



# HP FlexNetwork Portfolio Guide

HP is changing the rules of networking with a full portfolio of standards-based products, integrated solutions, and services developed specifically to solve the complexities of the extended enterprise.



HP 5900AF-48XGT-4QSFP+ Switch



HP 2920-24G-PoE+ Switch



HP 830 24-Port PoE+ Unified Wired-WLAN Switch



HP FlexFabric 11908-V Switch Chassis



HP 10500/7500 20G Unified Wired-WLAN Module

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**For too long the rules of networking dictated that a monolithic single-vendor solution was the only way to safely deliver the performance and reliability needed to satisfy your users. But we're changing those rules. Now you can eliminate vendor lock-in with a full portfolio of reliable, high-performance HP networking products, solutions, and services based on industry standards. This portfolio makes management easier by dramatically simplifying the complexities of networking, too.**

**Whether you're a large enterprise or a small emerging business, you'll discover that our networking solutions provide superior energy efficiency and cost savings, along with rock-solid end-to-end security. Now you can build out a cost-effective network environment that is flexible and interoperable with other networking and computing technology. Integrated as part of the HP Converged Infrastructure and supported by HP and partner service capabilities, HP networking solutions deliver application and business services across the extended enterprise to meet any business demand.**

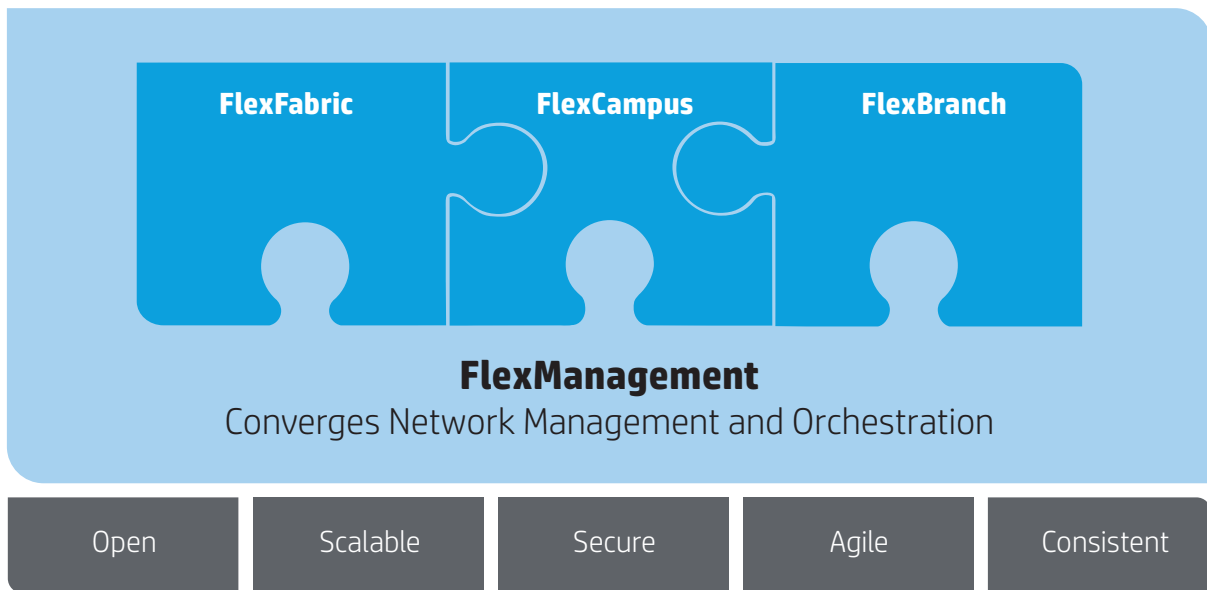


# The HP FlexNetwork architecture

The HP FlexNetwork architecture is a key component of the HP Converged Infrastructure. Enterprises can align their networks with their business needs—even as they change—by segmenting their networks into four interrelated modular building blocks that comprise the HP FlexNetwork architecture: HP FlexFabric, HP FlexCampus, HP FlexBranch, and HP FlexManagement. FlexFabric converges and secures the data center network with compute and storage. FlexCampus converges wired and wireless networks to deliver media-enhanced, secure, and identity-based access. FlexBranch converges network functionality and services to simplify the branch office. FlexManagement converges network management and orchestration.


The HP FlexNetwork architecture is designed to allow IT to manage these different network segments through a single pane-of-glass management application, the HP Intelligent Management Center (IMC). Because the FlexNetwork architecture is based on open standards, enterprises have the freedom to choose the best-in-class solution for their businesses. Even with the shift to the network cloud, the HP FlexNetwork architecture is ideal for supporting this evolution. Enterprises deploying private clouds must implement flatter, simpler data center networks to support the bandwidth-intensive, delay-sensitive server-to-server virtual machine and workload traffic flows that are associated with cloud computing. They must also be able to administer and secure virtual resources and orchestrate on-demand services. The HP FlexNetwork architecture helps enterprises to securely deploy and centrally orchestrate video, cloud, and mobility-enhanced architectures that scale from the data center to the network edge.

## FlexNetwork Architecture



## Data Center Switches

### Modular Core, aggregation switches

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity	
<b>HP 12500 Switch Series</b>										
	<b>HP 12518 AC Switch Chassis (JF430C)</b>	38	18			864		864	576	13.32 Tbps
	<b>HP 12518 DC Switch Chassis (JC653A)</b>	38	18			864		864	576	13.32 Tbps
	<b>HP 12508 AC Switch Chassis (JF431C)</b>	22	8			384		384	256	6.12 Tbps
	<b>HP 12508 DC Switch Chassis (JC652A)</b>	22	8			384		384	256	6.12 Tbps
	<b>HP 12504 AC Switch Chassis (JC654A)</b>	10	4			192		192	128	3.24 Tbps
	<b>HP 12504 DC Switch Chassis (JC655A)</b>	10	4			192		192	128	3.24 Tbps

#### HP 12500 Switch Series at a glance...

Next-generation, data center core switching platform with innovative technologies including Intelligent Resilient Framework (IRF), Ethernet Virtual Interconnect (EVI), and Multitenant Device Context (MDC). Available with 18, 8, or 4 slots dedicated to I/O modules and two slots for fully redundant management modules, with up to 13.32 Tbps performance and up to 288 (1:1) or 576 (4:1) 10GbE ports, and 864 (1:1) GbE ports. Nonblocking (L2, L3 IPv4, L3 IPv6, MPLS, and VPLS), zero service interruption design, midplane/CLOS architecture ready for future 40 GbE/100 GbE modules. The 12500 series and IRF deliver the simplest, most resilient, most efficient, highly scalable data center networks.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 12500 Switch Series

##### Modules

- HP 12500 Type A Main Processing Unit with Comware v7 Operating System (JG497A)
- HP 12500 Main Processing Unit (JC072B)
- HP 12500 48-port Gig-T LEB Module (JC074B)
- HP 12500 48-port Gig-T LEC Module (JC065B)
- HP 12500 48-port GbE SFP LEB Module (JC075B)
- HP 12500 48-port GbE SFP LEC Module (JC069B)
- HP 12500 48-port GbE SFP LEF Module (JC660A)
- HP 12500 8-port 10GbE XFP LEB Module (JC073B)
- HP 12500 8-port 10GbE XFP LEC Module (JC068B)
- HP 12500 8-port 10GbE SFP+ LEB Module (JC780A)
- HP 12500 8-port 10GbE SFP+ LEC Module (JC781A)
- HP 12500 8-port 10GbE SFP+ LEF Module (JC659A)
- HP 12500 16-port 10GbE SFP+ LEB Module (JC782A)
- HP 12500 16-port 10GbE SFP+ LEC Module (JC783A)
- HP 12500 32-port 10GbE SFP+ REB Module (JC064B)
- HP 12500 32-port 10GbE SFP+ REC Module (JC476B)
- HP 12500 Power Monitor Module (JC502A)
- HP 12500 TAA-compliant Main Processing Unit (JC808A)
- HP 12500 48-port Gig-T LEC TAA-compliant Module (JC809A)
- HP 12500 8-port 10GbE XFP LEC TAA-compliant Module (JC810A)
- HP 12500 48-port GbE SFP LEC TAA-compliant Module (JC811A)
- HP 12500 32-port 10GbE SFP+ REC TAA-compliant Module (JC812A)
- HP 12500 8-port 10GbE SFP+ LEC TAA-compliant Module (JC813A)
- HP 12500 16-port 10GbE SFP+ LEC TAA-compliant Module (JC814A)
- HP 1250x TAA-compliant G2 Fabric Module (JC815A)
- HP 12518 TAA-compliant G2 Fabric Module (JC816A)
- HP 12500 8-port 10GbE SFP+ LEF TAA-compliant Module (JC817A)
- HP 12500 48-port GbE SFP LEF TAA-compliant Module (JC818A)

- HP 12518 TAA-compliant Fabric Module (JC819A)
- HP 12508 TAA-compliant Fabric Module (JC820A)

##### Mounting kit

- HP X421 Chassis Universal 4-post Rack Mounting Kit (JC665A)

##### Appliance

- HP 12500 VPN Firewall Module (JC635A)

##### Memory

- HP X600 1G Compact Flash Card (JC684A)
- HP 12500 additional 1 GB SDRAM DDR2 (JC071A)

##### HP FlexFabric 12504 AC Switch Chassis (JC654A)

- HP 1250x G2 Fabric Module (JC658A)
- HP 12500 AC Power Entry Module (JF426A)
- HP 12500 2000W AC Power Supply (JF429A)
- HP FlexFabric 12504 Fan Assembly (JC664A)

##### HP FlexFabric 12504 DC Switch Chassis (JC655A)

- HP 1250x G2 Fabric Module (JC658A)
- HP X210 10-meter JG Connector to Bare 6AWG 37800 Watt 72V DC Power Cable (JG280A)
- HP 12500 1800W DC Power Supply (JC651A)
- HP FlexFabric 12504 Fan Assembly (JC664A)

##### HP 12508 AC Switch Chassis (JF431C)

- HP 12508 Fabric Module (JC067B)
- HP 1250x G2 Fabric Module (JC658A)
- HP 12508 Top and Bottom Cable Guides for AC Powered Switch (JC785A)
- HP 12500 Side Cable Management Guide (JC084A)
- HP 12500 2000W AC Power Supply (JF429A)
- HP 12500 AC Power Entry Module (JF426A)
- HP 12508 Fan Assembly (JC081A)
- HP 12508 Optional Air Filter (JC082A)

##### HP 12508 DC Switch Chassis (JC652A)

- HP 12508 Fabric Module (JC067B)
- HP 1250x G2 Fabric Module (JC658A)

- HP 12508 Top and Bottom Cable Guides for DC Powered Switch (JC787A)
- HP 12500 Side Cable Management Guide (JC084A)
- HP X210 10-meter JG Connector to Bare 6AWG 37800 Watt 72V DC Power Cable (JG280A)
- HP 12500 1800W DC Power Supply (JC651A)
- HP 12508 Fan Assembly (JC081A)
- HP 12508 Optional Air Filter (JC082A)

##### HP 12518 AC Switch Chassis (JF430C)

- HP 12518 G2 Fabric Module (JC657A)
- HP 12518 Fabric Module (JC066A)
- HP 12518 Top and Bottom Cable Guides for AC Powered Switch (JC786A)
- HP 12500 Side Cable Management Guide (JC084A)
- HP 12500 2000W AC Power Supply (JF429A)
- HP 12500 AC Power Entry Module (JF426A)
- HP 12518 Fan Assembly (JC080A)
- HP 12518 Optional Air Filter (JC083A)

##### HP 12518 DC Switch Chassis (JC653A)

- HP 12518 G2 Fabric Module (JC657A)
- HP 12518 Fabric Module (JC066A)
- HP 12518 Top and Bottom Cable Guides for DC Powered Switch (JC788A)
- HP 12500 Side Cable Management Guide (JC084A)
- HP X210 10-meter JG Connector to Bare 6AWG 37800 Watt 72V DC Power Cable (JG280A)
- HP 12500 1800W DC Power Supply (JC651A)
- HP 12518 Fan Assembly (JC080A)
- HP 12518 Optional Air Filter (JC083A)

##### Transceivers

See pages 65–70 for the HP Networking Transceiver Matrix.

## Data Center Switches (continued)

### Modular Core, aggregation switches (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	QSFP+ 40GbE ports	Switching capacity
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### HP FlexFabric 11900 Switch Series



#### HP FlexFabric 11908-V Switch Chassis (JG608A)

14	8						384	384	64	7.7 Tbps
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#### HP FlexFabric 11900 Switch Series at a glance...

The HP FlexFabric 11900 Switch Series is a high-performance data center aggregation switch that provides line-rate, high-density 10GbE and 40 GbE connectivity designed for cost-effective end-of-row (EoR) and small core deployments.

With latency as low as 3  $\mu$ s and ready for software-defined networking (SDN), the switch supports full Layer 2 and 3 features, including advanced features like TRansparent Interconnection of Lots of Links (TRILL), and Intelligent Resilient Framework (IRF), which provides the ability to build large, resilient switching fabrics. The switch supports fully redundant and hot-swappable components to complement its other enterprise-class capabilities.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP FlexFabric 11900 Switch Series

##### Modules

- HP FlexFabric 11900 Main Processing Unit (JG609A)
- HP FlexFabric 11900 32-port 10GbE SFP+ SF Module (JG611A)
- HP FlexFabric 11900 48-port 10GbE SFP+ SF Module (JG612A)
- HP FlexFabric 11900 4-port 40GbE QSFP+ SF Module (JG613A)
- HP FlexFabric 11900 8-port 40GbE QSFP+ SF Module (JG614A)

##### Power supplies

- HP FlexFabric 11900 2500W AC Power Supply (JG616A)
- HP FlexFabric 11900 2400W DC Power Supply (JG617A)

##### Mounting kit

- HP X421 Chassis Universal 4-post Rack Mounting Kit (JC665A)

##### Power cords

- HP 10500 -48V 3m DC Power Supply Cable (JG390A)
- HP 10500 -48V 15m DC Power Supply Cable (JG391A)

##### HP FlexFabric 11908-V Switch Chassis (JG608A)

- HP FlexFabric 11908 1.92Tbps Type D Fabric Module (JG610A)
- HP FlexFabric 11908-V Spare Fan Assembly (JG618A)


##### Transceivers


See pages 65–70 for the HP Networking Transceiver Matrix.



## Data Center Switches (continued)

### Fixed-port Top-of-Rack Network Access Switches

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	QSFP+ 40GbE ports	Switching capacity
<b>HP FlexFabric 5920 Switch Series</b>											
									24		480 Gbps
	<b>HP FlexFabric 5920AF-24XG Switch (JG296A)</b> <a href="#">HP FlexFabric 5920 Switch Series at a glance...</a> The HP FlexFabric 5920AF Switch is a high-performance 10GbE with large packet buffers top-of-rack (ToR) switch, dual internal AC or DC power supply, front-to-back or back-to-front airflow, full Layer 2 and Layer 3, IPv4/IPv6 dual-stack switch.										

<b>HP FlexFabric 5900 Switch Series</b>											
									48	4	1.28 Tbps
	<b>HP FlexFabric 5900AF-48XG-4QSFP+ Switch (JC772A)</b>										
					48		4			2	336 Gbps
	<b>HP FlexFabric 5900AF-48G-4XG-2QSFP+ Switch (JG510A)</b>										
									48	4	1.28 Tbps
	<b>HP FlexFabric 5900AF-48XGT-4QSFP+ Switch (JG336A)</b> <a href="#">HP FlexFabric 5900 Switch Series at a glance...</a> The HP FlexFabric 5900AF Switch is a high-density 10GbE with 40 GbE uplink and ultra-low-latency top-of-rack (ToR) switches, dual internal AC or DC power supply, front-to-back or back-to-front airflow, full Layer 2 and Layer 3, IPv4/IPv6 dual-stack switches.										

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP FlexFabric 5920 Switch Series

##### Power supplies

- HP FlexFabric 58x0AF 650W AC Power Supply (JC680A)
- HP FlexFabric 58x0AF 650W DC Power Supply (JC681A)

##### Fan trays

- HP FlexFabric 5920AF-24XG Back (power side) to Front (port side) Airflow Fan Tray (JG297A)
- HP FlexFabric 5920AF-24XG Front (port side) to Back (power side) Airflow Fan Tray (JG298A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

#### HP FlexFabric 5900 Switch Series

##### Power supplies

- HP FlexFabric 58x0AF 650W AC Power Supply (JC680A)
- HP FlexFabric 58x0AF 650W DC Power Supply (JC681A)

##### Fan trays

- HP FlexFabric 58x0AF Back (power side) to Front (port side) Airflow Fan Tray (JC682A)
- HP FlexFabric 58x0AF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

##### HP FlexFabric 5900AF-48XG-4QSFP+ Switch (JC772A)

- HP X711 Front (port side) to Back (power side) Airflow High Volume Fan Tray (JG552A)
- HP X712 Back (power side) to Front (port side) Airflow High Volume Fan Tray (JG553A)
- HP FlexFabric 58x0AF Back (power side) to Front (port side) Airflow Fan Tray (JC682A)
- HP FlexFabric 58x0AF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

##### HP FlexFabric 5900AF-48G-4XG-2QSFP+ Switch (JG510A)

- HP X711 Front (port side) to Back (power side) Airflow High Volume Fan Tray (JG552A)
- HP X712 Back (power side) to Front (port side) Airflow High Volume Fan Tray (JG553A)
- HP FlexFabric 58x0AF Back (power side) to Front (port side) Airflow Fan Tray (JC682A)
- HP FlexFabric 58x0AF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

##### HP FlexFabric 5900AF-48XGT-4QSFP+ Switch (JG336A)

- HP X711 Front (port side) to Back (power side) Airflow High Volume Fan Tray (JG552A)
- HP X712 Back (power side) to Front (port side) Airflow High Volume Fan Tray (JG553A)

## Data Center Switches (continued)

### Fixed-port Top-of-Rack Network Access Switches (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 5830 Switch Series</b>										
	<b>HP 5830AF-96G Switch (JC694A)</b>	2	0			96			10	392 Gbps
	<b>HP 5830AF-48G Switch with 1 Interface Slot (JC691A)</b>	1	1			48			4	160 Gbps

#### HP 5830 Switch Series at a glance...

High-performance Gigabit Ethernet data center top-of-rack switches. Ultra-deep buffer for IDC, dual internal AC/DC power supply, front-to-back or back-to-front airflow, full Layer 2 and Layer 3, IPv4/IPv6 dual-stack switch.

### HP 5820 Switch Series

	<b>HP 5820AF-24XG Switch (JG219A)</b>	1	0			2			24	484 Gbps
	<b>HP 5820-24XG-SFP+ Switch (JC102A)</b>	1				4			24	488 Gbps
	<b>HP 5820X-24XG-SFP+ TAA-compliant Switch (JG243A)</b>	1				4			24	488 Gbps
	<b>HP 5820-14XG-SFP+ Switch with 2 Interface Slots and 1 OAA Slot (JC106A)</b>	2	2+1x OAA			4			14 (22)	488 Gbps
	<b>HP 5820X-14XG-SFP+ TAA-compliant Switch with 2 Interface Slots and 1 OAA Slot (JG259A)</b>	2	2+1x OAA			4			14 (22)	488 Gbps

#### HP 5820 Switch Series at a glance...

High-performance 10-Gigabit Ethernet flex chassis switches. High density. L2/L3/L4, RIP/OSPF/BGP. 10GbE line-rate performance and IRF technology. Open Application Architecture (OAA) that extends and integrates application capability into the network. No PoE/PoE+ support.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP 5830 Switch Series

##### Power supplies

- HP 58x0AF 650W AC Power Supply (JC680A)
- HP 58x0AF 650W DC Power Supply (JC681A)

##### HP 5830AF-48G Switch with 1 Interface Slot (JC691A)

- HP 5500/5120 2-port 10GbE SFP+ Module (JD368B)
- HP 5830AF-48G Back (power side) to Front (port side) Airflow Fan Tray (JC692A)
- HP 5830AF-48G Front (port side) to Back (power side) Airflow Fan Tray (JC693A)

##### HP 5830AF-96G Switch (JC694A)

- HP 5830AF-96G Back (power side) to Front (port side) Airflow Fan Tray (JC695A)
- HP 5830AF-96G Front (port side) to Back (power side) Airflow Fan Tray (JC696A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

#### HP 5820 Switch Series

##### Power supplies

- HP 5800 300W AC Power Supply (JC087A)
- HP 5800 300W DC Power Supply (JC090A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

##### Appliance

- HP 5820 VPN Firewall Module (JD255A)

##### HP 5820-14XG-SFP+ Switch with 2 Slots (JC106A)

- HP 5820 4-port 8/4/2 Gbps FCoE SFP+ Module (JC530A)
- HP 5800 4-port 10GbE SFP+ Module (JC091A)
- HP 5800 2-port 10GbE SFP+ Module (JC092B)
- HP 5800 2RU Spare Fan Assembly (JC096A)
- HP 5820 VPN Firewall Module (JD255A)

##### HP 5820-24XG-SFP+ Switch (JC102A)

- HP 5800 1RU Spare Fan Assembly (JC098A)

##### HP 5820AF-24XG Switch (JG219A)


- HP 58x0AF 650W AC Power Supply (JC680A)
- HP 58x0AF 650W DC Power Supply (JC681A)
- HP 58x0AF Back (power side) to Front (port side) Airflow Fan Tray (JC682A)
- HP 58x0AF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

## Data Center Switches (continued)

### Fixed-port Top-of-Rack Network Access Switches (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 5800 Switch Series</b>										
										
<b>HP 5800-48G-PoE+ Switch with 2 Interface Slots (JC101A)</b>	2	2+1x OAA			48 (80)	48		(32)	0 (8)	284 Gbps
<b>HP 5800-48G-PoE+ TAA-compliant Switch with 2 Interface Slots (JG242A)</b>	2	2+1x OAA			48 (80)	48		(32)	0 (8)	284 Gbps
<b>HP 5800-48G-PoE+ Switch with 1 Interface Slot (JC104A)</b>	1	1			(16)	48		(16)	4 (8)	256 Gbps
<b>HP 5800-48G-PoE+ TAA-compliant Switch with 1 Interface Slot (JG257A)</b>	1	1			(16)	48		(16)	4 (8)	256 Gbps
<b>HP 5800-48G Switch with 1 Interface Slot (JC105A)</b>	1	1			48 (64)			(16)	4 (8)	256 Gbps
<b>HP 5800-48G TAA-compliant Switch with 1 Interface Slot (JG258A)</b>	1	1			48 (64)			(16)	4 (8)	256 Gbps
<b>HP 5800AF-48G Switch (JG225A)</b>	1	0			48				6	216 Gbps
<b>HP 5800-24G-SFP Switch with 1 Interface Slot (JC103A)</b>	1	1			(16)			24 (40)	4 (8)	208 Gbps
<b>HP 5800-24G-SFP TAA-compliant Switch with 1 Interface Slot (JG256A)</b>	1	1			(16)			24 (40)	4 (8)	208 Gbps
<b>HP 5800-24G-PoE+ Switch (JC099A)</b>	1	1			(16)	24		(16)	4 (8)	208 Gbps
<b>HP 5800-24G-PoE+TAA-compliant Switch (JG254A)</b>	1	1			(16)	24		(16)	4 (8)	208 Gbps
<b>HP 5800-24G Switch (JC100A)</b>	1	1			24 (40)			(16)	4 (8)	208 Gbps
<b>HP 5800-24G TAA-compliant Switch (JG255A)</b>	1	1			24 (40)			(16)	4 (8)	208 Gbps
<b>HP 5800 Switch Series at a glance...</b>										
Advanced Gigabit Ethernet and 10-Gigabit Ethernet flex chassis switches. L2/L3/L4, RIP/OSPF/BGP, MPLS, and VPLS. Both modular and fixed port (up to 48 ports). Media and OAA module slots; IRF; IPv4/IPv6.										

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 5800 Switch Series

##### Modules

- HP 5800 4-port 10GbE SFP+ Module (JC091A)
- HP 5800 2-port 10GbE SFP+ Module (JC092B)
- HP 5800 16-port Gig-T Module (JC094A)
- HP 5800 16-port SFP Module (JC095A)
- HP 5800 PoE TAA-compliant Module (JG260A)

##### Power supplies

- HP 5800/5500 150W AC Power Supply (JD362A)
- HP 5800/5500 150W DC Power Supply (JD366A)
- HP 5800 300W AC Power Supply (JC087A)
- HP 5800 300W DC Power Supply (JC090A)

- HP 5800 750W AC Power Supply (JC089A)
- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

##### EPS/RPS

- HP 5800 PoE Module (JC097B)

##### Fan trays

- HP 5800 2RU Spare Fan Assembly (JC096A)
- HP 5800 1RU Spare Fan Assembly (JC098A)

##### Appliance

- HP 5820 VPN Firewall Module (JD255A)

#### HP 5800AF-48G Switch (JG225A)


- HP 58x0AF 650W AC Power Supply (JC680A)
- HP 58x0AF 650W DC Power Supply (JC681A)
- HP 58x0AF Back (power side) to Front (port side) Airflow Fan Tray (JC682A)
- HP 58x0AF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

## Data Center Switches (continued)

### Fixed-port Top-of-Rack Network Access Switches (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 6600 Switch Series</b>										
	<b>HP 6600-48G-4XG Switch (J9452A)</b>	1			48				4 (SFP+)	176 Gbps
	<b>HP 6600-24XG Switch (J9265A)</b>	1							24 (SFP+)	322.8 Gbps
	<b>HP 6600-24G-4XG Switch (J9264A)</b>	1			24			4 DP	4 (SFP+)	101.8 Gbps
<p><b>HP 6600 Switch Series at a glance...</b> Switches enhanced for the data center server access layer. 24- and 48-port GbE and 10GbE models with front-to-back/back-to-front airflow, redundant fans and power supplies.</p> <p>Note: DP = Dual-personality ports</p>										

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 6600 Switch Series

##### Module

- HP 6600 Switch Fan Tray (J9271A)

##### Power supply

- HP 6600 Switch Power Supply (J9269A)

##### Mounting kits

- HP 6600 Series Rack Kit (J9469A)
- HP 6600-24XG, 48G, 48G-4XG Switch Air Plenum Kit (J9480A)
- HP 6600-24G and 24G-4XG Switch Air Plenum Kit (J9481A)


##### License

- HP 6600 Switch Premium License (J9305A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

### Blade Switch and Virtual Connect

	Height (RU)	Module slots (max)	1 Gb downlink ports	1 Gb/10 Gb downlink ports	10/100/1000 uplink ports	1 Gb/10 Gb uplink ports	10 Gb cross connect	Switching capacity
<b>HP 6125 Switch Series</b>								
	<b>HP 6125G Ethernet Blade Switch (658247-B21)</b>	Single bay	16		8		1	52 Gb
	<b>HP 6125G/XG Ethernet Blade Switch (658250-B21)</b>	Single bay	16		4	4	1	70 Gb
<p><b>HP 6125 Switch Series at a glance...</b> Designed for the HP BladeSystem c-Class enclosure, the HP 6125 series provides two distinct edge switches providing the same level of Comware features available on HP Networking data center switches worldwide. The HP 6125G Blade Switch provides 16 1-GbE downlinks and four copper 1 GbE plus four 1-GbE SFP uplinks, two of the SFP uplinks can be used as 10GbE IRF cross connects to another blade switch. The 6125G/XG switch provides 16 1-GbE downlinks as well as four 1-GbE copper uplinks plus four 10GbE SFP+ uplinks, two of which can be used as 10GbE IRF cross-connects. Both units have a 10GbE internal cross-connect for connectivity or IRF. Supports L2/L3/L4, RIP/OSPF/BGP, IRF, IPv4/IPv6.</p>								

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 6125 Switch Series

##### Transceivers


- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
- HP X125 1G SFP LC LH70 Transceiver (JD063B)
- HP X120 1G SFP RJ45 T Transceiver (JD089B)
- HP X120 1G SFP LC SX Transceiver (JD118B)

- HP X120 1G SFP LC LX Transceiver (JD119B)
- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X130 10G SFP+ LC SR Transceiver (JD092B)
- HP X130 10G SFP+ LC LRM Transceiver (JD093B)
- HP X130 10G SFP+ LC LR Transceiver (JD094B)
- HP X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable (JD095B)

- HP X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable (JD096B)
- HP X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable (JD097B)
- HP X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable (JD081B)

## Data Center Switches (continued)

### Blade Switch and Virtual Connect (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
 <b>HP 6120 Switch Series</b>	<b>HP 6120XG Blade Switch (516733-B21)</b>								
	1							8 uplinks, 16 internal	480 Gbps
	<b>HP 6120G/XG Blade Switch (498358-B21)</b>								
	1							3 uplinks	106 Gbps

#### HP 6120 Switch Series at a glance...

Designed for the HP BladeSystem c-Class enclosure, the HP 6120 series provides two distinct edge switches with options for blade server customers. The HP 6120XG Blade Switch provides 16 1-Gb/10-Gb downlinks and 8 10-Gb SFP+ uplinks, including a dual-personality CX4 and SFP+ 10-Gb uplink, and two 10-Gb cross-connects. The 6120G/XG provides 16 1-Gb downlinks as well as four 1-Gb copper uplinks, two 1-Gb SFP uplinks along with three 10-Gb uplinks, and a single 10-Gb cross-connect.

