Overview

HPE 5130 EI Switch Series



HP 5130-24G-4SFP+ EI Switch



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



Overview

HP 5130-48G-4SFP+ EI Switch



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



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



HP 5130-24G-2SFP+-2XGT EI Switch

Overview



HP 5130-48G-2SFP+-2XGT EI Switch



HP 5130-24G-PoE+-2SFP+-2XGT (370W) EI Switch



HP 5130-48G-PoE+-2SFP+-2XGT (370W) EI Switch

Models

Overview

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
HP 5130-24G-2SFP+-2XGT EI Switch	JG938A
HP 5130-48G-2SFP+-2XGT EI Switch	JG939A
HP 5130-24G-PoE+-2SFP+-2XGT (370W) EI Switch	JG940A
HP 5130-48G-PoE+-2SFP+-2XGT (370W) EI Switch	JG941A

Key features

- Fixed 10GbE 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 HPE 5130 EI Switch Series comprises 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) interfaces.

Unique Intelligent Resilient Fabric (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 access and can be used at the edge of a network or to connect server clusters in small 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**

Overview

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
- **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
- **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 compatible 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
- **HPE 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

Overview

- **Network Management**
  SNMP v1/v2c/v3, 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
- **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**
  allows 50 ms failover between links
- **Spanning Tree/MSTP, RSTP**
  provides redundant links while preventing network loops; supports up to 64 instances of MSTP
- **Intelligent Resilient Fabric (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**

Overview

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-bytes

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
- **DHCP server**
  centralizes and reduces the cost of IPv4 address management

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)**
  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**

Overview

  - **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, HTTPS and/or SNMPv3
- **Secure FTP/ SCP**
  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 802.3at Power over Ethernet (PoE+)**
  provides up to 30 W per port that allows support of the latest PoE+-capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af-compliant end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments
- **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
- **Unified Hewlett Packard Enterprise Comware operating system with modular architecture**
  provides an easy-to-enhance-and-extend feature set, which doesn't require whole-scale changes; all switching, routing, and security platforms leverage the Comware OS, a common unified modular operating system
- **Energy Efficient Ethernet (EEE) Support**
  reduces power consumption in accordance with IEEE 802.3az

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.

Switch Chassis

HP 5130-24G-4SFP+ EI Switch • 24 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG932A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG932A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG932A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG932A#B2E
HP 5130-24G-SFP-4SFP+ EI Switch • 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	JG933A See Configuration **NOTE:**1, 2
HP 5130-48G-4SFP+ EI Switch • 48 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG934A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG934A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG934A#B2C

Configuration

High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG934A#B2E
HP 5130-24G-PoE+-4SFP+ EI Swch • 24 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG936A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG936A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG936A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG936A#B2E
HP 5130-48G-PoE+-4SFP+ EI Swch • 48 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG937A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG937A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG937A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG937A#B2E
HP 5130-24G-2SFP+-2XGT EI Switch • 24 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports • min=0 \ max=2 SFP Transceivers • 2 RJ-45 1/10GBASE-T ports • Power supply included • 1U - Height	JG938A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG938A#B2B

Configuration

PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG938A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG938A#B2E
HP 5130-48G-2SFP+-2XGT EI Switch • 48 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports • min=0 \ max=2 SFP Transceivers • 2 RJ-45 1/10GBASE-T ports • Power supply included • 1U - Height	JG939A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG939A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG939A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG939A#B2E
HP 5130-24G-PoE+-2SFP+-2XT EI Swch • 24 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports • min=0 \ max=2 SFP Transceivers • 2 RJ-45 1/10GBASE-T ports • Power supply included • 1U - Height	JG940A See Configuration **NOTE:**2, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG940A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG940A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG940A#B2E
HP 5130-48G-PoE+-2SFP+-2XT EI Swch • 48 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports • min=0 \ max=2 SFP Transceivers • 2 RJ-45 1/10GBASE-T ports • Power supply included	JG941A See Configuration **NOTE:**2, 4, 5

