quality of Service (QoS)

- **Broadcast control**
allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic
- **Powerful QoS feature**
supports the following congestion actions: strict priority (SP) queuing, SDWRR, and SP+SDWRR
- **Advanced classifier-based QoS**
classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information; applies QoS policies such as setting priority level and rate limit to selected traffic on a per-port basis

Management

- **Friendly port names**
allows assignment of descriptive names to ports
- **Remote configuration and management**
enables configuration and management through a secure Web browser or a CLI located on a remote device
- **Manager and operator privilege levels**
provides read-only (operator) and read/write (manager) access on CLI and Web browser management interfaces
- **Command authorization**
leverages RADIUS to link a custom list of CLI commands to an individual network administrator's login; an audit trail documents activity
- **Secure Web GUI**
provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- **Dual flash images**
provides independent primary and secondary operating system files for backup while upgrading
- **Multiple configuration files**
stores easily to the flash image
- **Complete session logging**
provides detailed information for problem identification and resolution
- **SNMPv1, v2c, and v3**
facilitate centralized discovery, monitoring, and secure management of networking devices
- **Remote monitoring (RMON)**
uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications

- **Management VLAN**
segments traffic to and from management interfaces, including CLI/telnet, a Web browser interface, and SNMP
- **Device Link Detection Protocol (DLDP)**
monitors a cable between two switches and shuts down the ports on both ends if the cable is broken, this prevents network problems such as loops
- **Intelligent Resilient Framework (IRF) Lite**
allows configuration and management of a system of up to four devices by accessing a single switch connected with Gigabit Ethernet links

Connectivity

- **Auto-MDIX**
automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- **Flow control**
provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations
- **Jumbo packet support**
supports up to 10k byte frame size to improve performance of large data transfers
- **High-density port connectivity**
provides up to 48 fixed 10/100/1000BASE-T ports in an entry-level static Layer 3 switch
- **Ethernet operations, administration and maintenance (OAM)**
detects data link layer problems that occurred in the "last mile" using the IEEE 802.3ah OAM standard; monitors the status of the link between the two devices
- **Power over Ethernet Plus (PoE+) support**
provides 30 W power for connected devices, 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**
 - **IPv6 host**
enables switches to be managed and deployed at the IPv6 network's edge
 - **Dual stack (IPv4 and IPv6 using BIS)**
allows IPv4 hosts to communicate with IPv6 hosts
 - **IPv6 ACL**
for filtering IPv6 network traffic

Performance

- **Nonblocking architecture**
up to 104 Gb/s nonblocking switching fabric provides wirespeed switching with up to 77.4 million pps throughput
- **Hardware-based wirespeed access control lists (ACLs)**
help provide high levels of security and ease of administration without impacting network performance with a feature-rich TCAM-based ACL implementation

Resiliency and high availability

- **Separate data and control paths**
increases security and performance
- **Spanning Tree/MSTP, RSTP**
provide redundant links while preventing network loops
- **IEEE 802.3ad Link Aggregation Control Protocol (LACP)**
supports up to 26 trunks, each with 8 links per trunk; supports static or dynamic groups
- **Smart link**
allows 50 ms failover between links

Layer 2 switching

- **8K MAC address table**
provides access to many Layer 2 devices
- **VLAN support and tagging**
supports IEEE 802.1Q with 4,094 simultaneous VLAN IDs
- **IP multicast snooping**
automatically prevents flooding of IP multicast traffic
- **Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping**
controls and manages the flooding of multicast packets in a Layer 2 network

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
- **Dynamic Host Configuration Protocol (DHCP)**
simplifies the management of large IP networks; supports client; DHCP Relay enables DHCP operation across subnets
- **Loopback interface address**
defines an address in Routing Information Protocol (RIP) and Open Standard Path First (OSPF), improving diagnostic capability

Layer 3 routing

- **Static IP routing**
provides manually configured routing for both IPv4 and IPv6 networks

