QuickSpecs

Overview

HP 5130 EI Switch Series

HP 5130-24G-4SFP+ EI Switch

HP 5130-24G-SFP-4SFP+ EI Switch

HP 5130-48G-4SFP+ EI Switch

Overview

HP 5130-24G-PoE+-4SFP+ (370W) EI Switch

HP 5130-48G-PoE+-4SFP+ (370W) EI Switch

Models

HP 5130-24G-4SFP+ EI Switch	JG932A
HP 5130-24G-SFP-4SFP+ EI Switch	JG933A
HP 5130-48G-4SFP+ EI Switch	JG934A
HP 5130-24G-PoE+-4SFP+ (370W) EI Switch	JG936A
HP 5130-48G-PoE+-4SFP+ (370W) EI Switch	JG937A

Key features

- Fixed 10G Ports for high speed Stacking or Uplinks
- Support for multiple services
- Comprehensive security control policies
- Diversified quality of service (QoS) policies
- Excellent manageability

Product overview

The HP 5130 EI Switch Series is comprised of Gigabit Ethernet switches that support static and RIP Layer 3 routing, diversified services, and IPv6 forwarding, as well as provide four 10-Gigabit Ethernet (10GbE) extended interfaces. Unique Intelligent Resilient Framework (IRF) technology creates a virtual fabric by managing several switches as one logical device, which increases network resilience, performance, and availability, while reducing operational complexity. These switches provide Gigabit Ethernet

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access and can be used at the edge of a network or to connect server clusters in data centers. High availability, simplified management, and comprehensive security control policies are among the key features that distinguish this series.

Features and benefits

Software-defined networking

- **OpenFlow**
  supports OpenFlow 1.3 specification to enable SDN by allowing separation of the data (packet forwarding) and control (routing decision) paths

Quality of Service (QoS)

- **Broadcast control**
  allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic
- **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 port, VLAN, or whole switch
- **Powerful QoS feature**
  supports the following congestion actions: strict priority (SP) queuing, weighted round robin (WRR), and SP+WRR
- **Traffic policing**
  supports Committed Access Rate (CAR) and line rate

Management

- **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 HWTACACS to link a custom list of CLI commands to an individual network administrator's login; also provides an audit trail
- **Secure Web GUI**
  provides a secure, easy-to-use graphical interface for configuring
  the module via HTTPS
- **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
- **sFlow (RFC 3176)**
  provides scalable ASIC-based wirespeed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes
- **Management VLAN**
  segments traffic to and from management interfaces, including
  CLI/telnet, a Web browser interface, and SNMP

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- **Remote intelligent mirroring**
  mirrors ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port anywhere on the network
- **Device Link Detection Protocol (DLDP)**
  monitors a cable between two switches and shuts down the ports on both ends if the cable is broken, which prevents network problems such as loops
- **IPv6 management**
  provides future-proof networking because the switch is capable of being managed whether the attached network is running IPv4 or IPv6; supports pingv6, tracertv6, Telnetv6, TFTPv6, DNSv6, syslogv6, FTPv6, SNMPv6, DHCPv6, and RADIUS for IPv6
- **Troubleshooting**
  ingress and egress port monitoring enables network problem-solving; virtual cable tests provide visibility into cable problems
- **HP Intelligent Management Center (IMC)**
  integrates fault management, element configuration, and network monitoring from a central vantage point; built-in support for third-party devices enables network administrators to centrally manage all network elements with a variety of automated tasks, including discovery, categorization, baseline configurations, and software images; the software also provides configuration comparison tools, version tracking, change alerts, and more
- **Network management**
  SNMP v1/2/3, MIB-II with Traps, and RADIUS Authentication Client MIB (RFC 2618); embedded HTML management tool with secure access

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 9216-byte frame size to improve the performance of large data transfers
- **High-density connectivity**
  provides up to 48 fixed 10/100/1000BASE-T ports in a Layer 2/Layer 3 switch
- **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
- **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

Performance

- **Nonblocking architecture**
  up to 176 Gb/s nonblocking switching fabric provides wirespeed switching with up to 143 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**
  separates control from services and keeps service processing isolated; increases security and performance
- **External redundant power supply**
  provides high reliability
- **Smart link**