Configuration

- 1U - Height

PDU Cable NA/MEX/TW/JP — JG941A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JG941A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — JG941A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 5130-24G-4SFP+ EI BR Switch — JG975A
- 24 RJ-45 autosensing 10/100/1000 ports — See Configuration **NOTE:**2, 6, 7
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

HP 5130-48G-4SFP+ EI BR Switch — JG976A
- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration **NOTE:**2, 6, 7
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

HP 5130-24G-PoE+-4SFP+ EI BR Swch — JG977A
- 24 RJ-45 autosensing 10/100/1000 ports — See Configuration **NOTE:**2, 6, 7
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

HP 5130-48G-PoE+-4SFP+ EI BR Swch — JG978A
- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration **NOTE:**2, 6, 7
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

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

Configuration

	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
	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.

Note 6 Only available in Brazil.

Note 7 Localization required. (See Localization Menu)

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)

Configuration

Box Level Integration CTO Models

CTO Solution Sku

HP 51xx CTO Switch Solution • SSP trigger sku	JG706A See Configuration **NOTE:** 8

CTO Base Sku

HP 5130-24G-4SFP+ EI Switch • 24 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG932A See Configuration **NOTE:**2, 4, 5, 6, 7
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG932A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG932A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JG932A#B2E
HP 5130-24G-SFP-4SFP+ EI Switch • 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	JG933A See Configuration **NOTE:**1, 2, 6, 7
HP 5130-48G-4SFP+ EI Switch • 48 RJ-45 autosensing 10/100/1000 ports • 4 SFP+ ports • min=0 \ max=4 SFP+ Transceivers • Power supply included • 1U - Height	JG934A See Configuration **NOTE:**2, 4, 5, 6, 7
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG934A#B2B

Configuration

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

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

Configuration

	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
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)	
Note 8	Clic Only - When JG706A is ordered without any 0D1 accessories and without any of the listed	

Configuration

Factory Express SKUs, then CLIC will display an UNB.

Factory Express
HA838A1
HA839A1
HA840A1
HA841A1
HA848A1
HA849A1
HA867A1
HA868A1
HA875A1
HK135A1
HK136A1

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
- 4 SFP+ ports
- min=0 \ max=4 SFP+ Transceivers
- Power supply included
- 1U - Height

See Configuration **NOTE:**2, 4, 7

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)

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

See Configuration **NOTE:**1, 2, 7

Configuration

- 1U - Height

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, 7

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)

HP 5130-24G-PoE+-4SFP+ EI Swch — JG936A
- 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, 7

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)

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

See Configuration **NOTE:**2, 4, 7

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)

HP 5130-24G-2SFP+-2XGT EI Switch — JG938A
- 24 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports
- min=0 \ max=2 SFP Transceivers
- 2 RJ-45 1/10GBASE-T ports

See Configuration **NOTE:**2, 4, 7

Configuration

- Power supply included
- 1U - Height

PDU Cable NA/MEX/TW/JP — JG938A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JG938A#B2C
- C15 PDU Jumper Cord (ROW)

HP 5130-48G-2SFP+-2XGT EI Switch — JG939A
- 48 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports
- min=0 \ max=2 SFP Transceivers
- 2 RJ-45 1/10GBASE-T ports
- Power supply included
- 1U - Height

See Configuration **NOTE:**2, 4, 7

PDU Cable NA/MEX/TW/JP — JG939A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JG939A#B2C
- C15 PDU Jumper Cord (ROW)

HP 5130-24G-PoE+-2SFP+-2XT EI Swch — JG940A
- 24 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports
- min=0 \ max=2 SFP Transceivers
- 2 RJ-45 1/10GBASE-T ports
- Power supply included
- 1U - Height

See Configuration **NOTE:**2, 4, 7

PDU Cable NA/MEX/TW/JP — JG940A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JG940A#B2C
- C15 PDU Jumper Cord (ROW)

HP 5130-48G-PoE+-2SFP+-2XT EI Swch — JG941A
- 48 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports
- min=0 \ max=2 SFP Transceivers
- 2 RJ-45 1/10GBASE-T ports
- Power supply included
- 1U - Height

See Configuration **NOTE:**2, 4, 7

PDU Cable NA/MEX/TW/JP — JG941A#B2B

Configuration

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

PDU Cable ROW JG941A#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
Note 4	Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See Localization Menu)	

Configuration

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 HPE 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

Configuration

HP .5m Multi-mode OM3 LC/LC FC Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC FC Cable	AJ834A
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 • includes 1 x c13, 910w	JD362A See Configuration **NOTE:**2, 3, 4
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JD362A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JD362A#B2C
High Volt Switch to Wall Power Cord • NEMA L6-20P Cord (NA/MEX/JP/TW)	JD362A#B2E

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

Configuration

Defaulted Power Cable option on the Switches/Routers.

