Overview

Models	
HP 4210-8 Switch	JE022A
HP 4210-16 Switch	JE025A
HP 4210-24 Switch	JF427A
HP 4210-48 Switch	JE027A
HP 4210-8-PoE Switch	JE029A
HP 4210-24-PoE Switch	JE033A

### Key features

- Entry-level switching, enterprise-class features
- Affordable price
- Out-of-the-box plug-and-play simplicity
- Access control lists for improved security
- Energy efficient; quiet, fan-free design (non-PoE)

### Product overview

HP 4210 Switch Series are entry-level 10/100 Ethernet LAN switches with enterprise-class quality of service (QoS), security, and management features, delivering high value for network administrators looking for an economical edge device. Available Power over Ethernet (PoE) models are ideal for Voice over IP and wireless networking installations, while non-PoE models are also available for simple port expansion. Dual-personality ports allow flexibility, setting them apart from lower-end devices. The series supports an industry-standard command-line interface, Web-based administration, and SNMP management. Switches can be clustered in any combination up to 255 units for simplified administration. In addition to rack-mount models, HP 4210 switches are available in small form factor units for enterprise branch and small workgroup deployments, in both PoE and non-PoE versions, with the same manageability as the larger rack-mount models.

### Features and benefits

Quality of Service (QoS)

• Traffic prioritization (IEEE 802.1p): allows real-time traffic classification mapped to four hardware queues per port

#### Management

- Secure Web GUI: provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- Command-line interface (CLI): provides a secure, easy-to-use command-line interface for configuring the module via SSH or a switch console; provides direct real-time session visibility
- SNMPv1, v2c, and v3: facilitate centralized discovery, monitoring, and secure management of networking devices
- 3Com-heritage Comware V3 Operating System: CLI and Web user interface in common with HP 4XXX and 55XX series switches
- Port mirroring: enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

#### Connectivity

- Gigabit Ethernet uplinks: dual-personality ports for either 10/100/1000 or mini-GBIC SFP connectivity for increased connectivity flexibility
- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports



### Overview

#### Manageability

- RMON (remote monitoring): provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Full-featured console: provides complete control of the switch with a familiar command-line interface (CLI)
- Web interface: allows configuration of the switch from any Web browser on the network
- Multiple configuration files: allow multiple configuration files to be stored to flash image
- Software updates: free downloads from the Web
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol provides easy mapping using network management applications
- Virtual stacking capability: single IP address management for a virtual stack of up to 255 Comware-based 3Com legacy devices, including HP E4XXX and E55XX series switches

#### Layer 2 switching

- GARP VLAN Registration Protocol (GVRP): allows automatic learning and dynamic assignment of VLANs
- VLAN support and tagging: support IEEE 802.1Q with 4,094 simultaneous VLAN IDs

#### Security

- Access control lists (ACLs): provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number (may not apply to all models; see specifications for more details)
- RADIUS/TACACS+: eases switch management security administration by using a password authentication server
- Secure Shell: encrypts all transmitted data for secure remote CLI access over IP networks
- Secure Web management with HTTPS and SSL: encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch (may not apply to all models; see specifications for more details)
- IEEE 802.1X and RADIUS network logins: control port-based access for authentication and accountability
- Port security: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- Switch management logon security: can require either RADIUS or TACACS+ authentication for secure switch CLI logon
- Secure management access: securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- Custom banner: displays security policy when users log in to the switch
- Management password: provides security so that only authorized access to the Web browser interface is allowed
- Automatic VLAN assignment: automatically assigns users to the appropriate VLAN based on their identity and location and the time of day

#### Convergence

- LLDP-MED (Media Endpoint Discovery): is a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- Automated voice VLAN assignment: recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones (may not apply to all models; see specifications for more details)

#### Warranty and support

- Lifetime warranty: for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)\*
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)

\* Hardware warranty replacement for as long as you own the product, with next business day advance replacement (available in most countries) with a five-year hardware warranty replacement for the disk drive included with HP AllianceONE Services zl Module,



### Overview

HP Threat Management Services zl Module, HP PCM+ Agent with AllianceONE Services zl Module, and HP E-MSM765 zl Mobility Controller. For details, refer to the HP Software License, Warranty, and Support booklet at: www.hp.com/networking/warranty.



