QuickSpecs

HPE 3600 SI Switch Series

Overview

HPE 3600 SI Switch Series



Models

HPE FlexNetwork 3600 24 v2 SI Switch	JG304B
HPE FlexNetwork 3600 48 v2 SI Switch	JG305B
HPE FlexNetwork 3600 24 PoE+ v2 SI Switch	JG306C
HPE FlexNetwork 3600 48 PoE+ v2 SI Switch	JG307C

Key features

- Robust switching at the enterprise network edge
- Static and routing information protocol (RIP) L3 routing
- Automatic stacking with Intelligent Resilient Fabric (IRF)
- Integrated and distributed security enforcement
- Enterprise-level non-blocking performance

Product overview

The HPE 3600 SI Switch Series delivers intelligent, resilient performance while providing security and reliability for robust switching at the enterprise network edge. The series consists of Fast Ethernet and PoE/PoE+ switches, with features that can accommodate large enterprise and SMB applications. The switches deliver secure, resilient connectivity as well as the latest traffic-prioritization technologies to enhance converged networks. And they are designed for improved flexibility and scalability.

Features and benefits

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



Overview

priority level and rate limit to selected traffic on a per-port or per-VLAN basis

Powerful QoS feature

supports the following congestion actions: strict priority (SP) queuing, weighted round robin (WRR), weighted fair queuing (WFQ), and WRED

Traffic policing

supports Committed Access Rate (CAR) and line rate

Management

• Friendly port names

allows assignment of descriptive names to ports

• Remote configuration and management

enables configuration and management through a secure Web browser or a CLI located on a remote device

• Manager and operator privilege levels

provides read-only (operator) and read/write (manager) access on CLI and Web browser management interfaces

Command authorization

leverages 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

• Local and remote intelligent mirroring

mirrors traffic from a switch port to a remote switch port anywhere on the network; or mirrors traffic selected by an access control list(ACL) to a local switch port

• Management VLAN

segments traffic to and from management interfaces, including CLI/Telnet, a Web browser interface, and SNMP

• 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

Device link detection protocol

monitors the cable between two switches and shuts down the ports on both ends if the cable is broken, helping prevent network problems such as loops

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

• IPv6 management

future-proofs networking, as 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, dynamic host configuration protocol (DHCP) v6, and RADIUS for IPv6

Troubleshooting

Overview

enables network problem solving, using ingress and egress port monitoring; provides visibility into cable problems, using virtual cable tests

Connectivity

• IPv6

Telnet

for allowing CLI access via IPv6

– SNMP

for IPv6 switch management

– DNS

for IPv6 host management

– DHCP

for auto IPv6 address configuration of a switch

Auto-MDIX

provides automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports

Jumbo packet support

supports up to 9216-byte frame size to improve the performance of large data transfers

Gigabit Ethernet uplinks

are dual-personality ports for either 10/100/1000 or mini-GBIC SFP connectivity for increased connectivity flexibility

• High-density access

provides up to 48 fixed 10/100BASE-T PoE or non-PoE ports in an L2 or L3 switch

• Ethernet operations, administration and maintenance (OAM)

detects data link layer problems that occurred in the "last mile" using the IEEE 802.3ah OAM standard; monitors the status of the link between two devices

IEEE 802.3af Power over Ethernet (PoE)

provides up to 15.4 W per port to IEEE 802.3af-compliant PoE-powered devices such as IP phones, wireless access points, and security cameras

• IEEE 802.3at Power over Ethernet (PoE+)

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

Performance

Nonblocking performance

enables wire-speed switching with up to 13.1 million pps throughput, using up to 17.6 Gb/s non-blocking switching fabric

Gigabit Ethernet interface

provides a connection to the network that eliminates the network as a bottleneck

• Hardware-based wirespeed access control lists

feature-rich ACL implementation helps ensure high levels of security and ease of administration without impacting network performance

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

Overview

Smart link

allows 50 ms failover between links

• Spanning Tree/MSTP, RSTP

provides redundant links while preventing network loops

• 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

IEEE 802.3ad LACP

supports up to 24 trunks, each with 8 links per trunk; and provides support for static or dynamic groups

• Virtual Router Redundancy Protocol (VRRP)

allows groups of two routers to dynamically back each other up to create highly available routed environments in IPv4 and IPv6 networks

IRF capability

provides single IP address management for a resilient virtual switching fabric of up to nine switches

• Ring Resiliency Protection Protocol (RRPP)

provides standard sub 50 ms recovery for ring Ethernet-based topology

Manageability

RMON (remote monitoring)

provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events

Layer 2 switching

• 16/32K MAC address table

provides access to many L2 devices

VLAN support and tagging

supports IEEE 802.1Q with 4,094 simultaneous VLAN IDs

• GARP VLAN Registration Protocol

allows automatic learning and dynamic assignment of VLANs

• 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

Gigabit Ethernet port aggregation

allows grouping of ports to increase overall data throughput to a remote device

• Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping controls and manages the flooding of multicast packets in a Layer 2 network