Overview

allows 50 ms failover between links

- **Spanning Tree/MSTP, RSTP**
  provides redundant links while preventing network loops
- **Intelligent Resilient Framework (IRF)**
  creates virtual resilient switching fabrics, where two or more switches perform as a single L2 switch and L3 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; can eliminate the need for complex protocols like Spanning Tree Protocol, Equal-Cost Multipath (ECMP), or VRRP, thereby simplifying network operation

Layer 2 switching

- **16K MAC address table**
  provides access to many Layer 2 devices
- **VLAN support and tagging**
  supports IEEE 802.1Q with 4,094 simultaneous VLAN IDs
- **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
- **10GbE port aggregation**
  allows grouping of ports to increase overall data throughput to a remote device
- **Device Link Detection Protocol (DLDP)**
  monitors link connectivity and shuts down ports at both ends if unidirectional traffic is detected, preventing loops in STP-based networks
- **Jumbo Frame Support**
  improves the performance of large data transfers; supports frame size of up to 9K-byte

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; supports client; DHCP Relay enables DHCP operation across subnets
- **Loopback interface address**
  defines an address that can always be reachable, improving diagnostic capability
- **User Datagram Protocol (UDP) helper function**
  allows UDP broadcasts to be directed across router interfaces to specific IP unicast or subnet broadcast addresses and prevents server spoofing for UDP services such as DHCP
- **Route maps**
  provide more control during route redistribution; allow filtering and altering of route metrics

Layer 3 routing

- **Static IP routing**
  provides manually configured routing for both IPv4 and IPv6 networks
- **Routing Information Protocol (RIP)**
  uses a distance vector algorithm with UDP packets for route determination; supports RIPv1 and RIPv2 routing; includes loop protection

Security

- **Access control lists (ACLs)**

Overview

provides IP Layer 2 to Layer 4 traffic filtering; supports global ACL, VLAN ACL, port ACL, and IPv6 ACL

- **IEEE 802.1X**
  industry-standard method of user authentication using an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server
- **MAC-based authentication**
  client is authenticated with the RADIUS server based on the client's MAC address
- **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 providing 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 security**
  allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **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
- **IP source guard**
  helps prevent IP spoofing attacks
- **Dynamic ARP protection**
  blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
- **RADIUS/HWTACACS**
  eases switch management security administration by using a password authentication server

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
- **IEEE 802.3af Power over Ethernet**
  provides up to 15.4 W per port to PoE-powered devices such as IP phones, wireless access points, and video cameras
- **PoE allocations**
  supports multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user-specified) to allocate PoE power for more efficient energy savings
- **Voice VLAN**
  automatically assigns VLAN and priority for IP phones, simplifying network configuration and maintenance
- **IP multicast snooping (data-driven IGMP)**

Overview

prevents flooding of IP multicast traffic

Device support

- **Prestandard PoE Support**
  detects and provides power to prestandard PoE devices such as wireless LAN access points and IP phones

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 v2.0**
  advance hardware replacement with next-business-day delivery (available in most countries). See www.hp.com/networking/warrantysummary for duration details.
- **Electronic and telephone support (for Limited Lifetime Warranty 2.0)**
  limited 24x7 telephone support is available from HP for the first 3 years; 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

QuickSpecs

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.

Switch Chassis

HP 5130-24G-4SFP+ EI Switch   **JG932A**
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

See Configuration Note:2, 4, 5

PDU Cable NA/MEX/TW/JP   **JG932A#B2B**
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   **JG932A#B2C**
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   **JG932A#B2E**
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5130-24G-SFP-4SFP+ EI Switch   **JG933A**
- 24 SFP ports
- (Of the 24, 8 are dual-personality ports - autosensing 10/100/1000BASE-T or SFP)
- min=0 \ max=24 SFP Transceivers
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Must select min 1 power supply
- 1U - Height

See Configuration Note:1, 2

HP 5130-48G-4SFP+ EI Switch   **JG934A**
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

