# QuickSpecs

## **Overview**

## **HPE OfficeConnect 1910 Switch Series**

## **Models**

HPE OfficeConnect 1910 24 Switch	JG538A
HPE OfficeConnect 1910 8 Switch	JG536A
HPE OfficeConnect 1910 48 Switch	JG540A
HPE OfficeConnect 1910 8 PoE+ Switch	JG537A
HPE OfficeConnect 1910 24 PoE+ Switch	JG539A

## **Key features**

- Customized operation using intuitive Web interface
- Layer 3 static routing with 32 network segments and expansion routes.
- Access control lists for granular security control
- Spanning Tree: STP, RSTP, and MSTP
- Limited Lifetime Warranty

## **Product overview**

HPE OfficeConnect 1910 Switch Series consists of advanced smart-managed fixed-configuration Fast Ethernet switches designed for small businesses in an easy-to-administer solution. By utilizing the latest design in silicon technology, this series is one of the most power efficient in the market. The series is part of the OfficeConnect portfolio of Hewlett Packard Enterprise small business networking products.

The series consists of five Fast Ethernet models. The 8- and 24- port models include two dual-personality SFP ports to support fiber connectivity. The 48 port model has 2 dedicated SFP ports plus two 10/100/1000 Ethernet ports. The 8- and 24-port Fast Ethernet models are available with or without PoE.

All models support rack mounting or desktop operation. Customizable features include basic Layer 2 features like VLANs and link aggregation, as well as advanced features such as Layer 3 static routing, IPv6, ACLs, and Spanning Tree Protocols. HPE OfficeConnect 1910 Switch Series includes a Limited Lifetime Warranty. This warranty provides advance hardware replacement with next business day shipment in most countries, limited 24x7 telephone support available from HPE for the first 90 days, and limited electronic and business hours telephone support is available from HPE for the entire warranty period.

## Features and benefits

## **Management**

## • Simple Web management

allows for easy management of the switch- even by nontechnical users- through an intuitive Web GUI; http and secure http (https) is supported

## • Single IP management

enables management of up to four HPE OfficeConnect 1910 devices devices using a single Web interface; simplifies management of multiple devices



#### Secure Web GUI

provides a secure, easy-to-use graphical interface for configuring the module via HTTPS

## SNMPv1, v2c, and v3

facilitates management of the switch, as the device can be discovered and monitored from an SNMP management station

## • Complete session logging

provides detailed information for problem identification and resolution

## • Dual flash images

provides independent primary and secondary operating system files for backup while upgrading

## Port mirroring

enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

## Management security

restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide Telnet and SNMP access; local and remote syslog capabilities allow logging of all access

#### Network Time Protocol (NTP)

synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time

## • 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

#### Limited CLI

enables users to quickly deploy and troubleshoot devices in the network

#### RMON

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

### • Default DHCP client mode

allows the switch to be directly connected to a network, enabling plug-and-play operation; in absence of DHCP server on the network, the switch will fallback to a unique static address determined by the MAC address of the switch

#### **Quality of Service (QoS)**

#### Broadcast control

allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

#### Rate limiting

sets per-port ingress enforced maximums and per-port, per-queue minimums

## Traffic prioritization

provides time-sensitive packets (like VoIP and video) with priority over other traffic based on DSCP or IEEE 802.1p classification; packets are mapped to four hardware queues for more effective throughput

## **Connectivity**

### IPv6

#### o IPv6 host

enables switches to be managed and deployed at the IPv6 network's edge

## IPv6 routing

supports IPv6 static routes

#### o MLD snooping

forwards IPv6 multicast traffic to the appropriate interface, preventing traffic flooding

#### IPv6 ACL/QoS

supports ACL and QoS for IPv6 network traffic

#### Auto-MDI/MDIX

adjusts automatically for straight-through or crossover cables on all 10/100/1000 ports

## • IEEE 802.3X flow control

provides a flow throttling mechanism propagated through the network to prevent packet loss at a congested node

## • IEEE 802.3af Power over Ethernet (PoE) ready

provides up to 15.4 W per port to power standards-compliant IP phones, wireless LAN access points, Web cameras, and more (all PoE models)

#### • IEEE 802.3at Power over Ethernet (PoE+)

provides up to 30 W per port which 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.