Layer 3 services

Address Resolution Protocol (ARP)

determines the MAC address of another IP host in the same subnet

• Dynamic Host Configuration Protocol (DHCP)

simplifies the management of large IP networks and supports client and server; DHCP Relay enables DHCP operation across subnets

Loopback interface address

defines an address in Routing Information Protocol (RIP) and Open Standard Path First (OSPF), improving diagnostic

Overview

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

IPv4 routing protocols

support static routes and RIP

IPv6 routing protocols

provide routing of IPv6 at wire speeds; and support static routes and RIPng

IPv6 tunneling

allows a smooth transition from IPv4 to IPv6 by encapsulating IPv6 traffic over an existing IPv4 infrastructure

Equal-Cost Multipath (ECMP)

enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth

Bidirectional forwarding detection

enables link connectivity monitoring and reduces network convergence time for the VRRP, static routing, and IRF

Security

ACL enablement

provides IP L2 to L4 traffic filtering; and supports VLAN ACL and port ACL

• Multiple user authentication methods

- IEEE 802.1X

uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards

Web-based authentication

provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support the IEEE 802.1X supplicant

MAC-based authentication

authenticates the client 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 the day—allowing multiple types of users on the same network to access specific network services without risking network security or allowing unauthorized access to sensitive data

Automatic VLAN assignment

assigns users automatically 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

• Endpoint Admission Defense (EAD)

Overview

provides security policies to users accessing a network

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

• Dynamic ARP protection

blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data

• IP Source Guard

filters packets on a per-port basis, which prevents illegal packets from being forwarded

RADIUS/HWTACACS

eases switch management security administration by using a password authentication server

Multiple customer edge

facilitates MPLS VPN network integration with support for up to 63 VPNs

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

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 and data-driven IGMP

automatically prevent flooding of IP multicast traffic

Multicast VLAN

allows multiple VLANs to receive the same multicast traffic, reducing network bandwidth demand by mitigating multiple streams to each VLAN

Device support

Cisco prestandard PoE support

detects and provides power to Cisco's prestandard PoE devices such as wireless LAN access points and IP phones

Additional information

• Green initiative support

provides support for RoHS and WEEE regulations

Green IT and power

Overview

uses the latest advances in silicon development and shuts off unused ports to improve power efficiency

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.

 HPE FlexNetwork 3600 24 v2 SI Switch 24 RJ-45 autosensing 10/100 ports 2 SFP dual-personality 10/100/1000 ports 2 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	JG304B See Configuration NOTE: 1, 4, 5, 6
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG304B#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG304B#B2C
High Volt Switch/Router to Wall Power CordNEMA L6-20P Cord (NA/MEX/JP/TW)	JG304B#B2E
 HPE FlexNetwork 3600 48 v2 SI Switch 48 RJ-45 autosensing 10/100 ports 2 SFP dual-personality 10/100/1000 ports 2 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	JG305B See Configuration NOTE: 1, 4, 5, 6
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG305B#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG305B#B2C
High Volt Switch/Router to Wall Power CordNEMA L6-20P Cord (NA/MEX/JP/TW)	JG305B#B2E
HPE FlexNetwork 3600 24 PoE+ v2 SI Switch • 24 RJ-45 autosensing 10/100 PoE+ ports • 2 SFP dual-personality 10/100/1000 ports • 2 SFP 1000 Mbps ports • min=0 \ max=4 SFP Transceivers • 1U - Height	JG306C See Configuration NOTE: 1, 4, 5, 6

Configuration

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW JG306C#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch/Router to Wall Power Cord JG306C#B2E

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

HPE FlexNetwork 3600 48 PoE+ v2 SI Switch JG307C

• 48 RJ-45 autosensing 10/100 PoE+ ports See

2 SFP dual-personality 10/100/1000 ports
 2 SFP 1000 Mbps ports
 Configuration
 NOTE:1, 4, 5, 6

min=0 \ max=4 SFP Transceivers

1U - Height

PDU Cable NA/MEX/TW/JP JG307C#B2B

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

PDU Cable ROW JG307C#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch/Router to Wall Power Cord

JG307C#B2E

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

Configuration Rules:

Note 1 The following Transceivers install into this switch:

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

Note 4 When Switches are Not Factory Racked, Then Switch to Wall Power Cord should be the

Defaulted Power Cable option on the Switches.

Note 5 Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) or

#B2E. (See Localization Menu)

Note 6 #B2E is Offered only in NA, Mexico, Taiwan and Japan.