Security

- **Access control lists (ACLs)**
provides IP Layer 2 to Layer 4 traffic filtering; supports global ACL, VLAN ACL, port ACL, and IPv6 ACL

Identity-driven security and access control

- **Per-user ACLs**
permits or denies user access to specific network resources based on user identity and time of day, allowing multiple types of users on the same network to access specific network services without risking network security or allowing unauthorized access to sensitive data
- **Automatic VLAN assignment**
automatically assigns users to the appropriate VLAN based on their identities
- **Secure management access**
delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- **Secure FTP**
allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- **Guest VLAN**
provides a browser-based environment to authenticated clients that is similar to IEEE 802.1X
- **Port isolation**
secures and adds privacy, and prevents malicious attackers from obtaining user information
- **STP BPDU port protection**
blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- **STP root guard**
protects the root bridge from malicious attacks or configuration mistakes
- **DHCP protection**
blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- **Dynamic ARP protection**
blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
- **IP source guard**
helps prevent IP spoofing attacks
- **Endpoint Admission Defense (EAD)**
provides security policies to users accessing a network
- **RADIUS/HWTACACS**
eases switch management security administration by using a password authentication server
- **Port security**
allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **MAC-based authentication**
allows or denies access to the switch based on a client MAC address

Convergence

- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- **LLDP-MED**
is a standard extension that automatically configures network devices, including LLDP-capable IP phones
- **LLDP-CDP compatibility**
receives and recognizes CDP packets from Cisco's IP phones for seamless interoperation
- **Voice VLAN**
automatically assigns VLAN and priority for IP phones, simplifying network configuration and maintenance
- **IP multicast snooping (data-driven IGMP)**
prevents flooding of IP multicast traffic
- **Multicast VLAN**
reduces network bandwidth demand by eliminating multiple streams to each VLAN

Additional information

- **Green IT and power**
improves energy efficiency through the use of the latest advances in silicon development; shuts off unused ports and utilizes variable-speed fans, reducing energy costs
- **Green initiative support**
provides support for RoHS and WEEE regulations

Warranty and support

- **Lifetime warranty**
advance hardware replacement for as long as you own the product with next-business-day delivery (available in most countries)†
- **Electronic and telephone support**
limited electronic and business-hours telephone support is available from HP for the entire warranty period; 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

†HP 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 MSM765 zL 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.

HP 5120 SI Switch Series

Specifications



HP 5120-48G SI Switch (JE072A)



HP 5120-24G SI Switch (JE074A)



HP 5120-16G SI Switch (JE073A)