### HP Virtual Connect Modules

	<b>HP Virtual Connect FlexFabric 10 Gb/24-port Module (571956-B21)</b>								
	1								480 Gbps
	<b>HP Virtual Connect FlexFabric 10/24 Enterprise Edition BLc7000 Option (605865-B21)</b>								
	1								480 Gbps

#### HP Virtual Connect Modules at a glance...

The HP Virtual Connect FlexFabric 10-Gb/24-port Module with 16x 10-Gb downlinks, 4x 1-Gb/10-Gb Ethernet (SFP+) shared uplinks, 4x 10-Gb Ethernet or 2/3/8 Gb Fibre Channel (SFP+) is the most flexible way to connect virtualized server blades to data or storage networks in an HP BladeSystem c7000 Enclosure. The Enterprise Edition includes two of the FlexFabric modules.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 6120 Switch Series

##### HP 6120XG Blade Switch

###### Transceivers

- HP 1Gb SX Ethernet SFP (453151-B21)
- HP 1Gb RJ-45 Ethernet SFP (453154-B21)
- HP SFP+ Ethernet SR (455883-B21)
- HP SFP+ Ethernet LR (455886-B21)
- HP SFP+ Ethernet LRM (455889-B21)
- HP X132 10G SFP+ LC SR Transceiver (J9150A)
- HP X132 10G SFP+ LC LR Transceiver (J9151A)
- HP X132 10G SFP+ LC LRM Transceiver (J9152A)

###### Cables

- HP BladeSystem c-Class Small Form-Factor Pluggable .5m 10GbE Copper Cable (487649-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 1m 10GbE Copper Cable (487652-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 3m 10GbE Copper Cable (487655-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 5m 10GbE Copper Cable (537963-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 7m 10GbE Copper Cable (487658-B21)
- HP X242 SFP+ SFP+ 1m Direct Attach Cable (J9281B)
- HP X242 SFP+ SFP+ 3m Direct Attach Cable (J9283B)
- HP X242 SFP+ SFP+ 7m Direct Attach Cable (J9285B)

###### License

- HP 6120XG Switch CEE License (608074-B21)

#### HP 6120G/XG Blade Switch

##### Transceivers

- HP 1Gb SX Ethernet SFP (453151-B21)
- HP 1Gb RJ-45 Ethernet SFP (453154-B21)
- HP 1350nm Long-range 10 Gigabit Small Form Factor Pluggable Module Option Kit (443757-B21)
- HP 850nm Short-range 10 Gigabit Small Form Factor Pluggable Module Option Kit (443756-B21)

##### Cables

- HP BladeSystem c-Class .5m 10GbE CX4 Cable Option (444477-B21)
- HP BladeSystem c-Class 1m 10GbE CX4 Cable Option (444477-B22)
- HP BladeSystem c-Class 3m 10GbE CX4 Cable Option (444477-B23)
- HP BladeSystem c-Class 15m 10GbE CX4 Cable Option (444477-B27)

##### XFP to SFP+ cables

- HP X244 XFP SFP+ 1m Direct Attach Cable (J9300A)
- HP X244 XFP SFP+ 3m Direct Attach Cable (J9301A)
- HP X244 XFP SFP+ 5m Direct Attach Cable (J9302A)

#### HP Virtual Connect FlexFabric


##### Transceivers

- HP 1Gb SX Ethernet SFP (453151-B21)
- HP 1Gb RJ-45 Ethernet SFP (453154-B21)
- HP SFP+ Ethernet SR (455883-B21)
- HP SFP+ Ethernet LR (455886-B21)
- HP SFP+ Ethernet LRM (455889-B21)
- HP 4Gb Short Wave B-series Fibre Channel SFP (AJ715A)
- HP 4Gb Long Wave B-series 30km Fibre Channel SFP (AN211A)

- HP 4Gb Short Wave SFP (A7446B)
- HP 8Gb Short Wave B-series Fibre Channel SFP+ (AJ716A)
- HP 8Gb Long Wave B-series 10km Fibre Channel SFP+ (AJ717A)
- HP 8Gb Short Wave 500m Fibre Channel SFP+ (AJ718A)

##### Cables

- HP BladeSystem c-Class Small Form-Factor Pluggable .5m 10GbE Copper Cable (487649-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 1m 10GbE Copper Cable (487652-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 3m 10GbE Copper Cable (487655-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 5m 10GbE Copper Cable (537963-B21)
- HP BladeSystem c-Class Small Form-Factor Pluggable 7m 10GbE Copper Cable (487658-B21)
- HP X242 SFP+ SFP+ 1m Direct Attach Cable (J9281B)
- HP X242 SFP+ SFP+ 3m Direct Attach Cable (J9283B)
- HP X242 SFP+ SFP+ 7m Direct Attach Cable (J9285B)
- HP X244 XFP SFP+ 1m Direct Attach Cable (J9300A)
- HP X240 10G SFP+ SFP+ 0.65m DA Cable (JD095B)
- HP X240 10G SFP+ SFP+ 1.2m DA Cable (JD096B)
- HP X240 10G SFP+ SFP+ 3m DA Cable (JD097B)
- HP X244 XFP SFP+ 3m Direct Attach Cable (J9301A)
- HP X244 XFP SFP+ 5m Direct Attach Cable (J9302A)
- HP 3m C-series Passive Copper SFP+ Cable (AP784A)
- HP 5m C-series Passive Copper SFP+ Cable (AP785A)
- HP 1m B-series Active Copper Cable with Integrated SFP+ Transceiver (AP818A)
- HP 3m B-series Active Copper Cable with Integrated SFP+ Transceiver (AP819A)
- HP 5m B-series Active Copper Cable with Integrated SFP+ Transceiver (AP820A)

	Height (RU)	Module slots	SDRAM (included/available)	Compact Flash slot	Hardware hot-swap	Routing performance (PPS)	Routing/Switching capacity	Routing table size	
<b>HP 8800 Router Series</b>									
	<b>HP 8812 Router Chassis (JC150B)</b>	17	12 + 2 slots	2/4 GB	1	Yes	864 million	1.44 Tbps	3 million entries
	<b>HP 8808 Router Chassis (JC149B)</b>	21	8 + 2 slots	2/4 GB	1	Yes	576 million	960 Gbps	3 million entries
	<b>HP 8805 Router Chassis (JC148B)</b>	11	5 + 2 slots	2/4 GB	1	Yes	360 million	600 Gbps	3 million entries
<p><b>HP 8800 Router Series at a glance...</b>                      Routers with up to 12 I/O slots, 1.44 Tbps switching capacity. Series provides carrier-class H-QoS, dynamic routing, MPLS, IPv4/IPv6, multicast, security, and availability. Supports IPv6 and IPv4-to-IPv6 transition technologies.</p>									

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 8800 Router Series**

**Cables**

- HP X260 E1 BNC 75 ohm 3m Router Cable (JC127A)
- HP X260 E1 RJ45 120 ohm 2m Router Cable (JC156A)
- HP X260 E1 RJ45 120 ohm 3m Router Cable (JC126A)
- HP X260 E1 RJ45 120 ohm 15m Router Cable (JC151A)
- HP X260 E1 RJ45 120 ohm 30m Router Cable (JC152A)
- HP X260 E1 BNC Extend 10m Router Cable (JC153A)
- HP X260 E1 BNC Extend 15m Router Cable (JC154A)
- HP X260 E1 BNC Extend 20m Router Cable (JC155A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)
- HP X260 T1 RJ45 100 ohm 3m Router Cable (JC128A)
- HP X260 T1 Router Cable (JD518A)
- HP X500 T1 Voice Router Cable (JD535A)

**Mounting kit**

- HP X421 Chassis Universal 4-post Rack Mounting Kit (JC665A)

**License**

- HP 8800 Router Software License (JC157A)

**Router modules**

- HP 8800 Single Service Processing Engine Module (JC139A)
- HP 8800 Dual Service Processing Engine Module (JC142A)
- HP 8800 Single Service Processing Engine Enhanced Module (JC130A)
- HP 8800 Dual Service Processing Engine Enhanced Module (JC133A)
- HP 8800 10-port GbE SFP Module (JC131A)
- HP 8800 20-port 1000BASE-X Module (JC132B)
- HP 8800 20-port 10/100/1000 Ethernet Electrical Interface Module (JC135B)
- HP 8800 1-port 10GbE XFP Module (JC129A)
- HP 8800 8-port E1/T1/8-port SFP Module (JC134A)
- HP 8800 32-port E1/T1/2-port GbE SFP Module (JC145A)

- HP 8800 1-port OC-3/STM-1 (E1/T1) CPOS/8-port GbE SFP Module (JC477A)
- HP 8800 2-port OC-3/STM-1 (E1/T1) CPOS/8-port GbE SFP Module (JC478A)
- HP 8800 4-port OC-3/STM-1 (E3/T3) CPOS/4-port GbE SFP Module (JC479A)
- HP 8800 1-port OC-12/STM-4 (E3/T3) CPOS/4-port GbE SFP Module (JC480A)
- HP 8800 1-port OC-48/STM-16 (OC-3) CPOS SFP Module (JC481A)
- HP 8800 8-port OC-3c/OC-12c POS/GbE SFP Module (JC482A)
- HP 8800 2-port OC-3c/STM-1c POS SFP/6-port GbE SFP Module (JC483A)
- HP 8800 2-port OC-12c/STM-4c POS SFP/6-port GbE SFP Module (JC484A)
- HP 8800 2-port OC-48c/STM-16c POS SFP/4-port GbE SFP Module (JC485A)
- HP 8800 4-port OC-48c / STM-16c POS SFP Module (JC486A)
- HP 8800 1-port OC-192c/STM-64c POS XFP Module (JC487A)
- HP 8800 2-port OC-48c/STM-16c RPR SFP Module (JC488A)
- HP 8800 1-port OC-192c/STM-64c RPR XFP Module (JC489A)
- HP 8800 4-port OC-3c/STM-1c ATM SFP Module (JC490A)
- HP 8800 1-port OC-12c/STM-4c ATM SFP Module (JC491A)
- HP 8800 Net Analysis Service Processing Module (JC143A)
- HP 8800 NAT Processing Module (JC144A)
- HP 8800 Dual Fabric Main Processing Unit (JC596A)
- HP 8800 Single Processor Service Engine Module (JC598A)
- HP 8800 Dual Processor Service Engine Module (JC599A)
- HP 8800 Network Address Translation Service Module (JC607A)
- HP 8800 48-port GbE SFP Service Processing Module (JC604A)
- HP 8800 4-port 10GbE XFP Service Processing Module (JC602A)
- HP 8800 2-port 10GbE XFP Service Processing Module (JC605A)
- HP 8800 16-port GbE SFP/8-port GbE Combo Service Processing Module (JC606A)
- HP 2GB Registered DDR2 SDRAM Memory (JC609A)

- HP 8800 Single Fabric Main Processing Unit (JC597A)
- HP 8800 Enhanced Dual Processor Service Engine Module (JC601A)
- HP 8800 48-port Gig-T Service Processing Module (JC603A)
- HP 8800 Network Analysis Service Module (JC608A)
- HP 8800 Enhanced Single Processor Service Engine Module (JC600A)

**Memory**

- HP 8800 1GB SDRAM (JC136A)
- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X600 256M Compact Flash Card (JC686A)

**HP 8812 Router Chassis (JC150B)**

- HP 9500 3500W AC Power Frame (JC111A)
- HP 9500/8800 1800W AC Power Supply (JC110B)
- HP 9500/8800 3500W DC Power Supply (JC473A)
- HP 8800 Single Fabric Main Processing Unit (JC597A)
- HP 8800 Dual Fabric Main Processing Unit (JC596A)

**HP 8808-V Router Chassis (JC149B)**

- HP 9500 3500W AC Power Frame (JC111A)
- HP 9500/8800 1800W AC Power Supply (JC110B)
- HP 9500/8800 3500W DC Power Supply (JC473A)
- HP 8800 Single Fabric Main Processing Unit (JC597A)
- HP 8800 Dual Fabric Main Processing Unit (JC596A)


**HP 8805 Router Chassis (JC148B)**

- HP 9500/8800 1800W AC Power Supply (JC110B)
- HP 9500 3500W AC Power Frame (JC111A)
- HP 9500/8800 2000W 36-75V DC Power Supply (JC029B)
- HP 8800 Single Fabric Main Processing Unit (JC597A)
- HP 8800 Dual Fabric Main Processing Unit (JC596A)

**Transceivers**

See pages 65–70 for the HP Networking Transceiver Matrix.

## Data Center Routers (continued)

	Height (U)	Module slots	Memory size (default/max)	Compact Flash (include + external)	Hardware hot-swap	Routing performance (MPPS)	Routing table size (entries)	
<b>HP HSR6800 Router Series</b>								
	<b>HP HSR6802 Router Chassis (JG361A)</b>	2 MPU	2 SAP or 4 HIM, or 8 MIM	4G/4G	1+1	Yes	120	4 million
	<b>HP HSR6804 Router Chassis (JG362A)</b>	2 MPU	4 SAP or 8 HIM, or 16 MIM	4G/4G	1+1	Yes	240	4 million
	<b>HP HSR6808 Router Chassis (JG363A)</b>	2 MPU	1 SF; 8 SAP or 16 HIM, or 32 MIM	4G/4G	1+1	Yes	420	4 million

### HP HSR6800 Router Series at a glance...

The HP HSR6800 Router Series is made up of high-performance WAN services routers designed for large-scale data center and high-end campus WAN deployments. Built on a multicore distributed processing architecture, the routers scale up to 420 Mpps in IP forwarding and up to 2 Tbps in switching capacity, delivering robust routing (MPLS, IPv4, IPv6, dynamic routing, and nested QoS), security (stateful firewall, IPSec/Dynamic VPN, DoS protection, and NAT), full Layer 2 switching, and traffic analysis capabilities. The platform offers high-density GbE/10GbE interface options and is 40G/100G ready. Moreover, the HSR6800 routers are the first in the industry to support system virtualization using Intelligent Resilient Framework (IRF) technology.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP HSR6800 Router Series

##### Security module

- HP 6600 VPN Firewall Module (JC639A)

##### Power supplies

- HP 6600 650W AC Power Supply (JC492A)
- HP 6600 650W DC Power Supply (JC493A)
- HP HSR6800 1200W DC Power Supply (JG334A)
- HP HSR6800 1200W AC Power Supply (JG335A)

##### Router modules

- HP HSR6800 RSE-X2 Router Main Processing Unit (JG364A)
- HP HSR6800 FIP-600 Flexible Interface Platform Router Module (JG360A)
- HP 6600 FIP-210 Flexible Interface Platform Module (JC167B)
- HP 6600 FIP-110 Flexible Interface Platform Module (JC166B)
- HP HSR6800 4-port 10GbE SFP+ Service Aggregation Platform (SAP) Router Module (JG366A)
- HP 6600 48-port GbE SFP Service Aggregation Platform Module (JG556A)
- HP 6600 48-port Gig-T Service Aggregation Platform Module (JC567A)
- HP 6600 24-port GbE SFP Service Aggregation Platform Module (JC568A)
- HP 6600 1-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC161A)

- HP 6600 2-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC162A)
- HP 6600 4-port Gig-T HIM Module (JC163A)
- HP 6600 8-port Gig-T HIM Module (JC164A)
- HP 6600 1-port 10-GbE XFP HIM Module (JC168A)
- HP 6600 2-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC169A)
- HP 6600 1-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC170A)
- HP 6600 4-port GbE SFP HIM Module (JC171A)
- HP 6600 4-port OC-3c/STM-1c or 2-port OC-12c/STM-4c POS SFP HIM Module (JC172A)
- HP 6600 2-port OC-3c/STM-1c or 1-port OC-12c/STM-4c POS SFP HIM Module (JC173A)
- HP 6600 8-port GbE SFP HIM Module (JC174A)
- HP 6600 1-port OC-3c/STM-1c ATM SFP HIM Module (JC175A)
- HP 6600 1-port OC-48c/STM-16c POS/CPOS SFP HIM Module (JC494A)
- HP 6600 2-port OC-3c/STM-1c ATM SFP HIM Module (JC495A)
- HP 6600 8-port 10/100Base-T HIM Module (JC575A)
- HP 6600 2-port OC-48c/STM-16c RPR SFP HIM Module (JC576A)
- HP MSR 8-port T1/Fractional T1 MIM Module (JC159A)
- HP MSR 8-port T1/CT1/PRI MIM Module (JC160A)
- HP MSR 2-port Enhanced Sync/Async Serial MIM Module (JD540A)

- HP MSR 4-port Enhanced Sync/Async Serial MIM Module (JD541A)
- HP MSR 8-port Enhanced Sync/Async Serial MIM Module (JD552A)
- HP MSR 8-port E1/CE1/PRI (75ohm) MIM Module (JD563A)
- HP MSR 1-port T3/CT3/FT3 MIM Module (JD628A)
- HP MSR 1-port FE3/CE3 MIM Module (JD630A)
- HP MSR 8-port E1/Fractional E1 (75ohm) MIM Module (JF255A)

##### Memory

- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X610 1GB DDR2 SDRAM Memory (JC071A)
- HP 2GB DDR2 SDRAM Memory (JG205A)
- HP X610 2G VLP DDR3 SDRAM Memory (JG482A)

##### HP HSR6802 Router Chassis (JG361A)

- HP HSR6802 Router Spare Fan Assembly (JG367A)


##### HP HSR6804 Router Chassis (JG362A)

- HP HSR6804 Router Spare Fan Assembly (JG368A)

##### HP HSR6808 Router Chassis (JG363A)

- HP HSR6808 Router Spare Fan Assembly (JG369A)
- HP HSR6808 SFE-X1 Switch Fabric Engine Router Module (JG365A)

## Data Center Routers (continued)

	Height (U)	Module slots	Memory size (default/max)	Compact Flash (include + external)	Hardware hot-swap	Routing performance (MPPS)	Routing table size (entries)
<b>HP HSR6600 Router Series</b>							
							
<b>HP HSR6602-G Router (JG353A)</b>	2 RU	1 FIP or 2 HIM, or 4 MIM	2G/2G	1+1	Yes	9	1 million
<b>HP HSR6602-XG Router (JG354A)</b>	2 RU	1 FIP or 2 HIM, or 4 MIM	4G/4G	1+1	Yes	9	1 million

### HP HSR6600 Router Series at a glance...

The HP HSR6600 Router Series is made up of high-performance WAN routers that are ideal for small-to-medium campus WAN edge/aggregation and high-end branch deployments. Built on a multicore centralized processing architecture, the series delivers robust routing, security, full Layer 2 switching, and modular WAN and LAN interface options in a small 2RU form factor. Additionally, the series offers carrier-class reliability to reduce disruption from network or system failures.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP HSR6600 Router Series

##### Power supplies

- HP 5800 300W AC Power Supply (JC087A)
- HP 5800 300W DC Power Supply (JC090A)

##### Fan tray

- HP HSR6602 Router Spare Fan Assembly (JG359A)

##### Router modules

- HP 6600 8-port 10/100Base-T HIM Module (JC575A)
- HP 6600 4-port Gig-T HIM Module (JC163A)
- HP 6600 8-port Gig-T HIM Module (JC164A)
- HP 6600 4-port GbE SFP HIM Module (JC171A)
- HP 6600 8-port GbE SFP HIM Module (JC174A)
- HP 6600 1-port 10-GbE XFP HIM Module (JC168A)
- HP 6600 1-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC161A)

- HP 6600 2-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC162A)
- HP 6600 2-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC169A)
- HP 6600 1-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC170A)
- HP 6600 4-port OC-3c/STM-1c or 2-port OC-12c/STM-4c POS SFP HIM Module (JC172A)
- HP 6600 2-port OC-3c/STM-1c or 1-port OC-12c/STM-4c POS SFP HIM Module (JC173A)
- HP 6600 1-port OC-3c/STM-1c ATM SFP HIM Module (JC175A)
- HP 6600 1-port OC-48c/STM-16c POS/CPOS SFP HIM Module (JC494A)
- HP 6600 2-port OC-3c/STM-1c ATM SFP HIM Module (JC495A)
- HP 6600 2-port OC-48c/STM-16c RPR SFP HIM Module (JC576A)
- HP MSR 2-port Enhanced Sync/Async Serial MIM Module (JD540A)


- HP MSR 8-port T1/Fractional T1 MIM Module (JC159A)
- HP MSR 8-port T1/CT1/PRI MIM Module (JC160A)
- HP MSR 4-port Enhanced Sync/Async Serial MIM Module (JD541A)
- HP MSR 8-port Enhanced Sync/Async Serial MIM Module (JD552A)
- HP MSR 1-port T3/CT3/FT3 MIM Module (JD628A)
- HP MSR 1-port FE3/CE3 MIM Module (JD630A)
- HP MSR 8-port E1/Fractional E1 (75ohm) MIM Module (JF255A)
- HP 6600 FIP-10 Flexible Interface Platform Router Module (JG357A)
- HP 6600 FIP-20 Flexible Interface Platform Router Module (JG358A)

##### Memory

- HP X610 2G VLP DDR3 SDRAM Memory (JG482A)



## Data Center Routers (continued)

	Height (U)	Module slots	Compact Flash slot	Hardware hot-swap	Routing performance (PPS)	Routing table size	
<b>HP 6600 Router Series</b>							
	<b>HP 6616 Router Chassis (JC496A)</b>	20	16 HIM	1	Yes	Up to 252 million	2 million entries
	<b>HP 6608 Router Chassis (JC177B)</b>	7	8 HIM	1	Yes	Up to 108 million	2 million entries
	<b>HP 6604 Router Chassis (JC178B)</b>	5	4 HIM	1	Yes	Up to 36 million	2 million entries
	<b>HP 6602 Router (JC176A)</b>	1	2 HIM	1	Yes	4.5 million	1 million entries
<b>HP 6600 Router Series at a glance...</b>							
Series of 16-, 8-, 4-, and 2-HIM-slot routers with a complete portfolio of LAN and WAN interface modules and a hardware-based encryption engine. The series' fully distributed architecture (6604/6608/6616) eliminates single points of failure.							

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### HP 6600 Router Series

#### Cables

- HP X200 V.24 DTE 3m Serial Port Cable (JD519A)
- HP X200 V.24 DCE 3m Serial Port Cable (JD521A)
- HP X200 V.35 DTE 3m Serial Port Cable (JD523A)
- HP X200 V.35 DCE 3m Serial Port Cable (JD525A)
- HP X200 X.21 DTE 3m Serial Port Cable (JD527A)
- HP X200 X.21 DCE 3m Serial Port Cable (JD529A)
- HP X260 RS449 3m DTE Serial Port Cable (JF825A)
- HP X260 RS449 3m DCE Serial Port Cable (JF826A)
- HP X260 RS530 3m DTE Serial Port Cable (JF827A)
- HP X260 RS530 3m DCE Serial Port Cable (JF828A)
- HP X260 8E1 BNC 75 ohm 3m Router Cable (JD512A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)
- HP X290 A-MSR30 1m RPS Cable (JD637A)

#### Router modules

- HP 6600 1-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC161A)
- HP 6600 2-port OC-3/STM-1 (E1/T1) CPOS SFP HIM Module (JC162A)
- HP 6600 2-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC169A)
- HP 6600 1-port OC-3/STM-1 (E3/T3) CPOS SFP HIM Module (JC170A)
- HP 6600 4-port OC-3c/STM-1c or 2-port OC-12c/STM-4c POS SFP HIM Module (JC172A) (JC173A)
- HP 6600 1-port OC-48c/STM-16c POS/CPOS SFP HIM Module (JC494A)
- HP 6600 1-port OC-3c/STM-1c ATM SFP HIM Module (JC175A)
- HP 6600 2-port OC-3c/STM-1c ATM SFP HIM Module (JC495A)
- HP 6600 4-port GbE SFP HIM Module (JC171A)
- HP 6600 8-port GbE SFP HIM Module (JC174A)
- HP 6600 4-port Gig-T HIM Module (JC163A)

- HP 6600 8-port Gig-T HIM Module (JC164A)
- HP 6600 1-port 10GbE XFP HIM Module (JC168A)
- HP MSR 2-port Enhanced Sync/Async Serial MIM Module (JD540A)
- HP MSR 4-port Enhanced Sync/Async Serial MIM Module (JD541A)
- HP MSR 8-port Enhanced Sync/Async Serial MIM Module (JD552A)
- HP MSR 2-port Gig-T MIM Module (JD548A)
- HP MSR 8-port E1/CE1/PRI (75ohm) MIM Module (JD563A)
- HP MSR 8-port E1/Fractional E1 (75ohm) MIM Module (JF255A)
- HP MSR 8-port T1/CT1/PRI MIM Module (JC160A)
- HP MSR 1-port FE3/CE3 MIM Module (JD630A)
- HP MSR 8-port T1/Fractional T1 MIM Module (JC159A)
- HP MSR 1-port T3/CT3/FT3 MIM Module (JD628A)
- HP 6600 8-port 10/100BASE-T HIM Module (JC575A)
- HP 6600 2-port OC-48c/STM-16c RPR SFP HIM Module (JC576A)

#### Memory

- HP 6600 1GB SDRAM (JC179A)

#### HP 6602 Router (JC176A)

- HP RPS 800 Redundant Power Supply (JD183A)
- HP X290 MSR30 1m RPS Cable (JD637A)

#### HP 6604 Router Chassis (JC178B)

- HP 7500 650W DC Power Supply (JD209A)
- HP 7500 650W AC Power Supply (JD217A)
- HP 6604 Dustproof Frame (JC572A)
- HP 6604 Spare Fan Assembly (JC569A)
- HP 6600 Router Software License (JC180A)
- HP 6600 RPE-X1 Main Processing Unit (JC165A)
- HP 6600 RSE-X1 Main Processing Unit (JC566A)
- HP 6600 24-port GbE SFP Service Aggregation Platform Module (JC568A)
- HP 6600 48-port Gig-T Service Aggregation Platform Module (JC567A)
- HP 6600 FIP-110 Flexible Interface Platform Module (JC166B)
- HP 6600 FIP-210 Flexible Interface Platform Module (JC167B)

#### HP 6616 Router Chassis (JC496A)

- HP 6600 650W AC Power Supply (JC492A)
- HP 6600 650W DC Power Supply (JC493A)
- HP 6616 Spare Fan Assembly (JC571A)
- HP 6616 Dustproof Frame (JC574A)
- HP 6600 RPE-X1 Carrier Card (JC497A)
- HP 6600 Router Software License (JC180A)
- HP 6600 RPE-X1 Main Processing Unit (JC165A)
- HP 6600 RSE-X1 Main Processing Unit (JC566A)
- HP 6600 24-port GbE SFP Service Aggregation Platform Module (JC568A)
- HP 6600 48-port Gig-T Service Aggregation Platform Module (JC567A)
- HP 6600 FIP-110 Flexible Interface Platform Module (JC166B)
- HP 6600 FIP-210 Flexible Interface Platform Module (JC167B)

#### HP 6608 Router Chassis (JC177B)

- HP 7500 650W DC Power Supply (JD209A)
- HP 7500 650W AC Power Supply (JD217A)
- HP 6608 Spare Fan Assembly (JC570A)
- HP 6608 Dustproof Frame (JC573A)
- HP 6600 Router Software License (JC180A)
- HP 6600 RPE-X1 Main Processing Unit (JC165A)
- HP 6600 RSE-X1 Main Processing Unit (JC566A)
- HP 6600 24-port GbE SFP Service Aggregation Platform Module (JC568A)
- HP 6600 48-port Gig-T Service Aggregation Platform Module (JC567A)
- HP 6600 FIP-110 Flexible Interface Platform Module (JC166B)
- HP 6600 FIP-210 Flexible Interface Platform Module (JC167B)

#### Transceivers

See pages 65–70 for the HP Networking Transceiver Matrix.

### Core/Distribution

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 10500 Switch Series</b>									
<b>HP 10512 Switch Chassis (JC748A)</b>	18	20				576		576	11.5 Tbps
<b>HP 10508-V Switch Chassis (JC611A)</b>	20	8				384		384	7.7 Tbps
<b>HP 10508 Switch Chassis (JC612A)</b>	14	8				384		384	7.7 Tbps
<b>HP 10504 Switch Chassis (JC613A)</b>	8	4				192		192	3.8 Tbps



#### HP 10500 Switch Series at a glance...

Next-generation enterprise network core switches setting a new benchmark for performance, low latency, reliability, and future-proof scalability, as well as green technology to enable a video-ready network and provide an unmatched user experience with an advanced, simplified network architecture.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 10500 Switch Series

##### Modules

- HP 10500 Type A Main Processing Unit with Comware v7 Operating System (JG496A)
- HP 10500 Main Processing Unit (JC614A)
- HP 10500 16-port GbE SFP/8-port GbE Combo/2-port 10GbE XFP SE Module (JC617A)
- HP 10500 48-port Gig-T SE Module (JC618A)
- HP 10500 48-port GbE SFP SE Module (JC619A)
- HP 10500 4-port 10GbE XFP SE Module (JC620A)
- HP 10500 16-port GbE SFP/8-port GbE Combo/2-port 10GbE XFP EA Module (JC621A)
- HP 10500 48-port GbE SFP EA Module (JC622A)
- HP 10500 48-port Gig-T EA Module (JC623A)
- HP 10500 4-port 10GbE XFP EA Module (JC624A)
- HP 10500 48-port GbE SFP EB Module (JC625A)
- HP 10500 16-port GbE SFP/8-port GbE Combo/2-port 10GbE XFP EB Module (JC626A)
- HP 10500 4-port 10GbE XFP EB Module (JC627A)
- HP 10500 16-port 10GbE SFP+ SC Module (JC628A)
- HP 10500 8-port 10GbE SFP+ EB Module (JC629A)
- HP 10500 8-port 10GbE SFP+ EA Module (JC630A)
- HP 10500 8-port 10GbE SFP+ SE Module (JC631A)
- HP 10500 32-port 10GbE SFP+ SF Module (JC755A)
- HP 10500 48-port 10GbE SFP+ SF Module (JC756A)
- HP 10500 4-port 40GbE QSFP+ SF Module (JC757A)

- HP 10500 16-port GbE SFP/8-port GbE Combo SE Module (JC763A)
- HP 10500 8-port 40GbE QSFP+ SF Module (JG392A)
- HP 10500 4-port 40GbE CFP SF Module (JG396A)

##### Security module

- HP 7500 Load Balancing Module (JD252A)

##### Power supplies

- HP 10500 2500W AC Power Supply (JC610A)
- HP 10500 2400W DC Power Supply (JC747A)

##### Mounting kit

- HP X421 Chassis Universal 4-post Rack Mounting Kit (JC665A)

##### Licenses

- HP 10500/7500 SSL VPN 1000-user License (JD257A)
- HP 10500/7500 SSL VPN 5000-user License (JD258A)
- HP 10500/7500 Unified Wired-WLAN Module 128-Access Point E-LTU (JG649AAE)

##### Power cords

- HP 10500 -48V 3m DC Power Supply Cable (JG390A)
- HP 10500 -48V 15m DC Power Supply Cable (JG391A)

##### Appliances

- HP 10500/7500 Advanced VPN Firewall Module (JD249A)
- HP 10500/7500 SSL VPN Module with 500-user License (JD253A)
- HP 10500/7500 NetStream Monitoring Module (JD254A)

##### WLAN

- HP 10500/7500 20G Unified Wired-WLAN Module (JG639A)

##### HP 10504 Switch Chassis (JC613A)

- HP 10504 400Gbps Type A Fabric Module (JC615A)
- HP 10504 880Gbps Type B Fabric Module (JC751A)
- HP 10504 1.2Tbps Type D Fabric Module (JC752A)
- HP 10504 Spare Fan Assembly (JC632A)

##### HP 10508 Switch Chassis (JC612A)

- HP 10508/10508-V 720Gbps Type A Fabric Module (JC616A)
- HP 10508/10508-V 1.04Tbps Type B Fabric Module (JC753A)
- HP 10508/10508-V 2.32Tbps Type D Fabric Module (JC754A)
- HP 10508 Spare Fan Assembly (JC633A)

##### HP 10508-V Switch Chassis (JC611A)

- HP 10508/10508-V 720Gbps Type A Fabric Module (JC616A)
- HP 10508/10508-V 1.04Tbps Type B Fabric Module (JC753A)
- HP 10508/10508-V 2.32Tbps Type D Fabric Module (JC754A)
- HP 10508-V Spare Fan Assembly (JC634A)

##### HP 10512 Switch Chassis (JC748A)

- HP 10512 1.52Tbps Type B Fabric Module (JC749A)
- HP 10512 3.44Tbps Type D Fabric Module (JC750A)
- HP 10512 Spare Top Fan Tray Assembly (JC758A)
- HP 10512 Spare Bottom Fan Tray Assembly (JC773A)

##### Transceivers

See pages 65–70 for the HP Networking Transceiver Matrix.