Remarks:

Configuration

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

 HPE FlexNetwork 3600 24 v2 SI Switch 24 RJ-45 autosensing 10/100 ports 2 SFP dual-personality 10/100/1000 ports 2 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	JG304B See Configuration NOTE: 1, 3, 4, 5
PDU Cable NA/MEX/TW/JP	JG304B#B2B
C15 PDU Jumper Cord (NA/MEX/TW/JP)	
PDU Cable ROW	JG304B#B2C
C15 PDU Jumper Cord (ROW)	
HPE FlexNetwork 3600 48 v2 SI Switch 48 RJ-45 autosensing 10/100 ports	JG305B See
 2 SFP dual-personality 10/100/1000 ports 2 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	Configuration NOTE: 1, 3, 4, 5
PDU Cable NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	JG305B#B2B
PDU Cable ROW	JG305B#B2C
C15 PDU Jumper Cord (ROW)	
 HPE FlexNetwork 3600 24 PoE+ v2 SI Switch 24 RJ-45 autosensing 10/100 PoE+ ports 2 SFP dual-personality 10/100/1000 ports 2 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	JG306C See Configuration NOTE: 1, 3, 4, 5

Configuration

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

PDU Cable ROW JG306C#B2C

C15 PDU Jumper Cord (ROW)

HPE FlexNetwork 3600 48 PoE+ v2 SI Switch JG307C

48 RJ-45 autosensing 10/100 PoE+ ports See

2 SFP dual-personality 10/100/1000 ports Configuration **NOTE:**1, 3, 4, 5

2 SFP 1000 Mbps ports

min=0 \ max=4 SFP Transceivers

1U - Height

PDU Cable NA/MEX/TW/JP JG307C#B2B

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

PDU Cable ROW JG307C#B2C

C15 PDU Jumper Cord (ROW)

Configuration Rules:

Note 1	The following	Transceivers	install into	this switch.
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HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X125 1G SFP LC LH70 Transceiver	JD063B
HPE X120 1G SFP RJ45 T Transceiver	JD089B
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B

Note 3 When Switches are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power

Cable option on the Switches.

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

(See Localization Menu)

If the CTO Switch Chassis needs to be racked, Then the CTO Base Model needs to integrate Note 5

(with #0D1) to the HPE Network 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)

Configuration

Transceivers

SFP Transceivers

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

Internal Power Supplies

Power Supplies included

Cables

Multi-Mode 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

Switch Enclosure Options

Stacking Cable kit

HPE FlexNetwork 3600 Switch SFP Stacking Kit

JD324B

External Redundant Power Supplies

HPE RPS 800 Redundant Power Supply

JD183A

Configuration

• Height = 1U See

• includes 1 x c13, 800w Configuration

NOTE:2

HPE RPS1600 Redundant Power System

JG136A See

• Height = 1U

Configuration

• includes 1 x c13, 1600w and Power Supply port

NOTE:2

HPE RPS1600 1600W AC Power Supply

JG137A See

• Installs into JG136A only

Configuration

NOTE:1

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.

Options for External/Redundant Power Supplies

HPE X290 1000 A JD5 2m RPS Cable

JD187A

Technical Specifications

HPE FlexNetwork 3600 24 v2 SI Switch (JG304B)

Ports 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX):

Media Type: Auto-MDIX; Duplex: half or full

2 SFP dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T)

2 SFP 1000 Mbps ports

Additional ports and

1 RJ-45 serial console port

slots

Physical characteristics Dimensions 17.32(w) x 10.24(d) x 1.72(h) in (43.99 x 26.01 x 4.37 cm) (1U height)

Weight 11.02 lb (5 kg)

Memory and processor 256 MB SDRAM, 128 MB flash; Packet buffer size: 2 MB

Mounting and enclosure Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)

1000 Mb Latency $< 5 \mu s$

Throughput up to 9.5 Mpps **Routing/Switching** 12.8 Gbps

capacity

Switch fabric speed 27.5 Gbps

Routing table size 2048 entries (IPv4)

Environment Operating temperature 32°F to 122°F (0°C to 50°C)

Operating relative

humidity

Nonoperating/Storage

temperature

-40°F to 158°F (-40°C to 70°C)

5% to 95%, noncondensing

Nonoperating/Storage

relative humidity

5% to 95%, noncondensing

Acoustic Low-speed fan: 39.5 dB, High-speed fan: 48.4 dB

Electrical characteristics Frequency 50/60 Hz

Maximum heat 89 BTU/hr (93.9 kJ/hr)

dissipation

Voltage 100 - 240 VAC, rated

Maximum power rating 26 W

Notes Maximum power rating and maximum heat dissipation are the worst-case

theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and

all modules populated.

