

Overview

HPE FlexNetwork 5120 SI Switch Series

Models

HPE FlexNetwork 5120 8G PoE+ (180W) SI Switch	JG309B
HPE FlexNetwork 5120 8G PoE+ (65W) SI Switch	JG310B
HPE FlexNetwork 5120 48G SI Switch	JE072B
HPE FlexNetwork 5120 16G SI Switch	JE073B
HPE FlexNetwork 5120 24G SI Switch	JE074B
HPE FlexNetwork 5120 24G PoE+ (370W) SI Switch	JG091B

Key features

- Full wire-speed, multi-layer switching
- High reliability with redundancy
- Comprehensive security control policies
- Diversified Quality of Service (QoS) policies
- Excellent manageability

Product overview

The HPE FlexNetwork 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

Overview

- **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 Fabric (IRF):** allows configuration and management of a system of up to four devices by accessing a single switch connected with Gigabit Ethernet links; this has great advantages in reliability, distributed deployment, and easy management

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 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 wire-speed access control lists (ACLs):** feature-rich ACL implementation (TCAM-based) helps ensure high levels of security and ease of administration without impacting network performance

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

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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

Overview

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

- **Limited Lifetime Warranty**
See <http://www.hpe.com/networking/warrantysummary> for warranty and support information included with your product purchase.
- **Software releases**
to find software for your product, refer to <http://www.hpe.com/networking/support>; for details on the software releases available with your product purchase, refer to <http://www.hpe.com/networking/warrantysummary>

Configuration

Build To Order:

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

HP 5120-16G SI Switch

- 16 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JE073A

See Configuration
NOTE:1, 2

HPE FlexNetwork 5120 16G SI Switch

- 16 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JE073B

See Configuration
NOTE:1, 2

HP 5120-24G SI Switch

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JE074A

See Configuration
NOTE:1, 2

HPE FlexNetwork 5120 24G SI Switch

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JE074B

See Configuration
NOTE:1, 2

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

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JG091A

See Configuration
NOTE:1, 2

HPE FlexNetwork 5120 24G PoE+ (370W) SI Switch

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JG091B

See Configuration
NOTE:1, 2

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

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

JG092A

See Configuration
NOTE:1, 2

HPE FlexNetwork 5120 48G SI Switch

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers

JE072B

See Configuration
NOTE:1, 2

Configuration

- 1U - Height

HPE FlexNetwork 5120 8G PoE+ (180W) SI Switch

JG309B

- 48 RJ-45 autosensing 10/100/1000 ports
- 1 fixed Gigabit Ethernet SFP ports
- min=0 \ max=1 SFP Transceivers
- 1U - Height

See Configuration
NOTE:1, 2

HPE FlexNetwork 5120 8G PoE+ (65W) SI Switch

JG310B

- 48 RJ-45 autosensing 10/100/1000 ports
- 1 fixed Gigabit Ethernet SFP ports
- min=0 \ max=1 SFP Transceivers
- 1U - Height

See Configuration
NOTE:1, 2

Configuration Rules:

Note 1

The following Transceivers install into this Module:

- HPE X125 1G SFP LC LH40 1310nm Transceiver
- HPE X120 1G SFP LC LH40 1550nm Transceiver
- HPE X120 1G SFP LC SX Transceiver
- HPE X120 1G SFP LC LX Transceiver
- HPE X125 1G SFP LC LH70 Transceiver
- HPE X120 1G SFP LC BX 10-U Transceiver
- HPE X120 1G SFP LC BX 10-D Transceiver
- HPE X120 1G SFP RJ45 T Transceiver

JD061A
JD062A
JD118B
JD119B
JD063B
JD098B
JD099B
JD089B

Note 2

Localization required. (See Localization Menu for list.)

Rack Level Integration CTO Models

HPE FlexNetwork 5120 16G SI Switch

JE073B

- 16 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

See Configuration
NOTE:1, 2, 3

HPE FlexNetwork 5120 24G SI Switch

JE074B

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

See Configuration
NOTE:1, 2, 3

HPE FlexNetwork 5120 24G PoE+ (370W) SI Switch

JG091B

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers
- 1U - Height

See Configuration
NOTE:1, 2, 3

HPE FlexNetwork 5120 48G SI Switch

JE072B

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports
- min=0 \ max=4 SFP Transceivers

See Configuration
NOTE:1, 2, 3

Configuration

- 1U - Height

Configuration Rules:

Note 1	The following Transceivers install into this Module:	
	HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
	HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
	HPE X120 1G SFP LC SX Transceiver	JD118B
	HPE X120 1G SFP LC LX Transceiver	JD119B
	HPE X125 1G SFP LC LH70 Transceiver	JD063B
	HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
	HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
	HPE X120 1G SFP RJ45 T Transceiver	JD089B
Note 2	Localization required. (See Localization Menu for list.)	
Note 3	If HPE CTO Switch Chassis is selected to be Rack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the BW966A and BW968A HPE Universal Rack Only. (Default to the BW966A.)	