## Campus-Branch Switches (continued)

### Core/Distribution (continued)

HP 7500 Switch Series	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 7510 Switch Chassis (JD238B)</b>	16	10+2	480	480	504	480	504	504	84	1.152 Tbps
<b>HP 7506-V Switch Chassis (JD241B)</b>	21	6+2	288	288	312	288	312	312	52	768 Gbps
<b>HP 7506 Switch Chassis (JD239B)</b>	13	6+2	288	288	312	288	312	312	52	768 Gbps
<b>HP 7503-S Switch Chassis (JD243B)</b>	4	2+1	96	96	120	116	120	120	16	144 Gbps
<b>HP 7503 Switch Chassis (JD240B)</b>	10	3+2	144	144	168	144	168	168	28	480 Gbps
<b>HP 7502 Switch Chassis (JD242B)</b>	4	2+2	96	96	96	96	96	96	16	192 Gbps
<b>HP 7503 Switch with 48-port Gig-T PoE+ Module and 384Gbps MPU with 2 XFP ports (JG507A)</b>	10	3+2	144	144	168	144	168	168	28	480 Gbps
<b>HP 7506 Switch with 2 48-port Gig-T PoE+ Modules and 384Gbps MPU with 2 XFP ports (JG508A)</b>	13	6+2	288	288	312	288	312	312	52	768 Gbps
<b>HP 7510 Switch with 2 48-port Gig-T PoE+ Modules and 768Gbps MPU (JG509A)</b>	16	10+2	480	480	504	480	504	504	84	1.152 Tbps

#### HP 7500 Switch Series at a glance...

Cost-effective 10-Gigabit Ethernet port density. 10-, 6-, 6-V, 3-, 3-S, and 2-slot switches with up to 1.152 Tbps performance, up to 84 10GbE and 504 GbE ports, and innovative Intelligent Resilient Framework (IRF) technology that enables multiple interconnected switches to be managed as a single logical entity. Wirespeed L2/L3/IPv4/IPv6/MPLS and OSPF/BGP/IS-IS routing. Open Application Architecture (OAA) that extends and integrates application capability into the network. The series has 40G as well as unified wired and wireless capabilities.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 7500 Switch Series

##### Modules

- HP 7500 48-port 100BASE-FX Module (JD197B)
- HP 7500 48-port 10/100BASE-T Module (JD198B)
- HP 7500 48-port Gig-T PoE-ready Module (JD199B)
- HP 7500 16-port GbE SFP/8-port GbE Combo SA Module (JC667A)
- HP 7500 20-port Gig-T/4-port GbE PoE-upgradable Combo SA Module (JC668A)
- HP 7500 2-port 10GbE XFP Module (JD201A)
- HP 7500 24-port GbE SFP Module (JD203B)
- HP 7500 24-port Gig-T Module (JD204B)
- HP 7500 24-port GbE SFP/2-port 10GbE XFP Module (JD205A)
- HP 7500 12-port GbE SFP Module (JD207A)
- HP 7500 24-port Gig-T/2-port 10GbE XFP Module (JD206A)
- HP 7500 48-port Gig-T Module (JD210A)
- HP 7500 48-port GbE SFP Module (JD211B)
- HP 7500 24-port GbE SFP Module with 8 Combo Ports (JD223A)
- HP 7500 40-port Gig-T/8-port SFP PoE-ready Module (JD228B)
- HP 7500 8-port 10G SFP+ Module (JF290A)
- HP 7500 20-port Gig-T/4-port GbE Combo PoE-upgradable SC Module (JC669A)
- HP 7500 8-port 10GbE XFP Extended Module (JD191A)
- HP 7500 48-port Gig-T PoE+ Extended Module (JD229B)
- HP 7500 24-port GbE SFP/2-port 10GbE XFP Extended Module (JD230A)
- HP 7500 24-port GbE SFP Extended Module (JD234A)
- HP 7500 4-port 10GbE XFP Extended Module (JD235A)
- HP 7500 2-port 10GbE XFP Extended Module (JD236A)
- HP 7500 48-port GbE SFP Extended Module (JD237A)
- HP 7500 12-port GbE SFP Advanced Module (JD202A)
- HP 7500 1-port 1/10GbE XFP Module (JD200A)
- HP 7500 48-port GbE SFP Enhanced Module (JD221A)
- HP 7500 24-port GbE SFP Enhanced Module (JD231A)
- HP 7500 4-port 10GbE XFP Enhanced Module (JD232A)
- HP 7500 2-port 10GbE XFP Enhanced Module (JD233A)
- HP 7500 4-port 40GbE QSFP+ SC Module (JC792A)
- HP 7500 4-port 40GbE CFP SC Module (JG373A)

##### Security module

- HP 7500 Load Balancing Module (JD252A)

##### Licenses

- HP 10500/7500 SSL VPN 1000-user License (JD257A)
- HP 10500/7500 SSL VPN 5000-user License (JD258A)
- HP 10500/7500 Unified Wired-WLAN Module 128-Access Point E-LTU (JG649AAE)

##### WLAN

- HP 10500/7500 20G Unified Wired-WLAN Module (JG639A)

##### Appliances

- HP TippingPoint S1200N IPS A7500 Module (JC527A)
- HP 10500/7500 Advanced VPN Firewall Module (JD249A)
- HP 10500/7500 SSL VPN Module with 500-user License (JD253A)
- HP 10500/7500 NetStream Monitoring Module (JD254A)

##### Memory

- HP 7500 PoE DIMM Module (JD192B)
- HP 7500 24-port PoE DIMM (JC671A)
- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X600 256M Compact Flash Card (JC686A)

**HP 7510 Switch Chassis (JD238B); HP 7510 Switch with 2 48-port Gig-T PoE+ Modules and 768Gbps MPU (JG509A); HP 7506-V Switch Chassis (JD241B); HP 7506 Switch Chassis (JD239B); HP 7506 Switch with 2 48-port Gig-T PoE+ Modules and 384Gbps MPU with 2 XFP ports (JG508A); HP 7503 Switch Chassis (JD240B); HP 7503 Switch with 48-port Gig-T PoE+ Module and 384Gbps MPU with 2 XFP ports (JG507A)**

- HP 7500 384Gbps Fabric Module with 2 XFP Ports (JD193B)
- HP 7500 384Gbps Fabric Module (JD194B)
- HP 7500 384Gbps Advanced Fabric Module (JD195A)
- HP 7500 1400W DC Power Supply (JD208A)
- HP 7500 1400W AC Power Supply (JD218A)
- HP 7500 2800W AC Power Supply (JD219A)
- HP 7500 6000W AC Power Supply (JD227A)

**HP 7503-S Switch Chassis with 1 Fabric Slot (JD243B); HP 7502 Switch Chassis (JD242B)**

- HP 7500 650W AC Power Supply (JD217A)

- HP 7500 650W DC Power Supply (JD209A)
- HP 7502 300W AC Power Supply (JD226A)
- HP 7502 300W DC Power Supply (JD225A)
- HP RPS 800 Redundant Power Supply (JD183A)
- HP 7503-S Spare Fan Assembly (JC672A)

##### Model specific accessories

- HP 7510 Switch Chassis (JD238B); HP 7510 Switch with 2 48-port Gig-T PoE+ Modules and 768Gbps MPU (JG509A)**
- HP 7500 768Gbps Fabric Module (JD220A) [7510 models only]
- HP 7510 Spare Fan Assembly (JD216A)

##### HP 7506-V Switch Chassis (JD241B)

- HP 7506-V Spare Fan Assembly (JD215A)

##### HP 7506 Switch Chassis (JD239B); HP 7506 Switch with 2 48-port Gig-T PoE+ Modules and 384Gbps MPU with 2 XFP ports (JG508A)

- HP 7506 Spare Fan Assembly (JD214A)

##### HP 7503 Switch Chassis (JD240B); HP 7503 Switch with 48-port Gig-T PoE+ Module and 384Gbps MPU with 2 XFP ports (JG507A)

- HP 7503 Spare Fan Assembly (JD212A)

##### HP 7503-S Switch Chassis with 1 Fabric Slot (JD243B)

- HP 7503 Fabric Module with 24 GbE Ports (JD222A)
- HP 7503-S 144 Gbps Fabric/Main Processing Unit with PoE-upgradable 20p Gig-T/4p GbE Combo (JC666A)

##### HP 7502 Switch Chassis (JD242B)

- HP 7502 Fabric Module (JD196A)
- HP 7502 Spare Fan Assembly (JD213A)


##### Transceivers and cables


See pages 65–70 for the HP Networking Transceiver Matrix.

TAA-compliant modules are available for the HP 7500 Switch Series. For specific models, please refer to the HP 7500 TAA-compliant Switch Series data sheet.

## Campus-Branch Switches (continued)

### Core/Distribution (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity (Gbps)	Switching capacity/with v2 modules (Gbps)
<b>HP 8200 zL Switch Series</b>											
	<b>HP 8212-92G-PoE+/2XG-SFP+ v2 zL Switch with Premium Software (J9639A)</b>	9	12	288	288	288	288	288	96	645.6	1123.2
	<b>HP 8212 zL Switch with Premium Software (J9641A)</b>	9	12	288	288	288	288	288	96	645.6	1123.2
	<b>HP 8206-44G-PoE+/2XG-SFP+ v2 zL Switch with Premium Software (J9638A)</b>	6	6	144	144	144	144	144	48	322.8	561.6
	<b>HP 8206 zL Switch with Premium Software (J9640A)</b>	6	6	144	144	144	144	144	48	322.8	561.6
	<b>HP 8200 zL Switch Series at a glance...</b> Core, distribution, and mission-critical access layer switch with advanced high availability, Layer 2 to Layer 4 and intelligent edge feature set with OpenFlow support, and enterprise-class performance and security. Integrated solutions are available with HP Services zL modules. Scalable 10 Gb and 10/100/1000 Gb connectivity is provided in a modular form factor.										

<b>HP 6200-24G-mGBIC yL Switch</b>											
	<b>HP 6200-24G-mGBIC yL Switch (J8992A)</b>	1	1				24	24	4	101.8	
	<b>HP 6200-24G-mGBIC yL Switch at a glance...</b> Premium Layer 2/3/4 Gigabit SFP switch ideal for distribution layer switching. Enterprise-class manageability with robust command-line interface (CLI), Web interface, and full SNMP support. Advanced Layer 3 routing—including OSPF, PIM-SM, PIM-DM, RIP v1/v2, and static routes. Comprehensive IPv4/IPv6 operation. One expansion slot for up to four optional 10-Gigabit Ethernet ports.										

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 8200 zL Switch Series

##### Modules

- HP 8-port 10GBASE-T v2 zL Module (J9546A)
- HP 8-port 10GbE SFP+ v2 zL Module (J9538A)
- HP 4-port 10GbE CX4 zL Module (J8708A)
- HP 4-port 10GbE X2 zL Module (J8707A)
- HP 4-port 10GbE SFP+ zL Module (J9309A)
- HP 20-port Gig-T PoE+/2-port 10GbE SFP+ v2 zL Module (J9536A)
- HP 20-port Gig-T/2-port 10GbE SFP+ v2 zL Module (J9548A)
- HP 20-port Gig-T PoE+/4-port SFP v2 zL Module (J9535A)
- HP 20-port Gig-T/4-port SFP v2 zL Module (J9549A)
- HP 24-port SFP v2 zL Module (J9537A)
- HP 12-port Gig-T PoE+/12-port SFP v2 zL Module (J9637A)
- HP 24-port Gig-T PoE+ v2 zL Module (J9534A)
- HP 24-port Gig-T v2 zL Module (J9550A)
- HP 24-port 10/100/1000 PoE zL Module (J8702A)
- HP 20-port Gig-T/4-port Mini-GBIC zL Module (J8705A)
- HP 24-port Mini-GBIC zL Module (J8706A)
- HP 24-port 10/100 PoE+ v2 zL Module (J9547A)
- HP 24-port 10/100 PoE+ zL Module (J9478A)

- HP 24-port 10/100/1000 PoE+ zL Module (J9307A)
- HP 20-port 10/100/1000 PoE+/4-port Mini-GBIC zL Module (J9308A)
- HP 8200 zL System Support Module (J9095A)
- HP 8200 zL Management Module (J9092A)
- HP 8200 zL Fabric Module (J9093A)

##### Network services modules

- HP Survivable Branch Communication zL Module powered by Microsoft® Lync (J9485A)
- HP Advanced Services zL Module with Citrix XenServer Platform (J9747A)
- HP Advanced Services zL Module with VMware vSphere Platform (J9748A)

##### Power supplies

- HP 1500W PoE+ zL Power Supply (J9306A)
- HP 1500W zL Power Supply (J8713A)
- HP 875W zL Power Supply (J8712A)

##### Licenses

- HP 8200 zL Switch Premium License (J9474A)
- HP MSM760/765 40-access point license (J9371A)

##### WLAN

- HP MSM765zL Mobility Controller (J9370A)

##### Fan trays

- HP 8206 zL Switch Fan Tray (J9476A)
- HP 8212 zL Switch Fan Tray (J9094A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

#### HP 6200-24G-mGBIC yL Switch

##### Modules

- HP 10GbE 2-port SFP+/2-port CX4 yL Module (J9312A)
- HP 10GbE 2-port X2/2-port CX4 yL Module (J8694A)

##### EPS/RPS

- HP 620 Redundant/External Power Supply (J8696A)
- HP 630 Redundant and/or External Power Supply (J9443A)


##### Mounting kit

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

**Core/Distribution (continued)**

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity (Gbps)	Switching capacity/with v2 modules (Gbps)
<b>HP 5400 zL Switch Series</b>											
	<b>HP 5412-92G-PoE+/4G-SFP v2 zL Switch with Premium Software (J9540A)</b>	7	12	288	288	288	288	288	96	645.6	758.4
	<b>HP 5412-92G-PoE+/2XG-SFP+ v2 zL Switch with Premium Software (J9532A)</b>	7	12	288	288	288	288	288	96	645.6	758.4
	<b>HP 5412 zL Switch with Premium Software (J9643A)</b>	7	12	288	288	288	288	288	96	645.6	758.4
	<b>HP 5406-44G-PoE+/4G-SFP v2 zL Switch with Premium Software (J9539A)</b>	4	6	144	144	144	144	144	48	322.8	379.2
	<b>HP 5406-44G-PoE+/2XG-SFP+ v2 zL Switch with Premium Software (J9533A)</b>	4	6	144	144	144	144	144	48	322.8	379.2
	<b>HP 5406 zL Switch with Premium Software (J9642A)</b>	4	6	144	144	144	144	144	48	322.8	379.2
	<b>HP 5406 8p 10GBASE-T 8p 10GbE SFP+ v2 zL Switch with Premium Software (J9866A)</b>	4	6	144	144	144	144	144	48	322.8	379.2

**HP 5400 zL Switch Series at a glance...**

Core, distribution, and advanced access layer switch with Layer 2 to Layer 4 and intelligent edge feature set with OpenFlow support, scalable 10/100/1000 and 10GbE connectivity, enterprise-class performance and security, and HP Services zL module integration.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 5400 zL Switch Series**

**Modules**

- HP 8-port 10GBASE-T v2 zL Module (J9546A)
- HP 4-port 10GbE CX4 zL Module (J8708A)
- HP 4-port 10GbE X2 zL Module (J8707A)
- HP 4-port 10GbE SFP+ zL Module (J9309A)
- HP 8-port 10GbE SFP+ v2 zL Module (J9538A)
- HP 20-port Gig-T PoE+/2-port 10GbE SFP+ v2 zL Module (J9536A)
- HP 20-port Gig-T PoE+/4-port SFP v2 zL Module (J9535A)
- HP 24-port SFP v2 zL Module (J9537A)
- HP 12-port Gig-T PoE+/12-port SFP v2 zL Module (J9637A)
- HP 24-port 10/100/1000 PoE zL Module (J8702A)
- HP 20-port 10/100/1000 PoE+/4-port Mini-GBIC zL Module (J9308A)
- HP 20-port Gig-T/4-port Mini-GBIC zL Module (J8705A)

- HP 24-port Mini-GBIC zL Module (J8706A)
  - HP 24-port 10/100/1000 PoE+ zL Module (J9307A)
  - HP 24-port Gig-T PoE+ v2 zL Module (J9534A)
  - HP 24-port 10/100 PoE+ zL Module (J9478A)
  - HP 24-port 10/100 PoE+ v2 zL Module (J9547A)
  - HP 24-port Gig-T v2 zL Module (J9550A)
  - HP 20-port Gig-T / 4-port SFP v2 zL Module (J9549A)
  - HP 20-port Gig-T / 2-port 10GbE SFP+ v2 zL Module (J9548A)
- Network services modules**
- HP Survivable Branch Communication zL Module powered by Microsoft Lync (J9485A)
  - HP Advanced Services zL Module with Citrix XenServer Platform (J9747A)
  - HP Advanced Services zL Module with VMware vSphere Platform (J9748A)

**Power supplies**

- HP 1500W PoE+ zL Power Supply (J9306A)
- HP 1500W zL Power Supply (J8713A)
- HP 875W zL Power Supply (J8712A)

**EPS/RPS**

- HP zL Power Supply Shelf (J8714A)

**Licenses**

- HP MSM760/765 Additional 40 Access Point License (J9371A)
- HP 5400 zL Premium License (J8994A)


**WLAN**

- HP MSM765zL Mobility Controller (J9370A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**Core/Distribution (continued)**

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (10GBASE-FX) (max)	SFP (100GBASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 3800 Switch Series</b>										
	<b>HP 3800-48G-PoE+-4SFP+ Switch (J9574A)</b>	1	1			48			4	176 Gbps
	<b>HP 3800-48G-PoE+-4XG Switch (J9588A)</b>	1	1			48			4	176 Gbps
	<b>HP 3800-48G-4SFP+ Switch (J9576A)</b>	1	1		48				4	176 Gbps
	<b>HP 3800-48G-4XG Switch (J9586A)</b>	1	1		48				4	176 Gbps
	<b>HP 3800-24G-PoE+-2SFP+ Switch (J9573A)</b>	1	1			24			2	88 Gbps
	<b>HP 3800-24G-PoE+-2XG Switch (J9587A)</b>	1	1			24			2	88 Gbps
	<b>HP 3800-24G-2SFP+ Switch (J9575A)</b>	1	1		24				2	88 Gbps
	<b>HP 3800-24G-2XG Switch (J9585A)</b>	1	1		24				2	88 Gbps
	<b>HP 3800-24SFP-2SFP+ Switch (J9584A)</b>	1	1					24	2	88 Gbps
	<b>HP 3800 Switch Series at a glance...</b>									
	Next-generation managed 1U fixed-configuration Gigabit Ethernet switches with 10G uplinks and meshed stacking technology. With Layer 2/3/4 features, low latency, and highly resilient HP ProVision ASIC architecture. Support for SFP+, 10GBASE-T, PoE+, modular stacking, OpenFlow, and more.									

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 3800 Switch Series**

**Module**

- HP 3800 4-port Stacking Module (J9577A)

**Cables**

- HP 3800 0.5m Stacking Cable (J9578A)
- HP 3800 1m Stacking Cable (J9665A)
- HP 3800 3m Stacking Cable (J9579A)

**Fan tray**

- HP 3800 Switch Fan Tray (J9582A)

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**HP 3800-24G-PoE+-2SFP+ Switch (J9573A)**

- HP X312 1000W 100-240VAC to 54VDC Power Supply (J9580A)

**HP 3800-48G-PoE+-4SFP+ Switch (J9574A)**

- HP X312 1000W 100-240VAC to 54VDC Power Supply (J9580A)

**HP 3800-24G-2SFP+ Switch (J9575A)**

- HP X311 400W 100-240VAC to 12VDC Power Supply (J9581A)

**HP 3800-48G-4SFP+ Switch (J9576A)**

- HP X311 400W 100-240VAC to 12VDC Power Supply (J9581A)

**HP 3800-24G-2XG Switch (J9585A)**

- HP X311 400W 100-240VAC to 12VDC Power Supply (J9581A)

**HP 3800-48G-4XG Switch (J9586A)**

- HP X311 400W 100-240VAC to 12VDC Power Supply (J9581A)

**HP 3800-24G-PoE+-2XG Switch (J9587A)**

- HP X312 1000W 100-240VAC to 54VDC Power Supply (J9580A)

**HP 3800-48G-PoE+-4XG Switch (J9588A)**

- HP X312 1000W 100-240VAC to 54VDC Power Supply (J9580A)


**HP 3800-24SFP-2SFP+ Switch (J9584A)**


- HP X311 400W 100-240VAC to 12VDC Power Supply (J9581A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

Access

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 5500 HI Switch Series</b>										
					48 (64)		4 (20)	4 (20)	2 (6)	224 Gbps
					24 (40)		4 (20)	4 (20)	2 (6)	176 Gbps
					0 (8)	24	4 (12)		2 (6)	176 Gbps
					0 (16)	48	4 (20)	4 (20)	2 (6)	224 Gbps
					4		24 (32)	24 (32)	2 (6)	176 Gbps
<b>HP 5500 HI Switch Series at a glance...</b>										
The 5500 HI Series switches are 24- and 48-port Gigabit Ethernet switches with full L3+ features as well as Enhanced MPLS/VPLS support, dual modular power supplies for high resiliency, full IRF stacking, and IPv4/IPv6 dual-stack routing; include 1440 W of PoE+ using dual power supplies for high resiliency.										

<b>HP 5500 EI Switch Series</b>										
						48 PoE+		4 (8)	0 (4)	196 Gbps
						48 PoE+		4 (8)	0 (4)	196 Gbps
					48			4 (8)	0 (4)	196 Gbps
					48			4 (8)	0 (4)	196 Gbps
					48			4 (8)	0 (4)	196 Gbps
						24 PoE+		4 (8)	0 (4)	144 Gbps
						24 PoE+		4 (8)	0 (4)	144 Gbps
					8			24 (28)	0 (4)	144 Gbps
					24			4 (8)	0 (4)	144 Gbps
					24			4 (8)	0 (4)	144 Gbps
					24			4 (8)	0 (4)	144 Gbps
<b>HP 5500 EI Switch Series at a glance...</b>										
Scalable LAN switch series that enhances network performance with Gigabit Ethernet. 24- and 48-port GbE switches with 10GbE uplinks and L2/L3/L4 RIP/OSPF. PoE/non-PoE/PoE+; AC/DC; IRF; IPv4/IPv6.										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 5500 HI Switch Series**

**Modules**

- HP 5500 2-port 10GbE XFP Module (JD359B)
- HP 5500 2-port 10GbE Local Connect Module (JD360B)
- HP 5500 1-port 10GbE XFP Module (JD361B)
- HP 5500/4800 2-port GbE SFP Module (JD367A)
- HP 5500/5120 2-port 10GbE SFP+ Module (JD368B)
- HP 5500 HI 8-port Gig-T Module (JG313A)
- HP 5500 HI 8-port SFP Module (JG314A)

**Power supplies**

- HP 5800/5500 150W AC Power Supply (JD362A)
- HP 5800/5500 150W DC Power Supply (JD366A)
- HP X362 720W AC PoE Power Supply (JG544A)
- HP X362 1110W AC PoE Power Supply (JG545A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

(This product line adds two new modules with 8 ports of Gigabit or SFP, which dramatically increases the maximum port counts.)

**HP 5500 EI Switch Series**

**Modules**

- HP 5500 2-port 10GbE XFP Module (JD359B)
- HP 5500 2-port 10GbE Local Connect Module (JD360B)
- HP 5500 1-port 10GbE XFP Module (JD361B)
- HP 5500/4800 2-port GbE SFP Module (JD367A)
- HP 5500/5120 2-port 10GbE SFP+ Module (JD368B)

**Power supplies**

- HP 5800/5500 150W AC Power Supply (JD362A)
- HP 5800/5500 150W DC Power Supply (JD366A)
- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)


**Power cords**

- HP X290 1000 A JD5 2m RPS Cable (JD187A)
- HP X290 1000 A JD5 Non-PoE 2m RPS Cable (JD188A)
- HP X290 1000 B JD5 2m RPS Cable (JD189A)
- HP X290 500/800 1m RPS Cable (JD190A)
- HP X290 500 U 1m RPS Cable (JD185A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 5500 SI Switch Series</b>										
						48 PoE+		4 DP—4 (8)	0 (4)*	192 Gbps
<b>HP 5500-48G-PoE+ SI Switch with 2 Interface Slots (JG239A)</b>	1	2								
<b>HP 5500-48G SI Switch with 2 Interface Slots (JD370A)</b>	1	2			48			4 (8)	0 (4)	192 Gbps
<b>HP 5500-24G-PoE+ SI Switch with 2 Interface Slots (JG238A)</b>	1	2				24 PoE+		4 DP—4 (8)	0 (4)*	144 Gbps
<b>HP 5500-24G SI Switch with 2 Interface Slots (JD369A)</b>	1	2			24			4 (8)	0 (4)	144 Gbps
<b>HP 5500 SI Switch Series at a glance...</b>										
Flexible, scalable, highly resilient Gigabit Ethernet switching for demanding enterprise network applications. 24- and 48-port Gigabit Ethernet switches with 10GbE uplinks and L2/L3 (RIP). PoE/non-PoE/PoE+; AC/DC; IRF; IPv4/IPv6.										
Note: DP = Dual-personality ports										
*Using 2 modules										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 5500 SI Switch Series**

**Modules**

- HP 5500 2-port 10GbE XFP Module (JD359B)
- HP 5500 2-port 10GbE Local Connect Module (JD360B)
- HP 5500 1-port 10GbE XFP Module (JD361B)
- HP 5500/5120 2-port 10GbE SFP+ Module (JD368B)
- HP 5500/4800 2-port GbE SFP Module (JD367A)

**Power supplies**

- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

**Power cords**


- HP X290 1000 A JD5 2m RPS Cable (JD187A)
- HP X290 500 C 1m RPS Cable (JD184A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.




Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 5120 EI Switch Series</b>										
						48 PoE+		4 DP—4 (8)	(4)	196 Gbps
						48 PoE+		4 DP—4 (8)	(4)	196 Gbps
				48				4 DP—4 (8)	(4)	196 Gbps
				48				4 DP—4 (8)	(4)	196 Gbps
				48				4		96 Gbps
						24 PoE+		4 DP—4 (8)	(4)	144 Gbps
						24 PoE+		4 DP—4 (8)	(4)	144 Gbps
				24				4 DP—4 (8)	(4)	144 Gbps
				24				4 DP—4 (8)	(4)	144 Gbps
				24				4		48 Gbps

**HP 5120 EI Switch Series at a glance...**

Gigabit Ethernet switches that support diversified services, with up to four 10GbE extended interfaces. Static L3 routing, IRF, IPv6/IPv4, PoE/non-PoE/PoE+.

Note: DP = Dual-personality ports

<b>HP 5120 SI Switch Series</b>										
					48			4		104 Gbps
						24 PoE+		4		56 Gbps
						24 PoE+		4		56 Gbps
				24				4		56 Gbps
				16				4		40 Gbps

**HP 5120 SI Switch Series at a glance...**

Intelligent manageable switches designed for high performance, high-density port access, and easy installation. Gigabit Ethernet ports, Gigabit SFP uplinks, static L3 routing, IPv6/IPv4, IRF, PoE+, and single IP address management.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 5120 EI Switch Series**

**Modules**

- HP 5500 2-port 10GbE XFP Module (JD359B)
- HP 5500 2-port 10GbE Local Connect Module (JD360B)
- HP 5500 1-port 10GbE XFP Module (JD361B)
- HP 5500/5120 2-port 10GbE SFP+ Module (JD368B)
- HP 5500/4800 2-port GbE SFP Module (JD367A)

**Power supplies**

- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

**Power cords**

- HP X290 1000 A JD5 2m RPS Cable (JD187A)
- HP X290 500/800 1m RPS Cable (JD190A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 5120 SI Switch Series**

**Power supplies**

- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)


**Power cord**

- HP X290 1000 A JD5 2m RPS Cable (JD187A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**Access (continued)**

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 4200 vl Switch Series</b>										
	<b>HP 4208-96 vl Switch (J8775B)</b>	5	8	192		192	32	32	4 (X2)	76.8 Gbps
	<b>HP 4208-68G-4SFP vl Switch (J9030A)</b>	5	8	192		192	32	32	4 (X2)	76.8 Gbps
	<b>HP 4208 vl Switch Chassis (J8773A)</b>	5	8	192		192	32	32	4 (X2)	76.8 Gbps
	<b>HP 4204-44G-4SFP vl Switch (J9064A)</b>	3	4	96		96	16	16	4 (X2)	38.4 Gbps
	<b>HP 4204 vl Switch Chassis (J8770A)</b>	3	4	96		96	16	16	4 (X2)	38.4 Gbps
	<b>HP 4202-72 vl Switch (J8772B)</b>	3	2	120		48	8	8	2 (X2)	33.6 Gbps
<p><b>HP 4200 vl Switch Series at a glance...</b>                      Access layer switch with Layer 2 with Layer 3 static IP routing feature set, scalable 10/100/1000 connectivity, and 10GbE uplinks.</p>										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 4200 vl Switch Series**

**Modules**

- HP 12-port 100FX MTRJ vl Module (J8763A)
- HP 24-port 10/100-TX vl Module (J8765B)
- HP 24-port Gig-T vl Module (J8768A)
- HP 4-port Mini-GBIC vl Module (J8776A)
- HP 20-port Gig-T / 4-port SFP vl Module (J9033A)
- HP 1-port 10GbE X2 vl Module (J8766A)

**EPS/RPS**

- HP gl/xl/vl Switch Redundant Power Supply (J4839A)


**Transceivers and cables**


See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 3800 Switch Series**

Refer to the FlexCampus — Campus-Branch Switches—on page 22.

Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 3600 EI Switch Series</b>										
										
<b>HP 3600-48-PoE+ V2 EI Switch (JG302A)</b>	1			48				4		17.6 Gbps
<b>HP 3600-48 V2 EI Switch (JG300A)</b>	1		48					4 (2 DP)		17.6 Gbps
<b>HP 3600-24-PoE+ V2 EI Switch (JG301A)</b>	1			24 PoE+				4 (2 DP)		12.8 Gbps
<b>HP 3600-24-SFP V2 EI Switch (JG303A)</b>	1		24					4 (2 DP)		12.8 Gbps
<b>HP 3600-24-SFP EI Switch (JD334A)</b>	1				2		24	2		12.8 Gbps
<b>HP 3600-24 V2 EI Switch (JG299A)</b>	1		24					4 (2 DP)		12.8 Gbps
<b>HP 3600 EI Switch Series at a glance...</b>										
Stackable, scalable, voice-optimized 10/100 Ethernet switches for high-performance networking. Up to 48 10/100 PoE or non-PoE ports, four Gigabit Ethernet uplinks, 17.6 Gbps switching capacity. Supports Distributed Device Management (DDM), Dynamic Link Aggregation (DLA), and RIP and OSPF routing; IPv6 full Layer 3 unicast and multicast routing (for V2 SKUs), IPv6/IPv4 dual stack (for V2 SKUs).										
Note: DP = Dual-personality ports										

<b>HP 3600 SI Switch Series</b>										
										
<b>HP 3600-48-PoE+ V2 SI Switch (JG307A)</b>	1			48 PoE+				4 (2 DP)		17.6 Gbps
<b>HP 3600-48 V2 SI Switch (JG305A)</b>	1		48					4 (2 DP)		17.6 Gbps
<b>HP 3600-24-PoE SI Switch (JD325A)</b>	1			24				4		12.8 Gbps
<b>HP 3600-24 V2 SI Switch (JG304A)</b>	1		24					4 (2 DP)		12.8 Gbps
<b>HP 3600 SI Switch Series at a glance...</b>										
Multi-layer switches that fulfill the enterprise requirement for a unified, highly resilient network. 48 or 24 10/100 ports, Gigabit Ethernet uplinks, PoE and non-PoE configurations. AC or DC power, IEEE 802.1X access control, and MAC authentication. Supports RIP routing, IRF, Distributed Device Management (DDM), and Dynamic Link Aggregation (DLA); IPv6 Layer 3 routing (for V2 SKUs), IPv6/IPv4 dual stack (for V2 SKUs).										
Note: DP = Dual-personality ports										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 3600 EI Switch Series**

**Cable**

- HP 3600 Switch SFP Stacking Kit (JD324B)

**Power supplies**

- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

**Power cords**

- HP X290 500 V 1m RPS Cable (JD186A)
- HP X290 1000 A JD5 2m RPS Cable (JD187A)
- HP X290 1000 A JD5 Non-PoE 2m RPS Cable (JD188A)
- HP X290 1000 B JD5 2m RPS Cable (JD189A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 3600 SI Switch Series**

**Cable**

- HP 3600 Switch SFP Stacking Kit (JD324B)

**Power supplies**

- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)


**Power cord**

- HP X290 1000 A JD5 2m RPS Cable (JD187A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 3500 yl Switch Series</b>										
	<b>HP 3500-48G-PoE+ yl Switch (J9311A)</b>	1	1			48		4 DP	4	149.8 Gbps
	<b>HP 3500-48G-PoE yl Switch (J8693A)</b>	1	1			48		4 DP	4	149.8 Gbps
	<b>HP 3500-24G-PoE+ yl Switch (J9310A)</b>	1	1			24		4 DP	4	101.8 Gbps
	<b>HP 3500-24G-PoE yl Switch (J8692A)</b>	1	1			24		4 DP	4	101.8 Gbps
<b>HP 3500 Switch Series (10/100 models)</b>										
	<b>HP 3500-48-PoE Switch (J9473A)</b>	1		44		4		4 DP		16.8 Gbps
	<b>HP 3500-48 Switch (J9472A)</b>	1		44		4		4 DP		16.8 Gbps
	<b>HP 3500-24-PoE Switch (J9471A)</b>	1		20		4		4 DP		12 Gbps
	<b>HP 3500-24 Switch (J9470A)</b>	1		20		4		4 DP		12 Gbps

**HP 3500 Switch Series at a glance...**

Advanced Layer 2/3/4 switches with enterprise-class manageability, robust command-line interface (CLI) and Web interface, and full SNMP support. Purpose-built, programmable ProVision ASIC supports demanding networking features. Non-PoE, PoE, and PoE+ models. Advanced Layer 3 routing—including OSPF\*, PIM-SM\*, PIM-DM\*, RIP v1/v2, and static routes. Comprehensive IPv4/IPv6 operation and OpenFlow support. Gigabit SFP ports for fiber flexibility, and expansion slot for up to four optional 10-Gigabit Ethernet ports.