HP 4210-8 Switch (JE022	2A)	
Ports	8 RJ-45 autosensing 10/1 Media Type: Auto-MDIX;	00 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full
	1 dual-personality 10/100 IEEE 802.3ab Type 1000	0/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, BASE-T)
	1 RJ-45 serial console po	rt
Physical characteristics	Dimensions	6.3(d) x 9.1(w) x 1.7(h) in. (16 x 23.11 x 4.32 cm) (1U height)
	Weight	2.3 lb. (1.04 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting		ation. Optional angle mounting set is available for mounting in an EIA a or equipment cabinet (hardware not included)
Performance	Throughput	up to 2.7 million pps
	Routing/Switching capacity	3.6 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	<b>.</b>	ment Center; command-line interface; Web browser; out-of-band management Manager; Telnet; IEEE 802.3 Ethernet MIB
	3-year, 4-hour onsite, 24) 3-year, 4-hour onsite, 24) 3-year, 24x7 SW phone s 1-year, post-warranty, 4-h 1-year, post-warranty, 4-h 4-year, 4-hour onsite, 24) 4-year, 4-hour onsite, 24) 4-year, 24x7 SW phone s 5-year, 4-hour onsite, 13) 5-year, 4-hour onsite, 24) 5-year, 4-hour onsite, 24)	
	5 Yr 6 hr Call-to-Repair C	



1-year, 24x7 sottware phone support, sottware updates (HR666E)
1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates
(HR665E)
1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange
(HS730E)
1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS731E)
3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS732E)
3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS733E)
4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS734E)
4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS735E)
5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS736E)
5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS737E)
Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP 4210-16 Switch (JE02	25A)		
Ports	16 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 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)		
	1 RJ-45 serial console port		
Physical characteristics	Dimensions	6.3(d) x 14.2(w) x 1.7(h) in. (16 x 36.07 x 4.32 cm) (1U height)	
	Weight	3.4 lb. (1.54 kg)	
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB	
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)		
Performance	Throughput	up to 5.4 million pps	
	Routing/Switching capacity	7.2 Gbps	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 95%, non-condensing	
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
Electrical characteristics	Voltage	100-240 VAC	
	Frequency	50 / 60 Hz	
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1		
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A		
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Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB
Management Services	<ul> <li>(serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UX198E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UX201E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX204E)</li> <li>3-year, 24x7 SW phone support, software updates (UX207E)</li> <li>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR663E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR664E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UX199E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UX202E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX205E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX205E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UX200E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UX200E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UX203E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX206E)</li> <li>5-year, 24x7 SW phone support, software updates (UX209E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UX210E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UX212E)</li> <li>1-year, 6 hour Call-to-Repair Onsite for hardware, 24x7 software phone support and software updates ((HR665E))</li> <li>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS730E)</li> <li>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS734E)</li> <li>3-year, 24x7 software phone support, software updates + A hour Hardware Exchange (HS733E)</li> <li>4-year</li></ul>
	(HS736E) 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS737E) Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

<b>TP 4210-24 Switch</b> (JF42	2/A)	
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 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)	
	1 RJ-45 serial console po	rt
Physical characteristics	Dimensions	6.3(d) x 17.3(w) x 1.7(h) in. (16 x 43.94 x 4.32 cm) (1U height)
	Weight	4.7 lb. (2.13 kg)