## Packet storm protection

protects against broadcast, multicast, or unicast storms with user-defined thresholds

## Cable diagnostics

detects cable issues remotely, using a browser-based tool

## Security

## Advanced access control lists (ACLs)

enables network traffic filtering and enhances network control using MAC- and IP-based ACLs; time-based ACLs allow for greater flexibility with managing network access

## Secure Sockets Layer (SSL)

encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch

#### • IEEE 802.1X and RADIUS network logins

controls port-based access for authentication and accountability

#### Automatic VLAN assignment

assigns users automatically to the appropriate VLAN based on their identity, location and time of day

#### 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 mistake

### Automatic denial-of-service protection

monitors for malicious attacks and protects the network by blocking the attacks

## Management password

provides security so that only authorized access to the Web browser interface is allowed

#### **Performance**

## • Half-/full-duplex auto-negotiating capability on every port

doubles the throughput of every port

## Selectable queue configurations

allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications

## IGMP snooping

improves network performance through multicast filtering, instead of flooding traffic to all ports

#### Fiber uplink

provides greater distance connectivity using Gigabit fiber uplinks

## Layer 2 switching

## • VLAN support and tagging

supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously

## • Spanning Tree Protocol (STP)

supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

## BPDU filtering

drops BPDU packets when STP is enabled globally but disabled on a specific port

## • Jumbo frame support

supports up to 10 kilobyte frame size to improve the performance of large data transfers

## 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

## DHCP relay

simplifies management of DHCP addresses in networks with multiple subnets

### Layer 3 routing

## Static IPv4/IPv6 routing

provides basic routing (supporting up to 32 static routes and 8 virtual VLAN interfaces); allows manual configuration of routing

## Resiliency and high availability

## • Link aggregation

groups together multiple ports (up to a maximum of 2 ports) automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks; (8-port, 24-port and 48- port models support a maximum of 8 ports per trunk; the 8-port models supports 4 trunks; the 24-port model supports 8 trunks; the 48-port model supports 16 trunks)

#### Convergence

## • LLDP-MED (Media Endpoint Discovery)

defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones

## PoE allocations

supports multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user-specified) to allocate PoE power for more efficient energy savings

## Auto voice VLAN

recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones

## **Additional information**

## • Green initiative support

provides support for RoHS and WEEE regulation

## • 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

## **Warranty and support**

## • Limited Lifetime Warranty

This series comes with a Limited Lifetime Warranty providing advance hardware replacement with next business day shipment in most countries, 24x7 phone support available for the first 90 days, and electronic and business hours phone support for the entire warranty period. See <a href="http://www.hpe.com/networking/warrantysummary">http://www.hpe.com/networking/warrantysummary</a> for full warranty and support information included with your product purchase.

**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 OfficeConnect 1910 8 Switch

JG536A

• 8 RJ-45 autosensing 10/100 ports

See Configuration

• 2 SFP dual-personality 1000 Mbps ports

**NOTE:** 2,3

min=0 \ max=2 SFP Transceivers

• 1U - Height

HPE OfficeConnect 1910 8 PoE+ Switch

JG537A

• 8 RJ-45 auto-negotiating 10/100 ports

See Configuration

• 2 SFP dual-personality 1000 Mbps ports

**NOTE:**2,3

min=0 \ max=2 SFP Transceivers

• 1U - Height

HPE OfficeConnect 1910 24 Switch

JG538A

24 RJ-45 autosensing 10/100 ports

See Configuration

• 2 SFP dual-personality 1000 Mbps ports

**NOTE:**2,3

min=0 \ max=2 SFP Transceivers

1U - Height

HPE OfficeConnect 1910 24 PoE+ Switch

JG539A

• 24 RJ-45 auto-negotiating 10/100 ports

See Configuration

• 2 SFP dual-personality 1000 Mbps ports

**NOTE:** 2,3

min=0 \ max=2 SFP Transceivers

• 1U - Height

HPE OfficeConnect 1910 48 Switch

JG540A

48 RJ-45 autosensing 10/100 ports

See Configuration

2 RJ-45 autosensing10/100/1000 ports

2 SFP 1000 Mbps ports

min=0 \ max=2 SFP Transceivers

• 1U - Height

**NOTE:** 2,3

Configuration Rules:

Note 1

The following Transceivers install into this switch:

HPE X121 1G SFP LC SX Transceiver

J4858C

	HPE X121 1G SFP LC LX Transceiver	J4859C
	HPE X121 1G SFP RJ45 T Transceiver	J8177C
	HPE X120 1G SFP LC SX Transceiver	JD118B
	HPE X120 1G SFP LC LX Transceiver	JD119B
	HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
	HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
	HPE X125 1G SFP LC LH70 Transceiver	JD063B
	HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
	HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
Note 2	Localization required. (See Localization Menu for list.)	
Note 3	The following Transceivers install into this switch:	
	HPE X121 1G SFP LC SX Transceiver	J4858C
	HPE X121 1G SFP LC LX Transceiver	J4859C
	HPE X120 1G SFP LC LX Transceiver	JD119B
Note 4	The following Transceivers install into this switch:	
	HPE X121 1G SFP LC SX Transceiver	J4858C
	HPE X121 1G SFP LC LX Transceiver	J4859C
	HPE X121 1G SFP RJ45 T Transceiver	J8177C
	HPE X120 1G SFP LC SX Transceiver	JD118B
	HPE X120 1G SFP LC LX Transceiver	JD119B
	HPE X120 1G SFP RJ45 T Transceiver	JD089B
	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
Note 5	Localization (Wall Power Cord) required on orders without #B2B or #Localization Menu)	B2C (PDU Power Cord). (See

# Internal or External Power Supplies(Model Dependant)

Internal Power supplies Included

## **External Redundant Power Supplies**

HPE RPS1600 Redundant Power System

Height = 1U

includes 1 x c13, 1600w and Power Supply port

JG136A See Configuration

**NOTE:**2,3,4

HPE RPS1600 1600W AC Power Supply

JG137A

• Installs into JG136A only See Configuration

**NOTE:**1,3

## 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.

Note 3 Each switch will only support 1 JG136A and 1 JG137A Power supply systems.

## Options for the HP 1600 External RPS Power Supply

HPE X290 1000 A JD5 2m RPS Cable JD187A

Remark: These cables are used to connect the External Power System to Switch.

## **Transceivers**

## **SFP Transceivers**

HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP RJ45 T Transceiver	J8177C
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
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 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

## **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

#### **HPE OfficeConnect 1910 24 Switch (**JG538A)

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

Duplex: half or full

2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000

Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)

1 RJ-45 console port to access limited CLI port

Supports a maximum of 24 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45

10/100/1000 port or SFP 100/1000 slot

Physical characteristics **Dimensions** 17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height)

> Weight 4.85 lb (2.2 kg)

**Memory and processor** Module MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB

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

**Performance** 100 Mb Latency < 5 us

> 1000 Mb Latency < 5 **u**s

**Throughput** up to 6.6 Mpps (64-byte packets)

**Routing/Switching** 

capacity

8.8 Gb/s

Routing table size 32 entries (IPv4), 32 entries (IPv6)

MAC address table size 8192 entries

**Environment** Operating temperature 32°F to 104°F (0°C to 40°C)

**Operating relative** 

humidity

10% to 90%, noncondensing

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

temperature

**Non-operating/Storage** 10% to 95%, noncondensing

relative humidity

**Electrical characteristics Frequency** 50/60 Hz

> 100-240 VAC Voltage

Maximum power rating 12 W

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all

ports plugged in, and all modules populated.

Safety IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000,

61000-3-3; ICES-003 Class A

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

IEEE 802.3 Ethernet MIB

**Notes** SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28

Gigabit-capable ports.