Transceivers

SFP Transceivers

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

Cables

Multi-Mode Cables

HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

Configuration

Switch Enclosure Options

External/Redundant Power Supplies

HPE RPS1600 Redundant Power System

JG136A

- Height = 1U
- includes 1 x c13, 1600w and Power Supply port

See

Configuration

NOTE:2, 3

HPE RPS1600 1600W AC Power Supply

JG137A

- Installs into JG136A only

See

Configuration

NOTE:1

Configuration Rules:

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

Note 2 Localization required. (See Localization Menu for list.)

Note 3 Only 1 JG136A can be connected per switch.

Rack Mount Kit

HPE 3100/4210 16/8 PoE Rackmount Kit

JD323A

See

Configuration

NOTE:1

Configuration Rules:

Note 1 This rack mount kit is only supported on the following switches:

HPE FlexNetwork 5120 8G PoE+ (180W) SI Switch

JG309B

HPE FlexNetwork 5120 8G PoE+ (65W) SI Switch

JG310B

Options for External/Redundant Power Supplies

HPE X290 1000 A JD5 2m RPS Cable

JD187A

Technical Specifications

HPE FlexNetwork 5120 8G PoE+ (180W) SI Switch (JG309B)

I/O ports and slots	8 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 1 SFP fixed Gigabit Ethernet SFP port
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	Dimensions 11.81(w) x 6.3(d) x 1.72(h) in (30.0 x 26 x 4.36 cm) (1U height) Weight 6.61 lb (3 kg)
Memory and processor	128 MB flash, 128 MB SDRAM; Packet buffer size: 0.5 MB
Mounting and enclosure	Requires angle mounting set if rack mounted (not included)
Performance	1000 Mb Latency < 3 µs Throughput up to 13.4 Mpps Routing/Switching capacity 18 Gbps Routing table size 32 entries (IPv4) MAC address table size 8192 entries
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 Acoustic Pressure: 39.4 dB, Low-speed fan: 39.4 dB, High-speed fan: 48.6 dB; ISO 7779
Electrical characteristics	Maximum heat dissipation 163 BTU/hr (171.97 kJ/hr) Voltage 100 - 240 VAC, rated (Depending on power supply chosen) Maximum power rating 230 W Idle power 19 W PoE power 180 W PoE+ 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. 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 a 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

Technical Specifications

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
Management	IMC - Intelligent Management Center; Command-line interface; Web browser; SNMP manager
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE FlexNetwork 5120 8G PoE+ (65W) SI Switch (JG310B)

I/O ports and slots	8 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 1 SFP fixed Gigabit Ethernet SFP port
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	<p>Dimensions 11.81(w) x 6.3(d) x 1.72(h) in (30.0 x 26.0 x 4.36 cm) (1U height)</p> <p>Weight 6.61 lb (3 kg)</p>
Memory and processor	128 MB flash, 128 MB SDRAM; Packet buffer size: 0.5 MB
Mounting and enclosure	Requires angle mounting set if rack mounted (not included)
Performance	<p>1000 Mb Latency < 3 µs</p> <p>Throughput up to 13.4 Mpps</p> <p>Routing/Switching capacity 18 Gbps</p> <p>Routing table size 32 entries (IPv4)</p> <p>MAC address table size 8192 entries</p>
Environment	<p>Operating temperature 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity 10% to 90%, noncondensing</p> <p>Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity 5% to 95%, noncondensing</p> <p>Acoustic N/A (fanless)</p>
Electrical characteristics	<p>Maximum heat dissipation 95 BTU/hr (100.23 kJ/hr)</p> <p>Voltage 100 - 240 VAC, rated (Depending on power supply chosen)</p> <p>Maximum power rating 93 W</p> <p>Idle power 10 W</p> <p>PoE power 65 W PoE+</p> <p>Frequency 50/60 Hz</p> <p>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</p>

Technical Specifications

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 a 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
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
Management	IMC - Intelligent Management Center; Command-line interface; Web browser; SNMP manager
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE FlexNetwork 5120 48G SI Switch (JE072B)