### HP 4210 Switch Series

Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Mounts in an EIA standard	19-in. telco rack or equipment cabinet (hardware included)
Performance	Throughput	up to 6.6 million pps
	Routing/Switching capacity	8.8 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL	. 60950-1; IEC 60950-1; EN 60950-1
Emissions	VCCI Class A; EN 55022	Class A; EN 55024; ICES-003 Class A
Management	<b>5</b>	
Services	<ul> <li>IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UV834E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UV837E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV840E)</li> <li>3-year, 24x7 SW phone support, software updates (UV843E)</li> <li>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR668E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR669E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR670E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UV835E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UV838E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR670E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UV835E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UV835E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV836E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV836E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV836E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV837E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV837E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV837E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV842E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UV837E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UV837E)</li> <li>5-year,</li></ul>	



### HP 4210 Switch Series

Technical Specificati	ons		
		one support, software updates + 4 hour Hardware Exchange (HS719E) one support, software updates + Next Business Day Hardware Exchange	
		one support, software updates + 4 hour Hardware Exchange (HS721E)	
		: www.hp.com/networking/services for details on the service-level descriptions r details about services and response times in your area, please contact your	
HP 4210-48 Switch (JEO)	27A)		
Ports	48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-T Media Type: Auto-MDIX; Duplex: half or full		
	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); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only		
	, 2 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)		
	1 RJ-45 serial console po		
Physical characteristics	Dimensions	9.1(d) x 17.3(w) x 1.7(h) in. (23.11 x 43.94 x 4.32 cm) (1U height)	
	Weight	6.8 lb. (3.08 kg)	
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB	
Mounting	Mounts in an EIA standard	d 19-in. telco rack or equipment cabinet (hardware included)	
Performance	Throughput up to 13.1 million pps		
	Routing/Switching capacity	17.6 Gbps	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 95%, non-condensing	
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
Electrical characteristics	Voltage	100-240 VAC	
	Frequency	50 / 60 Hz	
Safety	CSA 22.2 No. 60950; UI	- 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB		
Services	3-year, 4-hour onsite, 24 3-year, 4-hour onsite, 24 3-year, 24x7 SW phone s 1-year, post-warranty, 4-h	k5 coverage for hardware (UX198E) k7 coverage for hardware (UX201E) k7 coverage for hardware, 24x7 SW phone support and SW updates (UX204E) upport, software updates (UX207E) nour onsite, 13x5 coverage for hardware (HR663E) nour onsite, 24x7 coverage for hardware (HR664E)	



### Technical Specifications

4-year, 4-hour onsite, 13x5 coverage for hardware (UX199E)
4-year, 4-hour onsite, 24x7 coverage for hardware (UX202E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX205E)
4-year, 24x7 SW phone support, software updates (UX208E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UX200E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UX203E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX206E)
5-year, 24x7 SW phone support, software updates (UX209E)
3 Yr 6 hr Call-to-Repair Onsite (UX210E)
4 Yr 6 hr Call-to-Repair Onsite (UX211E)
5 Yr 6 hr Call-to-Repair Onsite (UX212E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR667E)
1-year, 24x7 software phone support, software updates (HR666E)
1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates
(HR665E)
1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange
(HS730E)
1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS731E)
3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange
(HS732E)
3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS733E)
4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange
(HS734E)
4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS735E)
5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange
(HS736E)
5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS737E)
Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

### HP 4210-8-PoE Switch (JE029A)

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Ports		100 PoE ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, a Type: Auto-MDIX; Duplex: half or full	
	1 dual-personality 10/100/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)		
	1 RJ-45 serial console po	rt	
Physical characteristics	Dimensions	9.2(d) x 11.8(w) x 1.7(h) in. (23.37 x 29.97 x 4.32 cm) (1U height)	
	Weight	4.9 lb. (2.22 kg)	
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB	
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)		
Performance	Throughput	up to 2.7 million pps	
	Routing/Switching capacity	3.6 Gbps	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	



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	Operating relative humidity	10% to 95%, non-condensing	
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
Electrical characteristics	Voltage	100-240 VAC	
	PoE power	65 W	
	Frequency	50 / 60 Hz	
Safety	CSA 22.2 No. 60950; UL	60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022	Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB		
Services			



HP 4210 Switch Series

Technical Specifications

local HP sales office.