Safety UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2;

IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J: ROHS

Compliance

Emissions FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4

Technical Specifications

2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A

Management

IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager

Services

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

HPE FlexNetwork 3600 48 v2 SI Switch (JG305B)

Ports 48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);

Media Type: Auto-MDIX; Duplex: half or full

2 SFP dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T)

2 SFP 1000 Mbps 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 (43.99 x 26.01 x 4.37 cm) (1U height)

> Weight 8.82 lb (4 kg)

Memory and processor

256 MB SDRAM, 128 MB flash; Packet buffer size: 4 MB

Mounting and enclosure

Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)

Performance 100 Mb Latency < 6 µs

> 1000 Mb Latency < 5 us

Throughput up to 13.1 Mpps (64-byte packets)

Routing/Switching

capacity

17.6 Gbps

Switch fabric speed 55 Gbps

Routing table size 2048 entries (IPv4)

Environment Operating temperature

32°F to 122°F (0°C to 50°C)

Operating relative

humidity

5% to 95%, noncondensing

Nonoperating/Storage

temperature

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage

relative humidity

5% to 95%, noncondensing

Electrical characteristics Frequency

Acoustic

50/60 Hz

Maximum heat

140 BTU/hr (147.7 kJ/hr)

dissipation

Voltage

100 - 240 VAC, rated

Maximum power rating 41 W

Notes Maximum power rating and maximum heat dissipation are the worst-case

Low-speed fan: 43.2 dB, High-speed fan: 50 dB

theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and

Technical Specifications

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; EN 60950-1/A11; FDA 21 CFR Subchapter J: ROHS

Compliance

Emissions FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4

2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A

Management IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager

Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for

details on the service-level descriptions and product numbers. For details about services and response

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

HPE FlexNetwork 3600 24 PoE+ v2 SI Switch (JG306C)

Ports 24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full

2 SFP dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T)

2 SFP 1000 Mbps 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 (44.0 x 42.0 x 4.36 cm) (1U height)

Weight 22.05 lb (10 kg)

Memory and processor 256 MB SDRAM, 128 MB flash; Packet buffer size: 2 MB

Mounting and enclosure Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)

1000 Mb Latency $< 5 \mu s$

Throughput up to 9.5 Mpps (64-byte packets)

12.8 Gbps

Routing/Switching

capacity

Switch fabric speed 27.5 Gbps

Routing table size 2048 entries (IPv4)

Environment Operating temperature 32°F to 122°F (0°C to 50°C)

Operating relative

humidity

5% to 95%, noncondensing

Nonoperating/Storage

temperature

relative humidity

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage

Nonoperanng/Siorag

5% to 95%, noncondensing

Acoustic Low-speed fan: 44.7 dB, High-speed fan: 53.8 dB

Electrical characteristics Frequency 50/60 Hz

Maximum heat 143 BTU/hr (150.86 kJ/hr)

dissipation

Technical Specifications

Voltage 100 - 240 VAC, rated

Maximum power rating 795 W

PoE power 720 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. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).

With AC input, the maximum power consumption is 460 W; PoE/PoE+ is 370 W. With DC input, the maximum power consumption is 795 W;

PoE/PoE+ is 720 W.

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; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS

Compliance

Emissions FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4

2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN

61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A

Management IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager

Services Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for

details on the service-level descriptions and product numbers. For details about services and response

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

HPE FlexNetwork 3600 48 PoE+ v2 SI Switch (JG307C)

Ports 48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3at PoE+); Duplex: half or full

2 SFP dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T)

2 SFP 1000 Mbps 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 (43.99 x 42.01 x 4.37 cm) (1U height)

Weight 22.05 lb (10 kg)

Memory and processor 256 MB SDRAM, 128 MB flash; Packet buffer size: 4 MB

Mounting and enclosure Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)

Performance 100 Mb Latency < 6 µs

1000 Mb Latency $< 5 \mu s$

Throughput up to 13.1 Mpps (64-byte packets)

Routing/Switching 17.6 Gbps

capacity

Switch fabric speed 55 Gbps

Routing table size 2048 entries (IPv4)

Technical Specifications

Environment Operating temperature $32^{\circ}F$ to $122^{\circ}F$ ($0^{\circ}C$ to $50^{\circ}C$)

Operating relative

5% to 95%, noncondensing

humidity

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: 43.5 dB, High-speed fan: 55 dB

Electrical characteristics 50/60 Hz Frequency

> **Maximum heat** dissipation

198 BTU/hr (208.89 kJ/hr)

Voltage 100 - 240 VAC, rated

Maximum power rating 820 W

PoE power 720 W PoE+

Maximum power rating and maximum heat dissipation are the worst-case **Notes**

> theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and

all modules populated.

PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).

With AC input, the maximum power consumption is 440 W; PoE/PoE+ is 320 W. With DC input, the maximum power consumption is 820 W;

PoE/PoE+ is 720 W.

UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; Safety

IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS

Compliance

Emissions FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4

> 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN

61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A

IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager **Management**

Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for **Services**

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 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II

RFC 2573 (SNMPv3 Applications)

RFC 2578-2580 SMIv2

RFC 2819 (RMON groups Alarm, Event, History and Statistics only)

RFC 3410 (Management Framework) RFC 3416 (SNMP Protocol Operations v2)

Technical Specifications

RFC 3417 (SNMP Transport Mappings)

HTML and telnet management Multiple Configuration Files

SNMP v3 and RMON RFC support

SSHv1/SSHv2 Secure Shell

General protocols

IEEE 802.1ad Q-in-Q

IEEE 802.1D MAC Bridges

IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s (MSTP)

IEEE 802.1v VLAN classification by Protocol and Port

IEEE 802.1w Rapid Reconfiguration of Spanning Tree

IEEE 802.1X PAE

IEEE 802.3 Type 10BASE-T

IEEE 802.3ab 1000BASE-T

IEEE 802.3ac (VLAN Tagging Extension)

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3af Power over Ethernet

IEEE 802.3at Power over Ethernet Plus

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 1058 RIPv1

RFC 1213 Management Information Base for Network Management of TCP/IP-based internets

RFC 1812 IPv4 Routing

RFC 2131 DHCP

RFC 2236 IGMP Snooping

RFC 2338 VRRP

RFC 2453 RIPv2

RFC 2474 Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers

RFC 2644 Directed Broadcast Control

RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types

RFC 2711 IPv6 Router Alert Option

RFC 3410 Applicability Statements for SNMP

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 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)

RFC 4594 Configuration Guidelines for DiffServ Service Classes

Technical Specifications

IPv6 RFC 1881 IPv6 Address Allocation Management

RFC 1887 IPv6 Unicast Address Allocation Architecture

RFC 1981 IPv6 Path MTU Discovery

RFC 2080 RIPng for IPv6

RFC 2373 IPv6 Addressing Architecture

RFC 2375 IPv6 Multicast Address Assignments

RFC 2460 IPv6 Specification

RFC 2461 IPv6 Neighbor Discovery

RFC 2462 IPv6 Stateless Address Auto-configuration

RFC 2463 ICMPv6

RFC 2464 Transmission of IPv6 over Ethernet Networks

RFC 2475 IPv6 DiffServ Architecture

RFC 2711 IPv6 Router Alert Option

RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers

RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping

only)

RFC 2925 Remote Operations MIB (Ping only)

RFC 3056 Connection of IPv6 Domains via IPv4 Clouds

RFC 3162 RADIUS and IPv6

RFC 3306 Unicast-Prefix-based IPv6 Multicast Addresses

RFC 3307 IPv6 Multicast Address Allocation

RFC 3315 DHCPv6 (client and relay)

RFC 3484 Default Address Selection for IPv6

RFC 3493 Basic Socket Interface Extensions for IPv6

RFC 3513 IPv6 Addressing Architecture

RFC 3542 Advanced Sockets API for IPv6

RFC 3587 IPv6 Global Unicast Address Format

RFC 3596 DNS Extension for IPv6

RFC 4113 MIB for UDP

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

RFC 5095 Deprecation of Type 0 Routing Headers in IPv6

MIBs RFC 1213 MIB II

RFC 1493 Bridge MIB

RFC 1724 RIPv2 MIB

RFC 1757 Remote Network Monitoring MIB

RFC 1907 SNMPv2 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

Technical Specifications

RFC 2665 Ethernet-Like-MIB

RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

RFC 2819 RMON MIB

RFC 3414 SNMP-User based-SM MIB RFC 3415 SNMP-View based-ACM MIB

Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

RFC 1157 SNMPv1

RFC 1757 RMON 4 groups: Stats, History, Alarms and Events

RFC 1901 SNMPv2 Introduction

RFC 1902 Structure of Management Information for Version 2 of the Simple Network Management

Protocol (SNMPv2)

RFC 1903 SNMPv2 Textual Conventions

RFC 1904 SNMPv2 Conformance

RFC 1905 SNMPv2 Protocol Operations

RFC 1906 SNMPv2 Transport Mappings

RFC 2570 SNMPv3 Overview

RFC 2571 An Architecture for Describing SNMP Management Frameworks

RFC 2572 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)

RFC 2573 SNMP Applications

RFC 2574 SNMPv3 User-based Security Model (USM)

RFC 2575 SNMPv3 View-based Access Control Model (VACM)

RFC 2578 Structure of Management Information Version 2 (SMIv2)

RFC 2579 Textual Conventions for SMIv2

REC 2580 Conformance Statements for SMIv2

RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)

RFC 3410 Introduction to Version 3 of the Internet-standard Network Management Framework

RFC 3414 SNMPv3 User-based Security Model (USM)