I/O ports and slots	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
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	Dimensions 17.3(w) x 10.24(d) x 1.72(h) in (43.94 x 26.0 x 4.37 cm) (1U height) Weight 11.02 lb (5 kg)
Memory and processor	128 MB flash, 128 MB SDRAM; Packet buffer size: 1 MB
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	1000 Mb Latency < 3 µs Throughput up to 77.4 Mpps Routing/Switching capacity 104 Gbps Routing table size 32 entries (IPv4) MAC address table size 8192 entries
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 Acoustic Pressure: 42.2 dB, Low-speed fan: 42.2 dB, High-speed fan: 50 dB; ISO 7779
Electrical characteristics	Maximum heat dissipation 204 BTU/hr (215.22 kJ/hr) Voltage 100 - 240 VAC, rated (Depending on power supply chosen) Maximum power rating 59.8 W

Technical Specifications

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

HPE FlexNetwork 5120 16G SI Switch (JE073B)

I/O ports and slots	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
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	<p>Dimensions 17.3(w) x 6.3(d) x 1.72(h) in (43.94 x 16 x 4.37 cm) (1U height)</p> <p>Weight 6.61 lb (3 kg)</p>
Memory and processor	128 MB flash, 128 MB SDRAM; Packet buffer size: 0.5 MB
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	<p>1000 Mb Latency < 3 µs</p> <p>Throughput up to 29.8 Mpps</p> <p>Routing/Switching capacity 40 Gbps</p> <p>Routing table size 32 entries (IPv4)</p> <p>MAC address table size 8192 entries</p>
Environment	<p>Operating temperature 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity 10% to 90%, noncondensing</p> <p>Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity 5% to 95%, noncondensing</p> <p>Acoustic Pressure: 44.4 dB; ISO 7779</p>
Electrical characteristics	Maximum heat dissipation 85 BTU/hr (89.68 kJ/hr)

Technical Specifications

Voltage	100 - 240 VAC, rated (Depending on power supply chosen)
Maximum power rating	25.1 W
Idle power	11.9 W
Frequency	50/60 Hz
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>
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	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
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE FlexNetwork 5120 24G SI Switch (JE074B)

I/O ports and slots	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
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	<p>Dimensions 17.3(w) x 6.3(d) x 1.72(h) in (43.94 x 16 x 4.37 cm) (1U height)</p> <p>Weight 6.61 lb (3 kg)</p>
Memory and processor	128 MB flash, 128 MB SDRAM; Packet buffer size: 0.5 MB
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	<p>1000 Mb Latency < 3 µs</p> <p>Throughput up to 41.7 Mpps</p> <p>Routing/Switching capacity 56 Gbps</p> <p>Routing table size 32 entries (IPv4)</p> <p>MAC address table size 8192 entries</p>
Environment	<p>Operating temperature 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity 10% to 90%, noncondensing</p> <p>Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity 5% to 95%, noncondensing</p>

Technical Specifications

	Acoustic	Pressure: 43.8 dB; ISO 7779
Electrical characteristics	Maximum heat dissipation	107 BTU/hr (112.89 kJ/hr)
	Voltage	100 - 240 VAC, rated (depending on power supply chosen)
	Maximum power rating	31.5 W
	Idle power	13.4 W
	Frequency	50/60 Hz
	Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>
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	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	
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

HPE FlexNetwork 5120 24G PoE+ (370W) SI Switch (JG091B)

I/O ports and slots	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
Additional ports and slots	1 RJ-45 serial console port
Physical characteristics	Dimensions 17.32(w) x 14.17(d) x 1.72(h) in (44.0 x 36 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
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	1000 Mb Latency < 3 µs Throughput up to 41.7 Mpps Routing/Switching capacity 56 Gbps Routing table size 32 entries (IPv4) MAC address table size 8192 entries
Environment	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 10% to 90%, noncondensing Nonoperating/Storage -40°F to 158°F (-40°C to 70°C)