HP 4210-24-PoE Switch	(JE033A)	
Ports	24 RJ-45 autosensing 10/100 PoE ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3af PoE); Media Type: Auto-MDIX; Duplex: half or full	
		af POE); Media Type: Auto-MDIX; Duplex: half or full D/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,
	IEEE 802.3ab Type 10001	
	1 RJ-45 serial console por	t
Physical characteristics	Dimensions	16.9(d) x 17.3(w) x 1.7(h) in. (42.93 x 43.94 x 4.32 cm) (1U height)
	Weight	13.4 lb. (6.08 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Mounts in an EIA standard	19-in. telco rack or equipment cabinet (hardware included)
Performance	Throughput	up to 6.6 million pps
	Routing/Switching capacity	8.8 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	PoE power	370 W
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	<b>.</b>	nent Center; command-line interface; Web browser; out-of-band management Aanager; Telnet; IEEE 802.3 Ethernet MIB
Services	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UX198E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (UX201E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UX204E)</li> <li>3-year, 24x7 SW phone support, software updates (UX207E)</li> <li>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR663E)</li> <li>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR664E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UX199E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UX202E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UX205E)</li> <li>4-year, 24x7 SW phone support, software updates (UX208E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UX200E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UX203E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UX209E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UX210E)</li> </ul>	



### Technical Specifications

Technical Specification	ons	
	(HR665E) 1-year, 24x7 software phone support, software upor (HS730E) 1-year, 24x7 software phone support, software upor 3-year, 24x7 software phone support, software upor (HS732E) 3-year, 24x7 software phone support, software upor 4-year, 24x7 software phone support, software upor (HS734E) 4-year, 24x7 software phone support, software upor (HS736E) 5-year, 24x7 software phone support, software upor (HS736E)	dates (HR666E) e, 24x7 software phone support and software updates dates + Next Business Day Hardware Exchange dates + 4 hour hardware exchange (HS731E) dates + Next Business Day Hardware Exchange dates + 4 hour Hardware Exchange (HS733E) dates + Next Business Day Hardware Exchange dates + 4 hour Hardware Exchange (HS735E) dates + Next Business Day Hardware Exchange
Standards and protocols (applies to all products in series)	local HP sales office. General protocols IEEE 802.1 ag Service Layer OAM IEEE 802.1 D MAC Bridges IEEE 802.1 P Priority IEEE 802.1 Q (GVRP) IEEE 802.1 Q VLANs IEEE 802.1 v VLAN classification by Protocol and Port IEEE 802.1 w Rapid Reconfiguration of Spanning Tree IEEE 802.1 W Rapid Reconfiguration of Spanning Tree IEEE 802.3 ad Link Aggregation (LAG) IEEE 802.3 ad Link Aggregation (LAG) IEEE 802.3 u 100BASE-T IEEE 802.3 u 100BASE-X IEEE 802.3 z 1000BASE-X IEEE 802.3 z 1000BASE-X RFC 768 UDP RFC 792 ICMP RFC 793 TCP RFC 854 TELNET RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 Clarifications and Extensions for the Bootstrap Protocol RFC 3576 Ext to RADIUS (CoA only) RFC 4675 RADIUS VLAN & Priority	RFC 2572 SNMP-MPD MIB RFC 2573 SNMP-Notification MIB RFC 2574 SNMP USM MIB RFC 2618 RADIUS Client MIB RFC 2600 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB RFC 2665 Ethernet-Like-MIB RFC 2668 MAU-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-MIB RFC 2737 Entity MIB (Version 2) RFC 2819 RMON MIB RFC 2863 The Interfaces Group MIB RFC 2863 The Interfaces Group MIB RFC 2925 Ping MIB RFC 3414 SNMP-User based-SM MIB RFC 3415 SNMP-View based-ACM MIB RFC 3415 SNMP-View based-ACM MIB RFC 3418 MIB for SNMPv3 RFC 3826 AES for SNMP's USM MIB RFC 4133 Entity MIB (Version 3) Network management IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.1D (STP) RFC 1215 SNMP Generic traps RFC 2571 SNMP Management Frameworks RFC 2572 SNMPv3 Message Processing RFC 2573 SNMPv3 Applications RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) RFC 3414 SNMPv3 User-based Security Model (USM)