RFC 3415 SNMPv3 View-based Access Control Model VACM)

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

SNMPv1/v2c/v3

QoS/CoS

RFC 4594 Configuration Guidelines for DiffServ Service Classes

Accessories

HPE 3600 SI Switch Series accessories

Transceivers	
HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X125 1G SFP LC LH70 Transceiver	JD063B
HPE X120 1G SFP RJ45 T Transceiver	JD089B
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
Cables	
HPE FlexNetwork 3600 Switch SFP Stacking Kit	JD324B
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
Power Supply	
HPE RPS1600 Redundant Power System	JG136A
HPE RPS1600 1600W AC Power Supply	JG137A
Power cords	
LIDE VOCA 1000 A IDE 0 - DDC 0 LL	

HPE X290 1000 A JD5 2m RPS Cable

JD187A

Accessory Product Details

NOTE: Details are not av	ailable for all accessories.	The following specification	ns were available at the time of publication.		
HPE X125 1G SFP LC	Ports	1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)			
LH40 1310nm	Connectivity	Connector type	LC		
Transceiver (JD061A)		Wavelength	1310 nm		
A small form-factor	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)		
pluggable SFP Gigabit		Full configuration weight	0.04 lb. (0.02 kg)		
LH40 transceiver that	Electrical characteristics	Power consumption typical 0.8 W			
provides a full duplex Gigabit solution up to		Power consumption	1.0 W		
40km on a single-mode		maximum			
fiber.	Cabling	Cable type:			
noci.	_	Single-mode fiber optic, co	omplying with ITU-T G.652;		
		Maximum distance:			
		• 40km distance			
		Fiber type	Single Mode		
	Services	Refer to the Hewlett Packa	ard Enterprise website at		
		http://www.hpe.com/networking/services for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office			
HPE X120 1G SFP LC	Ports	1 LC 1000BASE-LH port (C 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)		
LH40 1550nm	Connectivity	Connector type	LC		
Transceiver (JD062A)	,	Wavelength	1550 nm		
A small form-factor	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)		
pluggable (SFP) Gigabit		Full configuration weight	0.04 lb. (0.02 kg)		
LH40 transceiver that	Flootrical characteristics	Full configuration weight	· ·		
provides a full-duplex	Electrical characteristics	Power consumption typica			
Gigabit solution up to 40 km on a single mode fiber		Power consumption maximum	1.0 W		
	Cabling	Cable type:			
	Cabining	Single-mode fiber optic, complying with ITU-T G.652;			
		Maximum distance:			
		40km distance			

Fiber type

Services

Refer to the Hewlett Packard Enterprise website at

Single Mode

http://www.hpe.com/networking/services for details on the service-

Accessory Product Details

level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

response times in your area, please contact your local Hewlett Packard

HPE X125 1G SFP LC LH70 Transceiver (JD063B)	Ports Connectivity	1 LC 1000BASE-LH port (r Connector type Wavelength	no IEEE standard exists for 1550 nm optics) LC 1550 nm
A small form-factor pluggable (SFP) Gigabit	Physical characteristics	_	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
LH70 transceiver that provides a full-duplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 70km on a single-mode	Electrical characteristics	Power consumption typical	0.8 W
fiber.		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, co	mplying with ITU-T G.652;
		Maximum distance: • 70km	
		Fiber type	Single Mode
	Services	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	

HPE X120 1G	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)		
SFP RJ45 T	Connectivity	Connector type	RJ-45	
Transceiver	Physical	Dimensions	2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)	
(JD089B)	characteristics	Full configuration weight	0.07 lb. (0.03 kg)	
A small form	Electrical	Power consumption typical	0.8 W	
factor pluggable	characteristics	Power consumption maximum	1.0 W	
(SFP) Gigabit 1000Base-T transceiver that provides a full duplex Gigabit	Cabling	9 ,	tter recommended), 100 Ù differential 4-pair unshielded ted pair (STP) balanced, complying with IEEE 802.3ab	
solution up to 100m on a Cat-		Maximum distance: • 100m		
5+ cable.	Services	Refer to the Hewlett Packard Enter	prise website at	
		•	g/services for details on the service-level descriptions bout services and response times in your area, please	

contact your local Hewlett Packard Enterprise sales office

Enterprise sales office

Accessory	Proc	luct l	Details
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(JD098B)

cable.