See Configuration Note:2, 4, 5

PDU Cable NA/MEX/TW/JP   **JG934A#B2B**
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   **JG934A#B2C**
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   **JG934A#B2E**
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5130-24G-PoE+-4SFP+ EI Swch   **JG936A**
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports

See Configuration

Configuration

- min=0 \ max=4 SFP+ Transceivers   Note:2, 4, 5
- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP   JG936A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JG936A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JG936A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5130-48G-PoE+-4SFP+ EI Swch   JG937A
- 48 RJ-45 autosensing 10/100/1000 ports   See
- 4 SFP+ ports   Configuration
- min=0 \ max=4 SFP+ Transceivers   Note:2, 4, 5
- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP   JG937A#B2B
C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JG937A#B2C
C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JG937A#B2E
NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration Rules:

Note 1   The following Transceivers install into this Switch: (SFP Ports)

HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
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 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 X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A

Note 2   The following Transceivers install into this Switch: (SFP+ Ports)

HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B

Configuration

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 X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A
HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LR Transceiver	JD094B
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 4   Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) or #B2E. (See Localization Menu)

Note 5   #B2E is Offered only in NA, Mexico, Taiwan and Japan.

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)
High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Box Level Integration CTO Models

CTO Solution Sku

HP 51xx CTO Switch Solution	JG706A

- SSP trigger sku

CTO Base Sku

HP 5130-24G-4SFP+ EI Switch	JG932A See Configuration Note:2, 4, 5, 6, 7

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP	JG932A#B2B

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

PDU Cable ROW	JG932A#B2C

- C15 PDU Jumper Cord (ROW)

Configuration

High Volt Switch to Wall Power Cord	JG932A#B2E
• NEMA L6-20P Cord (NA/MEX/JP/TW)	
HP 5130-24G-SFP-4SFP+ EI Switch	JG933A
• 24 SFP ports	See Configuration Note:1, 2, 6, 7
• (Of the 24, 8 are dual-personality ports - autosensing 10/100/1000BASE-T or SFP)	
• min=0 \ max=24 SFP Transceivers	
• 4 SFP+ ports	
• min=0 \ max=4 SFP+ Transceivers	
• Must select min 1 power supply	
• 1U - Height	
HP 5130-48G-4SFP+ EI Switch	JG934A
• 48 RJ-45 autosensing 10/100/1000 ports	See Configuration Note:2, 4, 5, 6, 7
• 4 SFP+ ports	
• min=0 \ max=4 SFP+ Transceivers	
• Power supply included	
• 1U - Height	
PDU Cable NA/MEX/TW/JP	JG934A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
PDU Cable ROW	JG934A#B2C
• C15 PDU Jumper Cord (ROW)	
High Volt Switch to Wall Power Cord	JG934A#B2E
PDU Cable NA/MEX/TW/JP	JG936A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
PDU Cable ROW	JG936A#B2C
• C15 PDU Jumper Cord (ROW)	
High Volt Switch to Wall Power Cord	JG936A#B2E
• NEMA L6-20P Cord (NA/MEX/JP/TW)	
HP 5130-48G-PoE+-4SFP+ EI Swch	JG937A
• 48 RJ-45 autosensing 10/100/1000 ports	See Configuration Note:2, 4, 5, 6, 7
• 4 SFP+ ports	
• min=0 \ max=4 SFP+ Transceivers	
• Power supply included	
• 1U - Height	
PDU Cable NA/MEX/TW/JP	JG937A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
PDU Cable ROW	JG937A#B2C
• C15 PDU Jumper Cord (ROW)	
High Volt Switch to Wall Power Cord	JG937A#B2E

Configuration

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

Configuration Rules:

Note 1   The following Transceivers install into this Switch: (SFP Ports) (Use #0D1 quoted to switch if switch is CTO) - if applicable

HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
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 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 X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A

Note 4   Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) or #B2E. (See Localization Menu)

Note 5   #B2E is Offered only in NA, Mexico, Taiwan and Japan.

Note 6   If this Switch is selected, Then a Minimum of 1 factory integrated accessory must be ordered and integrated to CTO chassis. See Menu below, option must have a #0D1 to be integrated to the CTO Chassis.