Technical Specifications

	temperature	
	Nonoperating/Storage	5% to 95%, noncondensing
	relative humidity	
	Acoustic	Low-speed fan: 51.8 dB, High-speed fan: 55.3 dB; ISO 7779
Electrical characteristics	Maximum heat dissipation	539 BTU/hr (568.65 kJ/hr)
	Voltage	100 - 240 VAC, rated (depending on power supply chosen)
	Maximum power rating	832 W
	Idle power	27.5 W
	PoE power	720 W PoE+, optional
	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. PoE power is the power supplied by the internal power supply and the optional redundant power unit. With AC input, the maximum power consumption is 528 W (370 W for PoE).
	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		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 Services	IMC - Intelligent Management Center; Command-line interface; Web browser; SNMP manager Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
Standards and protocols (Applies to all products in series)	General protocols	RFC 3513 IPv6 Addressing Architecture
	IEEE 802.1D MAC Bridges	RFC 3542 Advanced Sockets API for IPv6
	IEEE 802.1p Priority	RFC 3587 IPv6 Global Unicast Address Format
	IEEE 802.1Q VLANs	RFC 3596 DNS Extension for IPv6
	IEEE 802.1s Multiple Spanning Trees	RFC 3736 Stateless Dynamic Host Configuration Protocol (DHCP) Service for IPv6
	IEEE 802.1w Rapid Reconfiguration of Spanning Tree	RFC 4007 IPv6 Scoped Address Architecture
	IEEE 802.1X PAE	RFC 4022 MIB for TCP
	IEEE 802.3ad Link Aggregation Control Protocol (LACP)	RFC 4113 MIB for UDP
	IEEE 802.3x Flow Control	RFC 4251 SSHv6 Architecture
	IEEE 802.3z 1000BASE-X Gigabit Ethernet over fiber	RFC 4252 SSHv6 Authentication
	RFC 768 UDP	RFC 4253 SSHv6 Transport Layer
	RFC 792 ICMP	RFC 4254 SSHv6 Connection
	RFC 793 TCP	RFC 4291 IP Version 6 Addressing Architecture
	RFC 826 ARP	RFC 4293 MIB for IP
		RFC 4419 Key Exchange for SSH
		RFC 4443 ICMPv6

Technical Specifications

RFC 854 TELNET	RFC 4541 IGMP & MLD Snooping Switch
RFC 951 BOOTP	RFC 4861 IPv6 Neighbor Discovery
RFC 1350 TFTP Protocol (revision 2)	RFC 4862 IPv6 Stateless Address Auto-configuration
RFC 2131 DHCP	RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
RFC 2865 Remote Authentication Dial In User Service (RADIUS)	RFC 5722 Handling of Overlapping IPv6 Fragments
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 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	
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
	LLDP-MIB
Network management	
	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
	SNMPv1/v2c/v3

Accessories

HPE FlexNetwork 5120 SI Switch Series accessories

Transceivers

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

Cables

HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

HPE FlexNetwork 5120 24G PoE+ (370W) SI Switch (JG091B)

HPE RPS1600 Redundant Power System	JG136A
HPE RPS1600 1600W AC Power Supply	JG137A
HPE X290 1000 A JD5 2m RPS Cable	JD187A

¹ Products covered by 1 year warranty. See details at <http://www.hpe.com/networking/warrantyquickref>

Summary of Changes

Date	Version History	Action	Description of Change
10-Mar-2017	From Version 17 to 18	Changed	SKU descriptions and Accessories updated
20-Jan-2017	From Version 16 to 17	Changed	Minor edits on Features and benefits
06-May-2016	From Version 15 to 16	Changed	Edits made on Technical Specifications and Accessories. SKU descriptions updated.
05-Feb-2016	From Version 14 to 15	Changed	Minor edits made on Configuration section
01-Dec-2015	From Version 13 to 14	Added	SKUs added: JE072B, JE073B, JE074B, JG091B, JG309B, JG310B
		Changed	QuickSpecs name changed from HP 5120 SI Switch Series to HPE FlexNetwork 5120 SI Switch Series. Product overview, Features and benefits, Configuration and Technical Specification sections updated.
01-Dec-2014	From Version 12 to 13	Changed	Warranty and support updated
12-Nov-2013	From Version 11 to 12	Added	Configuration were added.
18-Jul-2013	From Version 10 to 11	Changed	Standards and protocols was revised.
16-Jul-2013	From Version 9 to 10	Changed	Updated the specifications and description for JD118B.
10-Jun-2013	From Version 8 to 9	Added	OM4 cables were added.
30-Mar-2012	From Version 7 to 8	Changed	Model names and Features and benefits were revised.
20-Mar-2012	From Version 5 to 7	Changed	Model names were revised.
01-Dec-2011	From Version 3 to 5	Changed	Features and Benefits and Standards and Protocols were revised.
30-Sep-2011	From Version 2 to 3	Added	Accessory Product Details was added.
16-Mar-2011	From Version 1 to 2	Added	HP A5120-24G-PoE+ SI Switch and HP A5120-24G-PPoE+ SI Switch Models were added.



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