\*Requires Premium License

Note: DP = Dual-personality ports

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 3500 yl Switch Series**

**Modules**

- HP 10GbE 2-port X2/2-port CX4 yl Module (J8694A)
- HP 10GbE 2-port SFP+/2-port CX4 yl Module (J9312A)

**EPS/RPS**

- HP 620 Redundant/External Power Supply (J8696A)
- HP 630 Redundant and/or External Power Supply (J9443A)

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**License**

- HP 3500 yl Premium License (J8993A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 3500 Switch Series (10/100 models)**

**EPS/RPS**

- HP 620 Redundant/External Power Supply (J8696A)
- HP 630 Redundant and/or External Power Supply (J9443A)

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)


**License**

- HP 3500 yl Premium License (J8993A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.


Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 3100 EI Switch Series</b>										
										
<b>HP 3100-48 V2 Switch (JG315A)</b>	1		48					4		17.6 Gbps
<b>HP 3100-24-PoE V2 EI Switch (JD313B)</b>	1			24				2 DP		8.8 Gbps
<b>HP 3100-24 V2 EI Switch (JD320B)</b>	1		24					2 DP		8.8 Gbps
<b>HP 3100-8 V2 EI Switch (JD318B)</b>	1		8					1 DP		3.6 Gbps

**HP 3100 EI Switch Series at a glance...**

Stackable switch line with enterprise-class security and support for converged voice and data. 8-, 16-, and 24-port L2 Fast Ethernet switches. Gigabit Ethernet uplinks. PoE/non-PoE, ACL support, single IP address management.

Note: DP = Dual-personality ports

<b>HP 3100 SI Switch Series</b>										
										
<b>HP 3100-24 V2 SI Switch (JG223A)</b>	1		24					2 DP		8.8 Gbps
<b>HP 3100-16 V2 SI Switch (JG222A)</b>	1		16					2 DP		7.2 Gbps
<b>HP 3100-8 V2 SI Switch (JG221A)</b>	1		8					1 DP		3.6 Gbps

**HP 3100 SI Switch Series at a glance...**

Intelligent network-manageable L2 Fast Ethernet switches offering high performance, high port density, low power consumption, and easy installation. 8, 16, and 24 10/100 downlink ports, Gigabit Ethernet uplinks, single IP address management.

Note: DP = Dual-personality ports

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 3100 EI Switch Series**

**Cable**

- HP 3600 Switch SFP Stacking Kit (JD324B)

**Power supplies**

- HP RPS 800 Redundant Power Supply (JD183A)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)

**Mounting kits**

- HP 3100/4210-16 Rack Mount Kit (JD321A)
- HP 3100/4210-9 Rack Mount Kit (JD322A)
- HP 3100/4210-16/-8 PoE Rack Mount Kit (JD323A)

**Power cords**

- HP X290 500 C 1m RPS Cable (JD184A)
- HP X290 1000 A JD5 2m RPS Cable (JD187A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 3100 SI Switch Series**

**Modules**

- HP 1-port Gig-T 3100 SI Module (JD298A)
- HP 1-port Gig-LX SC 3100 SI Module (JD299A)
- HP 1-port Gig-SX SC 3100 SI Module (JD300A)
- HP 1-port 10/100BASE-T PoE 3100 SI Module (JD301A)

**HP 3100-8 v2 SI Switch (JG221A)**

- HP 3100/4210-9 Rack Mount Kit (JD322A)


**HP 3100-16 v2 SI Switch (JG222A)**

- HP 3100/4210-16 Rack Mount Kit (JD321A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.


Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 2920 Switch Series</b>										
	<b>HP 2920-24G Switch (J9726A)</b>	1	3		24			4 DP	0 (4)	128 Gbps
	<b>HP 2920-24G-PoE+ Switch (J9727A)</b>	1	3			24		4 DP	0 (4)	128 Gbps
	<b>HP 2920-48G Switch (J9728A)</b>	1	3		48			4 DP	0 (4)	176 Gbps
	<b>HP 2920-48G-PoE+ Switch (J9729A)</b>	1	3			48		4 DP	0 (4)	176 Gbps

**HP 2920 Switch Series at a glance...**

Layer 2 with Layer 3 static IP and RIP IPv4 routing with stacking for up to four units with optional stacking module; supports up to two 2-port 10 Gb expansion modules with 10GBASE-T or SFP+ ports. Enterprise-class manageability with robust command-line interface (CLI), Web interface, and full SNMP support. Support for OpenFlow. PoE+ and non-PoE models available. All models have Gigabit SFP ports for fiber flexibility.

Note: DP = Dual-personality ports

<b>HP 2910 al Switch Series</b>										
	<b>HP 2910-48G-PoE+ al Switch (J9148A)</b>	1	2			48		4 DP	4	176 Gbps
	<b>HP 2910-48G al Switch (J9147A)</b>	1	2		48			4 DP	4	176 Gbps
	<b>HP 2910-24G-PoE+ al Switch (J9146A)</b>	1	2			24		4 DP	4	128 Gbps
	<b>HP 2910-24G al Switch (J9145A)</b>	1	2		24			4 DP	4	128 Gbps

**HP 2910 al Switch Series at a glance...**

Layer 2 with Layer 3 static IP and RIP IPv4 routing and two expansion slots for up to four optional 10-Gigabit Ethernet ports. Enterprise-class manageability with robust command-line interface (CLI), Web interface, and full SNMP support. Non-PoE and PoE+ models. All models have Gigabit SFP ports for fiber flexibility.

Note: DP = Dual-personality ports

<b>HP 2915-8G-PoE Switch</b>										
	<b>HP 2915-8G-PoE Switch (J9562A)</b>	1				8		2 DP		20 Gbps

**HP 2915-8G-PoE Switch at a glance...**

Fully managed 8-port 10/100/1000 switch with two additional dual-personality Gigabit Ethernet ports for copper or SFP connectivity. Static and RIP IPv4 routing. Quiet fanless operation, and a compact form factor for wall, surface, or rack mounting.

Note: DP = Dual-personality ports

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 2915-8G-PoE Switch**

**Mounting kit**

- HP X510 1U Cable Guard (J9700A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 2920 Switch Series**

**Modules**

- HP 2920 2-Port 10GbE SFP+ Module (J9731A)
- HP 2920 2-port 10GBASE-T Module (J9732A)
- HP 2920 2-Port Stacking Module (J9733A)

**Cables**

- HP 2920 0.5m Stacking Cable (J9734A)
- HP 2920 1.0m Stacking Cable (J9735A)
- HP 2920 3.0m Stacking Cable (J9736A)

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**HP 2920-24G Switch (J9726A)**

- HP X331 165W 100-240VAC to 12VDC Modular Power Supply (J9739A)

**HP 2920-24G-PoE+ Switch (J9727A)**

- HP X332 575W 100-240VAC to 54VDC Modular Power Supply (J9738A)

**HP 2920-48G Switch (J9728A)**

- HP X331 165W 100-240VAC to 12VDC Modular Power Supply (J9739A)

**HP 2920-48G-PoE+ Switch (J9729A)**

- HP X332 575W 100-240VAC to 54VDC Modular Power Supply (J9738A)

**HP 2920-48G-PoE+ 740W Switch (J9836A)**

- HP X332 575W 100-240VAC to 54VDC Modular Power Supply (J9738A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 2910 al Switch Series**

**Modules**

- HP 2-port 10GbE CX4 al Module (J9149A)
- HP 2-port 10GbE SFP+ al Module (J9008A)
- HP 10GbE al Switch Interconnect Kit (J9165A)

**EPS/RPS**

- HP 620 Redundant/External Power Supply (J8696A)
- HP 630 Redundant and/or External Power Supply (J9443A)


**Mounting kit**


- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 2620 Switch Series</b>										
				48 PoE+	2			2		17.6 Gbps
	1		48		2			2		17.6 Gbps
	1		12	12 PoE+	2			2		12.8 Gbps
	1			24 PoE+	2			2		12.8 Gbps
	1		24		2			2		12.8 Gbps
<p><b>HP 2620 Switch Series at a glance...</b>                      Fully managed Basic Layer 3 Fast Ethernet switches with IPv4/IPv6 static and RIP routing, two Gigabit Ethernet 10/100/1000 ports, and two SFP ports. Non-PoE and PoE+ models. HP 2620-24 Switch is fanless. Optional redundant external power supply.</p>										

<b>HP 2615-8-PoE Switch</b>										
				8				2 DP		5.6 Gbps
<p><b>HP 2615-8-PoE Switch at a glance...</b>                      Fully managed Basic Layer 3 Fast Ethernet 8-port 10/100 switch with two additional dual-personality Gigabit Ethernet ports for copper or SFP connectivity. Static and RIP IPv4 routing, robust security and management, enterprise-class features, lifetime warranty<sup>1</sup> (see page 71) for as long as you own the product, and software updates when and if available. Fanless for quiet operation, and compact form factor for wall, surface, or rack mounting.</p> <p>Note: DP = Dual-personality ports</p>										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 2620 Switch Series**

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**HP 2620-48-PoE+ Switch (J9627A)**

- HP 630 Redundant and/or External Power Supply (J9443A)
- HP 620 Redundant/External Power Supply (J8696A)

**HP 2620-24-PPoE+ Switch (J9624A)**

- HP 600 Redundant and External Power Supply (J8168A)

**HP 2620-24-PoE+ Switch (J9625A)**

- HP 630 Redundant and/or External Power Supply (J9443A)
- HP 620 Redundant/External Power Supply (J8696A)

**HP 2620-48 Switch (J9626A)**

- HP 600 Redundant and External Power Supply (J8168A)

**HP 2620-24 Switch (J9623A)**

- HP 600 Redundant and External Power Supply (J8168A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

**HP 2615-8-PoE Switch**


**Mounting kit**

- HP X510 1U Cable Guard (J9700A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.


Access (continued)

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 2530 Switch Series</b>										
						48		4		104 Gbps
								4		56 Gbps
								2 DP		20 Gbps
					48			4		104 Gbps
					24			4		56 Gbps
					8			2 DP		20 Gbps
				48	2			2		17.6 Gbps
				24	2			2		12.8 Gbps
				8				2 DP		5.6 Gbps
			48		2			2		17.6 Gbps
			24		2			2		12.8 Gbps
			8					2 DP		5.6 Gbps

**HP 2530 Switch Series at a glance...**

Fully managed Layer 2 switches with 8, 24, or 48 Gigabit Ethernet or Fast Ethernet ports. Rack-mountable, Enterprise-class manageability with robust command-line interface (CLI), Web interface, and full SNMP support. Support for IPv4/IPv6 host, EEE, and ACLs. PoE+ models and fanless design offered.

Note: DP = Dual-personality ports (dual-personality ports can be used as either an RJ-45 10/100/1000 port or as an SFP slot)

<b>HP 2520 Switch Series</b>										
				24	2			2 DP		12.8 Gbps
						8		2 DP		20 Gbps
				8				2 DP		5.6 Gbps

**HP 2520 Switch Series at a glance...**

Layer 2 switches in 24- and 8-port PoE configurations. Rack-mountable. Enterprise-class manageability with robust command-line interface (CLI), Web interface, and full SNMP support. Gigabit SFP ports for fiber flexibility. 8-port models offer fanless design.

Note: DP = Dual-personality ports (dual-personality ports can be used as either an RJ-45 10/100/1000 port or as an SFP slot)

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 2530 Switch Series**

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**HP 2530-8G-PoE+ Switch (J9774A)**

- HP X510 1U Cable Guard (J9700A)
- HP 2530 8-port Switch Power Adapter Shelf (J9820A)

**HP 2530-8-PoE+ Switch (J9780A)**

- HP X510 1U Cable Guard (J9700A)
- HP 2530 8-port Switch Power Adapter Shelf (J9820A)

**HP 2530-8G Switch (J9777A)**

- HP X510 1U Cable Guard (J9700A)
- HP 2530 8-port Switch Power Adapter Shelf (J9820A)

**HP 2530-8 Switch (J9783A)**

- HP X510 1U Cable Guard (J9700A)
- HP 2530 8-port Switch Power Adapter Shelf (J9820A)

**HP 2520 Switch Series**

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**HP 2520-8-PoE Switch (J9137A)**

- HP X510 1U Cable Guard (J9700A)
- HP X520 1U Power Adapter Shelf (J9701A)

**HP 2520-8G-PoE Switch (J9298A)**


- HP X510 1U Cable Guard (J9700A)
- HP X520 1U Power Adapter Shelf (J9701A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.



**Access (continued)**

	Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
<b>HP 2510 Switch Series</b>										
										
<b>HP 2510-48 Switch (J9020A)</b>	1		48		2			2		17.6 Gbps
<b>HP 2510-24 Switch (J9019B)</b>	1		24					2 DP		8.8 Gbps
<p><b>HP 2510 Switch Series at a glance...</b>                      Layer 2 switches with enterprise-class manageability, robust command-line interface (CLI) and Web interface, and full SNMP support. All units have Gigabit SFP ports for fiber flexibility. 24-port fanless design (HP 2510-24 Switch only).</p> <p>Note: DP = Dual-personality ports</p>										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**


**HP 2510 Switch Series**

**Mounting kit**

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

**Transceivers and cables**

See pages 65–70 for the HP Networking Transceiver Matrix.

	Dimensions	10/100BASE-TX ports	10/100/1000BASE-TX ports	RJ-45 pass-through ports	Powered by PoE	PoE forwarding	Managed
<b>HP IntelliJack Gigabit Switch Series</b>							
							
<b>HP NJ2000 1Gb IntelliJack Switch (JD057A)</b>	5.1 x 3.2 x 1.6 in. (13 x 8 x 4 cm)		5	2	PoE Enhanced PoE	Yes	Yes
<p><b>HP IntelliJack Gigabit Switch Series at a glance...</b>                      Unique “in-the-wall” Gigabit Ethernet switch designed to fit in a standard wall outlet box. Quickly convert a single-port Ethernet wall jack into a four-port Gigabit Ethernet connection. Power up to two attached PoE devices. Ideal for hard-to-wire locations needing additional wired Ethernet connections.</p>							

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP IntelliJack Gigabit Switch Series**

**Power supplies**

- HP Single-port 802.3at Gigabit PoE Midspan Power Supply (JD054A)
- HP Single-port 802.3af Gig PoE In-line Power Supply (JD059B)
- HP Gigabit IntelliJack 48V Power Supply (JD055B)
- HP 1-port Power Injector (J9407B)

**Mounting kit**

- HP NJ1000/2000 IntelliJack Desktop Stand (JD056A)

### Routers

#### HP 8800 Router Series

Refer to the FlexFabric — Data Center Routers—on page 14.

#### HP 6600 Router Series

Refer to the FlexFabric — Data Center Routers—on page 17.

## Wireless

### MultiService MSM Access Points and Controller Series

	10/100/1000	PoE/PoE+ (IEEE 802.3af/at) ports	AP managed (Std)	APs managed (max)	Layer 3 roaming support	Fast roaming support	Embedded server for authentication	Redundancy support
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#### HP 830 Unified Wired-WLAN Switch Series



<b>HP 830 24-Port PoE+ Unified Wired-WLAN Switch (JG640A)</b>	24	24	60	Yes	Yes	Yes	N+1, N+N
<b>HP 830 8-Port PoE+ Unified Wired-WLAN Switch (JG641A)</b>	8	12	24	Yes	Yes	Yes	N+1, N+N
<b>HP 830 24-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG646A)</b>	24	24	60	Yes	Yes	Yes	N+1, N+N
<b>HP 830 8-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG647A)</b>	8	12	24	Yes	Yes	Yes	N+1, N+N

#### HP 830 Unified Wired-WLAN Switch Series at a glance...

Integrates both wireless and GbE switching functions. The switch series provides Gigabit Ethernet ports, PoE+, and works with IEEE 802.11a/b/g/n APs to deliver a true unified wired and wireless branch office solution.

#### HP 10500/7500 Unified Wired-WLAN Modules



<b>HP 10500/7500 20G Unified Wired-WLAN TAA-compliant Module (JG645A)</b>		128	1024	Yes	Yes	Yes	1+1, N+1, N+N
<b>HP 10500/7500 20G Unified Wired-WLAN Module (JG639A)</b>		128	1024	Yes	Yes	Yes	1+1, N+1, N+N

#### HP 10500/7500 Unified Wired-WLAN Modules at a glance...

Highly scalable unified wired and wireless solution. Integrates into HP 10500/7500 modular switch series to provide unified access, security, and QoS. Fast roaming and comprehensive RF management optimize VoIP and rich media applications.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP 830 Unified Wired-WLAN Switch Series

##### HP 830 24-Port PoE+ Unified Wired-WLAN Switch (JG640A)

- HP 830 Unified Wired-WLAN Switch Uplink Module (JG643A)
- HP X130 10G XFP LC LR Transceiver (JD108B)
- HP X130 10G XFP LC SR Transceiver (JD117B)
- HP X135 10G XFP LC ER Transceiver (JD121A)
- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X125 1G SFP LC LH70 Transceiver (JD063B)
- HP X120 1G SFP LC SX Transceiver (JD118B)
- HP X120 1G SFP LC LX Transceiver (JD119B)
- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)
- HP 830 Unified Wired-WLAN Switch 12-Access Point E-LTU (JG648AAE)

##### HP 830 8-Port PoE+ Unified Wired-WLAN Switch (JG641A)

- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)

- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X125 1G SFP LC LH70 Transceiver (JD063B)
- HP X120 1G SFP LC SX Transceiver (JD118B)
- HP X120 1G SFP LC LX Transceiver (JD119B)
- HP 830 Unified Wired-WLAN Switch 12-Access Point E-LTU (JG648AAE)

##### HP 830 24-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG646A)

- HP 830 Unified Wired-WLAN Switch Uplink Module (JG643A)
- HP X130 10G XFP LC LR Transceiver (JD108B)
- HP X130 10G XFP LC SR Transceiver (JD117B)
- HP X135 10G XFP LC ER Transceiver (JD121A)
- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X125 1G SFP LC LH70 Transceiver (JD063B)
- HP X120 1G SFP LC SX Transceiver (JD118B)
- HP X120 1G SFP LC LX Transceiver (JD119B)

- HP RPS1600 Redundant Power System (JG136A)
- HP RPS1600 1600W AC Power Supply (JG137A)
- HP 830 Unified Wired-WLAN Switch 12-Access Point E-LTU (JG648AAE)





##### HP 830 8-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG647A)

- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X125 1G SFP LC LH70 Transceiver (JD063B)
- HP X120 1G SFP LC SX Transceiver (JD118B)
- HP X120 1G SFP LC LX Transceiver (JD119B)
- HP 830 Unified Wired-WLAN Switch 12-Access Point E-LTU (JG648AAE)

#### Access points managed

Compatible with MSM 802.11n Dual Radio access points (see page 35).

### MultiService MSM Access Points and Controller Series (continued)

	10/100/1000	PoE/PoE+ (IEEE 802.3af/at) ports	Number of radios	Virtual AP/multiple SSID (max)	Wireless Distribution System (WDS) Bridging	Wi-Fi certification	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)
<b>HP MSM 802.11n Dual Radio Access Point Series</b>									
									
<b>HP MSM466 Dual Radio 802.11n Access Point WW (J9622A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466 Dual Radio 802.11n Access Point (TAA) (J9656A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466 Dual Radio 802.11n Access Point AM (J9621A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466 Dual Radio 802.11n Access Point JP (J9620A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
									
<b>HP MSM466 Dual Radio 802.11n AP (IL) (J9619A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466-R Dual Radio 802.11n AP (AM) (J9715A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466-R Dual Radio 802.11n AP (WW) (J9716A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466-R Dual Radio 802.11n AP (JP) (J9717A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + a/b/g/n	0	6
<b>HP MSM466-R Single Radio 802.11n AP (IL) (J9718A)</b> [NOTE: Due to Israeli regulations, only 2.4 GHz can be used outdoors.]	1	1	450 Mbps	16	Yes	Yes	b/g/n	0	3
									
<b>HP MSM460 Dual Radio 802.11n Access Point WW (J9591A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM460 Dual Radio 802.11n Access Point (TAA) (J9655A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM460 Dual Radio 802.11n Access Point AM (J9590A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM460 Dual Radio 802.11n Access Point JP (J9589A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM460 Dual Radio 802.11n Access Point IL (J9618A)</b>	1	1	2 (450 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
									
<b>HP MSM430 Dual Radio 802.11n Access Point WW (J9651A)</b>	1	1	2 (300 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM430 Dual Radio 802.11n Access Point (TAA) (J9654A)</b>	1	1	2 (300 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM430 Dual Radio 802.11n Access Point AM (J9650A)</b>	1	1	2 (300 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM430 Dual Radio 802.11n Access Point JP (J9652A)</b>	1	1	2 (300 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0
<b>HP MSM430 Dual Radio 802.11n Access Point IL (J9653A)</b>	1	1	2 (300 Mbps)	32	Yes	Yes	a/n + b/g/n	6	0

#### HP MSM 802.11n Dual Radio Access Point Series at a glance...

The access points (MSM APs) bring intelligence to the network edge, providing scalable, seamless, secure wireless access from more places, anytime, either autonomously or centrally controlled by MSM controllers. MSM460 (A Computer Reseller News Innovation Award winner) and MSM466 access points were the first 3x3 MIMO access points on the market with three spatial streams, supporting 450 Mbps per radio. All the above APs support beam forming and beam steering.

Note: The MSM466-R is the first Indoor/Outdoor AP supporting dual radio 3x3 MIMO technology with three spatial streams. This rugged access point can be placed in harsh environments. With its internal heater, it can support temperatures from -40°C to 55°C (-40°F to 131°F) and can provide building-to-building Wi-Fi connectivity. The AP is IP67 and NEMA 4X-compliant. When running with a wireless controller, the MSM controller must be running at least v5.7 firmware. These APs also operate with the HP 830 Unified Wired-WLAN Switch Series, HP 10500/7500 Unified Wired-WLAN Modules, and the HP WX5002 and WX5004 Access Controller Series.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MSM 802.11n Dual Radio Access Point Series

##### Power supply

- HP 1-port Power Injector (J9407B)

##### Adapter

- Optional HP 802.11n Dual Frequency (USB) Wireless Client Adapter (JD039A)

##### HP MSM466 Dual Radio 802.11n Access Point

- HP Indoor-Outdoor Narrow Sector Dual Band 8/10 dBi MIMO 3 Element Antenna (J9169A)


- HP Indoor-Outdoor Point-to-Point Dual Band 10/13 dBi MIMO 3 Element Antenna (J9170A)
- HP Indoor Omnidirectional Dual Band 3/4 dBi MIMO 3 Element Antenna (J9171A)
- HP Indoor Omnidirectional Dual Band 2.5/6 dBi MIMO 6 Element Antenna (J9659A)
- HP Antenna Lightning Arrester (J8996A)


##### HP MSM466-R Dual Radio 802.11n Access Point (Indoor and Outdoor)

- HP Outdoor Omnidirectional 6 dBi at 2.4 GHz MIMO 3 Element Antenna (J9719A)

- HP Outdoor Omnidirectional 8 dBi at 5 GHz MIMO 3 Element Antenna (J9720A)
- HP Indoor-Outdoor Narrow Sector Dual Band 8/10 dBi MIMO 3 Element Antenna (J9169A)
- HP Indoor-Outdoor Point-to-Point Dual Band 10/13 dBi MIMO 3 Element Antenna (J9170A)
- HP Indoor Omnidirectional Dual Band 3/4 dBi MIMO 3 Element Antenna (J9171A)
- HP Indoor Omnidirectional Dual Band 2.5/6 dBi MIMO 6 Element Antenna (J9659A)
- HP Antenna Lightning Arrester (J8996A)

### MultiService MSM Access Points and Controller Series (continued)

	10/100/1000	PoE/PoE+ (IEEE 802.3af/at) ports	Number of radios	Virtual AP/multiple SSID (max)	Wireless Distribution System (WDS) Bridging	Wi-Fi certification	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)
<b>HP MSM 802.11n Access Point Series</b>									
									
<b>HP MSM410 Access Point WW (J9427B)</b>	1	1	1 (n/a/b/g)	16 SSIDs	Yes	Yes	a/b/g/n	3	
<b>HP MSM410 Access Point US (J9426B)</b>	1	1	1 (n/a/b/g)	16 SSIDs	Yes	Yes	a/b/g/n	3	
<b>HP MSM410 Access Point JP (J9529B)</b>	1	1	1 (n/a/b/g)	16 SSIDs	Yes	Yes	a/b/g/n	3	
<b>HP MSM410 Access Point IL (J9616A)</b>	1	1	1 (n/a/b/g)	16 SSIDs	Yes	Yes	a/b/g/n	3	
<b>HP MSM 802.11n Access Point Series at a glance...</b>									
Full-n-speed access points with legacy a/b/g support; completely support IEEE 802.3af PoE with full 3x3 MIMO.									

<b>HP MSM317 Access Device Series</b>									
									
<b>HP MSM317 Access Device US (J9422A)</b>	4 (10/100) 1 pass-through	1	1 (b/g)	16 SSIDs		Yes	b/g	2	
<b>HP MSM317 Access Device WW (J9423A)</b>	4 (10/100) 1 pass-through	1	1 (b/g)	16 SSIDs		Yes	b/g	2	
<b>HP MSM317 Access Device Series at a glance...</b>									
This unique device provides wired and wireless connectivity in a small "all-in-one" unit that can quickly and discretely be installed in a standard wall outlet. The device consists of an integrated IEEE 802.11 b/g Wi-Fi access point, four Ethernet ports, and a pass-through RJ-45 connector. MSM317 access devices require an MSM wireless controller.									

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MSM 802.11n Access Point Series

##### Power supply

- HP 1-port Power Injector (J9407B)

##### Adapter


- Optional HP 802.11n Dual Frequency (USB) Wireless Client Adapter (JD039A)

#### HP MSM317 Access Device Series

##### Power supply

- HP 1-port Power Injector (J9407B)

### MultiService MSM Access Points and Controller Series (continued)

	10/100/Gigabit/10G ports	PoE/PoE+ (IEEE 802.3af/at) ports	APs managed (std)	APs managed (max)	Layer 3 roaming support	Fast roaming support	Embedded server for authentication	Redundancy support
<b>HP MultiService (MSM) Controller Series</b>								
	<b>HP MSM765zl Mobility Controller (J9370A)</b>	2 (10GbE)		40	200 <sup>1</sup>	Yes	Yes	Yes <sup>1</sup>
	<b>HP MSM760 Mobility Controller (J9420A)</b>	2 (1 GbE)		40	200 <sup>1</sup>	Yes	Yes	Yes <sup>1</sup>
	<b>HP MSM760 Access Controller (J9421A)</b>	2 (1 GbE)		40	200 <sup>1</sup>	Yes <sup>2</sup>	Yes	Yes <sup>1,2</sup>
	<b>HP MSM720 Premium Mobility Controller (WW) (J9694A)<sup>3</sup></b>	4 (1 GbE); 2 DP	10	40 <sup>3</sup>	Yes	Yes	Yes	Yes <sup>4</sup>
	<b>HP MSM720 Access Controller (WW) (J9693A)<sup>3</sup></b>	4 (1 GbE); 2 DP	10	40 <sup>3</sup>	Yes <sup>2</sup>	Yes	Yes	Yes <sup>2,4</sup>

#### HP MultiService (MSM) Controller Series at a glance...

IEEE 802.11n-ready controllers providing centralized AP management, control, and guest services. Mobility controllers deliver fast roaming and VoWiFi with consistent security.

<sup>1</sup> Up to 5 MSM760 or 5 MSM765 Premium Mobility controllers (cross chassis) can be teamed to support up to 800 APs in a redundant configuration through a single management interface.

<sup>2</sup> With Premium Mobility controller upgrade.

<sup>3</sup> TAA SKU is available for this product.