Note 7   If the Switch Chassis is to be Box Level Factory Integrated (CTO), Then the #0D1 is required on the Switch Chassis and integrated to the JG706A - HP 51xx CTO Enablement. (Min 1/Max 1 Switch per SSP)

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)
High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Rack Level Integration CTO Models

Switch Chassis

HP 5130-24G-4SFP+ EI Switch	JG932A
• 24 RJ-45 autosensing 10/100/1000 ports	See
• 4 SFP+ ports	Configuration
• min=0 \ max=4 SFP+ Transceivers	Note:2, 4, 7
• Power supply included	
• 1U - Height	

Configuration

PDU Cable NA/MEX/TW/JP	JG932A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	

PDU Cable ROW	JG932A#B2C
• C15 PDU Jumper Cord (ROW)	

High Volt Switch to Wall Power Cord	JG932A#B2E
• NEMA L6-20P Cord (NA/MEX/JP/TW)	

HP 5130-24G-SFP-4SFP+ EI Switch   JG933A
See Configuration Note:1, 2, 7

- 24 SFP ports
- (Of the 24, 8 are dual-personality ports - autosensing 10/100/1000BASE-T or SFP)
- min=0 \ max=24 SFP Transceivers
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Must select min 1 power supply
- 1U - Height

HP 5130-48G-4SFP+ EI Switch   JG934A
See Configuration Note:2, 4, 7

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP	JG934A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	

PDU Cable ROW	JG934A#B2C
• C15 PDU Jumper Cord (ROW)	

High Volt Switch to Wall Power Cord	JG934A#B2E
• NEMA L6-20P Cord (NA/MEX/JP/TW)	

HP 5130-24G-PoE+-4SFP+ EI Swch   JG936A
See Configuration Note:2, 4, 7

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP	JG936A#B2B
• C15 PDU Jumper Cord (NA/MEX/TW/JP)	

PDU Cable ROW	JG936A#B2C
• C15 PDU Jumper Cord (ROW)	

High Volt Switch to Wall Power Cord	JG936A#B2E
• NEMA L6-20P Cord (NA/MEX/JP/TW)	

Configuration

HP 5130-48G-PoE+-4SFP+ EI Swch	JG937A

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

<div align="right">See Configuration Note:2, 4, 7</div>

PDU Cable NA/MEX/TW/JP	JG937A#B2B

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

PDU Cable ROW	JG937A#B2C

- C15 PDU Jumper Cord (ROW)

Configuration Rules:

Note 1 The following Transceivers install into this Switch: (SFP Ports) (Use #0D1 quoted to switch if switch is CTO) - if applicable

HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
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 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 X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A

Note 2 The following Transceivers install into this Switch: (SFP+ Ports) (Use #0D1 or #B01 quoted to switch if switch is CTO) - if applicable

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 X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A
HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LR Transceiver	JD094B
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

Configuration

Note 4   Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See
Localization Menu)
REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted
Power Cable option on the Switches/Routers.

Note 7   If HP CTO Switch Chassis is selected for Rack Level Integration, Then the Switch needs to integrate (with
#0D1) to the Rack.

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)

Transceivers

SFP Transceivers

HP X115 100M SFP LC FX Transceiver	JD102B
HP X110 100M SFP LC LX Transceiver	JD120B
HP X110 100M SFP LC LH40 Transceiver	JD090A
HP X110 100M SFP LC LH80 Transceiver	JD091A
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 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 X120 1G SFP LC LH40 1550nm XCVR	JD062A
HP X125 1G SFP LC LH40 1310nm XCVR	JD061A
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC LH100 Transceiver	JD103A

SFP+ Transceivers

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

Cables

Multi-Mode Cables

HP .5m Multi-mode OM3 LC/LC FC Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC FC Cable	AJ834A