Note 4 Not supported on JG932A, JG934A, JG936A, JG937A, JG938A, JG939A, JG940A, JG941A, 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)
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 • Height = 1U • includes 1 x c13, 800w	JD183A See Configuration **NOTE:**2, 3, 5, 7
HP RPS1600 Redundant Power System • Height = 1U • includes 1 x c13, 1600w and Power Supply port	JG136A See Configuration **NOTE:**2, 3, 6
HP RPS1600 1600W AC Power Supply • Installs into JG136A only	JG137A See Configuration **NOTE:**1, 6

Configuration Rules:

Note 1 If this power supply is selected, The JG136A - HPE 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, JG938A, JG939A, JG940A, JG941A.

Configuration

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
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, JG940A, JG941A to connect to JG136A.

Note 3 Supported on JG934A, JG976A, JG933A, JG938A, JG939A 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	< 3 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)
	Voltage	100 - 240 VAC, rated (depending on power supply chosen)
	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.

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	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 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.	

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

I/O ports and slots	16 SFP 100/1000 Mbps ports 8 SFP dual-personality ports - 10/100/1000BASE-T RJ-45 or 100/1000BASE-X 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	< 3 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

Technical Specifications

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.
	Voltage	100 - 240 VAC, rated -48 to -60 VDC, rated (depending on power supply chosen)
	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 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 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.	

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)	

Technical Specifications

Performance	**1000 Mb Latency**	< 5 µs
	10 Gbps Latency	< 3 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: 38.4 dB, High-speed fan: 47.0 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	130/153 BTU/hr (137.15/161.42 kJ/hr), For AC powered units. For DC powered units heat dissipation is 130BTU/hr min, 171 BTU/hr max
	Voltage	100 - 240 VAC, rated -48 to -60 VDC, rated (depending on power supply chosen)
	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

Technical Specifications

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.

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	< 3 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)
	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
	Voltage	100 - 240 VAC, rated -54 to -57 VDC (depending on power supply chosen)
	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

Technical Specifications

		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 HPE 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 HPE 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 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.	

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	
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	< 3 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)

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: 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.
	Voltage	100 - 240 VAC, rated -54 to -57 VDC (depending on power supply chosen)
	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 HPE 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 HPE 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 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.

HP 5130-24G-2SFP+-2XGT EI Switch (JG938A)

Technical Specifications

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 2 SFP+ fixed 1000/10000 SFP+ ports 2 RJ-45 1/10GBASE-T 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 4.37 cm) (1U height)
	Weight	6.61 lb (3 kg)
Memory and processor	1 GB SDRAM; Packet buffer size: 1.5 MB, 512 MB flash	
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	< 3 µs
	Throughput	up to 96 Mpps
	Routing/Switching capacity	128 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
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: 19 dB, High-speed fan: 44.5 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	68/116 BTU/hr (71.74/122.38 kJ/hr) for AC power.
	Voltage	100 - 240 VAC, rated (depending on power supply chosen)
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 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	

Technical Specifications

times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP 5130-48G-2SFP+-2XGT EI Switch (JG939A)

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 2 SFP+ fixed 1000/10000 SFP+ ports 2 RJ-45 1/10GBASE-T 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 27 x 4.37 cm) (1U height)
	Weight	11.02 lb (5 kg)
Memory and processor	1 GB SDRAM; Packet buffer size: 1.5 MB, 512 MB flash	
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	< 3 µs
	Throughput	up to 130.9 Mpps
	Routing/Switching capacity	176 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
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 dissipation	122/184 BTU/hr (128.71/194.12 kJ/hr)
	Voltage	100 - 240 VAC, rated -48 to -60 VDC (depending on power supply chosen)
	Notes	Power ratings for AC power indicated above. Current used is 5A Max when DC Power used. When supplemented with the use of an HPE RPS1600 Redundant Power System, up to 54 W of DC power can be supplied. DC input voltage range is -48 to -60 VDC. Total DC input power is 36 W typical and 54 W maximum. DC input voltage range is -48 VDC to -60 VDC. DC input source is the HPE 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	

Technical Specifications

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 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.	