A small form-factor

that provides a full duplex

Gigabit solution up to

10km on a single mode

HPE X120 1G SFP LC BX Ports 1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-U);

10-U Transceiver Duplex: full only

Connectivity Connector type LC Physical characteristics Dimensions 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17

cm)

pluggable (SFP) Gigabit **Full configuration** 0.04 lb. (0.02 kg) LX-BX10-U transceiver

weight

Electrical characteristics Power consumption 0.8 W

typical

Power consumption 1.0 W

maximum

Maximum distance: Cabling

• 10km

Fiber type Single Mode

Notes TX 1310nm RX 1490nm

Services Refer to the Hewlett Packard Enterprise website at

> http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard

1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-D);

Enterprise sales office

HPE X120 1G SFP LC BX Ports

10-D Transceiver Duplex: full only

(JD099B) **Connectivity Connector type** LC

Physical characteristics **Dimensions** 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17

A small form-factor cm) pluggable (SFP) Gigabit Full configuration 0.04 lb. (0.02 kg)

LX-BX10-D transceiver weight that provides a full duplex

Electrical characteristics Power consumption 0.8 W Gigabit solution up to

typical 10km on a single mode

cable. **Power consumption** 1.0 W maximum

> **Cabling** Maximum distance:

• Up to 10km

Fiber type Single Mode

Notes TX 1490nm RX 1310nm

Services Refer to the Hewlett Packard Enterprise website at

> http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard

Enterprise sales office

HPE X120 1G SFP LC SX Ports 1 LC 1000BASE-SX port

> **Connectivity Connector type** LC

Accessory Product Details

Accessory Product	Delaiis			
Transceiver (JD118B)		Wavelength	850 nm	
A see all faces for a	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17	
A small form-factor pluggable (SFP) Gigabit			cm)	
SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber.	Electrical characteristics	Full configuration	0.04 lb. (0.02 kg)	
		weight	00111	
		typical	0.8 W	
		Power consumption	1.0 W	
		maximum		
	Cabling	Maximum distance: • FDDI Grade distance = 220m • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by standard		
		Cable length	up to 550m	
		Fiber type	Multi Mode	
	Services			
	Sei vices	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the		
		level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office		
HPE X120 1G SFP LC LX	Ports	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)		
Transceiver (JD119B)	Connectivity	Connector type	LC	
A small form factor		Wavelength	1300 nm	
A small form-factor pluggable (SFP) Gigabig LX transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
provides a full duplex		Full configuration	0.04 lb. (0.02 kg)	
Gigabit solution up to 550m on MMF or 10Km on SMF		weight		
	Electrical characteristics	Power consumption typical	0.8 W	
		Power consumption maximum	1.0 W	
	Cabling	Cable type:		
		Either single mode or mu	ultimode;	
		Maximum distance: • 550m for Multimode • 10km for Singlemode		
		Fiber type	Both	
	Services	Refer to the Hewlett Pac	kard Enterprise website at	
		http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and		

Enterprise sales office

response times in your area, please contact your local Hewlett Packard

Accessory Product Details

HP LC to LC Multi-mode Cabling OM3 2-Fiber 0.5m 1-**Pack Fiber Optic Cable**

(AJ833A)

Notes

Cable type:

 $50/125 \, \mu \text{m}$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical glass: Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical glass: Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the Hewlett Packard Enterprise website at

http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

HP LC to LC Multi-mode Cabling OM3 2-Fiber 1.0m 1-Pack **Fiber Optic Cable** (AJ834A)

 $50/125 \, \mu \text{m}$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

Maximum distance:

Cable type:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one

Notes

Accessory Product Details

end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0 um Cladding diameter: 125 ± 2.0 um Coating diameter: 245 ± 10 um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

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 LC to LC Multi-mode Cabling OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable (AJ835A)

Cable type:

 $50/125~\mu m$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m:

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um

Accessory Product Details

- multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the Hewlett Packard Enterprise website at

http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

HP LC to LC Multi-mode Cabling OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable (AJ836A)

Cable type:

 $50/125~\mu m$ core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Agua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.

Accessory Product Details

- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

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 LC to LC Multi-mode Cabling OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable (AJ837A)

Cable type:

 $50/125~\mu m$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the Hewlett Packard Enterprise website at

<u>http://www.hpe.com/networking/services</u> 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

Accessory Product Details

HP LC to LC Multi-mode Cabling OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable (AJ838A)

Notes

Cable type:

 $50/125~\mu m$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0 um Cladding diameter: 125 ± 2.0 um Coating diameter: 245 ± 10 um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Agua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

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 LC to LC Multi-mode Cabling OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable (AJ839A)

Cable type:

 $50/125~\mu m$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m:

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one

Notes

Accessory Product Details

end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0 um Cladding diameter: 125 ± 2.0 um Coating diameter: 245 ± 10 um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

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 Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 1m Cable (QK732A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- \bullet Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- \bullet Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

Refer to the Hewlett Packard Enterprise website at

Accessory Product Details

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 Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 2m Cable (QK733A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- \bullet Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

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 Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 5m Cable (QK734A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- \bullet Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- \bullet Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

Refer to the Hewlett Packard Enterprise website at

Accessory Product Details

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 Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 15m Cable (QK735A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- \bullet Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

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HP Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 30m Cable (QK736A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- \bullet Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