Configuration

HP 2 m Multimode OM3 LC/LC FC Cable	AJ835A
HP 5 m Multimode OM3 LC/LC FC Cable	AJ836A
HP 15 m Multimode OM3 LC/LC FC Cable	AJ837A
HP 30 m Multimode OM3 LC/LC FC Cable	AJ838A
HP 50 m Multimode OM3 LC/LC FC Cable	AJ839A
HP Premier Flex LC/LC OM4 2f 1m Cbl	QK732A
HP Premier Flex LC/LC OM4 2f 2m Cbl	QK733A
HP Premier Flex LC/LC OM4 2f 5m Cbl	QK734A
HP Premier Flex LC/LC OM4 2f 15m Cbl	QK735A
HP Premier Flex LC/LC OM4 2f 30m Cbl	QK736A
HP Premier Flex LC/LC OM4 2f 50m Cbl	QK737A

Internal Power Supplies

(JG933A Switch Only) (std 0 // max 2) User Selection (min 1 // max 2) per switch enclosure

HP 5500 150WDC Power Supply — **JD366A** — See Configuration Note:4

HP 5500 150WAC Power Supply — **JD362A** — See Configuration Note:2, 3, 4
- includes 1 x c13, 910w

PDU Cable NA/MEX/TW/JP — **JD362A#B2B**
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — **JD362A#B2C**
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — **JD362A#B2E**
- NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration Rules:

Note 2   If #B2E is selected Then replace Localized option with #B2E for power supply and with #B2E for switch .
(Offered only in North America, Mexico, Taiwan, and Japan)

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

Note 4   Not supported on JG932A, JG934A, JG936A, JG937A, JG975A, JG976A, JG977A, JG978A.

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)

Configuration

Switch/Router/Power Supply to Wall Power Cord – Localized Option (Watson Default for BTO and Box Level CTO)
High Volt Switch/Router/Power Supply to Wall Power Cord – #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Switch Enclosure Options

External/Redundant Power Supplies

HP RPS 800 Redundant Power Supply | **JD183A**
- Height = 1U
- includes 1 x c13, 800w

See Configuration Note:2, 3, 5, 7

HP RPS1600 Redundant Power System | **JG136A**
- Height = 1U
- includes 1 x c13, 1600w and Power Supply port

See Configuration Note:2, 3, 6

HP RPS1600 1600W AC Power Supply | **JG137A**
- Installs into JG136A only

See Configuration Note:1, 6

Configuration Rules:

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

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

Note 3   Only 1 JD183A or JG136A can be connected per switch.

Note 5   Supported on JG934A, JG976A

Note 6   Supported on JG934A, JG976A, JG933A, JG936A, JG977A, JG937A, JG978A.

Note 7   Supported on JG933A only when connected to DC Power Supply JD366A with cable JD186A.

External/Redundant Power Cables

HP X290 RPS 500/800 list V 1m Cable | **JD186A**

See Configuration Note:1

HP X290 1000 A JD5 2m RPS Cable | **JD187A**

See Configuration Note:2

Configuration

HP RPS 1000/1600 A JD5 Non-PoE 2m Cable	JD188A See Configuration Note:3

Configuration Rules:

Note 1   Supported on JG934A, JG976A and JD366A when used in JG933A to connect to JD183A.

Note 2   Supported on JG936A, JG977A, JG937A, JG978A to connect to JG136A.

Note 3   Supported on JG934A, JG976A, JG933A to connect to JG136A.

Technical Specifications

HP 5130-24G-4SFP+ EI Switch (JG932A)

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 SFP+ fixed 1000/10000 SFP+ ports	
Additional ports and slots	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 6.3(d) x 1.72(h) in (44 x 16 x 4.36 cm) (1U height)
	Weight	11.02 lb (5 kg)
Memory and processor	1 GB SDRAM, 512 MB flash; packet buffer size: 1.5 MB	
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	
Performance	**1000 Mb Latency**	< 5 µs
	10 Gbps Latency	< 1.5 µs
	Throughput	96 Mpps
	Routing/Switching capacity	128 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
Reliability	**MTBF (years)**	98.1
Environment	**Operating temperature**	23°F to 113°F (-5°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	High-speed fan: 39.7 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	64/88 BTU/hr (67.52/92.84 kJ/hr)
	AC voltage	100 - 240 VAC
	Current	2 A
	Maximum power rating	26 W
	Idle power	19 W
	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.
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	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-4/2012.04; EN 6100-3-2:2006+A1:2009 + A2:2009; EN 61000-3-2:2006+A1:2009+A2:2009 ; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; AS/NZS CISPR 22:2009 Class A; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A	