	HP 5120-48G SI Switch (JE072A)	HP 5120-24G SI Switch (JE074A)	HP 5120-16G SI Switch (JE073A)
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 4 fixed Gigabit Ethernet SFP ports 1 RJ-45 serial console port	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 4 fixed Gigabit Ethernet SFP ports 1 RJ-45 serial console port	16 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 4 fixed Gigabit Ethernet SFP ports 1 RJ-45 serial console port
Physical characteristics	17.3(w) x 10.24(d) x 1.72(h) in (43.94 x 26.01 x 4.37 cm) (1U height) Weight 11.02 lb (5 kg)	17.3(w) x 6.3(d) x 1.72(h) in (43.94 x 16 x 4.37 cm) (1U height) Weight 6.61 lb (3 kg)	17.3(w) x 6.3(d) x 1.72(h) in (43.94 x 16 x 4.37 cm) (1U height) Weight 6.61 lb (3 kg)
Memory and processor	128 MB flash, 128 MB SDRAM; packet buffer size: 1 MB	128 MB flash, 128 MB SDRAM; packet buffer size: 0.5 MB	128 MB flash, 128 MB SDRAM; packet buffer size: 0.5 MB
Mounting	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	1000 Mb Latency < 3 μs Throughput 77.4 million pps Routing/Switching capacity 104 Gb/s Routing table size 32 entries (IPv4)	1000 Mb Latency < 3 μs Throughput 41.7 million pps Routing/Switching capacity 56 Gb/s Routing table size 32 entries (IPv4)	1000 Mb Latency < 3 μs Throughput 29.8 million pps Routing/Switching capacity 40 Gb/s Routing table size 32 entries (IPv4)
Environment	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 10% to 90%, noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 5% to 95%, noncondensing	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 10% to 90%, noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 5% to 95%, noncondensing	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 10% to 90%, noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 5% to 95%, noncondensing
Electrical characteristics	Frequency 50/60 Hz Maximum heat dissipation 189 BTU/hr (199.4 kJ/hr) Voltage 100-240 VAC Maximum power rating 55.4 W 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.	Frequency 50/60 Hz Maximum heat dissipation 108 BTU/hr (113.94 kJ/hr) Voltage 100-240 VAC Maximum power rating 31.5 W 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.	Frequency 50/60 Hz Maximum heat dissipation 76 BTU/hr (80.18 kJ/hr) Voltage 100-240 VAC Maximum power rating 22.4 W 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.
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	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	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	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; 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	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; 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	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; 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
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV858E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV861E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV864E) 3-year, 24x7 SW phone support, software updates (UV867E)	3-year, 4-hour onsite, 13x5 coverage for hardware (UV858E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV861E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV864E) 3-year, 24x7 SW phone support, software updates (UV867E)	3-year, 4-hour onsite, 13x5 coverage for hardware (UV858E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV861E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV864E) 3-year, 24x7 SW phone support, software updates (UV867E)

HP 5120 SI Switch Series

Specifications (continued)

HP 5120-48G SI Switch (JE072A)	HP 5120-24G SI Switch (JE074A)	HP 5120-16G SI Switch (JE073A)
1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR584E)	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR584E)	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR584E)
1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR585E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR585E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR585E)
1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR586E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR586E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR586E)
Installation with minimum configuration, system-based pricing (UX116E)	Installation with minimum configuration, system-based pricing (UX116E)	Installation with minimum configuration, system-based pricing (UX116E)
Installation with HP-provided configuration, system-based pricing (UX117E)	Installation with HP-provided configuration, system-based pricing (UX117E)	Installation with HP-provided configuration, system-based pricing (UX117E)
4-year, 4-hour onsite, 13x5 coverage for hardware (UV859E)	4-year, 4-hour onsite, 13x5 coverage for hardware (UV859E)	4-year, 4-hour onsite, 13x5 coverage for hardware (UV859E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UV862E)	4-year, 4-hour onsite, 24x7 coverage for hardware (UV862E)	4-year, 4-hour onsite, 24x7 coverage for hardware (UV862E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV865E)	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV865E)	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV865E)
4-year, 24x7 SW phone support, software updates (UV868E)	4-year, 24x7 SW phone support, software updates (UV868E)	4-year, 24x7 SW phone support, software updates (UV868E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UV860E)	5-year, 4-hour onsite, 13x5 coverage for hardware (UV860E)	5-year, 4-hour onsite, 13x5 coverage for hardware (UV860E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UV863E)	5-year, 4-hour onsite, 24x7 coverage for hardware (UV863E)	5-year, 4-hour onsite, 24x7 coverage for hardware (UV863E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV866E)	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV866E)	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV866E)
5-year, 24x7 SW phone support, software updates (UV869E)	5-year, 24x7 SW phone support, software updates (UV869E)	5-year, 24x7 SW phone support, software updates (UV869E)
3 Yr 6 hr Call-to-Repair Onsite (UW963E)	3 Yr 6 hr Call-to-Repair Onsite (UW963E)	3 Yr 6 hr Call-to-Repair Onsite (UW963E)
4 Yr 6 hr Call-to-Repair Onsite (UW964E)	4 Yr 6 hr Call-to-Repair Onsite (UW964E)	4 Yr 6 hr Call-to-Repair Onsite (UW964E)
5 Yr 6 hr Call-to-Repair Onsite (UW965E)	5 Yr 6 hr Call-to-Repair Onsite (UW965E)	5 Yr 6 hr Call-to-Repair Onsite (UW965E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR588E)	1-year, 6 hour Call-To-Repair Onsite for hardware (HR588E)	1-year, 6 hour Call-To-Repair Onsite for hardware (HR588E)
1-year, 24x7 software phone support, software updates (HR587E)	1-year, 24x7 software phone support, software updates (HR587E)	1-year, 24x7 software phone support, software updates (HR587E)
1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS682E)	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS682E)	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS682E)
1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS683E)	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS683E)	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS683E)
4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS686E)	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS686E)	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS686E)
4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS687E)	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS687E)	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS687E)
5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS688E)	5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS688E)	5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS688E)
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.	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.	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 5120 SI Switch Series