<sup>4</sup> Up to 2 MSM720 Premium Mobility controllers can be teamed to support up to 40 APs in a redundant configuration through a single management interface.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MultiService (MSM) Controller Series

##### HP MSM765 zl Premium Mobility Controller (J9370A)

- HP MSM760/765 Additional 40 Access Point License (J9371A)
- HP MSM720/760/765 Additional 10 Access Point License (J9697A)

##### HP MSM760 Premium Mobility Controller (J9420A)

- HP MSM760/765 Additional 40 Access Point License (J9371A)
- HP MSM720/760/765 Additional 10 Access Point License (J9697A)

##### HP MSM760 Access Controller (J9421A)

- HP MSM760 Premium Mobility License (J9491A)
- HP MSM760/765 Additional 40 Access Point License (J9371A)
- HP MSM720/760/765 Additional 10 Access Point License (J9697A)

##### HP MSM720 Premium Mobility Controller (WW) (J9694A)

- HP X121 1G SFP LC SX Transceiver (J4858C)
- HP X121 1G SFP LC LX Transceiver (J4859C)
- HP X121 1G SFP LC LH Transceiver (J4860C)
- HP X111 100M SFP LC FX Transceiver (J9054C)
- HP X112 100M SFP LC BX-D Transceiver (J9099B)
- HP X112 100M SFP LC BX-U Transceiver (J9100B)
- HP X122 1G SFP LC BX-D Transceiver (J9142B)
- HP X122 1G SFP LC BX-U Transceiver (J9143B)
- HP MSM720/760/765 Additional 10 Access Point License (J9697A)


##### HP MSM720 Access Controller (WW) (J9693A)


- HP X121 1G SFP LC SX Transceiver (J4858C)
- HP X121 1G SFP LC LX Transceiver (J4859C)
- HP X121 1G SFP LC LH Transceiver (J4860C)
- HP X111 100M SFP LC FX Transceiver (J9054C)
- HP X112 100M SFP LC BX-D Transceiver (J9099B)
- HP X112 100M SFP LC BX-U Transceiver (J9100B)
- HP X122 1G SFP LC BX-D Transceiver (J9142B)
- HP X122 1G SFP LC BX-U Transceiver (J9143B)
- HP MSM720/760/765 Additional 10 Access Point License (J9697A)
- HP MSM720 Premium Mobility License (J9698A)


#### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

### Standalone Wireless

	10/100/1000	PoE/PoE+ (IEEE 802.3af/at) ports	Number of radios	Virtual AP/multiple SSID (max)	Wireless Distribution System (WDS) Bridging	Wi-Fi certification	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)
<b>HP M220-802.11n Access Point Series</b>									
									
<b>HP M220-802.11n AM Access Point (J9798A)</b>	1	1	1	up to 8	Yes	Yes	a/b/g/n	2	0
<b>HP M220-802.11n WW Access Point (J9799A)</b>	1	1	1	up to 8	Yes	Yes	a/b/g/n	2	0
<p><b>HP M220-802.11n Access Point Series at a glance...</b>                      HP M220 802.11n Access Points are dual-band, single radio devices supporting high-speed wireless networking at 5 GHz or 2.4 GHz. They are fully compatible with the high-speed IEEE 802.11n wireless standard and backward compatible for legacy IEEE 802.11a/b/g support. They can run stand alone or be clustered for simplified administration of multiple HP M220 access points. With clustering, configuration changes automatically propagate across all M220 access points in your network. Clustering technology requires no wireless controller or additional hardware. HP M220-802.11n Access Points come with a lifetime warranty.*</p>									

<b>HP M200-802.11n Access Point Series</b>									
									
<b>HP M200-802.11n Access Point (US) (J9467A)</b>	1	1	1	4	Yes	a/b/g/n	a/b/g/n		3
<b>HP M200-802.11n Access Point (WW) (J9468A)</b>	1	1	1	4	Yes	a/b/g/n	a/b/g/n		3
<p><b>HP M200-802.11n Access Point Series at a glance...</b>                      IEEE 802.11n Independent Dual Band Access Point powered by PoE. Easy-to-use and deploy secure connectivity for all of the current and future wireless needs of growing small and medium businesses.</p>									

<b>HP Mobility Integrated Services Access Point Series</b>									
									
<b>HP MSM313 Access Point WW (J9350B)</b>	2 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	0	2
<b>HP MSM313 Access Point US (J9346B)</b>	2 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	0	2
<b>HP MSM313 Access Point JP (J9525B)</b>	2 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	0	2
<p><b>HP Mobility Integrated Services Access Point Series at a glance...</b>                      Integrated, full-featured MultiService Mobility Access Point and MultiService Mobility Controller in a single turnkey unit. The "US" model is for United States purchases. The "WW" model is for all locations outside the United States.</p>									

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP M200 802.11n Access Point Series

##### Wireless card and adapter

- HP Dual Band 802.11n Wireless USB Adapter (JD039A)

##### Power supply

- HP 1-port Power Injector (J9407B)

#### HP Mobility Integrated Services Access Point Series

##### Power supply

- HP MSM31x and MSM32x Power Supply (J9405B)

##### Mounting kit

- HP MSM310/MSM320 Access Point Mounting Bracket (J9403A)

##### External antennas


- HP 5 dBi Indoor/Outdoor Omnidirectional Antenna (J8441A)
- HP 8 dBi Outdoor Omnidirectional Antenna (J8444A)

- HP 3 dBi Dual Band Diversity Antenna (J8997A)
- HP 7 dBi Dual Band Directional Antenna (J8999A)

##### Adapter

- Optional HP 802.11n Dual Frequency (USB) Wireless Client Adapter (JD039A)

**Adapters**

	10/100/Gigabit/10G ports	PoE/PoE+ (IEEE 802.3af/at) ports	Number of radios	Virtual AP/multiple SSID (max)	Wireless Distribution System (WDS) Bridging	Wi-Fi Certified	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)
<b>HP M111 Client Bridge Series</b>									
	<b>HP M111 Client Bridge (J9389A)</b>	1 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	2
	<b>HP M111 Client Bridge JP (J9523A)</b>	1 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	2
<p><b>HP M111 Client Bridge Series at a glance...</b>                      The HP M111 Client Bridge bridges an Ethernet LAN segment, supporting a wide range of DECnet, IPX, AppleTalk, and other devices, to IEEE 802.11a/b/g WLAN, providing IEEE 802.1X PEAP authentication and up to WPA2 security without upgrading the clients.</p>									

**HP Dual Band 802.11n Wireless USB Adapter**



<b>HP Dual Band 802.11n Wireless USB Adapter (JD039A)</b>	USB connection only
<p><b>HP Dual Band 802.11n Wireless USB Adapter at a glance...</b>                      The HP Dual Band 802.11n Wireless USB Adapter is a simple, low-cost solution for bringing advanced high-speed wireless access to PCs that don't have these capabilities. Use it to add uncongested 5 GHz wireless support to PCs or laptops that only support 2.4 GHz. Bring IEEE 802.11n wireless to devices that have older embedded wireless or no wireless at all. Take advantage of the highest wireless performance by upgrading your end stations so they match the high-speed wireless infrastructure you are putting in place.</p>	

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP M111 Client Bridge Series**

**Power supplies**

- HP MSM31x/MSM32x Power Supply (J9405B)
- HP 1-port Power Injector (J9407B)


**Wireless antenna**

- HP Dual Band Indoor Short Omnidirectional Antenna (J9401A)

**HP Dual Band 802.11n Wireless USB Adapter**

This product has no modules or accessories.

### Wireless Security

	10/100/Gigabit/10G ports	PoE/PoE+ (IEEE 802.3af/at ports)	Number of radios	Managed sensors (std)	Managed sensors (max)	Wi-Fi Certified	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)	
<b>HP RF Manager Mobility Security IDS/IPS System Series</b>										
	<b>HP MSM415 RF Security Sensor (J9522A)</b>	1 (1 GbE)	1	1	N/A	N/A	N/A	a, b, g, n	3	No
	<b>HP RF Manager Controller with 50-sensor license (J9521A)</b>	2 (1G)	N/A	N/A	50	250	N/A	a, b, g, n	N/A	N/A
	<b>HP RF Manager for VMware 50 Sensor E-LTU (J9838AAE)</b>	N/A	N/A	N/A	50	250	N/A	a, b, g, n	N/A	N/A
<p><b>HP RF Manager Mobility Security IDS/IPS System Series at a glance...</b>                      802.11a/b/g/n sensor, a highly scalable WIPS manager, and site planning software protect the network and users from unauthorized wireless access 24x7, enforce comprehensive wireless and "no-wireless" policies, and provide extensive compliance reporting.</p>										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP RF Manager Mobility Security IDS/IPS System Series

##### Supported sensors

- HP MSM415 RF Security Sensor (J9522A)

##### Licenses

- HP RF Manager additional 50-sensor Upgrade License (J9399A)
- HP RF Manager Adv Wireless IPS License (J9644A)
- HP RF Manager for Additional 50 Sensor E-LTU (J9399AAE)

### Wireless RF Planning

	10/100/Gigabit/10G ports	PoE/PoE+ (IEEE 802.3af/at ports)	Number of radios	Virtual AP/multiple SSID (max)	Wireless Distribution System (WDS) Bridging	Wi-Fi Certified	IEEE 802.11a/b/g/n	Internal antennas (standard)	External antennas (optional)	
<b>HP RF Planner</b>										
	<b>HP RF Planner (J9400A)</b>	N/A	N/A	N/A	N/A	N/A	N/A	a, b, g, n	N/A	N/A
<p><b>HP RF Planner at a glance...</b>                      HP RF Planner accurately models WLAN coverage by factoring in variables such as physical features, building materials, and WLAN equipment characteristics. It also facilitates deployment by assessing security risks and generating equipment lists.</p>										

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP RF Planner

This product has no modules or accessories.



**Switches****HP 5500 HI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 23.

**HP 5500 EI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 23.

**HP 5500 SI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 24.

**HP 5400 zL Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 21.

**HP 5120 EI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 25.

**HP 5120 SI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 25.

**HP 4200 vL Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 26.

**HP 3800 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 26.

**HP 3600 EI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 27.

**HP 3600 SI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 27.

**HP 3500 yL Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 28.

**HP 3500 Switch Series (10/100 models)**

Refer to FlexCampus — Campus-Branch Switches—on page 28.

**HP 3100 EI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 29.

**HP 3100 SI Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 29.

**HP 2920 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 30.

**HP 2915-8G-PoE Switch**

Refer to FlexCampus — Campus-Branch Switches—on page 30.

**HP 2910 aL Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 30.

**HP 2620 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 31.

**HP 2615-8-PoE Switch**

Refer to FlexCampus — Campus-Branch Switches—on page 31.

**HP 2530 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 32.

**HP 2520 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 32.

**HP 2510 Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 33.

**HP IntelliJack Gigabit Switch Series**

Refer to FlexCampus — Campus-Branch Switches—on page 33.

**MSM Access Point and Controller Series****HP 830 Unified Wired-WLAN Switch Series**

Refer to FlexCampus — Wireless—on page 34.

**HP MSM 802.11n Dual Radio Access Point Series**

Refer to FlexCampus — Wireless—on page 35.

**HP MSM 802.11n Access Point Series**

Refer to FlexCampus — Wireless—on page 36.

**HP MSM317 Access Device Series**

Refer to FlexCampus — Wireless—on page 36.

**HP MultiService (MSM) Controller Series**

Refer to FlexCampus — Wireless—on page 37.

**Standalone Wireless****HP M220-802.11n Access Point Series**

Refer to FlexCampus — Wireless—on page 38.

**HP M200-802.11n Access Point Series**

Refer to FlexCampus — Wireless—on page 38.

**HP Mobility Integrated Services Access Point Series**

Refer to FlexCampus — Wireless—on page 38.

**Adapters****HP M111 Client Bridge Series**

Refer to FlexCampus — Wireless—on page 39.

**HP Dual Band 802.11n Wireless USB Adapter**

Refer to FlexCampus — Wireless—on page 39.

**Wireless Security****HP RF Manager Mobility Security IDS/IPS System Series**

Refer to FlexCampus — Wireless—on page 40.

**Wireless RF Planning****HP RF Planner**

Refer to FlexCampus — Wireless—on page 40.

HP MSR50 Router Series	Height (RU)	Module slots	Included ports	USB ports	Enhanced service modules supported	SDRAM (included/available)	Compact Flash slot	Embedded voice support (VPM/VCPM)	Hardware hot-swap	Routing performance (PPS)
<b>HP MSR50-60 Router Chassis (JF231A)</b>	4	6 FIC/4 SIC 6 FIC/0 SIC*	2/3 GbE*	2	2	512/1024 MB 1 GB/2 GB*	1	4/1	Yes	Up to 1.28 million*
<b>HP MSR50-60 DC Router Chassis (JF640A)</b>	4	6 FIC/4 SIC 6 FIC/0 SIC*	2/3 GbE*	2	2	512/1024 MB 1 GB/2 GB*	1	4/1	Yes	Up to 1.28 million*
<b>HP MSR50-40 Router Chassis (JD433A)</b>	3	4 FIC/4 SIC 4 FIC/0 SIC*	2/3 GbE*	2	2	512/1024 MB 1 GB/2 GB*	1	4/1	Yes	Up to 1.28 million*
<b>HP MSR50-40 DC Router Chassis (JF285A)</b>	3	4 FIC/4 SIC 4 FIC/0 SIC*	2/3 GbE*	2	2	512/1024 MB 1 GB/2 GB*	1	4/1	Yes	Up to 1.28 million*



### HP MSR50 Series at a glance...

Designed for large branch, regional office, and enterprise deployments, the routers deliver high-performance converged routing, switching, wireless, security, and voice services with modular, high-density WAN, LAN, and voice interface options in a single platform. The HP MSR50 Router Series provides full-featured routing, IPv6, QoS, MPLS, security, switching, wireless, and voice services with optional embedded hardware-based encryption and voice processing to deliver superior forwarding up to 1280 Kpps.

\* MPU G2

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MSR50 Series

##### Processing modules

- HP MSR50 G2 Main Processing Unit (JD429B)
- HP MSR50 Main Processing Unit (JD653A)
- HP MSR50 G2 Multi-Service Module (JD430A)
- HP MSR50 Multi-Service Module (JD651A)

##### Cables

- HP X260 E1 BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 Auxiliary Router Cable (JD508A)
- HP X260 E1 RJ45 3m Router Cable (JD509A)
- HP X260 E1 RJ45 BNC Conversion Router Cable (JD511A)
- HP X260 8E1 BNC 75 ohm 3m Router Cable (JD512A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 E1 RJ45 20m Router Cable (JD517A)
- HP X260 T1 Router Cable (JD518A)
- HP X200 V.24 DTE 3m Serial Port Cable (JD519A)
- HP X200 V.24 DCE 3m Serial Port Cable (JD521A)
- HP X200 V.35 DTE 3m Serial Port Cable (JD523A)
- HP X200 V.35 DCE 3m Serial Port Cable (JD525A)
- HP X200 X.21 DTE 3m Serial Port Cable (JD527A)
- HP X200 X.21 DCE 3m Serial Port Cable (JD529A)
- HP X260 T3/E3 Router Cable (JD531A)
- HP X260 E3-30 E3/T3 Router Cable (JD533A)
- HP X500 T1/E1 Voice RJ45 Interface Connector (JD535A)
- HP X260 E1 8-port Router Cable (JD635A)
- HP X200 Transit Plug D25F Single Cable (JD636A)
- HP X260 E1 4-port IMA Router Cable (JD638A)
- HP X260 8T1 RJ45 3m Router Cable (JD639A)
- HP X260 Transit RJ45 0.5m Single Cable (JD641A)
- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 RS449 3m DTE Serial Port Cable (JF825A)
- HP X260 RS449 3m DCE Serial Port Cable (JF826A)
- HP X260 RS530 3m DTE Serial Port Cable (JF827A)
- HP X260 RS530 3m DCE Serial Port Cable (JF828A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)
- HP MSR 15m D50M to 24\*RJ11 Router Cable (JG318A)

##### Flexible interface card (FIC) modules

- HP MSR Large Survivable Branch Communication FIC Module powered by Microsoft Lync (JG589A)
- HP MSR 1-port Gig-T FIC Module (JD583B)
- HP MSR 8-port Enhanced Async Serial FIC Module (JF260B)
- HP MSR 16-port Enhanced Async Serial FIC Module (JF265B)
- HP MSR 2-port Gig-T FIC Module (JF269B)
- HP MSR 2-port 1000BASE-X FIC Module (JF270B)

- HP MSR 1-port 1000BASE-X FIC Module (JD582A)
- HP MSR 2-port 10/100BASE-T FIC Module (JD577A)
- HP MSR 4-port 10/100BASE-T FIC Module (JF824A)
- HP MSR 16-port 10/100 PoE FIC Module (JD616A)
- HP MSR 24-port 10/100 PoE DFIC Module (JD617A)
- HP MSR 4-port E&M FIC Module (JD602A)
- HP MSR 4-port FXO FIC Module (JD593A)
- HP MSR 4-port FXS FIC Module (JD594A)
- HP MSR 24-port FXS FIC Module (JG197A)
- HP MSR 1-port T1 Voice FIC Module (JD605A)
- HP MSR 2-port T1 Voice FIC Module (JD606A)
- HP MSR 1-port E1 Voice FIC Module (JD607A)
- HP MSR 2-port E1 Voice FIC Module (JD587A)
- HP MSR 4-port Enhanced Sync/Async Serial FIC Module (JD584A)
- HP MSR 8-port Enhanced Sync/Async Serial FIC Module (JD580A)
- HP MSR 2-port E1/CE1/PRI FIC Module (JD578A)
- HP MSR 4-port E1/CE1/PRI FIC Module (JD588A)
- HP MSR 8-port E1/CE1/PRI (75ohm) FIC Module (JD585A)
- HP MSR 8-port T1/CT1/PRI FIC Module (JD586B)
- HP MSR 8-port T1 IMA FIC Module (JG200A)
- HP MSR 8-port E1 IMA (75ohm) FIC Module (JF278B)
- HP MSR 4-port E1/CE1/PRI FIC Module (JD591A)
- HP MSR 4-port T1/Fractional T1 FIC Module (JD592A)
- HP MSR 1-port T3/CT3/FT3 FIC Module (JD629A)
- HP MSR 1-port E3/CE3/FE3 FIC Module (JD625A)
- HP MSR 4-port Enhanced ISDN-S/T FIC Module (JD589A)
- HP MSR 4-port E1 IMA (75ohm) FIC Module (JD622A)
- HP MSR 1-port T3 ATM FIC Module (JD595A)
- HP MSR 1-port E3 ATM FIC Module (JD596A)
- HP MSR 1-port OC-3c/STM-1c ATM SFP FIC Module (JD633A)
- HP MSR 1-port OC-3c/STM-1c POS FIC Module (JD581C)
- HP MSR 1-port OC3(E1/T1) CPOS FIC Module (JG201A)
- HP MSR Open Application Platform (OAP) with VMware vSphere FIC Module (JG533A)

##### Smart interface card (SIC) modules

- HP MSR 4-port 10/100BASE-T Switch SIC Module (JD573B)
- HP MSR 9-port 10/100BASE-T Switch DSIC Module (JD574B)
- HP MSR 4-port 10/100BASE-T PoE Switch SIC Module (JD620A)
- HP MSR 9-port 10/100BASE-T PoE Switch DSIC Module (JD621A)
- HP MSR 1-port 10/100BASE-T SIC Module (JD545B)
- HP MSR 1-port 100BASE-X SIC Module (JF280A)
- HP MSR 1-port GbE Combo SIC Module (JD572A)
- HP MSR 2-port FXO SIC Module (JD558A)
- HP MSR 1-port FXO SIC Module (JD559A)
- HP MSR 2-port FXS SIC Module (JD560A)

- HP MSR 1-port FXS SIC Module (JD561A)
- HP MSR 4-port FXS/1-port FXO DSIC Module (JG189A)
- HP MSR 1-port E1 Voice SIC Module (JD575A)
- HP MSR 1-port T1 Voice SIC Module (JD576A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 2-port FXS/1-port FXO SIC Module (JD632A)
- HP MSR 1-port E1/CE1/PRI SIC Module (JF253B)
- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 1-port Enhanced Sync/Async Serial SIC Module (JD557A)
- HP MSR 1-port ADSL over POTS SIC Module (JD537A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 1-port ADSL over ISDN BRI U SIC Module (JG056B)
- HP MSR 1-port 8-wire G.SHDSL DSIC Module (JG191A)
- HP MSR 16-port Async Serial SIC Module (JG186A)
- HP MSR HSPA/WCDMA SIC Module (JG187A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (JF819A)
- HP MSR 802.11b/g/n SIC Module (NA) (JG211A)

##### Voice processors

- HP MSR Voice Co-processing Module (JD610A)
- HP MSR 32-Channel Voice Processing Module (JD598A)
- HP MSR 24-Channel Voice Processing Module (JD599A)
- HP MSR 16-Channel Voice Processing Module (JD600A)
- HP MSR 8-Channel Voice Processing Module (JD601A)

##### Encryption sub-cards

- HP MSR Advanced Network Data Encryption ESM Module (JD608A)
- HP MSR Standard Network Data Encryption ESM Module (JD609A)

##### Power supplies

- HP MSR50 350W AC Power Supply (JD650A)
- HP MSR50 500W PoE Power Module (JD652A)
- HP MSR50 350W DC Power Supply (JF443A)

##### License


- HP MSR50 Series Standard Version Router Software License (JD434A)

##### Memory

- HP 256MB DDR2 Register SDRAM (JD647A)
- HP 512MB DDR2 Register SDRAM (JD648A)

##### Transceivers

See pages 65–70 for the HP Networking Transceiver Matrix.

	Height (RU)	Module slots	Included ports	USB ports	Enhanced service modules supported	SDRAM (included/available)	Compact Flash slot	Embedded voice support (VPM/IVCPM)	Routing performance (PPS)
<b>HP MSR30 Router Series</b>									
									
<b>HP MSR30-60 PoE Router (JF804A)</b>	3	6 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-60 Router (JF230A)</b>	3	6 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-60 DC Router (JF801A)</b>	3	6 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-40 PoE Router (JF803A)</b>	2	4 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-40 Router (JF229A)</b>	2	4 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-40 DC Router (JF287A)</b>	2	4 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	360,000
<b>HP MSR30-20 PoE Router (JF802A)</b>	1	2 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	3/1	300,000
<b>HP MSR30-20 Router (JF284A)</b>	1	2 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	2/1	300,000
<b>HP MSR30-20 DC Router (JF235A)</b>	1	2 MIM/4 SIC	2 GbE	2	2	512/1024 MB	1	2/1	300,000
<b>HP MSR30-16 Router (JF233A)</b>	1	1 MIM/4 SIC	2 x 10/100	1	2	256/768 MB	1	2/1	240,000
<b>HP MSR30-16 PoE Router (JF234A)</b>	1	1 MIM/4 SIC	2 x 10/100	1	2	256/768 MB	1	2/1	240,000
<b>HP MSR30-11E Router (JG182A)</b>	1	1 MIM/2 SIC	2 x 10/100 WAN, 24 x 10/100 LAN	1	1	256 MB	0	0/0	220,000
<b>HP MSR30-11F Router (JG183A)</b>	1	1 MIM/2 SIC	2 x 10/100 WAN, 48 x 10/100 LAN	1	1	256 MB	0	0/0	220,000
<b>HP MSR30-10 DC Router (JG184A)</b>	1	1 MIM/2 SIC	2 x 10/100	1	1	256 MB	0	1/0	220,000
<b>HP MSR30-10 Router (JF816A)</b>	1	1 MIM/2 SIC	2 x 10/100	1	1	256 MB	0	1/0	220,000

### HP MSR30 Series at a glance...

Ideal for medium to large branch and regional offices; provide unmatched performance, integrated routing, switching, security, wireless, and voice services with a rich set of modular WAN/LAN and voice interface options in a single device to reduce operating and capital costs and simplify complexity.

Note: DP = Dual-personality port

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MSR30 Series

##### PoE modules (for MSR30 PoE routers)

- HP MSR 24-port 10/100 PoE DMIM Module (JD619A)
- HP MSR 16-port 10/100 PoE MIM Module (JD618A)
- HP MSR 9-port 10/100BASE-T PoE Switch DSIC Module (JD621A)
- HP MSR 4-port 10/100BASE-T PoE Switch SIC Module (JD620A)

##### Cables

Please refer to the HP MSR50 Series for a complete list of applicable cables for the HP MSR30 Series.

##### Multifunction interface modules (MIM)

- HP MSR Small Survivable Branch Communication MIM Module powered by Microsoft Lync (JG587A)
- HP MSR Medium Survivable Branch Communication MIM Module powered by Microsoft Lync (JG588A)
- HP MSR 2-port 10/100BASE-T MIM Module (JD613A)
- HP MSR 4-port 10/100BASE-T MIM Module (JD551A)
- HP MSR 2-port Gig-T MIM Module (JD548A)
- HP MSR 24-port 10/100 DMIM Module (JD564A)
- HP MSR 16-port 10/100BASE-T Switch XMIM Module (JF279A)
- HP MSR 24-port 10/100BASE-T Switch XMIM Module (JF276A)
- HP MSR 2-port Enhanced Sync/Async Serial MIM Module (JD540A)
- HP MSR 4-port Enhanced Sync/Async Serial MIM Module (JD541A)
- HP MSR 8-port Enhanced Sync/Async Serial MIM Module (JD552A)
- HP MSR 8-port Enhanced Async Serial MIM Module (JF840A)
- HP MSR 16-port Enhanced Async Serial MIM Module (JF841A)
- HP MSR 2-port FX0 MIM Module (JD543A)
- HP MSR 4-port FX0 MIM Module (JD542A)
- HP MSR 4-port FXS MIM Module (JD553A)
- HP MSR 1-port E1 Voice MIM Module (JD565A)
- HP MSR 1-port T1 Voice MIM Module (JD566A)
- HP MSR 2-port E1 Voice MIM Module (JD567A)
- HP MSR 2-port T1 Voice MIM Module (JD568A)
- HP MSR 16-port FXS MIM Module (JF822A)

- HP MSR 4-port ISDN-S/T Voice MIM Module (JF837A)
- HP MSR 4-port E&M MIM Module (JD539A)
- HP MSR 2-port E1/CE1/PRI MIM Module (JD544A)
- HP MSR 2-port T1/CT1/PRI MIM Module (JD549A)
- HP MSR 4-port E1/CE1/PRI MIM Module (JD550A)
- HP MSR 4-port T1/Fractional T1 MIM Module (JF254B)
- HP MSR 4-port E1/Fractional E1 MIM Module (JF257B)
- HP MSR 8-port E1 IMA (75ohm) MIM Module (JD555B)
- HP MSR 8-port E1/CE1/PRI (75ohm) MIM Module (JD563A)
- HP MSR 8-port E1/Fractional E1 (75ohm) MIM Module (JF255A)
- HP MSR 8-port T1/Fractional T1 MIM Module (JC159A)
- HP MSR 8-port T1/CT1/PRI MIM Module (JC160A)
- HP MSR 1-port T3/CT3/FT3 MIM Module (JD628A)
- HP MSR 1-port E3/CE3/FE3 MIM Module (JD630A)
- HP MSR 1-port OC-3c/STM-1c ATM SFP MIM Module (JD624A)
- HP MSR 1-port OC3c POS MIM Module (JG193A)
- HP MSR Open Application Platform (OAP) with VMware vSphere MIM Module (JG532A)

##### Smart interface card (SIC) modules

- HP MSR 4-port 10/100BASE-T Switch SIC Module (JD573B)
- HP MSR 2-port FXS SIC Module (JD574B)
- HP MSR 1-port 10/100BASE-T SIC Module (JD545B)
- HP MSR 1-port 100BASE-X SIC Module (JF280A)
- HP MSR 1-port GbE Combo SIC Module (JD572A)
- HP MSR 2-port FX0 SIC Module (JD558A)
- HP MSR 1-port FX0 SIC Module (JD559A)
- HP MSR 2-port FXS SIC Module (JD560A)
- HP MSR 1-port FXS SIC Module (JD561A)
- HP MSR 4-port FXS/1-port FX0 DSIC Module (JG189A)
- HP MSR 1-port E1 Voice SIC Module (JD575A)
- HP MSR 1-port T1 Voice SIC Module (JD576A)
- HP MSR 2-port E1 Voice SIC Module (JF821A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 2-port FXS/1-port FX0 SIC Module (JD632A)
- HP MSR 1-port E1/CE1/PRI SIC Module (JF253B)

- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A)
- HP MSR 1-port Enhanced Sync/Async Serial SIC Module (JD557A)
- HP MSR 1-port ADSL over POTS SIC Module (JD537A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 1-port ADSL over ISDN BRI U SIC Module (JG056B)
- HP MSR 1-port 8-wire G.SHDSL DSIC Module (JG191A)
- HP MSR 16-port Async Serial SIC Module (JG186A)
- HP MSR HSPA/WCDMA SIC Module (JG187A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (JF819A)
- HP MSR 802.11b/g/n SIC Module (NA) (JG211A)

##### Voice processors

- HP MSR 32-Channel Voice Processing Module (JD598A)
- HP MSR 24-Channel Voice Processing Module (JD599A)
- HP MSR 16-Channel Voice Processing Module (JD600A)
- HP MSR 8-Channel Voice Processing Module (JD601A)
- HP MSR Voice Co-processing Module (JD610A)

##### Encryption sub-cards

- HP MSR Advanced Network Data Encryption ESM Module (JD608A)
- HP MSR Standard Network Data Encryption ESM Module (JD609A)

##### Power supplies

- HP RPS800 Redundant Power System (JD183A)
- HP X290 MSR30 1m RPS Cable (JD637A)

##### Memory

- HP 256MB DDR2 Register SDRAM (JD647A)
- HP 512MB DDR2 Register SDRAM (JD648A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

	Height (RU)	Module slots	Included ports	USB ports	Enhanced service modules supported	SDRAM (included/available)	Compact Flash slot	Embedded voice support (VPM/VCPM)	Routing performance (PPS)
<b>HP MSR20 Router Series</b>									
	1	4 SIC	2 x 10/100	1	2	256/384 MB	1	2/1	180,000
<b>HP MSR20-40 Router (JF228A)</b>	1	4 SIC	2 x 10/100	1	2	256/384 MB	1	2/1	180,000
<b>HP MSR20-21 Router (JD663B)</b>	1	2 SIC	2 x 10/100 + 8 switched 10/100	1	1	256/384 MB	1	0	180,000
<b>HP MSR20-20 Router (JF283A)</b>	1	2 SIC	2 x 10/100	1	1	256/384 MB	1	0	180,000

### HP MSR20 Series at a glance...

Flexible, economical, full-featured routing, switching, security, and voice with flexible modular WAN and LAN connectivity options in a high-performance converged routing platform that is ideal for small to medium branch offices and enterprise deployments.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP MSR20 Series

##### Cables

- HP X260 Auxiliary Router Cable (JD508A)
- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X260 T1 Router Cable (JD518A)
- HP X500 T1/E1 Voice RJ45 Interface Connector (JD535A)
- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 E1 RJ45 20m Router Cable (JD517A)
- HP X260 E1 RJ45 3m Router Cable (JD509A)
- HP X260 E1 BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 E1 RJ45 BNC Conversion Router Cable (JD511A)
- HP X200 V.24 DTE 3m Serial Port Cable (JD519A)
- HP X200 V.24 DCE 3m Serial Port Cable (JD521A)
- HP X200 V.35 DTE 3m Serial Port Cable (JD523A)
- HP X200 V.35 DCE 3m Serial Port Cable (JD525A)
- HP X200 X.21 DTE 3m Serial Port Cable (JD527A)
- HP X200 X.21 DCE 3m Serial Port Cable (JD529A)
- HP X200 Transit Plug D25F Single Cable (JD636A)
- HP X260 Transit RJ45 0.5m Single Cable (JD641A)
- HP X260 R5449 3m DTE Serial Port Cable (JF825A)
- HP X260 R5449 3m DCE Serial Port Cable (JF826A)
- HP X260 R5530 3m DTE Serial Port Cable (JF827A)
- HP X260 R5530 3m DCE Serial Port Cable (JF828A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)

##### Smart interface card (SIC) modules

- HP MSR 4-port 10/100BASE-T Switch SIC Module (JD573B)
- HP MSR 9-port 10/100BASE-T Switch DSIC Module (JD574B)
- HP MSR 1-port 10/100BASE-T SIC Module (JD545B)
- HP MSR 1-port 100BASE-X SIC Module (JF280A)
- HP MSR 1-port GbE Combo SIC Module (JD572A)
- HP MSR 2-port FX0 SIC Module (JD558A)
- HP MSR 1-port FX0 SIC Module (JD559A)
- HP MSR 2-port FXS SIC Module (JD560A)
- HP MSR 1-port FXS SIC Module (JD561A)
- HP MSR 4-port FXS/1-port FX0 DSIC Module (JG189A)
- HP MSR 1-port E1 Voice SIC Module (JD575A)
- HP MSR 1-port T1 Voice SIC Module (JD576A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 2-port FXS/1-port FX0 SIC Module (JD632A)
- HP MSR 1-port CE1/PRI SIC Module (JF253B)
- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A)
- HP MSR 1-port Enhanced Sync/Async Serial SIC Module (JD557A)
- HP MSR 1-port ADSL over POTS SIC Module (JD537A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 1-port ADSL over ISDN BRI U SIC Module (JG056B)
- HP MSR 1-port 8-wire G.SHDSL DSIC Module (JG191A)

- HP MSR 16-port Async Serial SIC Module (JG186A)
- HP MSR HSPA/WCDMA SIC Module (JG187A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (JF819A)
- HP MSR 802.11b/g/n SIC Module (NA) (JG211A)

##### Voice processors (for use in HP MSR20-40 routers)

- HP MSR 32-channel Voice Processing Module (JD598A)
- HP MSR 24-channel Voice Processing Module (JD599A)
- HP MSR 16-channel Voice Processing Module (JD600A)
- HP MSR 8-channel Voice Processing Module (JD601A)
- HP MSR Voice Co-processing Module (JD610A)

##### Encryption sub-cards

- HP MSR Advanced Network Data Encryption ESM Module (JD608A)
- HP MSR Standard Network Data Encryption ESM Module (JD609A)

##### Memory

- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X600 256M Compact Flash Card (JC686A)

##### Transceivers

See pages 65–70 for the HP Networking Transceiver Matrix.