Technical Specifications

Immunity	Generic	EN 55024
	ESD	EN300 386
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	
Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

HP 5130-24G-SFP-4SFP+ EI Switch (JG933A)

I/O ports and slots	16 SFP 100/1000 Mbps ports	
	8 SFP dual-personality ports; 100/1000BaseX or 100/1000BASET RJ-45 Combo Ports	
	4 SFP+ fixed 1000/10000 SFP+ ports	
Additional ports and slots	1 RJ-45 serial console port	
Power supplies	2 power supply slots 1 minimum power supply required (ordered separately)	
Physical characteristics	**Dimensions**	17.32(w) x 14.17(d) x 1.72(h) in (44 x 36 x 4.36 cm) (1U height)
	Weight	17.64 lb (8 kg)
Memory and processor	1 GB SDRAM, 512 MB flash; packet buffer size: 1.5 MB	
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	
Performance	**1000 Mb Latency**	< 5 μs
	10 Gbps Latency	< 1.5 μs
	Throughput	96 Mpps
	Routing/Switching capacity	128 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
Reliability	**MTBF (years)**	52.79
Environment	**Operating temperature**	23°F to 113°F (-5°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	Low-speed fan: 47.1 dB, High-speed fan: 50.7 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	102/204 BTU/hr (107.61/215.22 kJ/hr), for AC Powered units. For DC powered units heat dissipation is 130BTU/hr min, 232BTU/hr max.
	AC voltage	100 - 240 VAC
	DC voltage	-48 to -60 VDC
	Current	5 A
	Maximum power rating	60 W
	Idle power	30 W
	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

Technical Specifications

	with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. Power Ratings for AC Power Supply indicated above. For DC input power, Idle Power is 38W and Max is 68W. DC Max input current is 8A. Units are supplied without a power supply. Customer must buy 1 or 2 JD362A(AC) or JD366A (DC) power supply.	
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	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-4/2012.04; EN 6100-3-2:2006+A1:2009 + A2:2009; EN 61000-3-2:2006+A1:2009+A2:2009 ; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; AS/NZS CISPR 22:2009 Class A; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A	
Immunity	**Generic**	EN 55024
	ESD	EN300 386
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	
Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

HP 5130-48G-4SFP+ EI Switch (JG934A)

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 SFP+ fixed 1000/10000 SFP+ ports	
Additional ports and slots	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 10.24(d) x 1.72(h) in (44 x 26 x 4.36 cm) (1U height)
	Weight	11.02 lb (5 kg)
Memory and processor	1 GB SDRAM, 512 MB flash; packet buffer size: 3 MB	
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	
Performance	**1000 Mb Latency**	< 5 μs
	10 Gbps Latency	< 1.5 μs
	Throughput	130.9 Mpps
	Routing/Switching capacity	176 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
Reliability	**MTBF (years)**	61.4
Environment	**Operating temperature**	23°F to 113°F (-5°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	Low-speed fan: 43.1 dB, High-speed fan: 53.4 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat	130/153 BTU/hr (137.15/161.42 kJ/hr), For AC powered units. For DC

Technical Specifications

	dissipation	powered units heat dissipation is 130BTU/hr min, 171 BTU/hr max
	AC voltage	100 - 240 VAC
	DC voltage	-48 to -60 VDC
	Current	10 A
	Maximum power rating	45 W
	Idle power	38 W
	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.
		Power ratings for AC power indicated above. Current used is 5A Max when DC Power used. For DC input power, idle power is 38W, maximum DC power used is 50W.
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		EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-4/2012.04; EN 6100-3-2:2006+A1:2009 + A2:2009; EN 61000-3-2:2006+A1:2009+A2:2009 ; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; AS/NZS CISPR 22:2009 Class A; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A
Immunity	**Generic**	EN 55024
	ESD	EN300 386
Management		IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services		Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP 5130-24G-PoE+-4SFP+ (370W) EI Switch (JG936A)