Specifications (continued)



HP 5120-24G-PoE+ (370W) SI Switch (JG091A)



HP 5120-24G-PoE+ (170W) SI Switch (JG092A)

Ports	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP ports 1 RJ-45 serial console port	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP ports 1 RJ-45 serial console port
Physical characteristics	17.32(w) x 16.54(d) x 1.72(h) in (44.0 x 42 x 4.36 cm) (1U height) Weight 15.43 lb (7 kg)	17.32(w) x 16.54(d) x 1.72(h) in (44.0 x 42 x 4.36 cm) (1U height) Weight 15.43 lb (7 kg)
Memory and processor	128 MB flash, 128 MB SDRAM; packet buffer size: 0.5 MB	128 MB flash, 128 MB SDRAM; packet buffer size: 0.5 MB
Mounting	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	1000 Mb Latency < 3 µs Throughput 41.7 million pps Routing/Switching capacity 56 Gb/s Routing table size 32 entries (IPv4)	< 3 µs 41.7 million pps 56 Gb/s 32 entries (IPv4)
Environment	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 10% to 90%, noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 5% to 95%, noncondensing	32°F to 113°F (0°C to 45°C) 10% to 90%, noncondensing -40°F to 158°F (-40°C to 70°C) 5% to 95%, noncondensing
Electrical characteristics	Frequency 50/60 Hz Maximum heat dissipation 539 BTU/hr (568.65 kJ/hr) Voltage 100-240 VAC DC voltage -52 to -55 VDC Maximum power rating 832 W PoE power 720 W 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. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). With AC input, the maximum power consumption is 523 W (370 W for PoE).	50/60 Hz 290 BTU/hr (305.95 kJ/hr) 100-240 VAC 255 W 170 W 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. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).
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	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	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; 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	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; 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
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV858E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV861E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV864E) 3-year, 24x7 SW phone support, software updates (UV867E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV859E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV862E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV865E) 4-year, 24x7 SW phone support, software updates (UV868E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV860E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UV863E)	3-year, 4-hour onsite, 13x5 coverage for hardware (UV858E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV861E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV864E) 3-year, 24x7 SW phone support, software updates (UV867E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV859E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV862E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV865E) 4-year, 24x7 SW phone support, software updates (UV868E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV860E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UV863E)

HP 5120 SI Switch Series

Specifications (continued)

HP 5120-24G-PoE+ (370W) SI Switch (JG091A)	HP 5120-24G-PoE+ (170W) SI Switch (JG092A)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV866E) 5-year, 24x7 SW phone support, software updates (UV869E) 3 Yr 6 hr Call-to-Repair Onsite (UW963E) 4 Yr 6 hr Call-to-Repair Onsite (UW964E) 5 Yr 6 hr Call-to-Repair Onsite (UW965E)	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV866E) 5-year, 24x7 SW phone support, software updates (UV869E) 3 Yr 6 hr Call-to-Repair Onsite (UW963E) 4 Yr 6 hr Call-to-Repair Onsite (UW964E) 5 Yr 6 hr Call-to-Repair Onsite (UW965E)
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.	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Standards and Protocols