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 OfficeConnect 1910 8 Switch (**JG536A)

**Ports** 8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX); Duplex: half or full

2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000

Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)

1 RJ-45 console port to access limited CLI port

Supports a maximum of 8 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45

10/100/1000 port or SFP 100/1000 slot

**Dimensions** Physical characteristics 10.47(w) x 6.38(d) x 1.73(h) in (26.6 x 16.2 x 4.4 cm) (1U height)

> Weight 2.2 lb (1 kg)

**Module Memory and processor** MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB

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

**Performance** 100 Mb Latency < 5 µs

> 1000 Mb Latency < 5 µs

**Throughput** up to 4.2 Mpps (64-byte packets) 5.6 Gb/s

**Routing/Switching** 

capacity

Routing table size 32 entries (IPv4), 32 entries (IPv6)

MAC address table size 8192 entries

**Environment Operating temperature**  $32^{\circ}F$  to  $104^{\circ}F$  ( $0^{\circ}C$  to  $40^{\circ}C$ )

Operating relative

humidity

temperature

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

10% to 90%, noncondensing

**Non-operating/Storage** 10% to 95%, noncondensing

relative humidity

**Electrical characteristics Frequency** 50/60 Hz

> Voltage 100-240 VAC

Maximum power rating

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.

IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition Safety

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000,

61000-3-3; ICES-003 Class A

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

IEEE 802.3 Ethernet MIB

**Notes** SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28

Gigabit-capable ports.

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 OfficeConnect 1910 48 Switch (JG540A)** 

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

Duplex: half or full

2 SFP 100/1000 Mbps slots (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X) 2 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

1 RJ-45 console port to access limited CLI port

Supports a maximum of 48 autosensing 10/100 ports plus 2 autosensing 10/100/1000 ports plus 2 SFP

100/1000 slots

Physical characteristics Dimensions 17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height)

> Weight 5.07 lb (2.3 kg)

**Memory and processor Module** MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 1.5 MB

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

**Performance** 100 Mb Latency < 5 **µ**s

1000 Mb Latency  $< 5 \mu s$ 

**Throughput** up to 13.1 Mpps (64-byte packets)

**Routing/Switching** 

capacity

17.6 Gb/s

Routing table size 32 entries (IPv4), 32 entries (IPv6)

MAC address table size 8192 entries

**Environment Operating temperature**  $32^{\circ}F$  to  $104^{\circ}F$  ( $0^{\circ}C$  to  $40^{\circ}C$ )

**Operating relative** 

humidity

10% to 90%, noncondensing

temperature

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

relative humidity

**Non-operating/Storage** 10% to 95%, noncondensing

**Electrical characteristics Frequency** 50/60 Hz

> Voltage 100-240 VAC

Maximum power rating 22 W

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all

ports plugged in, and all modules populated.

Safety IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000,

61000-3-3; ICES-003 Class A

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

IEEE 802.3 Ethernet MIB

Notes SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28

Gigabit-capable ports.

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 OfficeConnect 1910 8 PoE+ Switch (**JG537A)

**Ports** 8 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 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000

Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)

1 RJ-45 console port to access limited CLI port

Supports a maximum of 8 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45

10/100/1000 port or SFP 100/1000 slot

**Dimensions** Physical characteristics 12.99(w) x 9.06(d) x 1.73(h) in (33 x 23 x 4.4 cm) (1U height)

> Weight 4.63 lb (2.1 kg)

**Module** MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB **Memory and processor** 

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

**Performance** 100 Mb Latency < 5 **µ**s

< 5 **µ**s 1000 Mb Latency

**Throughput** up to 4.2 Mpps (64-byte packets)

**Routing/Switching** 5.6 Gb/s

capacity

Routing table size 32 entries (IPv4), 32 entries (IPv6)

MAC address table size 8192 entries

**Environment** Operating temperature 32°F to 104°F (0°C to 40°C)

Operating relative

humidity

10% to 90%, noncondensing

temperature

**Non-operating/Storage**  $-40^{\circ}\text{F}$  to  $158^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ )

**Non-operating/Storage** 10% to 95%, noncondensing relative humidity

**Electrical characteristics Frequency** 

50/60 Hz

Voltage 100-240 VAC

**Maximum power rating** 90 W 62 W PoE power

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

PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of an External Power Supply (EPS).

Safety IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000,

61000-3-3: ICES-003 Class A

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

IEEE 802.3 Ethernet MIB

Notes SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28

Gigabit-capable ports.