	Height (RU)	Module slots	Included ports	USB ports	SDRAM (included/available)	Routing performance (PPS)
<b>HP MSR20-1x Router Series</b>						
	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 x AM + 802.11b/g	1	256/256 MB	160,000
	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 AM	1	256/256 MB	160,000
	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 x ISDN BRI + 802.11b/g	1	256/256 MB	160,000
	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 x ISDN BRI	1	256/256 MB	160,000
	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	1	1 SIC	1 x G.SHDSL + 1 x 10/100 + 4 switched 10/100 + 1 x ISDN BRI	1	256/256 MB	160,000
	1	1 SIC	1 x G.SHDSL+ 1 x 10/100 + 4 switched 10/100 + 1 x ISDN BRI + 802.11b/g	1	256/256 MB	160,000
	1	1 SIC	1 x G.SHDSL+ 1 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256/256 MB	160,000
	1	1 SIC	1 x E1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	1	1 SIC	1 x T1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	1	1 SIC	1 x T1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	1	1 SIC	1 x E1 + 1 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256/256 MB	160,000
	1	1 SIC	1 x Serial + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	1	1 SIC	1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000

**HP MSR20-1x Series at a glance...**

Full-featured, economical routers designed for converged wired and wireless WAN and LAN environments at small remote branch offices and small to medium-sized businesses. The HP MSR20-1x Series routers deliver high-performance integrated routing, switching, security, wireless, and voice services with modular interface options in a single device.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP MSR20-1x Series**

**Cables**

- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X500 T1/E1 Voice RJ45 Interface Connector (JD535A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 E1 BNC 75 ohm 3m Router Cable (JD175A)
- HP X200 V.24 DTE 3m Serial Port Cable (JD519A)
- HP X200 V.24 DCE 3m Serial Port Cable (JD521A)
- HP X200 V.35 DTE 3m Serial Port Cable (JD523A)
- HP X200 V.35 DCE 3m Serial Port Cable (JD525A)
- HP X200 X.21 DTE 3m Serial Port Cable (JD527A)
- HP X200 X.21 DCE 3m Serial Port Cable (JD529A)
- HP X200 Transit Plug D25F Single Cable (JD636A)
- HP X260 Transit RJ45 0.5m Single Cable (JD641A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)

**Smart interface card (SIC) modules**

- HP MSR 1-port GbE Combo SIC Module (JD572A)
- HP MSR 2-port FXO SIC Module (JD558A)
- HP MSR 1-port FXO SIC Module (JD559A)
- HP MSR 2-port FXS SIC Module (JD560A)
- HP MSR 1-port FXS SIC Module (JD561A)
- HP MSR 2-port FXS/1-port FXO SIC Module (JD632A)
- HP MSR 1-port ISDN-U SIC Module (JD570A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 1-port ADSL over POTS SIC Module (JD537A)
- HP MSR 1-port Enhanced Sync/Async Serial SIC Module (JD557A)
- HP MSR 1-port E1/Fractional E1 SIC Module (JD634B)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 1-port 100BASE-X SIC Module (JF280A)
- HP MSR 8-port Async Serial SIC Module (JF281A)

- HP MSR 802.11b/g/n Wireless Access Point SIC Module (JF819A)
- HP 3G Wireless GSM/WCDMA WAN SIC Module (JF820A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (NA) (JG211A)
- HP MSR 1-port ADSL over ISDN SIC Module (JG056B)
- HP MSR 1-port 8-wire G.SHDSL (RJ45) DSIC Module (JG191A)
- HP MSR 16-port Async Serial SIC Module (JG186A)

**Voice processors (for use in HP MSR20-15/20-12 routers)**

- HP MSR 32-Channel Voice Processing Module (JD598A)
- HP MSR 24-Channel Voice Processing Module (JD599A)
- HP MSR 16-Channel Voice Processing Module (JD600A)
- HP MSR 8-Channel Voice Processing Module (JD601A)
- HP MSR Voice Co-processing Module (JD610A)

**Transceivers**

See pages 65–70 for the HP Networking Transceiver Matrix.

	Height (RU)	Module slots	Included ports	USB ports	SDRAM (included/available)	Routing performance (PPS)	Flash	
<b>HP MSR93x Router Series</b>								
	<b>HP MSR930 Router (JG511A)</b>	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports	1	256 MB DDR	up to 300K	128 MB
	<b>HP MSR930 3G Router (JG513A)</b>	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 3G wireless + antenna	1	256 MB DDR	up to 300K	128 MB
	<b>HP MSR931 Router (JG514A)</b>	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 serial port	1	256 MB DDR	up to 300K	128 MB
	<b>HP MSR931 3G Router (JG515A)</b>	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 3G wireless + antenna + 1 serial port	1	256 MB DDR	up to 300K	128 MB
	<b>HP MSR931 Dual 3G Router (JG531A)</b>	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 serial port + dual 3G wireless + 2 antennas	1	256 MB DDR	up to 300K	128 MB
<b>HP MSR93x Series at a glance...</b> High-performance small branch routers that deliver integrated routing, switching, security, and wireless WAN; available in 3G, dual 3G, and 4G LTE connectivity options.								

<b>HP MSR900 Router Series</b>								
	<b>HP MSR920-W Router (JF815A)</b>	1	Fixed	2 x 10/100 + 8 switched 10/100 + 802.11b/g	1	256 MB/ 256 MB	100,000	
	<b>HP MSR920 Router (JF813A)</b>	1	Fixed	2 x 10/100 + 8 switched 10/100	1	256 MB/ 256 MB	100,000	
	<b>HP MSR900-W Router (JF814A)</b>	1	Fixed	2 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256 MB/ 256 MB	70,000	
	<b>HP MSR900 Router (JF812A)</b>	1	Fixed	2 x 10/100 + 4 switched 10/100	1	256 MB/ 256 MB	70,000	
<b>HP MSR900 Series at a glance...</b> Combines performance with full-featured routing, switching, security, wireless, and voice services in a compact form factor for small office/home office (SOHO), remote branch offices, and small to medium-sized businesses.								

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### HP MSR93x Series

#### External Antenna

- HP MSR 3G Antenna (JG521A)
- HP MSR 3G RF 2.8m Antenna Cable (JG522A)

### HP MSR900 Series

This product has no modules or accessories.

### Intelligent Management Center—Platforms

	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	Deployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration
<b>HP Intelligent Management Center Basic Software Platform</b>									
<b>HP IMC Basic Edition Software Platform with 50-node E-LTU (JG546AAE)</b>	50 nodes	Windows®	No	Yes	Yes	Centralized	No	Yes	Enhanced
<b>HP IMC Basic Software Platform at a glance...</b>									
HP IMC Basic Software is an entry-level platform providing fault, configuration, and performance management for smaller networks.									
<b>HP Intelligent Management Center Standard Software Platform</b>									
<b>HP IMC Standard Software Platform with 100-node E-LTU (JF377AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed, hierarchical (child)	Yes	Yes	Enhanced
<b>HP IMC Standard Software Platform at a glance...</b>									
HP IMC Standard Software Platform is next-generation management software that provides a self-contained, comprehensive management platform with the flexibility and scalability to meet the needs of advanced enterprise networks.									
<b>HP Intelligent Management Center Enterprise Software Platform</b>									
<b>HP IMC Enterprise Software Platform with 200-node and 2-NTA-IMC node E-LTU (JF378AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes		Centralized, distributed, hierarchical (parent)	Yes	Yes	Enhanced

#### HP IMC Enterprise Software Platform at a glance...

HP IMC Enterprise Software Platform allows additional scaling to tens of thousands of nodes by offering a hierarchical mode of deployment.

\*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.

### Intelligent Management Center—Modules

	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	Deployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration
<b>HP IMC Network Traffic Analyzer Software</b>									
<b>HP IMC Network Traffic Analyzer Software Module with 10-node E-LTU (JF384AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Network Traffic Analyzer Software at a glance...</b>									
HP IMC Network Traffic Analyzer Software provides traffic analysis and visibility services for HP IMC.									
<b>HP IMC User Authentication Management Software</b>									
<b>HP IMC User Authentication Management Software Module with 200-user E-LTU (JF388AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		

#### HP IMC User Authentication Management Software at a glance...

HP IMC User Authentication Management Software enhances networking security and network management with HP IMC by providing access control for users and device management, extending management to network users.

\*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.

Intelligent Management Center—Modules (continued)										
	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	Deployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration	
<b>HP IMC User Behavior Auditor Software Module</b>										
<b>HP IMC User Behavior Auditor Software Module with 200-user E-LTU (JF421AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes			
<b>HP IMC User Behavior Auditor Software Module at a glance...</b>										
HP IMC User Behavior Auditor Software delivers intelligent logging and network analysis of internal users, providing a behavioral audit service for HP IMC.										
<b>HP IMC QoS Manager Software</b>										
<b>HP IMC QoS Manager Software Module E-LTU (JF408AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		Yes	
<b>HP IMC QoS Manager Software at a glance...</b>										
HP IMC QoS Manager Software enables traffic classification and control, and service-level reporting for HP IMC.										
<b>HP IMC Endpoint Admission Defense (EAD) Software</b>										
<b>HP IMC Endpoint Admission Defense Software Module with 200-user E-LTU (JF391AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes			
<b>HP IMC Endpoint Admission Defense Software at a glance...</b>										
HP IMC Endpoint Admission Defense Software helps companies use HP IMC to control and secure their mission-critical data by providing robust Network Access Control (NAC).										
<b>HP IMC Wireless Services Manager Software</b>										
<b>HP IMC Wireless Services Manager Software Module with 50-Access Point E-LTU (JF414AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		Yes	
<b>HP IMC Wireless Services Manager Software at a glance...</b>										
HP IMC Wireless Service Manager Software delivers wired and wireless enterprise network management solutions for HP IMC.										
<b>HP IMC MPLS VPN Software</b>										
<b>HP IMC MPLS VPN Software Module with 50-node E-LTU (JF410AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No	Yes	Yes	
<b>HP IMC MPLS VPN Software at a glance...</b>										
HP IMC MPLS VPN Software provides MPLS VPN discovery, topology, monitoring, auditing, performance, and VPN deployment for HP IMC.										
<b>HP IMC Voice Services Manager Software</b>										
<b>HP IMC Voice Services Manager Software Module with 100-phone E-LTU (JF402AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes			
<b>HP IMC Voice Services Manager Software at a glance...</b>										
HP IMC Voice Services Manager Software delivers secure, reliable, and managed IP telephony services for HP IMC.										
<b>HP IMC IPSec/VPN Manager Software</b>										
<b>HP IMC IPSec/VPN Manager Software Module with 25-node E-LTU (JG144AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes	
<b>HP IMC IPSec/VPN Manager Software at a glance...</b>										
HP IMC IPSec VPN manages IPSec devices and provides detailed information regarding the private network and visibility in the topology.										

\*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.



Intelligent Management Center—Modules (continued)									
	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	Deployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration
<b>HP IMC Service Operation Management Software</b>									
<b>HP IMC Service Operation Management Software Module E-LTU (JG139AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Service Operation Management Software at a glance...</b>									
HP IMC Service Operation Management Software provides full workflow management to ticket creation, resolution, and knowledge-base creation, and integrates with IMC's configuration center and fault management.									
<b>HP IMC Branch Intelligent Management System Software</b>									
<b>HP IMC Branch Intelligent Management System Software Module with 50-node E-LTU (JG265AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
<b>HP IMC Branch Intelligent Management System Software at a glance...</b>									
HP IMC Branch Intelligent Management System Software is based on TR-069 protocol, which allows the remote management of customer premise equipment (CPE) in WANs.									
<b>HP IMC Intelligent Analysis Reporter Software</b>									
<b>HP IMC Intelligent Analysis Reporter Software E-LTU (JG138AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Intelligent Analysis Reporter Software at a glance...</b>									
HP IMC Intelligent Analysis Reporter Software extends reporting capabilities to include customized reporting.									
<b>HP IMC Service Health Manager Software</b>									
<b>HP IMC Service Health Manager Software Module E-LTU (JG398AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Service Health Manager Software at a glance...</b>									
HP IMC Service Health Manager Software offers end-to-end service monitoring and assurance.									
<b>HP IMC TACACS+ Authentication Manager Software</b>									
<b>HP IMC TACACS+ Authentication Manager Software Module with 100-node E-LTU (JG483AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC TACACS+ Authentication Manager Software at a glance...</b>									
HP IMC TACACS+ Authentication Manager Software delivers authentication, authorization, and accounting based on TACACS protocol.									
<b>HP IMC Application Performance Manager Software</b>									
<b>HP IMC Application Performance Manager Software Module with 25-monitor E-LTU (JG489AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Application Performance Manager Software at a glance...</b>									
HP IMC Application Performance Manager Software Module monitors network impact to application performance.									
<b>HP IMC Extended API Software</b>									
<b>HP IMC Extended API E-LTU (JG399AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Extended API Software at a glance...</b>									
HP IMC Extended API Software offers a library of APIs, allowing external applications to interface with and leverage IMC configuration functions.									

\*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.

### Intelligent Management Center—Modules (continued)

	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	Deployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration
<b>HP IMC Virtual Application Network Connection Manager Software</b>									
<b>HP IMC VAN Connection Manager Software Module with E-LTU (JG494AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
<b>HP IMC Virtual Application Network Connection Manager Software at a glance...</b>									
HP IMC Virtual Application Network Connection Manager Software accelerates application deployment through automation of server edge provisioning.									
<b>HP IMC Remote Site Manager Software</b>									
<b>HP IMC Remote Site Manager Software Module License with E-LTU (JG495AAE)</b>	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
<b>HP IMC Remote Site Manager Software at a glance...</b>									
HP IMC Remote Site Manager Software provides secure remote management through the use of remote agents.									
<b>HP IMC Basic WLAN Manager Software Platform</b>									
<b>HP IMC Basic WLAN Manager Software Platform with 50 Access Point E-LTU (JG590AAE)</b>	50 nodes 50 access points	Windows	No	Yes	Yes	Centralized	Yes	Yes	Yes
<b>HP IMC Basic WLAN Manager Software Platform at a glance...</b>									
HP IMC Basic WLAN Manager is comprehensive wired and wireless management solution.									
<b>HP IMC Smart Connect Virtual Appliance Software</b>									
<b>HP IMC Smart Connect Edition Virtual Appliance Software E-LTU (JG659AAE)</b>	100 nodes 200 users	Linux OS provided in VM	Database included	Yes	Yes	Centralized	Yes	Yes	Yes
<b>HP IMC Smart Connect Virtual Appliance Software at a glance...</b>									
HP IMC Smart Connect is a self-contained virtual appliance providing complete BYOD management.									
<b>HP IMC Smart Connect w/WLAN Manager Virtual Appliance Software</b>									
<b>HP IMC Smart Connect w/WLAN Manager Virtual Appliance Edition E-LTU (JG660AAE)</b>	100 nodes 200 users	Linux OS provided in VM	Database included	Yes	Yes	Centralized	Yes	Yes	Yes
<b>HP IMC Smart Connect w/WLAN Manager Virtual Appliance Software at a glance...</b>									
HP IMC Smart Connect w/ WLAN is a self-contained virtual appliance providing complete BYOD management for wired and wireless networks.									
<b>HP IMC Virtualization Monitor Software</b>									
<b>HP IMC Virtualization Monitor Software with E-LTU (JG547AAE)</b>	Unlimited	Linux OS included	Database included	N/A	Yes	Installs on virtual server	N/A	N/A	N/A
<b>HP IMC Virtualization Monitor Software at a glance...</b>									
HP IMC Virtualization Monitor Software is a virtual machine that monitors a virtual server and provides Layer 4 through 7 traffic visibility.									

\*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.

### Wireless RF Planning


#### HP RF Planner

Refer to FlexCampus — Wireless—on page 40.

### Unified Wired and Wireless


#### HP 830 Unified Wired and Wireless Switch Series

Refer to FlexCampus — Wireless—on page 34.

	Height (RU)	Slots	Fixed interfaces	Modular interfaces	Stateful FW performance	Max virtual FWs	Max concurrent sessions	Max IPSec tunnels	VPN performance
<b>HP F5000 Firewall Standalone Chassis</b>									
									
<b>HP F5000 Firewall Standalone Chassis (JG216A)</b>	7U	5 slots 1 MPU, 4 SPU	2-GE (Mgmt. & HA)  2-USB (1 Host, 1 Device)	12-GE 12-SFP 2-XFP	40 Gbps	512	4M	5K	2 Gbps

**HP F5000 Firewall Standalone Chassis at a glance...**

The F5000 firewall appliance is a high-performance stateful firewall that delivers carrier-grade reliability in a scalable package designed to fit the needs of large enterprise deployments. It includes an advanced virtual firewall, hot-swappable power supplies, and rich VPN features such as IPSec/GRE/L2TP.

<b>HP F1000-E VPN Firewall Appliance</b>									
									
<b>HP F1000-E VPN Firewall Appliance (JD272A)</b>	1U	N/A	4-Combo 2-USB (1 Host, 1 Device)	4-GE 8-GE	8 Gbps	256	2M	2K	2 Gbps


**HP F1000-E VPN Firewall Appliance at a glance...**

The F1000-E firewall appliance is a high-performance stateful firewall that is ideal for large branch offices and regional sites. It includes an advanced virtual firewall and rich VPN features such as IPSec/GRE/L2TP. Routing features such as BGP, RIP, and OSPF are supported.

<b>HP F1000-EI VPN Firewall Appliance</b>									
									
<b>HP F1000-EI VPN Firewall Appliance (JG214A)</b>	1U	N/A	12-Combo 1-USB (Host)	4-SFP 2-XFP	4 Gbps	128	1M	4K	600 Mbps

**HP F1000-EI VPN Firewall Appliance at a glance...**

The F1000-EI FW appliance is a mid-performance stateful firewall that is ideal for medium-sized branch offices and regional sites. It includes an advanced virtual FW and rich VPN features such as IPSec/GRE/L2TP. Routing features such as BGP, RIP, and OSPF are supported.

<b>HP F1000-S-EI VPN Firewall Appliance</b>									
									
<b>HP F1000-S-EI VPN Firewall Appliance (JG213A)</b>	1U	N/A	12-Combo 1-USB (Host)	4-SFP 2-XFP	2 Gbps	64	1M	2K	400 Mbps

**HP F1000-S-EI VPN Firewall Appliance at a glance...**

The F1000-S-EI FW appliance is an entry-level performance stateful firewall that is ideal for small branch offices and regional sites. It includes an advanced virtual FW and rich VPN features such as IPSec/GRE/L2TP. Routing features such as BGP, RIP, and OSPF are supported.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP F5000 Firewall Standalone Chassis**

**Modules**

- HP F5000 Firewall Main Processing Unit (JG215A)
- HP F5000 8p GbE SFP/4p GbE Combo Module (JG212A)
- HP F5000 Fan Assembly (JG217A)
- HP S5000-A5 VPN 2-Port 10GbE Module (JD264A)
- HP S5000-A5 VPN 12-Port GbE Module (JD263A)

**HP F1000-E VPN Firewall Appliance**

This product has no modules or accessories.

**HP F1000-EI VPN Firewall Appliance**

This product has no modules or accessories.

**HP F1000-S-EI VPN Firewall Appliance**

This product has no modules or accessories.



## HP Small Business Networking Solutions


HP Networking is a leading provider of networks for small businesses. These are business-class products, with the reliability and performance one expects for non-consumer environments. The products are built with simplicity and ease of administration in mind, sparing small businesses with limited IT expertise some of the complexity of the enterprise product lines.

HP is the #1 worldwide market leader for smart Web-managed switches.<sup>1</sup> Smart managed switches are lightly configurable using an intuitive Web-based interface. They offer key features not found in unmanaged switches—virtual LANs, link aggregation, and, in some cases, even static routing and access control lists. They are ideal for small businesses with more developed networking requirements.

HP also has a strong offering of unmanaged switches. These plug-and-play devices deliver wirespeed performance at Gigabit or Fast Ethernet speeds, with zero administration required.

For small businesses looking for simple wireless networking, HP offers standalone Web-managed access points.

<sup>1</sup> Sources: Dell'Oro and Infonetics last updated for Q4 2012.

	Height (RU)	Module slots	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX)	SFP (1000BASE-X)	SFP (10GBASE-X)	Switching capacity	
<b>HP 1910 Switch Series</b>											
	<b>HP 1910-48G Switch (JE009A)</b>	1			48			4		104 Gbps	
	<b>HP 1910-24G-PoE (365W) Switch (JE007A)</b>	1				24		4		56 Gbps	
	<b>HP 1910-24G-PoE (170W) Switch (JE008A)</b>	1					24		4	56 Gbps	
	<b>HP 1910-24G Switch (JE006A)</b>	1				24			4	56 Gbps	
	<b>HP 1910-16G Switch (JE005A)</b>	1				16			4	40 Gbps	
	<b>HP 1910-8G-PoE+ (180W) Switch (JG350A)</b>	1RU/ Desktop					8		2		20 Gbps
	<b>HP 1910-8G-PoE+ (65W) Switch (JG349A)</b>	1RU/ Desktop					8		2		20 Gbps
	<b>HP 1910-8G Switch (JG348A)</b>	1RU/ Desktop				8			2		20 Gbps
	<b>HP 1910-48 Switch (JG540A)</b>	1		48		2			2 DP		13.6 Gbps
	<b>HP 1910-24 Switch (JG538A)</b>	1		24		2			2 DP		8.8 Gbps
	<b>HP 1910-24-PoE+ Switch (JG539A)</b>	1			24	2			2 DP		8.8 Gbps
	<b>HP 1910-8-PoE+ Switch (JG537A)</b>	1RU/ Desktop			8	2			2 DP		5.6 Gbps
	<b>HP 1910-8 Switch (JG536A)</b>	1RU/ Desktop		8		2			2 DP		5.6 Gbps

**HP 1910 Switch Series at a glance...**

Advanced smart managed Gigabit Ethernet and Fast Ethernet switches ideal for technology-savvy small businesses. Features include Layer 3 static routing, ACLs, 802.1X, IGMP snooping, QoS, STP/RSTP/MSTP, VLANs, IPv6 management and routing, and link aggregation. Plug-and-play setup yet highly customizable using an advanced Web-based interface for advanced feature setup. Includes six PoE models. PoE model available for Voice over IP implementations.

Note: DP = Dual-personality ports

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

**HP 1910 Switch Series**

**Transceivers and cables**


See pages 65–70 for the HP Networking Transceiver Matrix.

# Small Business

## Switches (continued)

Small Business

### Small Business Switches — Smart Web Managed (continued)

	Height (RU)	Module slots	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX)	SFP (1000BASE-X)	SFP (10GBASE-X)	Switching capacity
<b>HP 1810 Switch Series</b>										
	<b>HP 1810-48G Switch (J9660A)</b>	1			48			4		104 Gbps
	<b>HP 1810-24G v2 Switch (J9803A)</b>	1			24			2		52 Gbps
	<b>HP 1810-24 v2 Switch (J9801A)</b>	1		22	2			2		12.4 Gbps
	<b>HP 1810-8G v2 Switch (J9802A)</b>	1RU/ Desktop			8					16 Gbps
	<b>HP 1810-8 v2 Switch (J9800A)</b>	1RU/ Desktop		7	1					3.4 Gbps

#### HP 1810 Switch Series at a glance...

Entry-level smart managed Gigabit Ethernet and Fast Ethernet switches for small businesses. Easily configurable via an intuitive Web interface. Features include VLANs, loop protection, link aggregation trunking, Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP) and Kensington lock slot security. Compact 8-port can be PoE powered for remote placement. Energy-efficient green design.

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP 1810 Switch Series


##### Mounting kit

- HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

##### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

### Small Business Switches — Unmanaged

	Height (RU)	Module slots	10/100 ports	10/100 PoE ports	10/100/1000 ports	10/100/1000 PoE ports	SFP (100BASE-FX)	SFP (1000BASE-X)	SFP (10GBASE-X)	Switching capacity	
<b>HP 1410 Switch Series</b>											
	<b>HP 1410-24G Switch (J9561A)</b>	1			24			2 DP		48 Gbps	
	<b>HP 1410-24-2G Switch (J9664A)</b>	1		24	2					8.8 Gbps	
	<b>HP 1410-24 Switch (J9663A)</b>	1		24						4.8 Gbps	
	<b>HP 1410-16G Switch (J9560A)</b>	1				16				32 Gbps	
	<b>HP 1410-16 Switch (J9662A)</b>	1		16						3.2 Gbps	
	<b>HP 1410-8G Switch (J9559A)</b>	0.5RU/ Desktop				8					16 Gbps
	<b>HP 1410-8 Switch (J9661A)</b>	0.5RU/ Desktop		8							1.6 Gbps

#### HP 1410 Switch Series at a glance...

Unmanaged plug-and-play switches ideal for small business and entry-level networking. Flexible mounting options, including rack mounting of 16- and 24-port models or desktop placement of compact 8-port models. Fanless design for quiet operation. Energy-efficient green power-saving features, including the industry's first unmanaged Fast Ethernet switches compliant with the IEEE 802.3az Energy Efficient Ethernet standard.

Note: DP = Dual-personality ports

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP 1410 Switch Series

##### Transceivers and cables


See pages 65–70 for the HP Networking Transceiver Matrix.

# Small Business

## Switches (continued)

Small Business

### Small Business Switches — Unmanaged (continued)

	Height (RU)	10/100 ports	10/100/1000 ports	IEEE 802.1p prioritization	
<b>HP 1405 Small Office Switch Series</b>					
	<b>HP 1405-16G Desktop Switch (JD844A)</b>	Desktop		16	Yes
	<b>HP 1405-16 Desktop Switch (JD858A)</b>	Desktop	16		Yes
	<b>HP 1405-8G V2 Switch (J9794A)</b>	Desktop		8	Yes
	<b>HP 1405-8 V2 Switch (J9793A)</b>	Desktop	8		Yes
	<b>HP 1405-5G V2 Switch (J9792A)</b>	Desktop		5	Yes
	<b>HP 1405-5 V2 Switch (J9791A)</b>	Desktop	5		Yes
<b>HP 1405 Small Office Switch Series at a glance...</b> Unmanaged desktop switches for small office/home office networking. Certified "Class B" for business or home use. Quick plug-and-play setup and fanless design for silent operation. Energy-efficient green power-saving features.					

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

#### HP 1405 Small Office Switch Series

This product has no modules or accessories.

## Wireless

Small Business

### Wireless

#### HP M220-802.11n Access Point Series

HP M220-802.11n Access Points are dual-band, single-radio devices supporting high-speed wireless networking at 5 GHz or 2.4 GHz. See page 38 for details.

#### HP M200-802.11n Access Point Series

HP Networking has wireless solutions suitable for small businesses. These standalone access points combine business-class reliability and performance yet are simple to set up and administer. Consider the HP M200-802.11n Access Points. See page 38 for details.

#### HP Dual Band 802.11n Wireless USB Adapter

For networks with legacy systems not having the latest wireless support, the HP Dual Band 802.11n Wireless USB Adapter is a quick upgrade to connect using the latest wireless standard. See page 39 for specifics.

# Small Business

## Server Optimized Networking

Small Business

### Server Optimized Networking Devices

	Height (RU)	Module slots	10/100 ports (max)	10/100 PoE ports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (max)	SFP (100BASE-FX)	SFP (1000BASE-X)	SFP (10GBASE-X)	Switching capacity
<b>HP PS1810 Switch Series</b>										
HP PS1810-8G Switch (J9833A)	Desktop				8					16 Gbps
HP PS1810-24G Switch (J9834A)	1				24			2		52 Gbps
<p><b>HP PS1810 Switch Series at a glance...</b>            HP PS1810 Switch Series devices are purpose-built smart-managed Gigabit Layer 2 switches designed for small businesses looking for an integrated, easy-to-administer HP ProLiant server and switch solution.</p>										

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

### HP PS1810 Switch Series

#### Transceivers and cables

See pages 65–70 for the HP Networking Transceiver Matrix.

### Recommended companion products

HP ProLiant MicroServer Gen8



HP ProLiant ML310e Gen8 v2 Server




HP ProLiant DL320e Gen8 v2 Server





# HP Networking Unified Communications

## HP Networking Unified Communications


	Optimized for Lync	Audio quality	Speakerphone	Sidetone support	Headset support	Display	Power	Ethernet ports	LLDP	CODEC supported	
<b>Microsoft Lync Solutions</b>											
	<b>HP 4110 IP Phone (J9765A)</b>	Yes	Wideband	Full duplex	Yes	No	3.5" Color QVGA	PoE Class 2	Dual 10/100/1000	Yes	RT Audio, G.711, G.722, G.722.1
	<b>HP 4120 IP Phone (J9766B)</b>	Yes	Wideband	Full duplex	Yes	Yes (RJ9)	3.5" Color QVGA	PoE Class 2	Dual 10/100/1000	Yes	RT Audio, G.711, G.722, G.722.1
	<b>HP Survivable Branch Communication zI Module powered by Microsoft Lync (J9485A)</b> Please see page 59 for details.										
	<b>HP MSR Survivable Branch Communication Modules Series.</b> Please see below for details.										
<p><b>Microsoft Lync Solutions at a glance...</b></p> <p><b>HP 4110 and HP 4120 IP Phones</b>—Common area and desktop IP phones from HP Networking, optimized for Microsoft Lync. The HP 4110 and HP 4120 IP Phones are natively integrated unified communications (UC) devices that deliver rich presence; clear, high-definition audio; and seamless plug-and-play functionality. This family of IP phones provides customers with integrated, tested, and optimized IP phones, fine-tuned for Microsoft Lync and engineered to meet the high-quality standards of HP. The HP 4120 IP Phone Series supports Office 365.</p> <p><b>HP Survivable Branch Communication zI Module powered by Microsoft Lync</b>—HP Survivable Branch Communication Module (SBM) powered by Microsoft Lync provides survivable branch services such as external phone call capability while sustaining internal peer-to-peer communications when the data center cannot be reached.</p>											

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### Microsoft Lync Solutions

#### Power supply

- HP IP Phone SV Power Supply (J9767A)

	Processor	Memory	Hard disk drive	Flash	USB 2.0	Internal port	External port	Applicable chassis	
<b>HP MSR Survivable Branch Communication Module Series</b>									
	<b>HP MSR Small Survivable Branch Communication MIM Module powered by Microsoft Lync (JG587A)</b>	Intel® Atom N450 Processor (1.66 GHz)	2 GB DDR3	500 GB SATA 5400 rpm	512 MB	x 2	1 GbE	1 GbE	MSR30 series routers
	<b>HP MSR Medium Survivable Branch Communication MIM Module powered by Microsoft Lync (JG588A)</b>	Intel Dual Core™ i7-620UE Processor (4M cache, 1.06 GHz, 2 cores, 4 threads)	4 GB DDR3	500 GB SATA 5400 rpm	512 MB	x 2	1 GbE	1 GbE	MSR30 series routers
	<b>HP MSR Large Survivable Branch Communication FIC Module powered by Microsoft Lync (JG589A)</b>	Intel Core i7-620LE Processor (4M cache, 2.00 GHz, 2 cores, 4 threads)	8 GB DDR3	500 GB SATA 5400 rpm	512 MB	x 2	1 GbE	1 GbE	MSR50 series routers
<p><b>HP MSR Survivable Branch Communication Modules at a glance...</b></p> <p>HP MSR Survivable Branch Communication Module (SBM) powered by Microsoft Lync provides survivable branch services such as external phone call capability while sustaining internal peer-to-peer communications when the data center cannot be reached.</p>									


**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### HP MSR Survivable Branch Communication Modules

For complete unified communications solutions, please refer to FIC, MIM, and SIC voice gateway modules in the HP MSR50 and MSR30 Router Series on pages 42 and 43, respectively.