(applies to all products in series)

General protocols	IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.1X PAE	IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X Gigabit Ethernet over fiber RFC 768 UDP RFC 792 ICMP RFC 793 TCP RFC 826 ARP	RFC 854 TELNET RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 2131 DHCP RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 2866 RADIUS Accounting
IPv6	RFC 1350 TFTP RFC 1886 DNS Extension for IPv6 RFC 1887 IPv6 Unicast Address Allocation Architecture RFC 1981 IPv6 Path MTU Discovery RFC 2292 Advanced Sockets API for IPv6 RFC 2373 IPv6 Addressing Architecture RFC 2460 IPv6 Specification RFC 2461 IPv6 Neighbor Discovery RFC 2462 IPv6 Stateless Address Auto-configuration RFC 2463 ICMPv6 RFC 2464 Transmission of IPv6 over Ethernet Networks RFC 2465 Management Information Base for IP Version 6: Textual Conventions and General Group (partially support, only "IPv6 Interface Statistics table") RFC 2475 IPv6 DiffServ Architecture RFC 2553 Basic Socket Interface Extensions for IPv6	RFC 2711 IPv6 Router Alert Option RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only) RFC 2925 Remote Operations MIB (Ping only) RFC 3056 Connection of IPv6 Domains via IPv4 Clouds RFC 3162 RADIUS and IPv6 RFC 3363 DNS support RFC 3484 Default Address Selection for IPv6 RFC 3493 Basic Socket Interface Extensions for IPv6 RFC 3513 IPv6 Addressing Architecture RFC 3542 Advanced Sockets API for IPv6 RFC 3587 IPv6 Global Unicast Address Format RFC 3596 DNS Extension for IPv6 RFC 3736 Stateless Dynamic Host Configuration Protocol (DHCP) Service for IPv6	RFC 4007 IPv6 Scoped Address Architecture RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4253 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4291 IP Version 6 Addressing Architecture 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 RFC 5095 Deprecation of Type 0 Routing Headers in IPv6 RFC 5722 Handling of Overlapping IPv6 Fragments
MIBs	IEEE8021-PAE-MIB IEEE8023-LAG-MIB RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2011 SNMPv2 MIB for IP RFC 2013 SNMPv2 MIB for UDP RFC 2233 Interface MIB	RFC 2571 SNMP Framework MIB RFC 2572 SNMP-MPD MIB RFC 2573 SNMP-Target MIB RFC 2618 RADIUS Authentication Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2668 802.3 MAU MIB RFC 2674 802.1p and IEEE 802.1Q Bridge 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 4133 Entity MIB (Version 3) LLDP-EXT-DOT1-MIB LLDP-EXT-DOT3-MIB
Network management		IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

HP 5120 SI Switch Series accessories

Transceivers

HP X120 1G SFP LC SX Transceiver (JD118B)
HP X120 1G SFP LC LX Transceiver (JD119B)
HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
HP X125 1G SFP LC LH70 Transceiver (JD063B)
HP X120 1G SFP LC BX 10-U Transceiver (JD098B)
HP X120 1G SFP LC BX 10-D Transceiver (JD099B)
HP X120 1G SFP RJ45 T Transceiver (JD089B)

Cables

HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)
HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)
HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)
HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)
HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)
HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)
HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)
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)
HP 3600 Switch SFP Stacking Kit (JD324B)

Power Supply

HP RPS1600 Redundant Power System (JG136A)
HP RPS1600 1600W AC Power Supply (JG137A)

Power cords

HP X290 1000 A JD5 2m RPS Cable (JD187A)

To learn more, visit hp.com/networking

© Copyright 2010-2013 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft is a U.S. registered trademark of Microsoft Corporation.

4AA3-0726ENW, Created August 2010; Updated September 2013, Rev. 4