Refer to the Hewlett Packard Enterprise website at

Accessory Product Details

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 Premier Flex LC/LC Notes Multi-mode OM4 2 fiber 50m Cable (QK737A)

Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- \bullet Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
- Bandwidth: 3000 MHz-km @ 850nm (Laser)
- Jacket Color: Blue
- Jacket Material: Riser Grade Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color: White
- Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

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

HPE RPS1600 Redundant Power System (JG136A)

Ports 8 redundant power supply ports

Restrictions: two -56V/25A DC(PoE); six -56V/8A DC(non-PoE)

Physical characteristics Dimensions

Dimensions 15.63(d) x 17.32(w) x 1.74(h) in. (39.7 x 44 x 4.42

cm)

Weight 14.11 lb. (6.4 kg)

Full configuration 16.75 lb. (7.6 kg)

weight

Environment

Operating temperature

14°F to 122°F (-10°C to 50°C)

-40°F to 158°F (-40°C to 70°C)

Operating relative

5% to 95%

humidity

Nonoperating/Storage

temperature

Nonoperating/Storage

5% to 95%

relative humidity

Altitude up to 13,123 ft. (4 km)

Acoustic Pressure: 53 dB; ISO 7779, ISO 9296

Electrical characteristics Voltage 100-120/200-240 VAC

Accessory Product Details

Current	30/60 A
Idle power	38 W
Maximum power rating	3550 W
RPS power	3200 W
PoE power	2800 W
RPS	-55 V
PoE	-55 V
Frequency	50/60 Hz
	1.11

Notes Idle power is the actual power consumption of

the device with no ports connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if

equipped), 100% traffic, all ports plugged in, and

all modules populated.

With one RPS1600 Power Supply, the PRS1600 Redundant Power System can provide 1600W power output; With two PRS1600 Power Supplies, the output power is 3200W.

CE Labeled; UL 60950-1; IEC 60950-1; ICES-003; FCC Part 15, Subpart B; EU Safety

RoHS Compliant; EN 60950-1/A11; C-Tick; VCCI Class A; ROHS Compliance;

EN 300386

Services Refer to the Hewlett Packard Enterprise website at

> http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard

Enterprise sales office

HPE RPS1600 1600W AC Power Supply

(JG137A)

Physical characteristics Dimensions 8.19(d) x 4.96(w) x 1.63(h) in. (20.8 x 12.6 x 4.15

cm)

Weight 3.02 lb. (1.37 kg)

Environment Operating temperature 14°F to 122°F (-10°C to 50°C)

Operating relative

humidity

5% to 95%

-40°F to 158°F (-40°C to 70°C) Nonoperating/Storage

temperature

Nonoperating/Storage

relative humidity

5% to 95%

Electrical characteristics Voltage 100-120/200-240 VAC

> **Current** 15/30 A **Maximum power rating** 1600 W **Frequency** 50/60 Hz

Notes Maximum power rating and maximum heat

Accessory Product Details

dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

Services

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

Summary of Changes

Date	Version History	Action	Description of Change:
29-Apr-2016	From Version 18 to 19	Changed	SKU descriptions updated on all the document
01-Apr-2016	From Version 17 to 18	Changed	Technical Specifications updated
01-Dec-2015	From Version 16 to 17	Changed	Overview and Technical Specifications updated
20-Apr-2015	From Version 15 to 16	Changed	Models update from A to B/B to C
			Features and Benefits and Technical Specifications were updated
01-Dec-2014	From Version 14 to 15	Changed	Updated Warranty and support
21-Apr-2014	From Version 13 to 14	Changed	Standards and protocols were revised.
08-Apr-2014	From Version 12 to 13	Removed	Removed several items from the Transceivers section of Accessories.
16-Jan-2014	From Version 10 to 12	Changed	Build to Order, Rack Level Integration, and Transceivers were revised in Configuration.
10-Jun-2013	From Version 9 to 10	Added	OM4 cables were added.
04-Dec-2012	From Version 8 to 9	Changed	Changes were made to Models, Features and Benefits. The model specifications had minor updates, as did the Accessories section.
21-Sep-2012	From Version 6 to 8	Changed	One model was removed, Features and Benefits was updated, and the ports specifications for three of the remaining models was updated.
31-May-2012	From Version 5 to 6	Changed	The dimensions for two models were revised.
26-Mar-2012	From Version 4 to 5	Changed	The document was revised throughout, including adding some new models.
07-Nov-2011	From Version 3 to 4	Changed	The product name was updated throughout the document.
29-Sep-2011	From Version 2 to 3	Added	Accessory Product Details was added.
16-Mar-2011	From Version 1 to 2	Changed	Specifications were revised.

Summary of Changes





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

c04111590 - 13788 - Worldwide - V19 - 29-April-2016