# HP Networking Unified Communications

## HP Networking Unified Communications (continued)

	Optimized for Lync	Audio quality	Speakerphone	Headset support	Display	Ethernet ports	Maximum calls	Programmable buttons	Backlit	Energy Save Mode	
<b>HP 350x IP Phone Series</b>											
	<b>HP 3503 IP Phone (JC508A)</b>	No	Wideband	Full duplex	Yes (RJ9)	5" (110.6 mm x 67.4 mm) Color	2	8	21	Yes	Yes
	<b>HP 3502 IP Phone (JC507A)</b>	No	Wideband	Full duplex	Yes (RJ9)	4.3" (95 mm x 52 mm)	2	6	15	Yes	Yes
	<b>HP 3500 IP Phone (JC504A)</b>	No	Wideband	Full duplex	Yes (RJ9)	3.5" (85 mm x 28 mm)	2	2	2	No	Yes
	<b>HP 3500B IP Phone (JC505A)</b>	No	Wideband	Full duplex	Yes (RJ9)	3.5" (85 mm x 28 mm)	2	2	2	No	Yes
<b>HP 350x IP Phone Series at a glance...</b> The full-featured, SIP-based HP 350x IP Phone Series meets the diverse communications needs of organizations of all sizes with a full range of call-handling features and functionality that encourage collaboration and increases productivity. 350x IP Phones are a family of energy-efficient, backlit, SIP-based phones that are compatible with VCX version 9.5 and higher but are not Microsoft Lync certified and not compatible with the NBX system.											



**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### HP 350x IP Phone Series

#### IP Phone accessories

- HP 350x IP Phone AC Power Adapter (JC509A)
- HP 350x IP Phone Wall Mount (JC510A)
- HP 350x IP Phone Stand (JC511A)

## Application Delivery Platforms and Solutions

	Processor	Memory	Hard disk drive	Operating system/application	USB 2.0	Applicable chassis	Number of Services zI Module in the chassis	
<b>HP MSR OAP MIM Module</b>								
	<b>HP MSR OAP MIM module (JG532A)</b>	Intel Core i7-620UE, 1060 MHz	4 GB DDR SDRAM	500 GB SATA	5400 rpm, 512 MB flash, VMware vSphere 5.0	Yes	MSR30-16/ MSR30-20/ MSR30-40/ MSR30-60	2 max (in any MSR30-40 or MSR30-60 router) 1 (in the MSR30-16 and MSR30-20 router)
<b>HP MSR OAP MIM Modules at a glance...</b> The HP MSR OAP MIM Module is a converged networking, computing, and virtualization solution inside the MSR router family that hosts one or multiple networking or business applications inside the MSR50-40 and MSR50-60 router series.								
<b>HP MSR OAP FIC Module</b>								
	<b>HP MSR OAP FIC module (JG533A)</b>	Intel Core i7-620LE, 2000 MHz	8 GB DDR3 SDRAM	500 GB SATA	5400 rpm, 512 MB flash; VMware vSphere 5.0	Yes	MSR50 series	2 max (in any MSR50 series router)
<b>HP MSR OAP FIC Modules at a glance...</b> The HP MSR OAP FIC Module is a converged networking, computing, and virtualization solution inside the MSR router family that hosts one or multiple networking or business applications inside the MSR30-16 and higher router series.								

**Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)**

### HP MSR OAP MIM Module

This product has no modules or accessories.

### HP MSR OAP FIC Module

This product has no modules or accessories.

# Application Delivery Platforms and Solutions

## Application Delivery Platforms and Solutions (continued)

	Processor	Memory	Hard disk drive	Operating system/application	USB 2.0	Applicable chassis	Number of Services zL Module in the chassis
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### HP Advanced Services zL Module with VMware vSphere platform



#### HP Advanced Services zL Module with VMware vSphere platform (J9748A)

Intel Core 2 Duo Processor T9400, 2.53 GHz	Maximum of 8 GB DDR2 SDRAM (installed)	250 GB SATA	VMware vSphere 5.0	Yes	5400 and 8200	Up to 4 (max of 2 for the 8206zl switch)
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#### HP Advanced Services zL Module with VMware vSphere platform at a glance...

The HP Advanced Services zL Module with VMware vSphere platform is a converged networking, computing, and virtualization solution inside the 5400 zL and 8200 zL switch family that hosts one or multiple networking or business applications inside the switch.

### HP Advanced Services zL Module with Citrix XenServer platform



#### HP Advanced Services zL Module with Citrix XenServer platform (J9747A)

Intel Core 2 Duo Processor T9400, 2.53 GHz	Maximum of 4 GB DDR2 SDRAM (installed)	250 GB SATA	Citrix XenServer 5.6 SP2	Yes	5400 and 8200	Up to 4 (max of 2 for the 8206zl switch)
--	--	-------------	--------------------------	-----	---------------	--

#### HP Advanced Services zL Module with Citrix XenServer platform at a glance...

The HP Advanced Services zL Module with Citrix XenServer platform is a converged networking, computing, and virtualization solution inside the 5400zL and 8200zL switch family that hosts one or multiple networking or business applications inside the switch.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP Advanced Services zL Module with VMware vSphere platform

This product has no modules or accessories.

#### HP Advanced Services zL Module with Citrix XenServer platform

This product has no modules or accessories.

	Processor	Memory	Hard disk drive	Maximum number of simultaneous calls	Microsoft Lync (Survivable Branch)	Integrated media gateway	Survivable solution	Toll bypass support	Least-cost routing support
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### HP Survivable Branch Communication zL Module powered by Microsoft Lync



#### HP Survivable Branch Communication zL Module powered by Microsoft Lync (J9485A)

Intel T9400 Core 2 Duo 2.53 GHz	Maximum of 4 GB DDR2 SDRAM (installed)	250 GB SATA	120	Yes	Yes	Yes	Yes	Yes
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#### HP Survivable Branch Communication zL Module powered by Microsoft Lync at a glance...

HP Survivable Branch Communication zL Module (SBM) powered by Microsoft Lync provides survivable branch services such as external phone call capability while sustaining internal peer-to-peer communications when the data center cannot be reached.

### Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit [hp.com/networking](http://hp.com/networking).)

#### HP Survivable Branch Communication zL Module powered by Microsoft Lync

- Sangoma 1-port T1/E1/J1 Telephony Card (J9487A)
- Sangoma 2-port T1/E1/J1 Telephony Card (J9488A)
- Sangoma 4-port T1/E1/J1 Telephony Card (J9489A)

- Sangoma 4-port FXS Telephony Card (J9482A)
- Sangoma 4-port FXO Telephony Card (J9516A)
- Sangoma 2-port FXO/2-port FXS Telephony Card (J9518A)

# HP Networking Product Matrix

	WLAN	Specialty ports		Resiliency			Security			Convergence			Layer 3			Layer 2		IPv6		
	WLAN capabilities with optional modules	PoE/PoE+	10GbE ports	Advanced stacking (IRF, XRN, etc.)	Redundant power	Redundant fabric	Hot-swap modules	Access control lists	RADIUS login	DHCP snooping	IEEE 802.1p prioritization	DSCP (DiffServ)	Voice VLAN	Static routes	RIP v1/v2	OSPF	Multicast filtering	Link aggregation	IPv6 management	IPv6 routing
<b>Switches</b>																				
<b>Modular switches</b>																				
HP 12500 Switch Series			•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
HP 10500 Switch Series	•		•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
HP 7500 Switch Series	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 8200 zl Switch Series	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 6125 Switch Series			•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
HP 6120 Switch Series			•		•		•	•	•	•	•	•		•	•		•	•	•	
HP 5400 zl Switch Series	•	•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 4200 vl Switch Series			•		•		•		•	•	•	•		•			•	•		

# HP Networking Product Matrix (continued)

	Specialty ports		Resiliency			Security			Convergence			Layer 3			Layer 2		IPv6		
	PoE/PoE+	10GbE ports	Advanced stacking (IRF, XRN, etc.)	Redundant power	Redundant fabric	Hot-swap modules	Access control lists	RADIUS login	DHCP snooping	IEEE 802.1p prioritization	DSCP (DiffServ)	Voice VLAN	Static routes	RIPv1/v2	OSPF	Multicast filtering	Link aggregation	IPv6 management	IPv6 routing
<b>Switches</b>																			
<b>Fixed-port switches</b>																			
HP 5920 Switch Series		•	•	•	•	•	•	•		•	•		•		•	•	•	•	•
HP 5900 Switch Series		•	•	•	•	•	•	•		•	•		•		•	•	•	•	•
HP 5830 Switch Series		•	•	•	•	•	•	•		•			•	•	•	•	•	•	•
HP 5820 Switch Series		•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP 5800 Switch Series	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 5500 EI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 5500 HI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 3800 Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 3500 yl Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 6600 Switch Series		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 6200-24G-mGBIC yl Switch		•	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 3600 EI Switch Series	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•+
HP 3600 SI Switch Series	•		•	•		•	•	•	•	•	•	•	•	•		•	•	•+	•+
HP 3500 Switch Series (10/100 models)	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP 5500 SI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•	
HP 5120 EI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•			•	•	•	•
HP 5120 SI Switch Series	•		•	•		•	•	•	•	•	•	•	•			•	•	•	
HP 2920 Switch Series	•	•	•			•	•	•	•	•	•	•	•	•		•	•	•	•
HP 2910 al Switch Series	•	•	•			•	•	•	•	•	•	•	•	•		•	•	•	•
HP 2915-8G-PoE Switch	•					•	•	•	•	•	•	•	•	•		•	•	•	•
HP 2620 Switch Series	•			•		•	•	•	•	•	•	•	•	•		•	•	•	•
HP 2615-8-PoE Switch	•					•	•	•	•	•	•	•	•	•		•	•	•	•
HP 2530 Switch Series	•					•	•		•	•	•					•	•	•	
HP 2520 Switch Series	•						•		•	•	•					•	•	•	
HP 2510 Switch Series								•	•	•						•	•		
HP 3100 EI Switch Series	•			•			•	•	•	•	•					•	•	•	•
HP 3100 SI Switch Series								•	•	•	•					•	•	•+	
HP 1910 Switch Series	•						•	•	•	•	•	•				•	•	•	•
HP 1905 Switch Series	•						•	•		•	•	•				•	•		
HP 1810 Switch Series										•							•		
HP IntelliJack Gigabit Switch Series	•									•							•		
HP 1410 Switch Series										•									
HP 1405 Small Office Switch Series										•									
HP 830 Unified Wired-WLAN Switch		•					•	•	•	•	•	•	•	•		•	•	•	•

+ V2 switches only

# HP Networking Product Matrix (continued)

	Hardware			Resiliency		Security			Convergence			Routing				Unified OS and Management				
	Compact Flash slot	USB ports	Enhanced service modules supported	Hardware hot-swap	Bandwidth on demand/Dial on demand	Firewall and access control lists	Layer 2 and 3 VPN: MPLS and IPSec	Encryption: DES, 3DES, and AES	Converged, full-featured routing, switching, and security services platform	Integrated voice support	SIP voice gateway	Modular WAN/LAN connectivity	BGP, OSPF, RIPv1/v2, static routes, IPv4/IPv6	MPLS	Multicast routing (IGMP, PIM-SM, PIM-DM)	Quality of Service (QoS)	Management (SNMPv1/v2/v3, SSH)	Single operating system (Comware)	Dual software image/Configuration rollback and control, and data plane separation	Single pane of glass management with HP iMC
<b>Routers</b>																				
<b>Routers</b>																				
HP 8800 Router Series	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP 6600 Router Series	•			•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP MSR50 Series	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP MSR30 Series	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSR20 Series	•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP MSR20-1x Series	•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
HP MSR900 and MSR93x Series	•	•			•	•	•	•	•			•	•	•	•	•	•	•	•	•

	Hardware			Security					Management			
	10G ports	PoE/PoE+ ports	SNMPv3 and SSH	RADIUS authentication	IEEE 802.1X support	EAP-TLS and EAPMD5, EAP-TTLA PEAP	WPA/WPA2	SNMPv1/v2/v3	Telnet support	HP iMC/WSM/PMM management	Web management and discovery wizard	
<b>Wireless LAN</b>												
<b>Wireless controllers</b>												
HP MultiService (MSM) Controller Series	•		•	•	•	•	•	•	•	•	•	
<b>Unified wired and wireless LAN</b>												
HP 830 Unified Wired-WLAN Switch Series		•	•	•	•	•	•	•	•	•	•	
HP 10500/7500 Unified Wired-WLAN Module			•	•	•	•	•	•	•	•	•	

# HP Networking Product Matrix (continued)

	Ports		Modes					Wireless features				Security							
	PoE/PoE+ ports	Multiple radio design	IEEE 802.11a (54 Mbps)	IEEE 802.11b (11 Mbps)	IEEE 802.11g (54 Mbps)	IEEE 802.11n (300 Mbps)	IEEE 802.11n (450 Mbps)	Virtual AP/Multiple SSID	Wireless distribution system (WDS) bridging	Wi-Fi Certified	Wi-Fi Multimedia (WMM) QoS	AES encryption	SNMPv3 and SSH	RADIUS authentication	IEEE 802.1X support	EAP-TLS and EAPMD5, EAP-TTLS PEAP	WPA/WPA2	VPN initiation and termination	VPN pass-through
<b>Wireless LAN (continued)</b>																			
<b>Wireless routers and access points</b>																			
HP MSM 802.11n Dual Radio Access Point Series	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSM 802.11n Access Point Series	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•		•
HP MSM317 Access Device Series	•			•	•			•		•		•	•	•	•	•	•		•
HP Mobility Integrated Services Access Point Series	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•
HP M200 802.11n Access Point Series	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•		
HP M220 802.11n Access Point Series	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•		
HP M111 Client Bridge Series	•		•	•	•			•		•	•	•	•	•	•	•	•		•
<b>Wireless security, bridges</b>																			
HP Networking Mobility Security IDS/IPS Series	•	•	•	•	•	•						•							
<b>Wireless client adapters</b>																			
HP 802.11n Dual Frequency (USB) Wireless Client Adapter			•	•	•	•			•					•		•			

	Security features							HA		Management			
	Stateful FW	Virtual firewalls	IPSec-VPN with 3DES encryption	GRE tunneling	DDOS protection	AAA—RADIUS, HWTACACS+, Local Auth	IKE—pre-shared keys	Active-active or active-passive	Redundant power supplies	IMC Network Management (status, health, monitoring)	Command Line Interface (CLI)	Onboard Web-based mgmt	Telnet
<b>FlexSecurity</b>													
<b>VPN-FW appliances</b>													
HP F5000-A5 Firewall Standalone Chassis*	•	•	•	•	•	•	•	•	•	•	•	•	•
HP F1000-E VPN Firewall Appliance	•	•	•	•	•	•	•	•	•	•	•	•	•
HP F1000-EI VPN Firewall Appliance	•	•	•	•	•	•	•	•	•	•	•	•	•
HP F1000-S-EI VPN Firewall Appliance	•	•	•	•	•	•	•	•	•	•	•	•	•

- \* F5000-A5 Firewall chassis can be configured with:
- HP F5000 Firewall Main Processing Unit
  - HP F5000 8p GbE SFP/4p GbE Combo Module
  - HP F5000 Fan Assembly
  - HP S5000-A5 VPN 2-Port 10GbE Module
  - HP S5000-A5 VPN 12-Port GbE Module

# HP Networking Product Matrix (continued)

	Resource management				Performance monitoring				Integration and licensing				Configuration				Wireless			
	Discovery	Topology mapping	Monitoring	Inventory reports	Enhanced events and alarms	Scheduled tasks	Audit reports	Error and utilization reports	External database support	Unlimited maximum network size	Additional node, user, or application licenses supported	HP Network Node Manager- Windows integration	Configuration backup and restore	Network-wide VLAN support	Bulk agent updates	Bulk configuration	Extensible for third-party device support	Radio/WLAN discovery	WLAN security configuration	Radio/RF configuration
<b>Management software</b>																				
<b>HP Intelligent Management Center (IMC)</b>																				
HP IMC Standard Software Platform	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
HP IMC Enterprise Software Platform	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
HP IMC Network Traffic Analyzer Software			•	•	•	•	•		• <sup>1</sup>	•	•			•			•			
HP IMC User Authentication Management Software		•	•	•	•		•	•	• <sup>1</sup>	•	•						•			
HP IMC User Behavior Auditor Software Module			•				•		• <sup>1</sup>	•	•									
HP IMC QoS Manager Software			•	•	•	•	•	•	• <sup>1</sup>	•	•					•	•			
HP IMC Endpoint Admission Defense Software			•	•	•	•	•	•	• <sup>1</sup>	•	•									
HP IMC Wireless Services Manager Software		•	•	•	•	•	•	•	• <sup>1</sup>	•	•					•		•	•	•
HP IMC MPLS VPN Software		•	•	•	•	•	•	•	• <sup>2</sup>	•	•				•	•	•			
HP IMC Voice Services Manager Software		•	•	•	•	•	•	•	• <sup>2</sup>	•	•		•							
HP IMC IPSec/VPN Manager Software	•	•	•	•	•	•	•	•	• <sup>1</sup>	•	•		•		•	•				
HP IMC Service Operation Management Software				•	•	•	•	•	• <sup>1</sup>	•	•									
HP IMC Branch Intelligent Management Software	•		•	•	•	•			• <sup>1</sup>	•	•		•		•	•	•			
HP IMC Intelligent Analysis Reporter Software																				
HP IMC Service Health Manager Software		•	•		•	•	•	•	•	•	•									
HP IMC TACACS+ Authentication Manager Software					•	•	•	•	•	•	•						• <sup>3</sup>			
HP IMC Application Performance Manager Software	•	•	•		•	•	•	•	•	•	•									
HP IMC Extended API Software																				
HP IMC Virtual Application Network Manager Software			•						•								•			
HP IMC Remote Site Manager Software	•	•	•		•	•	•	•	•		• <sup>4</sup>		•	•	•	•				

<sup>1</sup> IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.

<sup>2</sup> IMC can support either Microsoft SQL or Oracle Database, depending on the operating system in use.

<sup>3</sup> TAM device support is vendor agnostic and supports devices that utilize the TACACS+ protocol.

<sup>4</sup> RMS can manage up to 1,000 devices using node count licenses from the main IMC server.



# HP Networking Transceiver Matrix

	SKU	12500	10500	8800 Router	8200	7500	6600 Router	6600 Switch	6200	6120G/XG	6120 XG	5920	5900	5830	5820	5800	5500 EI	5500 HI	5500 SI	
<b>Transceivers and cables</b>																				
<b>Transceivers and cables</b>																				
HP X121 1G SFP LC SX Transceiver	J4858C				•			•	•	•	•									
HP X121 1G SFP LC LX Transceiver	J4859C				•			•	•	•	•									
HP X121 1G SFP LC LH Transceiver	J4860C				•			•	•											
HP X121 1G SFP RJ45 T Transceiver	J8177C				•				•	•	•									
HP X131 10G X2 SC SR Transceiver	J8436A				•				•											
HP X131 10G X2 SC LR Transceiver	J8437A				•				•											
HP X131 10G X2 SC ER Transceiver	J8438A				•				•											
HP X131 10G X2 SC LRM Transceiver	J9144A				•				•											
HP X130 CX4 Optical Media Converter	J8439A				•				•											
HP X131 10G X2 CX4 Transceiver	J8440C				•				•											
HP X111 100M SFP LC FX Transceiver	J9054C				•			•	•											
HP X112 100M SFP LC BX-D Transceiver	J9099B				•			•	•											
HP X112 100M SFP LC BX-U Transceiver	J9100B				•			•	•											
HP X122 1G SFP LC BX-D Transceiver	J9142B				•			•	•											
HP X122 1G SFP LC BX-U Transceiver	J9143B				•			•	•											
HP X132 10G SFP+ LC SR Transceiver	J9150A				•			•	•		•									
HP X132 10G SFP+ LC LR Transceiver	J9151A				•			•	•		•									
HP X132 10G SFP+ LC LRM Transceiver	J9152A				•			•	•		•									
HP X132 10G SFP+ LC ER Transceiver	J9153A				•			•	•											
HP X242 SFP+ to SFP+ 1m Direct Attach Cable	J9281B				•			•	•		•									
HP X242 SFP+ to SFP+ 3m Direct Attach Cable	J9283B				•			•	•		•									
HP X242 SFP+ to SFP+ 7m Direct Attach Cable	J9285B				•			•	•		•									
HP X242 SFP+ to SFP+ 10m Direct Attach Cable	J9286B				•			•	•		•									
HP X242 SFP+ to SFP+15m Direct Attach Cable	J9287B				•			•	•		•									
HP X244 XFP SFP+ 1m Direct Attach Cable	J9300A				•			•	•	•	•									
HP X244 XFP SFP+ 3m Direct Attach Cable	J9301A				•			•	•	•	•									
HP X244 XFP SFP+ 5m Direct Attach Cable	J9302A				•			•	•	•	•									
HP X240 10G SFP+ 7m Direct Attach Cable	JC784C	•	•									•	•				•	•	•	
HP X124 1G SFP LC LH40 1310nm Transceiver	JD061A	•	•	•		•	•					•	•	•	•	•	•	•	•	•
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A	•	•	•		•	•					•	•	•	•	•	•	•	•	•
HP X125 1G SFP LC LH70 Transceiver	JD063B	•	•	•		•	•					•	•	•	•	•	•	•	•	•
HP X160 2.5G SFP LC 2km Transceiver	JD084A			•			•													
HP X160 2.5G SFP LC 15km Transceiver	JD085A			•			•													
HP X160 2.5G SFP LC 40km Transceiver	JD086A			•			•													
HP X160 2.5G SFP LC 80km Transceiver	JD087A			•			•													
HP X135 10G XFP LC LR Transceiver	JD088A			•																
HP X125 1G SFP RJ45 T Transceiver	JD089B	•	•	•		•	•					•	•	•	•	•	•	•	•	•
HP X110 100M SFP LC LH40 Transceiver	JD090A		•	•		•	•						•			•	•	•		
HP X110 100M SFP LC LH80 Transceiver	JD091A		•	•		•	•							•		•	•	•		
HP X130 SFP+ LC SR Transceiver	JD092B	•	•			•						•	•	•	•	•	•	•	•	•
HP X130 SFP+ LC LRM Transceiver	JD093B	•	•			•						•	•	•	•	•	•	•	•	•
HP X130 SFP+ LC LR Transceiver	JD094B	•	•			•						•	•	•	•	•	•	•	•	•
HP X240 SFP+ to SFP+ 0.65 m Direct Attach Cable	JD095C		•			•						•	•	•	•	•	•	•	•	•
HP X240 SFP+ to SFP+ 1.2 m Direct Attach Cable	JD096C		•			•						•	•	•	•	•	•	•	•	•
HP X240 SFP+ to SFP+ 3 m Direct Attach Cable	JD097C	•	•			•						•	•	•	•	•	•	•	•	•
HP X120 1G SFP LC BX 10-U Transceiver	JD098B	•	•	•		•	•					•	•			•	•	•	•	•
HP X120 1G SFP LC BX 10-D Transceiver	JD099B	•	•	•		•	•					•	•			•	•	•	•	•
HP X115 100M SFP LC BX 10-U Transceiver	JD100A		•			•														
HP X115 100M SFP LC BX 10-D Transceiver	JD101A		•			•														

# HP Networking Transceiver Matrix (continued)

Transceivers and cables	SKU	12500	10500	8800 Router	8200	7500	6600 Router	6600 Switch	6200	6120G/XG	6120 XG	5920	5900	5830	5820	5800	5500 EI	5500 HI	5500 S1
HP X110 100M SFP LC FX Transceiver	JD102B		•	•		•	•							•		•	•	•	
HP X120 1G SFP LC LH100 Transceiver	JD103A	•	•	•		•	•												
HP X135 SC ER XENPAK Transceiver	JD105A																		
HP X135 SC SR XENPAK Transceiver	JD106B																		
HP X130 SC ZR XFP Transceiver	JD107A	•	•	•		•													
HP X130 SC LR XFP Transceiver	JD108B	•	•	•		•	•										•	•	•
HP X170 1G SFP LC LH70 1550 Transceiver	JD109A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1570 Transceiver	JD110A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1590 Transceiver	JD111A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1610 Transceiver	JD112A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1470 Transceiver	JD113A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1490 Transceiver	JD114A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1510 Transceiver	JD115A	•	•	•		•								•					
HP X170 1G SFP LC LH70 1530 Transceiver	JD116A	•	•	•		•								•					
HP X130 LC SR XFP Transceiver	JD117B	•	•	•		•	•										•	•	•
HP X125 1G SFP LC SX Transceiver	JD118B	•	•	•		•	•					•	•	•	•	•	•	•	•
HP X120 1G SFP LC LX Transceiver	JD119B	•	•	•		•	•					•	•	•	•	•	•	•	•
HP X110 100M SFP LC LX Transceiver	JD120B		•	•		•	•							•		•	•	•	
HP X135 LC ER XFP Transceiver	JD121A	•	•	•		•	•										•	•	•
HP X124 1G SFP LC SX Transceiver	JD493A														•				
HP X124 1G SFP LC LX Transceiver	JD494A														•				
HP X110 100M SFP LC FX Dual Mode Transceiver	JD497A																•	•	•
HP X110 100M SFP LC LX10 Transceiver	JD498A																•	•	•
HP X130 SC LX4 XENPAK Transceiver	JD499A																		
HP X130 CX4 XENPAK Transceiver	JD502A																		
HP X130 CX4 XFP Transceiver	JD506A																		
HP X120 622M SFP LC LX 15km Transceiver	JF829A			•			•												
HP X120 622M SFP LC LH 40km 1310 Transceiver	JF830A			•			•												
HP X120 622M SFP LC LH 80km 1550 Transceiver	JF831A			•			•												
HP X120 100M/1G SFP LC LX Transceiver	JF832A	•																	
HP X110 100M SFP LC FX Transceiver	JF833A	•																	
HP X240 SFP+ to SFP+ 5m DAC Cable	JG081C	•	•			•						•	•	•	•	•	•	•	•
HP X180 10G XFP LC LH 80km 1538.98nm DWDM Transceiver	JG226A	•	•			•													
HP X180 10G XFP LC LH 80km 1539.77nm DWDM Transceiver	JG227A	•	•			•													
HP X180 10G XFP LC LH 80km 1540.56nm DWDM Transceiver	JG228A	•	•			•													
HP X180 10G XFP LC LH 80km 1542.14nm DWDM Transceiver	JG229A	•	•			•													
HP X180 10G XFP LC LH 80km 1542.94nm DWDM Transceiver	JG230A	•	•			•													
HP X180 10G XFP LC LH 80km 1558.98nm DWDM Transceiver	JG231A	•	•			•													
HP X180 10G XFP LC LH 80km 1559.79nm DWDM Transceiver	JG232A	•	•			•													
HP X180 10G XFP LC LH 80km 1560.61nm DWDM Transceiver	JG233A	•	•			•													
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A	•	•									•	•	•	•	•	•	•	•
HP X140 40G QSFP+ MPO SR4 Transceiver	JG325A		•										•						
HP X240 40G QSFP+ to QSFP+ 1m DAC Cable	JG326A												•						
HP X240 40G QSFP+ to QSFP+ 3m DAC Cable	JG327A												•						
HP X240 40G QSFP+ to QSFP+ 5m DAC Cable	JG328A												•						
HP X240 40G QSFP+ to 4x10G SFP+ 1m DAC Cable	JG329A												•						
HP X240 40G QSFP+ to 4x10G SFP+ 3m DAC Cable	JG330A												•						
HP X240 40G QSFP+ to 4x10G SFP+ 5m DAC Cable	JG331A												•						

# HP Networking Transceiver Matrix (continued)

Transceivers and cables	SKU	5400	5120 EI	5120 S1	4200	3800	3600 EI	3600 S1	3500	3100 EI	3100 S1	2920	2915	2910
HP X121 1G SFP LC SX Transceiver	J4858C	•			•	•			•			•	•	•
HP X121 1G SFP LC LX Transceiver	J4859C	•			•	•			•			•	•	•
HP X121 1G SFP LC LH Transceiver	J4860C	•			•	•			•			•	•	•
HP X121 1G SFP RJ45 T Transceiver	J8177C	•			•	•						•		
HP X131 10G X2 SC SR Transceiver	J8436A	•			•				•					
HP X131 10G X2 SC LR Transceiver	J8437A	•			•				•					
HP X131 10G X2 SC ER Transceiver	J8438A	•			•				•					
HP X131 10G X2 SC LRM Transceiver	J9144A	•			•				•					
HP X130 CX4 Optical Media Converter	J8439A	•			•				•					
HP X131 10G X2 CX4 Transceiver	J8440C	•			•				•					
HP X111 100M SFP LC FX Transceiver	J9054C	•			•	•			•			•	•	•
HP X112 100M SFP LC BX-D Transceiver	J9099B	•			•	•			•			•	•	•
HP X112 100M SFP LC BX-U Transceiver	J9100B	•			•	•			•			•	•	•
HP X122 1G SFP LC BX-D Transceiver	J9142B	•			•	•			•			•	•	•
HP X122 1G SFP LC BX-U Transceiver	J9143B	•			•	•			•			•	•	•
HP X132 10G SFP+ LC SR Transceiver	J9150A	•				•			•			•		•
HP X132 10G SFP+ LC LR Transceiver	J9151A	•				•			•			•		•
HP X132 10G SFP+ LC LRM Transceiver	J9152A	•				•			•			•		•
HP X132 10G SFP+ LC ER Transceiver	J9153A	•				•			•			•		•
HP X242 SFP+ to SFP+ 1m Direct Attach Cable	J9281B	•				•			•			•		•
HP X242 SFP+ to SFP+ 3m Direct Attach Cable	J9283B	•				•			•			•		•
HP X242 SFP+ to SFP+ 7m Direct Attach Cable	J9285B	•				•			•			•		•
HP X242 SFP+ to SFP+ 10m Direct Attach Cable	J9286B	•				•			•			•		•
HP X242 SFP+ to SFP+15m Direct Attach Cable	J9287B	•				•			•			•		•
HP X244 XFP SFP+ 1m Direct Attach Cable	J9300A	•				•			•			•		•
HP X244 XFP SFP+ 3m Direct Attach Cable	J9301A	•				•			•			•		•
HP X244 XFP SFP+ 5m Direct Attach Cable	J9302A	•				•			•			•		•
HP X240 10G SFP+ 7m Direct Attach Cable	JC784C		•											
HP X124 1G SFP LC LH40 1310nm Transceiver	JD061A		•	•			•	•						
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A		•	•			•	•						
HP X125 1G SFP LC LH70 Transceiver	JD063B		•	•			•	•						
HP X160 2.5G SFP LC 2km Transceiver	JD084A													
HP X160 2.5G SFP LC 15km Transceiver	JD085A													
HP X160 2.5G SFP LC 40km Transceiver	JD086A													
HP X160 2.5G SFP LC 80km Transceiver	JD087A													
HP X135 10G XFP LC LR Transceiver	JD088A													
HP X125 1G SFP RJ45 T Transceiver	JD089B		•	•			•	•		•				
HP X110 100M SFP LC LH40 Transceiver	JD090A						•							
HP X110 100M SFP LC LH80 Transceiver	JD091A						•							
HP X130 SFP+ LC SR Transceiver	JD092B		•											
HP X130 SFP+ LC LRM Transceiver	JD093B		•											
HP X130 SFP+ LC LR Transceiver	JD094B		•											
HP X240 SFP+ to SFP+ 0.65 m Direct Attach Cable	JD095C		•											
HP X240 SFP+ to SFP+ 1.2 m Direct Attach Cable	JD096C		•											
HP X240 SFP+ to SFP+ 3 m Direct Attach Cable	JD097C		•											
HP X120 1G SFP LC BX 10-U Transceiver	JD098B		•	•			•	•		•				
HP X120 1G SFP LC BX 10-D Transceiver	JD099B		•	•			•	•		•				
HP X115 100M SFP LC BX 10-U Transceiver	JD100A						•							
HP X115 100M SFP LC BX 10-D Transceiver	JD101A						•							