HP 5130-24G-PoE+-2SFP+-2XGT (370W) EI Switch (JG940A)

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 2 SFP+ fixed 1000/10000 SFP+ ports 2 RJ-45 1/10GBASE-T ports	
Additional ports and slots	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 16.54(d) x 1.72(h) in (44 x 36 x 4.37 cm) (1U height)
	Weight	13.23 lb (6 kg)
Memory and processor	1 GB SDRAM; Packet buffer size: 1.5 MB, 512 MB flash	
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	< 3 µs
	Throughput	up to 96 Mpps
	Routing/Switching capacity	128 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
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: 37.3 dB, High-speed fan: 47.1 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	105/1450 BTU/hr (159.3/1529.75 kJ/hr), for AC power. For DC Power 68 BTU/hr and max heat dissipation is 2627.3 BTU/hr
	Voltage	100 - 240 VAC, rated (depending on power supply chosen)

Technical Specifications

	PoE power	370 W PoE+
	Notes	PoE Power is the power supplied by the internal power supply. When supplemented with the use of an HPE 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 31W typical, and 425W max(including 370W PoE+ consumption). DC Input voltage range is -54 to -57VDC. Total DC input power is 20W Typical and 770W with 740W PoE+ Power consumption. DC Input Source is the HPE 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 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.	

HP 5130-48G-PoE+-2SFP+-2XGT (370W) EI Switch (JG941A)

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 2 SFP+ fixed 1000/10000 SFP+ ports 2 RJ-45 1/10GBASE-T ports	
Additional ports and slots	1 RJ-45 serial console port	
Physical characteristics	**Dimensions**	17.32(w) x 16.54(d) x 1.72(h) in (44 x 42 x 4.37 cm) (1U height)
	Weight	15.43 lb (7 kg)
Memory and processor	1 GB SDRAM; Packet buffer size: 3 MB, 512 MB flash	
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	< 3 µs
	Throughput	up to 130.9 Mpps
	Routing/Switching capacity	176 Gbps
	Routing table size	512 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16384 entries
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: 47.3 dB, High-speed fan: 50 dB; ISO 7779
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	147/1603 BTU/hr (155.08/1691.17 kJ/hr), for AC power. For DC power min heat dissipation is 102 BTU/hr and max heat dissipation is 3105 BTU/hr
	Voltage	100 - 240 VAC, rated -54 to -57 VDC (depending on power supply chosen)
	PoE power	370 W PoE+
	Notes	PoE Power is the power supplied by the internal power supply. When supplemented with the use of an HPE 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 43W typical, and 470W max(including 370W PoE+ consumption. DC Input voltage range is -54 to -57VDC. Total DC input power is 30W typical and 910W with 800W PoE+ Power consumption. DC Input Source is the HPE 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 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)

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

IP multicast

RFC 1112 IGMPv1
RFC 3376 IGMPv3

IPv6

RFC 1981 IPv6 Path MTU Discovery
RFC 2460 IPv6 Specification
RFC 2461 IPv6 Neighbor Discovery