### Technical Specifications

### MIBs

IEEE 8021-PAE-MIB IEEE 8023-LAG-MIB RFC 1213 MIB II RFC 1493 Bridge MIB RFC 1757 Remote Network Monitoring MIB RFC 1907 SNMPv2 MIB RFC 2013 SNMPv2 MIB for UDP RFC 2096 IP Forwarding Table MIB RFC 2233 Interfaces MIB RFC 2273 SNMP-NOTIFICATION-MIB RFC 2571 SNMP Framework MIB ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3

### Security

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



### Accessories

HP E4210 Switch Series	Transceivers	
accessories	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X124 1G SFP LC SX Transceiver	JD493A
	HP X125 1G SFP LC LH70 Transceiver	JD063B
	HP X115 100M SFP LC BX 10-U Transceiver	JD100A
	HP X110 100M SFP LC FX Transceiver	JD102B
	HP X115 100M SFP LC BX 10-D Transceiver	JD101A
	HP X124 1G SFP LC LX Transceiver	JD494A
	Cables	
	HP 0.5 m Multimode OM3 LC/LC Optical Cable	AJ833A
	HP 1 m Multimode OM3 LC/LC Optical Cable	AJ834A
	HP 2 m Multimode OM3 LC/LC Optical Cable	AJ835A
	HP 5 m Multimode OM3 LC/LC Optical Cable	AJ836A
	HP 15 m Multimode OM3 LC/LC Optical Cable	AJ837A
	HP 30 m Multimode OM3 LC/LC Optical Cable	AJ838A
	HP 50 m Multimode OM3 LC/LC Optical Cable	AJ839A
	NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable	BK837A
	NEW HP 1 m PremierFlex OM3+ LC/LC Optical Cable	BK838A
	NEW HP 2 m PremierFlex OM3+ LC/LC Optical Cable	BK839A
	NEW HP 5 m PremierFlex OM3+ LC/LC Optical Cable	BK840A
	NEW HP 15 m PremierFlex OM3+ LC/LC Optical Cable	BK841A
	NEW HP 30 m PremierFlex OM3+ LC/LC Optical Cable	BK842A
	NEW HP 50 m PremierFlex OM3+ LC/LC Optical Cable	BK843A
	Mounting Kit	
	HP 3100/4210-9 Rack Mount Kit	JD322A
	HP 3100/4210-16 Rack Mount Kit	JD321A
	HP 3100/4210-16/-8 PoE Rack Mount Kit	JD323A



### Accessory Product Details

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

HP 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
pluggable (SFP) Gigabig LX transceiver that provide:	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
a full duplex Gigabit		Full configuration weight	0.04 lb. (0.02 kg)
solution up to 550m on MMF or 10Km on SMF	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Either single mode or mult	timode;
		Maximum distance: • 550m for Multimode • 10km for Singlemode	
		Fiber type	Both
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about es in your area, please contact your local HP sales
HP X124 1G SFP LC SX	Ports	1 LC 1000BASE-SX port	
<b>Transceiver</b> (JD493A)	Connectivity	Connector type	LC
JD493A HP X124 1G SFP		Wavelength	850 nm
LC SX Transceiver that provides a full duplex	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
Gigabit solution up to		Full configuration weight	0.04 lb. (0.02 kg)
550m on Multi Mode fiber.	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 220m-550m	
		Fiber type	Multi Mode
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about es in your area, please contact your local HP sales



