

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.





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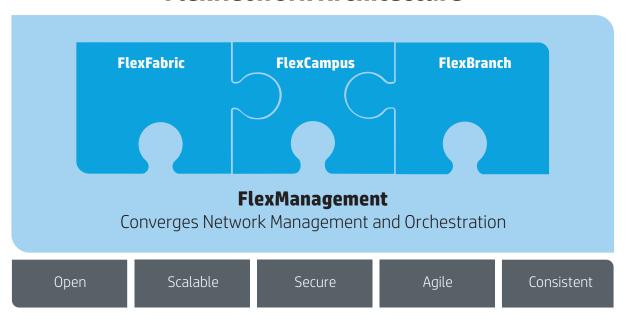
For too long the rules of networking dictated that a monolithic single-vendor solution was the only way to safely deliver the performance and reliability needed to satisfy your users. But we're changing those rules. Now you can eliminate vendor lock-in with a full portfolio of reliable, high-performance 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, delaysensitive 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

Modular Core, aggregation	switches						
		Height (RU)	Module slots (max)	10GbE ports	40GbE ports	100GbE ports	Switching capacity
HP FlexFabric 12900 Switch	Series						
Co el	HP FlexFabric 12916 Switch AC Chassis (JG632A)	23	16	768	256	64	36 Tb/s
OpenFlow	HP FlexFabric 12910 Switch AC Chassis (JG619A)	21	10	480	160	32	23 Tb/s



HP FlexFabric 12900 Switch Series is comprised of next-generation modular data center core switches designed to support virtualized data centers and the evolving needs of private and public cloud deployments. The 12900 series delivers unprecedented levels of performance, buffering, scale, and availability with high-density

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp.com/networking.)$

HP 12900 Switch Series

Modules

- HP FlexFabric 12900 48-port 1/10GbE SFP+ EC Module (JG626A)
- HP FlexFabric 12900 12-port 40GbE QSFP+ EC Module (JG857A)
- HP FlexFabric 12900 4-port 100GbE CFP EC Module (JG858A)
- HP FlexFabric 12900 48-port GbE SFP EB Module (JG855A)
- HP FlexFabric 12900 48-port 10/100/1000BASE-T EB Module
- HP FlexFabric 12900 48-port 10GbE SFP+ EA Module (JG624A)
- HP FlexFabric 12900 16-port 40GbE QSFP+ EA Module (JG625A)

Power supply

HP 12500 2000W AC Power Supply (JF429A)

Mounting kit

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

HP FlexFabric 12916 Switch AC Chassis_PL (JG632A_PL)

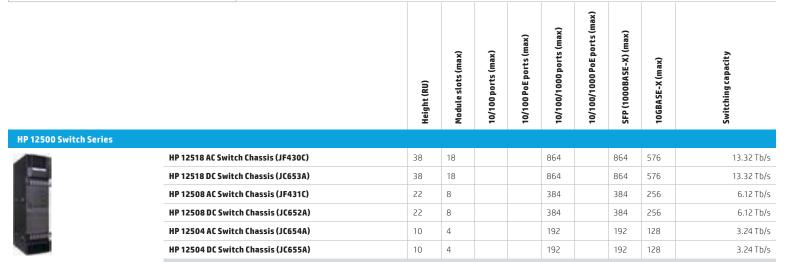
- HP FlexFabric 12916 Main Processing Unit (JG634A)
- HP FlexFabric 12916 6.14Tbps Type B Fabric Module (JG636A)
- HP FlexFabric 12916 2.56Tbps Type S Fabric Module (JG854A)
- HP FlexFabric 12916 Spare Top Fan Tray Assembly (JG637A)
- HP FlexFabric 12916 Spare Bottom Fan Tray Assembly (JG638A)
- HP FlexFabric 12916 Optional Air Filter (JG877A)

HP FlexFabric 12910 Switch AC Chassis_PL (JG619A_PL)

- HP FlexFabric 12910 Main Processing Unit (JG621A)
- HP FlexFabric 12910 3.84Tbps Type B Fabric Module (JG623A)
- HP FlexFabric 12910 1.92Tbps Type A Fabric Module (JG622A)
- HP FlexFabric 12910 Spare Fan Assembly (JG631A)
- HP FlexFabric 12910 Optional Air Filter (JG876A)

Data Center Switches (continued)

Modular Core, aggregation switches (continued)



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 Tb/s 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 40GbE/100GbE modules. The 12500 series and IRF deliver the simplest, most resilient, most efficient, highly scalable data center networks.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 12500 Switch Series

- 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



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
HP FlexFabric 11900 Switch Seri	ies											
OpenFlow	HP FlexFabric 11908-V Switch Chassis (JG608A)	14	8						384	384	64	7.7 Tb/s
hamma												



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 40GbE connectivity designed for cost-effective end-of-row (EoR) and small core deployments.