Technical Specifications

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 802.1ak Multiple Registration Protocol (MRP) and Multiple VLAN Registration Protocol (MVRP)
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
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 802.3at Power over Ethernet Plus
IEEE 802.3az Energy Efficient 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 855 Telnet Option Specification
RFC 894 IP over Ethernet
RFC 950 Internet Standard Subnetting Procedure
RFC 951 BOOTP
RFC 1027 Proxy ARP
RFC 1042 IP Datagrams
RFC 1071 Computing the Internet Checksum
RFC 1123 Requirements for Internet Hosts
RFC 1213 Management Information Base for Network Management of TCP/IP-based internets
RFC 1256 ICMP Router Discovery Protocol (IRDP)
RFC 2463 ICMPv6
RFC 2464 Transmission of IPv6 over Ethernet Networks
RFC 3162 RADIUS and IPv6
RFC 3306 Unicast-Prefix-based IPv6 Multicast Addresses
RFC 3315 DHCPv6 (client and relay)
RFC 3484 Default Address Selection for IPv6
RFC 3736 Stateless Dynamic Host Configuration Protocol (DHCP) Service for IPv6
RFC 4291 IP Version 6 Addressing Architecture
RFC 4293 MIB for IP
RFC 4443 ICMPv6
RFC 4861 IPv6 Neighbor Discovery
RFC 4862 IPv6 Stateless Address Auto-configuration

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 2579 Textual Conventions for SMIv2
RFC 2580 Conformance Statements for SMIv2

Technical Specifications

RFC 1305 NTPv3
RFC 1350 TFTP Protocol (revision 2)
RFC 1519 CIDR
RFC 1533 DHCP Options and BOOTP Vendor Extensions
RFC 1591 DNS (client only)
RFC 1812 IPv4 Routing
RFC 1866 Hypertext Markup Language - 2.0
RFC 2131 DHCP
RFC 2236 IGMP Snooping
RFC 2462 IPv6 Stateless Address Autoconfiguration
RFC 2474 Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers
RFC 2597 Assured Forwarding PHB Group
RFC 2616 HTTP Compatibility v1.1
RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types
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 3246 Expedited Forwarding PHB
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 3416 Protocol Operations for SNMP
RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
RFC 3576 Ext to RADIUS (CoA only)
RFC 3587 IPv6 Global Unicast Address Format
RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
RFC 4030 Authentication Suboption for DHCP Relay Agent
RFC 4213 Basic IPv6 Transition Mechanisms
RFC 4291 IP Version 6 Addressing Architecture
RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
RFC 4575 A Session Initiation Protocol (SIP) Event Package for Conference State
RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
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

QoS/CoS

RFC 2474 DS Field in the IPv4 and IPv6 Headers
RFC 3260 New Terminology and Clarifications for DiffServ

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

802.1r - GARP Proprietary Attribute Registration Protocol (GPRP)

Accessories

HPE 5130 EI Switch Series accessories

Transceivers

HP X110 100M SFP LC LH40 Transceiver	JD090A
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
HP X110 100M SFP LC LH80 Transceiver	JD091A
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
HP X115 100M SFP LC FX Transceiver	JD102B
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
HP X110 100M SFP LC LX Transceiver	JD120B
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
HP X115 100M SFP LC BX 10-U Transceiver	JD100A
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
HP X115 100M SFP LC BX 10-D Transceiver	JD101A
NOTE: Supported only on the HPE 5130-24G-SFP-4SFP+ EI Switch (JG933A), and only when used in the 1G downlink configuration	
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

Accessories

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

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

HP 5130-48G-2SFP+-2XGT EI Switch (JG939A)

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

HP 5130-24G-PoE+-2SFP+-2XGT (370W) EI Switch (JG940A)

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+-2SFP+-2XGT (370W) EI Switch (JG941A)

HP RPS1600 Redundant Power System	JG136A

Accessories

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:
08-Jan-2016	From Version 10 to 11	Changed	Technical Specifications and Accessories updated
01-Dec-2015	From Version 9 to 10	Changed	Overview and Technical Specifications updated
16-Oct-2015	From Version 8 to 9	Changed	Minor changes made on Technical Specifications
17-Aug-2015	From Version 7 to 8	Added	New models added: • JG938A • JG939A • JG940A • JG941A
		Changed	Updated Features and Benefits, Configuration and Technical Specifications
11-Jul-2015	From Version 6 to 7	Changed	Minor changes on Overview and Standard Protocols
10-Jul-2015	From Version 5 to 6	Changed	Error fixed on Features and benefits
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

Sign up for updates

★ Rate this document

© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

To learn more, visit: http://www.hpe.com/networking

c04394228 - 15058 - Worldwide - V11 - 08-January -2016

Hewlett Packard Enterprise