### Accessory Product Details

HP X125 1G SFP LC	Ports	1 LC 1000BASE-LH port (i	no IEEE standard exists for 1550 nm optics)	
LH70 Transceiver	Connectivity	Connector type	LC	
(JD063B)		Wavelength	1550 nm	
A small form-factor pluggable (SFP) Gigabit	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
LH70 transceiver that		Full configuration weight	0.04 lb. (0.02 kg)	
provides a full-duplex 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	omplying with ITU-T G.652;	
		Maximum distance: • 70km		
		Fiber type	Single Mode	
	Services	Refer to the HP website at www.hp.com/networking/services for details o the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP s office.		
HP X124 1G SFP LC LX	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)		
<b>Transceiver</b> (JD494A)	Connectivity	Connector type	LC	
		N. II.		
		Wavelength	1300 nm	
	Physical characteristics	Wavelength Dimensions	1300 nm 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
	Physical characteristics	-	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x	
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
	Physical characteristics Electrical characteristics	Dimensions Full configuration weight	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm) 0.04 lb. (0.02 kg)	
		Dimensions Full configuration weight Transceiver form factor Power consumption	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm) 0.04 lb. (0.02 kg) SFP	
		Dimensions Full configuration weight Transceiver form factor Power consumption typical Power consumption	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm) 0.04 lb. (0.02 kg) SFP 0.8 W	



Accessory Product I	Details	
HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)	Cabling	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
		<b>Maximum distance</b> : 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical glass: Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product De	etails	
HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)	Cabling	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
	Notes	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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product De	etails	
HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)	Cabling	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;
		<b>Maximum distance</b> : 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product D	etails	
HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)	Cabling	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;
	Notes	Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product	Details	
HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)	Cabling	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;
		<b>Maximum distance</b> : 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product	Details	
HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)	Cabling	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;
		<b>Maximum distance</b> : 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product	Details	
HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)	Cabling	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;
		<b>Maximum distance</b> : 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.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>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.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product Details

Accessory Hoduci L		
HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable (BK837A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ± 3um; Cladding diameter: 125um ± 2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> </ul>
		<ul> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen (LSZH) thermoplastic.</li> <li>Boot Color: White</li> </ul>
		<ul> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL OFN FT4, ROHS. Cable also has a longitudal white stripe that runs the entire length of the cable.</li> <li>Insertion Loss: less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 1 m PremierFlex OM3+ LC/LC Optical Cable (BK838A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<ul> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> </ul>
	c ·	1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product Details

### HP 4210 Switch Series

HP 2 m PremierFlex OM3+ LC/LC Optical Cable (BK839A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
		thermoplastic
		<ul> <li>Boot Color: White</li> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> </ul>
	Services	1310nm @ 23°C as tested in accordance with EIA 455-45 Refer to the HP website at www.hp.com/networking/services for details on the
	Services	service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 5 m PremierFlex OM3+ LC/LC Optical Cable (BK840A)	Notes	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 $\pm$ 3um, Cladding diameter: 125um $\pm$ 2um; Coating diameter: 245 $\pm$ 10um
		Bandwidth: 3000 MHz-km @ 850nm (Laser)     Instart Calan, Phys.
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<ul> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt; 30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product Details

HP 15 m PremierFlex OM3+ LC/LC Optical Cable (BK841A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> </ul>
		<ul> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<ul> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 30 m PremierFlex OM3 + LC/LC Optical Cable (BK842A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<ul> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> </ul>
	Services	1310nm @ 23°C as tested in accordance with EIA 455-45 Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



Accessory Product Details

### HP 4210 Switch Series

HP 50 m PremierFlex OM3+ LC/LC Optical Cable (BK843A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a</li> </ul>
		<ul> <li>longitudinal white stripe that runs the entire length of the cable.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

To learn more, visit: www.hp.com/networking

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