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 OfficeConnect 1910 24 PoE+ Switch (**JG539A)

**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+); Duplex: half or full

2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000

Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)

1 RJ-45 console port to access limited CLI port

Supports a maximum of 24 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45

10/100/1000 port or SFP 100/1000 slot

Physical characteristics **Dimensions** 17.32(w) x 9.37(d) x 1.73(h) in (44 x 23.8 x 4.4 cm) (1U height)

> Weight 7.28 lb (3.3 kg)

**Module** MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB **Memory and processor** 

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

**Performance** 100 Mb Latency < 5 µs

> 1000 Mb Latency < 5 **u**s

**Throughput** up to 6.6 Mpps (64-byte packets)

**Routing/Switching** 8.8 Gb/s

capacity

Routing table size 32 entries (IPv4), 32 entries (IPv6)

MAC address table size 8192 entries

**Environment Operating temperature** 32°F to 104°F (0°C to 40°C)

> Operating relative 10% to 90%, non-condensing

humidity

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

temperature

**Non-operating/Storage** 10% to 95%, noncondensing

relative humidity

**Electrical characteristics Frequency** 50/60 Hz

> Voltage 100-240 VAC

**Maximum power rating** 220 W 180 W PoE power

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all

ports plugged in, and all modules populated.

PoE Power is the power supplied by the internal power supply, it is dependent on the type and

quantity of power supplies and may be supplemented with the use of an External Power Supply (EPS).

Safety IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN

61000-3-2 2000, 61000-3-3; ICES-003 Class A

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

SNMP Manager; IEEE 802.3 Ethernet MIB

**Notes** SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28

Gigabit-capable ports.

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 Device management

(applies to all products in RFC 2819 RMON

series)

#### **General protocols**

IEEE 802.1D MAC Bridges

IEEE 802.1p Priority

IEEE 802.1Q VLANs

IEEE 802.1s (MSTP)

IEEE 802.1w Rapid Reconfiguration of Spanning Tree

IEEE 802.3 Type 10BASE-T

IEEE 802.3ab 1000BASE-T

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3i 10BASE-T

IEEE 802.3x Flow Control

IEEE 802.3z 1000BASE-X

#### **MIBs**

RFC 1213 MIB II

RFC 1493 Bridge MIB

RFC 2021 RMONv2 MIB

RFC 2233 Interface MIB

RFC 2233 Interfaces MIB

RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB

RFC 2573 SNMP-Notification MIB

RFC 2573 SNMP-Target MIB

RFC 2613 SMON MIB

RFC 2618 RADIUS Client MIB

RFC 2620 RADIUS Accounting MIB

RFC 2665 Ethernet-Like-MIB

RFC 2667 IP Tunnel MIB

RFC 2668 802.3 MAU MIB

RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

RFC 2737 Entity MIB (Version 2) RFC 3414 SNMP-User based-SM MIB

RFC 3415 SNMP-View based-ACM MIB

RFC 3418 MIB for SNMPv3

## **Network management**

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps

## QoS/Cos

IEEE 802.1p (CoS)

## Security

IEEE 802.1X Port Based Network Access Control

# Accessories

<b>HPE OfficeConnect 1910</b>	Transceivers			
Switch Series	HPE X121 1G SFP LC SX Transceiver	J4858C		
accessories	HPE X121 1G SFP LC LX Transceiver	J4859C		
	HPE X121 1G SFP RJ45 T Transceiver	J8177C		
	HPE X120 1G SFP LC SX Transceiver	JD118B		
	HPE X120 1G SFP LC LX Transceiver	JD119B		
	HPE X120 1G SFP RJ45 T Transceiver	JD089B		
	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		

SX

fiber.

## **Accessory Product Details**

full-duplex Gigabit solution

up to 550 m on multimode

NOTE: Details are not available for all accessories. The following specifications were available at the time of publication.