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 SFP+ fixed 1000/10000 SFP+ ports
Additional ports and slots		1 RJ-45 serial console port
Physical characteristics	**Dimensions**	17.32(w) x 11.81(d) x 1.72(h) in (44 x 30 x 4.37 cm) (1U height)
	Weight	17.64 lb (8 kg)
Memory and processor		1 GB SDRAM, 512 MB flash; packet buffer size: 1.5 MB
Mounting and enclosure		Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	**1000 Mb Latency**	< 5 µs
	10 Gbps Latency	< 1.5 µs
	Throughput	96 Mpps
	Routing/Switching capacity	128 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
Reliability	**MTBF (years)**	48.3
Environment	**Operating temperature**	23°F to 113°F (-5°C to 45°C)

Technical Specifications

	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	Low-speed fan: 49.8 dB, High-speed fan: 52.9 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	102/1569 BTU/hr (107.61/1655.29 kJ/hr), for AC Power. For DC Power min heat dissipation is 85BTU/hr and max heat dissipation is 2559 BTU/hr
	AC voltage	100 - 240 VAC
	Current	10 A
	Maximum power rating	460 W
	Idle power	N/A
	PoE power	370 W PoE+
	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. When supplemented with the use of an HP RPS1600 Redundant Power System, up to 740 W of PoE+ can be supplied. Max current rating for DC power is 25A. AC Input power is 30W typical, and 460W max(including 370W PoE+ consumption. DC Input voltage range is -54 to -57VDC. Total DC input power is 25W Typical and 790W with 740W PoE+ Power consumption. DC Input voltage range is -54VDC to -57VDC. DC Input Source is the HP RPS1600.
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		EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-4/2012.04; EN 6100-3-2:2006+A1:2009 + A2:2009; EN 61000-3-2:2006+A1:2009+A2:2009 ; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; AS/NZS CISPR 22:2009 Class A; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A
Immunity	**Generic**	EN 55024
	ESD	EN300 386
Management		IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager.
Services		Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP 5130-48G-PoE+-4SFP+ (370W) EI Switch (JG937A)

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 SFP+ fixed 1000/10000 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 x 36 x 4.36 cm) (1U height)
	Weight	17.64 lb (8 kg)
Memory and processor		1 GB SDRAM, 512 MB flash; packet buffer size: 3 MB

Technical Specifications

Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	
Performance	**1000 Mb Latency**	< 5 µs
	10 Gbps Latency	< 1.5 µs
	Throughput	130.9 Mpps
	Routing/Switching capacity	176 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
Reliability	**MTBF (years)**	37.1
Environment	**Operating temperature**	23°F to 113°F (-5°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	Low-speed fan: 50.6 dB, High-speed fan: 54.6 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	160/1671 BTU/hr (168.8/1762.91 kJ/hr), for AC power. For DC power min heat dissipation is 147BTU/hr and 3037BTU/hr max.
	AC voltage	100 - 240 VAC
	Current	10 A
	Maximum power rating	490 W
	Idle power	47 W
	PoE power	370 W PoE+
	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. When supplemented with the use of an HP RPS1600 Redundant Power System, up to 740 W of PoE+ can be supplied. Max current rating for DC power is 25A. AC Input power is 47W typical, and 490W max(including 370W PoE+ consumption. DC Input voltage range is -54 to -57VDC. Total DC input power is 43W typical and 890W with 800W PoE+ Power consumption. DC Input voltage range is -54VDC to -57VDC. DC Input Source is the HP RPS1600.
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	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-4/2012.04; EN 6100-3-2:2006+A1:2009 + A2:2009; EN 61000-3-2:2006+A1:2009+A2:2009 ; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; AS/NZS CISPR 22:2009 Class A; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A	
Immunity	**Generic**	EN 55024
	ESD	EN300 386
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	
Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level	

Technical Specifications

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)