# HP Networking Transceiver Matrix (continued)

Transceivers and cables	SKU	5400	5120 EI	5120 S1	4200	3800	3600 EI	3600 S1	3500	3100 EI	3100 S1	2920	2915	2910
HP X110 100M SFP LC FX Transceiver	JD102B									•				
HP X120 1G SFP LC LH100 Transceiver	JD103A						•							
HP X135 SC ER XENPAK Transceiver	JD105A													
HP X135 SC SR XENPAK Transceiver	JD106B													
HP X130 SC ZR XFP Transceiver	JD107A													
HP X130 SC LR XFP Transceiver	JD108B		•											
HP X170 1G SFP LC LH70 1550 Transceiver	JD109A						•	•						
HP X170 1G SFP LC LH70 1570 Transceiver	JD110A						•	•						
HP X170 1G SFP LC LH70 1590 Transceiver	JD111A						•	•						
HP X170 1G SFP LC LH70 1610 Transceiver	JD112A						•	•						
HP X170 1G SFP LC LH70 1470 Transceiver	JD113A						•	•						
HP X170 1G SFP LC LH70 1490 Transceiver	JD114A						•	•						
HP X170 1G SFP LC LH70 1510 Transceiver	JD115A						•	•						
HP X170 1G SFP LC LH70 1530 Transceiver	JD116A						•	•						
HP X130 LC SR XFP Transceiver	JD117B		•											
HP X125 1G SFP LC SX Transceiver	JD118B		•	•			•	•		•				
HP X120 1G SFP LC LX Transceiver	JD119B		•	•			•	•		•				
HP X110 100M SFP LC LX Transceiver	JD120B						•			•				
HP X135 LC ER XFP Transceiver	JD121A		•											
HP X124 1G SFP LC SX Transceiver	JD493A													
HP X124 1G SFP LC LX Transceiver	JD494A													
HP X110 100M SFP LC FX Dual Mode Transceiver	JD497A		•											
HP X110 100M SFP LC LX10 Transceiver	JD498A		•											
HP X130 SC LX4 XENPAK Transceiver	JD499A													
HP X130 CX4 XENPAK Transceiver	JD502A													
HP X130 CX4 XFP Transceiver	JD506A													
HP X120 622M SFP LC LX 15km Transceiver	JF829A													
HP X120 622M SFP LC LH 40km 1310 Transceiver	JF830A													
HP X120 622M SFP LC LH 80km 1550 Transceiver	JF831A													
HP X120 100M/1G SFP LC LX Transceiver	JF832A													
HP X110 100M SFP LC FX Transceiver	JF833A													
HP X240 SFP+ to SFP+ 5m DAC Cable	JG081C		•											
HP X180 10G XFP LC LH 80km 1538.98nm DWDM Transceiver	JG226A													
HP X180 10G XFP LC LH 80km 1539.77nm DWDM Transceiver	JG227A													
HP X180 10G XFP LC LH 80km 1540.56nm DWDM Transceiver	JG228A													
HP X180 10G XFP LC LH 80km 1542.14nm DWDM Transceiver	JG229A													
HP X180 10G XFP LC LH 80km 1542.94nm DWDM Transceiver	JG230A													
HP X180 10G XFP LC LH 80km 1558.98nm DWDM Transceiver	JG231A													
HP X180 10G XFP LC LH 80km 1559.79nm DWDM Transceiver	JG232A													
HP X180 10G XFP LC LH 80km 1560.61nm DWDM Transceiver	JG233A													
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A		•											
HP X140 40G QSFP+ MPO SR4 Transceiver	JG325A													
HP X240 40G QSFP+ to QSFP+ 1m DAC Cable	JG326A													
HP X240 40G QSFP+ to QSFP+ 3m DAC Cable	JG327A													
HP X240 40G QSFP+ to QSFP+ 5m DAC Cable	JG328A													
HP X240 40G QSFP+ to 4x10G SFP+ 1m DAC Cable	JG329A													
HP X240 40G QSFP+ to 4x10G SFP+ 3m DAC Cable	JG330A													
HP X240 40G QSFP+ to 4x10G SFP+ 5m DAC Cable	JG331A													

# HP Networking Transceiver Matrix (continued)

Transceivers and cables	SKU																
		2620	2615	2530	2520	2510	1910	1905	1810**	1410**	1405	MSM720	MSR900	MSR50	MSR30	MSR20-1x	MSR20
HP X121 1G SFP LC SX Transceiver	J4858C	•	•	•	•	•	•	•	•	•	•	•					
HP X121 1G SFP LC LX Transceiver	J4859C	•	•	•	•	•	•	•	•	•	•	•					
HP X121 1G SFP LC LH Transceiver	J4860C	•	•	•	•	•						•					
HP X121 1G SFP RJ45 T Transceiver	J8177C	•		•		•	•		•								
HP X131 10G X2 SC SR Transceiver	J8436A																
HP X131 10G X2 SC LR Transceiver	J8437A																
HP X131 10G X2 SC ER Transceiver	J8438A																
HP X131 10G X2 SC LRM Transceiver	J9144A																
HP X130 CX4 Optical Media Converter	J8439A																
HP X131 10G X2 CX4 Transceiver	J8440C																
HP X111 100M SFP LC FX Transceiver	J9054C	•	•	•	•	•			•	•		•					
HP X112 100M SFP LC BX-D Transceiver	J9099B	•	•	•	•	•						•					
HP X112 100M SFP LC BX-U Transceiver	J9100B	•	•	•	•	•						•					
HP X122 1G SFP LC BX-D Transceiver	J9142B	•	•	•	•	•						•					
HP X122 1G SFP LC BX-U Transceiver	J9143B	•	•	•	•	•						•					
HP X132 10G SFP+ LC SR Transceiver	J9150A																
HP X132 10G SFP+ LC LR Transceiver	J9151A																
HP X132 10G SFP+ LC LRM Transceiver	J9152A																
HP X132 10G SFP+ LC ER Transceiver	J9153A																
HP X242 SFP+ to SFP+ 1m Direct Attach Cable	J9281B																
HP X242 SFP+ to SFP+ 3m Direct Attach Cable	J9283B																
HP X242 SFP+ to SFP+ 7m Direct Attach Cable	J9285B																
HP X242 SFP+ to SFP+ 10m Direct Attach Cable	J9286B																
HP X242 SFP+ to SFP+15m Direct Attach Cable	J9287B																
HP X244 XFP SFP+ 1m Direct Attach Cable	J9300A																
HP X244 XFP SFP+ 3m Direct Attach Cable	J9301A																
HP X244 XFP SFP+ 5m Direct Attach Cable	J9302A																
HP X240 10G SFP+ 7m Direct Attach Cable	JC784C																
HP X124 1G SFP LC LH40 1310nm Transceiver	JD061A												•	•	•	•	
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A												•	•	•	•	
HP X125 1G SFP LC LH70 Transceiver	JD063B												•	•	•	•	
HP X160 2.5G SFP LC 2km Transceiver	JD084A																
HP X160 2.5G SFP LC 15km Transceiver	JD085A																
HP X160 2.5G SFP LC 40km Transceiver	JD086A																
HP X160 2.5G SFP LC 80km Transceiver	JD087A																
HP X135 10G XFP LC LR Transceiver	JD088A																
HP X125 1G SFP RJ45 T Transceiver	JD089B						•										
HP X110 100M SFP LC LH40 Transceiver	JD090A												•	•	•	•	
HP X110 100M SFP LC LH80 Transceiver	JD091A												•	•	•	•	
HP X130 SFP+ LC SR Transceiver	JD092B																
HP X130 SFP+ LC LRM Transceiver	JD093B																
HP X130 SFP+ LC LR Transceiver	JD094B																
HP X240 SFP+ to SFP+ 0.65 m Direct Attach Cable	JD095C																
HP X240 SFP+ to SFP+ 1.2 m Direct Attach Cable	JD096C																
HP X240 SFP+ to SFP+ 3 m Direct Attach Cable	JD097C																
HP X120 1G SFP LC BX 10-U Transceiver	JD098B						•						•	•	•	•	
HP X120 1G SFP LC BX 10-D Transceiver	JD099B						•						•	•	•	•	
HP X115 100M SFP LC BX 10-U Transceiver	JD100A																
HP X115 100M SFP LC BX 10-D Transceiver	JD101A																

\*\* 24- or 48-port version only.

# HP Networking Transceiver Matrix (continued)

Transceivers and cables	SKU	2620	2615	2530	2520	2510	1910	1905	1810**	1410**	1405	MSM720	MSR900	MSR50	MSR30	MSR20-1x	MSR20
HP X110 100M SFP LC FX Transceiver	JD102B													•	•	•	•
HP X120 1G SFP LC LH100 Transceiver	JD103A													•	•	•	•
HP X135 SC ER XENPAK Transceiver	JD105A																
HP X135 SC SR XENPAK Transceiver	JD106B																
HP X130 SC ZR XFP Transceiver	JD107A																
HP X130 SC LR XFP Transceiver	JD108B																
HP X170 1G SFP LC LH70 1550 Transceiver	JD109A																
HP X170 1G SFP LC LH70 1570 Transceiver	JD110A																
HP X170 1G SFP LC LH70 1590 Transceiver	JD111A																
HP X170 1G SFP LC LH70 1610 Transceiver	JD112A																
HP X170 1G SFP LC LH70 1470 Transceiver	JD113A																
HP X170 1G SFP LC LH70 1490 Transceiver	JD114A																
HP X170 1G SFP LC LH70 1510 Transceiver	JD115A																
HP X170 1G SFP LC LH70 1530 Transceiver	JD116A																
HP X130 LC SR XFP Transceiver	JD117B																
HP X125 1G SFP LC SX Transceiver	JD118B						•							•	•	•	•
HP X120 1G SFP LC LX Transceiver	JD119B						•	•						•	•	•	•
HP X110 100M SFP LC LX Transceiver	JD120B													•	•	•	•
HP X135 LC ER XFP Transceiver	JD121A																
HP X124 1G SFP LC SX Transceiver	JD493A						•	•									
HP X124 1G SFP LC LX Transceiver	JD494A						•	•									
HP X110 100M SFP LC FX Dual Mode Transceiver	JD497A																
HP X110 100M SFP LC LX10 Transceiver	JD498A																
HP X130 SC LX4 XENPAK Transceiver	JD499A																
HP X130 CX4 XENPAK Transceiver	JD502A																
HP X130 CX4 XFP Transceiver	JD506A																
HP X120 622M SFP LC LX 15km Transceiver	JF829A																
HP X120 622M SFP LC LH 40km 1310 Transceiver	JF830A																
HP X120 622M SFP LC LH 80km 1550 Transceiver	JF831A																
HP X120 100M/1G SFP LC LX Transceiver	JF832A																
HP X110 100M SFP LC FX Transceiver	JF833A																
HP X240 SFP+ to SFP+ 5m DAC Cable	JG081C																
HP X180 10G XFP LC LH 80km 1538.98nm DWDM Transceiver	JG226A																
HP X180 10G XFP LC LH 80km 1539.77nm DWDM Transceiver	JG227A																
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HP X240 40G QSFP+ to QSFP+ 5m DAC Cable	JG328A																
HP X240 40G QSFP+ to 4x10G SFP+ 1m DAC Cable	JG329A																
HP X240 40G QSFP+ to 4x10G SFP+ 3m DAC Cable	JG330A																
HP X240 40G QSFP+ to 4x10G SFP+ 5m DAC Cable	JG331A																

\*\* 24- or 48-port version only.

# HP Networking Services and Support

## HP Networking Warranty

Your HP networking products will include industry-leading warranty and support with the product purchase. Most HP switches and WLAN products include the HP lifetime warranty<sup>†</sup> (for as long as you own the product). All warranties feature advance replacement (available in most countries),\* with coverage for the entire product, including fans and power supplies, for the entire warranty period. Visit [hp.com/networking/warranty](http://hp.com/networking/warranty) to view the HP Hardware Warranty Statement with terms and conditions, and go to [hp.com/networking/warrantysummary](http://hp.com/networking/warrantysummary) to see the warranty and support included with each of your products.

Your warranty, though, is just one component of a rich, multi-layered support structure. To help make our networking products even easier to implement, use, and maintain, we support most of them via many avenues: self-help tools available 24x7 on the Web, telephone support, email support and electronic case submission, and periodic software releases and updates. Refer to [hp.com/networking/support](http://hp.com/networking/support) for details on these support features, and visit [hp.com/networking/contact-support](http://hp.com/networking/contact-support) for details on how to contact HP for technical support.

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<sup>†</sup> HP warranty includes repair or replacement of hardware for as long as you own the product, with next-business-day advance replacement (available in most countries). The disk drive included with HP AllianceONE Advanced Services and Services z1 Modules, HP Threat Management Services z1 Module, HP AllianceONE Extended z1 Module with Riverbed Steelhead, HP MSM765 z1 Mobility Controller, and HP Survivable Branch Communication z1 Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the software license and hardware warranty statements at [hp.com/networking/warranty](http://hp.com/networking/warranty).

\* Response times are based on local standard business days and working hours. Response time begins once HP has completed confirming the product failure and identifying the replacement part. Response time is based on commercially reasonable effort and subject to a daily shipment cutoff time. In some countries and regions and under certain supplier constraints, response time may vary. If your location is outside the customary service zone, response time may be longer. Contact your local HP service organization for response time availability in your area.

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## HP Network Services

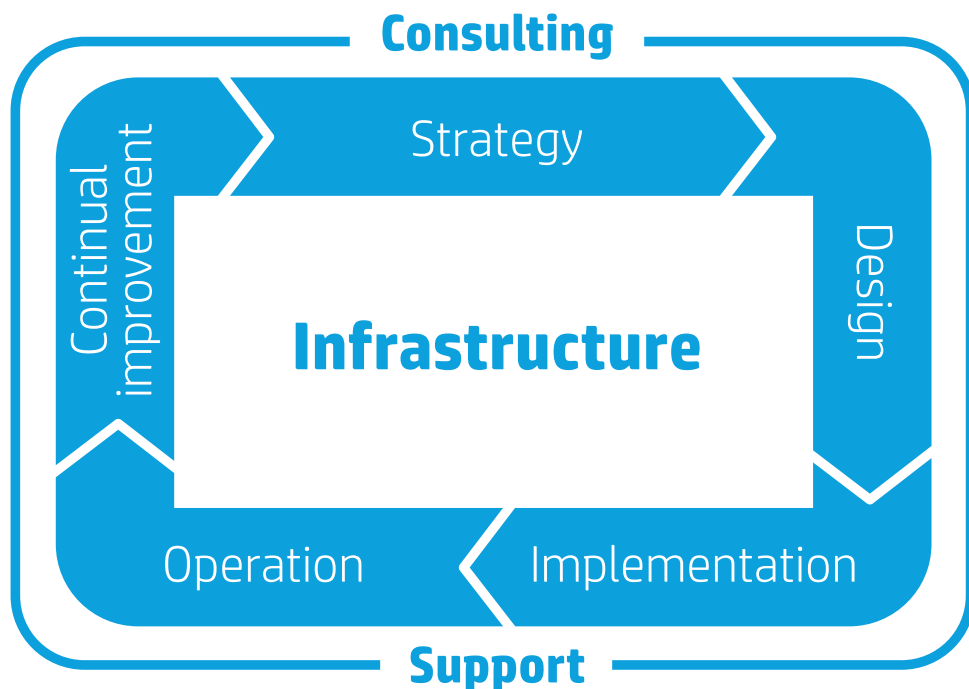
Connecting the enterprise isn't just about routing, switching, and wireless products. It's really about the network enabling the business and market trends such as cloud computing, Big Data, and mobility. It's about creating an agile network that can mirror the instant scale-up and scale-down capabilities of compute and store environments. This state of responsive scalability can be defined as *elastic connectivity*. By delivering elastic connectivity, you can be your most productive through universal access to people, applications, and data. In addition, your business can enhance the delivery of critical business services by using private, public, or hybrid models. Such challenges are why savvy networking professionals complement their networking investments with services from HP. By relying on our experts for consulting, implementation, and support services, you can plan, implement, and operate your network infrastructure more easily and effectively. You gain solutions to solve your immediate business problems and have the flexibility to respond to your future needs.

### HP Network Strategy and Planning Services

These services define the vision, current state, readiness, and pragmatic next steps for the future state of your network. The Connectivity Transformation Experience Workshop is a highly interactive, HP facilitated one-day session between your key stakeholders and senior HP consultants. This structured discussion takes a fact-based, analytical approach to help achieve alignment of your vision, identify the current state of your network, and describe your network's future state and what your specific transformation agenda should be. Our consultants can leverage HP's reference architectures to create an open standards-based technology deployment blueprint. And if you're undergoing a data center consolidation or deploying new technologies, we can collect and analyze detailed network data, then supply you with an assessment of your readiness, as well as recommendations and a roadmap.

### HP Cloud-Ready Networking Services

These services help you prepare your network to meet the demands of cloud computing. From visibility to control, from acceleration to protection, our experts work with you to leverage your existing investments as you move to cloud-based application delivery. You'll realize the full value of your cloud initiative while securing your enterprise data and applications. Our end-to-end approach is aligned with both your short- and long-term goals. You can leverage the HP reference architecture for a network blueprint tailored to your unique needs and use our proven methodology to transform your data center network to one that is cloud ready. We can help accelerate your project and reduce implementation risks, thanks to validated designs and extensive project experience.



HP Cloud-Ready Networking Services help prepare your network to meet the performance demands of cloud computing. This holistic, end-to-end approach builds a solid foundation for your cloud initiative, encompassing four elements critical to your success:

- Analyze: know before you go
- Optimize: enhance what you have
- Protect: build a secure cloud
- Continuously improve: be ready for change

#### HP FlexNetwork Services

These services help you evolve your network to one that leverages the advantages and efficiencies of an end-to-end open standards environment. You can begin with an interactive strategy workshop that focuses on helping your organization to understand the design and financial benefits of transitioning your environment to a multivendor approach. Our consultants can collaborate with you to analyze and validate your current and future IT architecture needs and create a comprehensive modular design. Plus, we also offer a full suite of WLAN services, along with flexible time and expense consulting.

#### HP SDN Services

Software-defined networking (SDN) is introducing capabilities that enable you to evolve your network from one with a traditional rigid architecture to one with an agile architecture based on network resource virtualization. HP SDN Services help you plan for the best way to begin an SDN journey in your environment through full SDN deployment and the related changes that will impact people and processes.

#### HP IPv6 Services

Enterprise businesses are now recognizing the inevitability and importance of IPv6 as a means of addressing pervasive connectivity. These businesses appreciate the fact that IPv6 represents the future of IP traffic and, if leveraged properly, can represent a means to market differentiation and business enablement. HP's comprehensive suite of IPv6 services can help in all phases of your IPv6 journey, from planning and strategy through design, implementation, support, and education. We'll show you how to leverage your existing assets and take advantage of IPv6 technology without introducing risk to the rest of your IT environment. Our proven methodology provides a smooth transition and a deployment strategy that's aligned with your business strategy.

#### HP Network Infrastructure Optimization Services

Universal access to people, applications, and data relies on an optimized network to deliver a positive user experience. HP Network Infrastructure Optimization Services examine all aspects of the network environment for slowdowns, focusing especially on your suite of mission-critical business applications. These lifecycle services focus on the five optimization topology domains: inside the data center, DC to DC, WAN, campus LAN, and WLAN.

#### HP Mobility Services

Founded on the principle of universal access to people, applications, and data, this HP offering addresses universal access through a comprehensive suite of services including BYOD and client virtualization.

**Connected People (Unified Communications)**—responds to your users' most basic requirement to communicate and collaborate in real time, on any device, wherever they are leveraging the significant joint product developments and R&D from Microsoft and HP.



**HP Connected Workplace Services**—focus on enabling access to your corporate and other applications securely from outside the office and on any device.

**Connected Data**—connect people to their data in ways that allow for maximum flexibility and ease of access.

**Mobility and connectivity**—enable universal access to people, applications, and data through a comprehensive suite of services that extend across the network infrastructure right out to mobile devices and applications. This includes end-to-end network and mobility management and security solutions.

#### **Availability and support services**

HP Network Support Services (NSS) brings together proven methodologies and best practices to keep your network functioning at its best. These services can substantially improve network availability and reduce downtime, leading to lower operational costs and an improved return on your IT investment.

## HP Education Services

Whether in the enterprise or the SMB, education can mean the difference between rapid employee turnover and poor performance on the one hand, and a professional, knowledgeable, and committed workforce on the other. At HP, we understand the role of professional education in an organization's ability to operate efficiently and take advantage of new technologies. With HP Education Services, we offer highly focused training aimed at specific products and technologies; and through HP ExpertOne, we also offer a wide range of training paths leading to professional certifications in disciplines such as the cloud and networking. Technology Services—Networking Services and Solutions People Devices Apps Information

## Smart, streamlined support for greater business and IT agility

### Is your network keeping up with your business?

More than ever, your network is a key enabler of business agility and operational efficiency. Investments in network infrastructure technology—such as IP voice, video, mobility, unified communications, virtualization, and cloud-based environments—make connections among people, processes and information faster, smarter and more flexible than ever before.

As your business and IT operations grow increasingly mobile, connected, interactive, immediate, and fluid, your IT team faces unprecedented challenges as they strive to meet ever-higher performance and availability demands. Support is evolving to meet these challenges, as new processes and technologies offer opportunities to increase the productivity and efficiency of IT operations.

## Support that keeps pace with your changing IT world

Drawing upon more than four decades of global networking leadership, HP is in the vanguard of network support. HP has developed innovative processes and tools that inject new economies into supporting your network, enabling you to:

- Improve network availability, enhance performance, and reduce downtime
- Strengthen your network to support advanced technology and mission-critical applications
- Simplify network management
- Increase return on investment in people, processes, and technologies

## Support to help you succeed in a collaborative and fluid world

You need access to the right support as well as the right technologies to keep your network as dynamic and flexible as your business. HP Network Support Services helps you succeed in this increasingly collaborative and fluid world.

HP Network Support Services offers the advantages of a support partnership with the same trusted company that provides support for other aspects of your IT infrastructure. HP certified network experts bring you their knowledge of heterogeneous environments as well as the latest tools and practices in integrated, automated management to streamline and enhance support.

With HP, you can also simplify management of your complex, multivendor environment by reducing the number of service support vendors and consolidating support resources.

## The HP Network Support Services portfolio

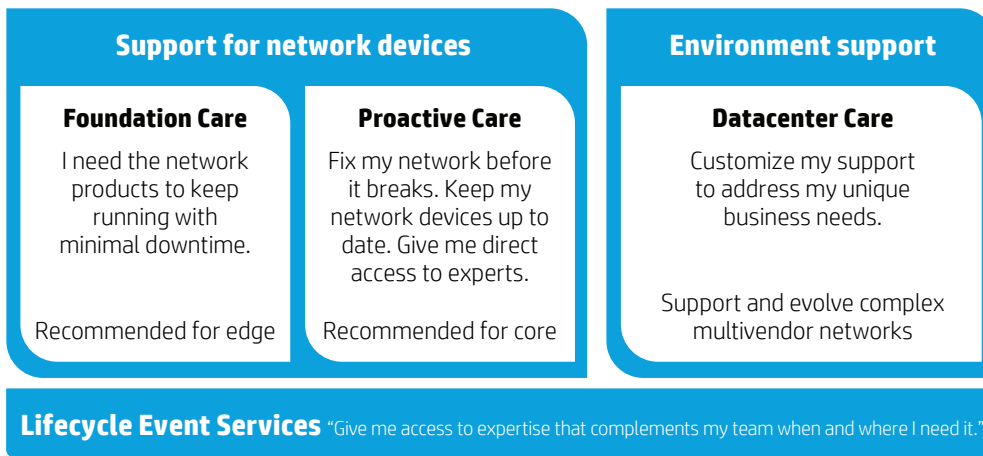
The HP Network Support Services portfolio offers you support that is:

- **Personalized**  
Support when, where, and how you want it from certified HP network experts
- **Proactive**  
Tools and processes that prevent problems before they cause outages or performance degradation
- **Simplified**  
Straightforward support choices and a single point of contact for all your support needs, including multivendor issues

The portfolio offers a choice of standard and customized support services. You can obtain device and software support separately, with service levels that vary from next-business day to 24x7 coverage, or integrate your device and software support.

## HP Support Services

Personalized, proactive, simplified



The four components of HP Network Support Services are:

- **Foundation Care**  
Foundation Care extends your warranty and fixes network hardware and software problems.
- **Proactive Care**  
Proactive Care helps optimize the availability and performance of your networking platform and keeps devices up to date.
- **Datacenter Care**  
Datacenter Care provides customized networking support, including business-critical multivendor environments.
- **Lifecycle Event Services**  
Lifecycle Event Services is per-event support that provides access to HP experts when and where you need them, to complement your in-house team.

### HP Foundation Care

Expand and enhance reactive support of your network hardware and software and accelerate device repair and replacement with HP Foundation Care. Choose from a variety of support service levels (next-business-day, 24x7, or 6-hour call-to-repair support) offered onsite or remotely for quick problem resolution. You can also extend your warranty coverage from one to five years.

HP Foundation Care Support includes:

- Network device support, with repair or replacement by an onsite service technician
- Software updates and firmware upgrades
- 24x7 phone assistance for device-specific problem diagnosis and resolution
- Software updates, firmware upgrades, and 24x7 phone assistance for device-specific problem diagnosis and resolution

And you can integrate hardware and software support with the following service options:

- **HP Exchange Plus** combines hardware exchange and 24x7 software support as well as software updates (where applicable). Two hardware exchange service levels are available: next-business-day exchange (NBD Exchange Plus) or 4-hour hardware exchange (4hr Exchange Plus). With a single service for software support and hardware exchange, this integrated service can be delivered with increased simplicity and offers an affordable option.
- **HP Support Plus** combines comprehensive hardware and software support as well as software updates (where applicable). Working with your IT team, HP engineers deliver hardware support onsite and provide software support by phone 13 hours a day, five days a week.
- **HP Support Plus 24** delivers the above services around-the-clock, 365 days a year.

### HP Comprehensive Defective Material Retention (CDMR)

HP Comprehensive Defective Material Retention (CDMR) allows you to keep all data retentive components. Before the actual replacement occurs, you must inform the authorized HP support agent of your intention to keep the disk drive/data retentive component. You must also copy the information found on the label of the malfunctioning disk drive/component and provide it to HP. The malfunctioning part will then be replaced. You will be responsible for destroying and/or permanently removing the device from production.

HP Defective Material Retention (DMR) and CDMR options help you:

- Reduce security risks with classified, proprietary, and confidential data
- Keep sensitive data compliant with privacy regulations
- Achieve a simpler, more cost-effective solution when you choose not to return a malfunctioning component

## HP Proactive Care

Gain the paybacks of prevention with this service that integrates reactive and proactive support to help you meet the challenges of managing converged, virtualized, and cloud-based environments built on industry-standard platforms. Offered at exceptional price points, this service enables you to solve complex problems before they impact your business, and helps reduce complexity and risk.

A range of hardware support levels (next-business-day onsite, 4-hour response, 24x7 onsite, or 6-hour call-to-repair onsite support) along with 24x7 software support are available to address the reactive support requirements for customer environments.

HP Proactive Care leverages innovative HP remote tools and support infrastructure investments to cost-effectively deliver superior proactive support.

You can access HP experts online, by phone and, as needed, onsite for problem resolution and escalation call management with a single point of contact throughout the process. HP experts also advise your team on firmware and software management and best practices.

For mission-critical environments, HP provides services that include the proactive, onsite expertise of a dedicated account support manager and team, and priority access to reactive assistance through the HP worldwide network of mission-critical response centers. Remote support tools monitor your environment for potential problems. Your dedicated HP team evaluates your existing infrastructure against your availability needs, recommends ways to improve service levels, and helps you implement management changes to enhance control of processes and applications.

## HP Datacenter Care

Ideal for business-critical environments, this custom-tailored form of environment support can help meet your most demanding service-level commitments. Reactive support and proactive services can extend from relationship management and enhanced call handling to full end-to-end support of a discrete network or an entire infrastructure with thousands of multivendor devices.

Once you've defined the specific services you need, you'll benefit from HP tools and analytics, an assigned account team that knows your environment, and fast access to the right expertise for quicker problem resolution.

## HP Lifecycle Event Services

This set of ad hoc services spans all stages of your network lifecycle. You obtain the technical expertise you need, when, where, and how you require it on a per-event basis, either as a prepackaged offer or as a statement-of-work engagement. These services come in handy when you find it difficult to predict the type, nature, and frequency of resource requirements that you may have at any point in the lifecycle, from strategy and planning through design, deployment, ongoing operation, and optimization.

- **HP Installation/Installation and Startup Services**  
We will help you get your HP networking device up and running quickly by providing everything from preliminary solution planning to installation, configuration, device verification, device startup, and product briefing services.
- **Remote Network Monitoring Services**  
HP helps manage your network environment effectively with 24x7 monitoring and real-time reporting of device health statistics as well as network usage information offered via a secure, dedicated VPN tunnel.
- **HP Education Services**  
HP offers a set of online and instructor-led courses to equip your IT team with the skills to implement HP networking devices, improve system performance, and streamline technology migration and consolidation. Courses are available on all networking products as well as every aspect of network management.

# HP ExpertOne Training and Certification

HP ExpertOne optimizes your skills to architect, implement, and operate modern networking solutions that help you pioneer IT transformations and accelerate business performance.

- **Innovative expertise**  
Gain valuable expertise through the combination of business insight, technical knowledge, and live lab experiences, based on open standard technologies, multivendor interoperability, wired and wireless LAN integration, and a more agile networking architecture. Prepare yourself and your network for cloud, convergence, BYOD and the implementation of SDN.
- **Flexible learning**  
Choose the right learning options to suit your needs. HP ExpertOne certification learning paths include HP Press study-guide publications, instructor-led training with live remote labs, and/or self-paced online training.
- **Fast Tracks**  
Leverage your current certifications achieved through other IT vendors such as Cisco by taking advantage of Fast Track certification paths to more rapidly achieve HP ExpertOne certification.
- **Comprehensive portfolio**  
Expand your horizons by enhancing your networking skills and by also taking advantage of the entire HP ExpertOne portfolio of offerings that span IT from cloud computing to client systems. HP ExpertOne also provides program benefits such as personalized certification tracking and guidance, as well as exclusive access to: tools, resources, events, and a community of experts for ongoing support.

To learn more, visit: [hp.com/expertone/networking\\_certification\\_portfolio.html](http://hp.com/expertone/networking_certification_portfolio.html)

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