Transceiver (J4858C) **Physical characteristics** Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm)

Weight: 0.04 lb. (0.02 kg)

A small form-factor Transceiver form factor: SFP pluggable (SFP) Gigabit

**Environment** Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 5% to 85%, noncondensing transceiver that provides a

Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C)

Altitude: up to 10,000 ft. (3 km) **Electrical characteristics** Power consumption typical: 0.4 W

Power consumption maximum: 0.7 W

**Cabling** Type:

> $62.5/125 \,\mu\text{m}$  or  $50/125 \,\mu\text{m}$  (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively;

#### Maximum distance:

- 2-220 m (62.5  $\mu$ m core diameter, 160 MHz\*km bandwidth
- 2-275 m (62.5  $\mu$ m core diameter, 200 MHz\*km bandwidth
- 2-500 m (50  $\mu$ m core diameter, 400 MHz\*km bandwidth)
- 2-550 m (50  $\mu$ m core diameter, 500 MHz\*km bandwidth)

Cable length: 2-550m Fiber type: Multi Mode

**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-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only

Enterprise sales office

HPE X121 1G SFP LC LX **Ports** 

HP X121 1G SFP LC LX

gigabit transceiver with LC

Transceiver: An SFP

connectors using LX

format

technology.

Transceiver (J4859C) Physical characteristics Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm)

Weight: 0.04 lb. (0.02 kg)

**Environment** Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 0% to 85%, noncondensing

Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C)

Altitude: up to 10,000 ft. (3 km)

**Cabling** Type:

> Either single mode or multimode; 62.5/125  $\mu$ m or 50/125  $\mu$ m (core/cladding) diameter, graded-index, low metal content,

multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, singlemode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;

#### Maximum distance:

- 2-550 m (multimode 62.5  $\mu$ m core diameter, 500 MHz\*km bandwidth)
- 2-550 m (multimode 50 µm core diameter, 400 MHz\*km bandwidth)
- 2-550 m (multimode 50  $\mu$ m core diameter, 500 MHz\*km bandwidth)
- 2-10,000 m (single-mode fiber)

**Notes** A mode conditioning patch cord may be needed in some multimode fiber

installations.

Wavelength: 1310nm

Power Consumption: < 500mW Typical

Refer to the Hewlett Packard Enterprise website at **Services** 

> 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 X121 1G SFP RJ45 T Ports

Transceiver (J8177C)

HP X121 1G SFP RJ45 T Transceiver: An SFP format

gigabit transceiver with RJ45 connectors using 1000BaseT technology. 1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full

only

Physical characteristics Dimensions: 2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)

Weight: 0.06 lb. (0.03 kg)

**Environment** Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM airflow

over the SFP module

Operating relative humidity: 0% to 95% @ 75°F (25°C), noncondensing Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Nonoperating/Storage relative humidity: 0% to 95% @ 77°F (25°C),

noncondensing

Altitude: up to 10,000 ft. (3000 km)

Cabling Cable type:

> 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP)

balanced, complying with IEEE 802.3ab 1000BASE-T;

Maximum distance:

100 m

**Notes** 

Power consumption is nominally 1 watt.

For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J8177C 1000Base-T

Mini-GBIC" on the "HP Mini-GBICs and SFPs" Manuals Web page.

The J8177C Gigabit copper mini-GBIC is not supported on dual-personality ports.

The J8177C is capable of 100 Mb operation. This is supported on only the HP E8200zl, E5400zl, and HP E6200-24G-mGBIC yl Switches using software version K.12.21 or later. Use the "auto-100" port setting to enable 100 Mb operation.

Important: The earlier J8177B does not support 100 Mb operation. When used in the Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C mini-GBIC can be installed in either the upper or lower mini-GBIC port, but will block access to the other port.

**Services** 

Connectivity

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

Transceiver (JD118B) A small form-factor

HPE X120 1G SFP LC SX Ports

pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber

1 LC 1000BASE-SX port

LC **Connector type** 

> Wavelength 850 nm

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

cm)

**Full configuration** 0.04 lb. (0.02 kg)

weight

**Electrical characteristics Power consumption** 0.8 W

typical

**Power consumption** 1.0 W

maximum

Maximum distance: Cabling

• FDDI Grade distance = 220m

• OM1 = 275m

• OM2 = 500m

• OM3 = Not Specified by standard

Cable length up to 550m Fiber type Multi Mode

**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

A small form-factor

LX transceiver that

on SMF

provides a full duplex

Gigabit solution up to 550m on MMF or 10Km

## **Accessory Product Details**

HPE X120 1G SFP LC LX Ports 1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)