Device management
RFC 1157 SNMPv1/v2c
RFC 1305 NTPv3
RFC 2573 (SNMPv3 Applications)
RFC 2819 (RMON groups Alarm, Event, History and Statistics only)
RFC 3416 (SNMP Protocol Operations v2)
HTML and telnet management
Multiple Configuration Files
SNMP v3 and RMON RFC support
SSHv1/SSHv2 Secure Shell
TACACS/TACACS+
Web UI
General protocols
IEEE 802.1ad Q-in-Q
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 802.3 Type 10BASE-T
IEEE 802.3ab 1000BASE-T
IEEE 802.3ad Link Aggregation Control Protocol (LACP)
IEEE 802.3ae 10-Gigabit Ethernet
IEEE 802.3af Power over Ethernet
IEEE 802.3i 10BASE-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 783 TFTP Protocol (revision 2)
RFC 791 IP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1213 Management Information Base for Network Management of TCP/IP-based internets
RFC 1305 NTPv3
RFC 1350 TFTP Protocol (revision 2)
RFC 1519 CIDR
RFC 1812 IPv4 Routing
RFC 1866 Hypertext Markup Language - 2.0
RFC 2131 DHCP
RFC 2236 IGMP Snooping
RFC 2616 HTTP Compatibility v1.1
RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types

IPv6
RFC 2461 IPv6 Neighbor Discovery
RFC 2463 ICMPv6
RFC 3162 RADIUS and IPv6
RFC 3306 Unicast-Prefix-based IPv6 Multicast Addresses
RFC 3315 DHCPv6 (client and relay)

MIBs
RFC 1212 Concise MIB Definitions
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interface MIB
RFC 2571 SNMP Framework MIB
RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2573 SNMP-Target MIB
RFC 2574 SNMP USM 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 2737 Entity MIB (Version 2)
RFC 2819 RMON MIB
RFC 2863 The Interfaces Group 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

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)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2138 RADIUS Authentication
RFC 2139 RADIUS Accounting
RFC 2865 RADIUS (client only)
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Technical Specifications

RFC 2668 Definitions of Managed Objects for IEEE
802.3 Medium Attachment Units (MAUs)
RFC 2865 Remote Authentication Dial In User
Service (RADIUS)
RFC 2866 RADIUS Accounting
RFC 3414 User-based Security Model (USM) for
version 3 of the Simple Network Management
Protocol (SNMPv3)
RFC 3415 View-based Access Control Model
(VACM) for the Simple Network Management
Protocol (SNMP)
RFC 3418 Management Information Base (MIB) for
the Simple Network Management Protocol (SNMP)
RFC 3576 Ext to RADIUS (CoA only)
RFC 4213 Basic IPv6 Transition Mechanisms
802.1r - GARP Proprietary Attribute Registration
Protocol (GPRP)

Accessories

HP FlexFabric 5700 Switch Series accessories
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 X115 100M SFP LC BX 10-U Transceiver	JD100A
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
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 LH100 Transceiver	JD103A
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
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
HP X130 10G SFP+ LC SR Transceiver	JD092B
HP X130 10G SFP+ LC LR Transceiver	JD094B
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

Cables

HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic 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 5130-24G-SFP-4SFP+ EI Switch (JG933A)

HP 5500 150WAC Power Supply	JD362A
HP 5500 150WDC Power Supply	JD366A

HP 5130-48G-4SFP+ EI Switch (JG934A)

HP RPS 800 Redundant Power Supply	JD183A
HP RPS1600 Redundant Power System	JG136A
HP RPS1600 1600W AC Power Supply	JG137A
HP X290 500 V 1m RPS Cable	JD186A
HP X290 1000 A JD5 Non-PoE 2m RPS Cable	JD188A

Accessories

HP 5130-24G-PoE+-4SFP+ (370W) EI Switch (JG936A)

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

HP 5130-48G-PoE+-4SFP+ (370W) EI Switch (JG937A)

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

Summary of Changes

Date	Version History	Action	Description of Change:
24-Feb-2015	From Version 4 to 5	Changed	Memory and processor data updated on Technical Specification section
15-Jan-2015	From Version 3 to 4	Changed	Minor changes made on Technical Specifications
12-Jan-2015	From Version 2 to 3	Changed	Errors fixed on Features and benefits section
01-Dec-2014	From Version 1 to 2	Changed	Warranty and support updated

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