Transceiver (JD119B) Connectivity Connector type LC

**Wavelength** 1300 nm

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

cm)

**Full configuration** 0.04 lb. (0.02 kg)

weight

**Electrical characteristics Power consumption** 0.8 W

typical

Power consumption 1.0 W

maximum

**Cabling** Cable type:

Either single mode or multimode;

Maximum distance:
• 550m for Multimode
• 10km for Singlemode

Fiber type Both

**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 X120 1G SFP RJ45 T Transceiver

(JD089B)

Ports 1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)

**Connectivity Connector type** RJ-45

**Physical Dimensions** 2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)

**characteristics** Full configuration weight 0.07 lb. (0.03 kg)

ElectricalPower consumption typical0.8 WcharacteristicsPower consumption maximum1.0 W

**Cabling** Cable type:

1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab

1000BASE-T

Maximum distance:

• 100m

**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

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

## 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

**Notes** 

(AJ833A)

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:  $50 \pm 3.0$ um Cladding diameter:  $125 \pm 2.0$ um Coating diameter:  $245 \pm 10$ um
- 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 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 1.0m 1-Pack Fiber Optic Cable (AJ834A)

#### 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 ± 3.0um Cladding diameter: 125 ±
 2.0um Coating diameter: 245 ± 10um

#### Notes

- 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 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 2.0m 1-**Pack Fiber Optic Cable** (AJ835A)

## 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: 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

## **Notes**

- 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 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.
- 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**

**Notes** 

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

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

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 30.0m 1-Pack Fiber Optic Cable

#### 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

**Notes** 

(AJ838A)

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: 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 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 end and LC duplex connectors on other end.

Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ±
 2.0um Coating diameter: 245 ± 10um

#### Notes

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

# **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: HP 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

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 Premier Flex LC/LC** Notes Multi-mode OM4 2 fiber

#### **Services**

## 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: HP 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**

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# 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: HP 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 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: HP 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
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Refer to the Hewlett Packard Enterprise website at

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#### **Services**

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.

- $\bullet$  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: HP 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
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Refer to the Hewlett Packard Enterprise website at

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## Services

**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.

- 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: HP 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

Refer to the Hewlett Packard Enterprise website at

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# **Summary of Changes**

Date	Version History	Action	Description of Change:
06-May-2016	From Version 16 to 17	Changed	Document name changed to HPE OfficeConnect Switch
			Series. Overview, Features and Benefits, Technical
		Specifications updated.	
18-Mar-2016	From Version 15 to 16	Changed	Version updated to change Concentra ID from c03824531
			to c05051651
01-Dec-2015	From Version 14 to 15	Changed	Overview, Features and Benefits and Technical
			Specifications updated.
01-Dec-2014	From Version 12 to 14	Changed	Updated Warranty and support and Product Overview
25-Feb-2014	From Version 11 to 12	Changed	Internal and External Power Supplies, Transceivers, and
			Cables were revised.
09-Dec-2013	From Version 10 to 11	Changed	Configuration was revised.
09-Oct-2013	From Version 9 to 10	Removed	HP X124 1G SFP LC SX and HP X124 1G SFP LC LX
			Transceivers were removed.
11-Sep-2013	From Version 8 to 9	Added	Configuration was added.
10-Jun-2013	From Version 7 to 8	Added	OM4 cables were added.
14-May-2012	From Version 6 to 7	Changed	Features and Benefits were updated
			The product description and Key Features were also
			updated
			3 new models were added.
26-Sep-2011	From Version 4 to 6	Changed	The QuickSpecs was completely revised, including
			changing the title.
20-Jun-2011	From Version 2 to 4	Changed	Features and Benefits were updated
			The product description and Key Features were also
			updated
20-Oct-2010	From Version 1 to 2	Changed	Features and Benefits were reorganized and updated
			Layer 3 routing
			Ports, Notes, Services note and General Protocols were
			revised throughout Models
			PremierFlex Cables were added

# **Summary of Changes**





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