With latency as low as 3 µs 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.)

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 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)

Transceiver

480 Gb/s

Data Center Switches (continued)

Fixed-port Top-of-Rack Network Access Switches

Tinea port top of Mackingthork	necess 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
HP FlexFabric 5930 Switch Series												
	HP FlexFabric 5930-32QSFP+ Switch (JG726A)	1									32	2.56 Tb/s
And the same of th	HP FlexFabric 5930 Switch Series at a glance											

HP FlexFabric 5920 Switch Series

PEFFERENCE





HP FlexFabric 5920AF-24XG Switch (JG296A)

HP FlexFabric 5920 Switch Series at a glance...

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.

HP FlexFabric 5930 Switch Series is a 40GbE switch with 32 QSFP+ ports. The switch supports VXLAN and NVGRE for multi-tenancy and network virtualization.

HP FlexFabric 5900 Switch Series





HP FlexFabric 5900AF-48XG-4QSFP+ Switch (JC772A)	1				48	4	1.28 Tb/s
HP FlexFabric 5900AF-48G-4XG-2QSFP+ Switch (JG510A)	1		48		4	2	336 Gb/s
HP FlexFabric 5900AF-48XGT-4QSFP+ Switch (JG336A)	1				48	4	1.28 Tb/s

HP FlexFabric 5900 Switch Series at a glance...

The HP FlexFabric 5900AF Switch is a high-density 10GbE with 40GbE 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.

HP FlexFabric 5900v Virtual Switch Series



HP FlexFabric Virtual Switch 5900v for VMware ESX 5.x E-LTU (JG814AAE)

HP FlexFabric 5900v Virtual Switch Series at a glance...

The HP FlexFabric Virtual Switch 5900v for VMware is a replacement product for the VMware vCenter Enterprise Plus vSwitch that allows IEEE 802.1Qbg-compliant HP FlexFabric devices to apply orchestrated network policies defined by IMC VAN Connection Manager to a VMware ESXi environment.

$Modules\ and\ accessories\ (For\ the\ most\ complete\ listing\ of\ modules,\ transceivers,\ power\ options,\ and\ other\ accessories,\ visit\ hp.com/networking.)$

HP FlexFabric 5930 Switch Series

Power supplies

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

Fan trays

- 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 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 78–83 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 travs

- 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 78-83 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 58xOAF Front (port side) to Back (power side) Airflow Fan Tray (JC683A)

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

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- 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)

HP FlexFabric 5900v Virtual Switch Series

Licenses

- HP FlexFabric Virtual Switch 5900v for VMware ESX 5.x E-LTU (JG814AAE)
- HP FlexFabric Virtual Switch Orchestration Software for 5900v VMware ESX E-LTU (JG815AAE)



Data Center Switches (continued)

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

rixeu-port rop-or-kack Netwo	ik 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
HP 5830 Switch Series											
	HP 5830AF-96G Switch (JC694A)	2	0			96				10	392 Gb/s
	HP 5830AF-48G Switch with 1 Interface Slot (JC691A)	1	1			48				4	160 Gb/s

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



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

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.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

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 78–83 for the HP Networking Transceiver Matrix.

HP 5820 Switch Series

Power supplies

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



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	SFP (100BASE-FX) (max	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
HP 5800 Switch Series											
	HP 5800-48G-PoE+ Switch with 2 Interface Slots (JC101A)	2	2+1x OAA			48 (80)	48		(32)	0 (8)	284 Gb/s
	HP 5800-48G-PoE+ TAA-compliant Switch with 2 Interface Slots (JG242A)	2	2+1x OAA			48 (80)	48		(32)	0 (8)	284 Gb/s
	HP 5800-48G-PoE+ Switch with 1 Interface Slot (JC104A)	1	1			(16)	48		(16)	4 (8)	256 Gb/s
	HP 5800-48G-PoE+ TAA-compliant Switch with 1 Interface Slot (JG257A)	1	1			(16)	48		(16)	4 (8)	256 Gb/s
	HP 5800-48G Switch with 1 Interface Slot (JC105A)	1	1			48 (64)			(16)	4 (8)	256 Gb/s
	HP 5800-48G TAA-compliant Switch with 1 Interface Slot (JG258A)	1	1			48 (64)			(16)	4 (8)	256 Gb/s
	HP 5800AF-48G Switch (JG225A)	1	0			48				6	216 Gb/s
	HP 5800-24G-SFP Switch with 1 Interface Slot (JC103A)	1	1			(16)			24 (40)	4 (8)	208 Gb/s
	HP 5800-24G-SFP TAA-compliant Switch with 1 Interface Slot (JG256A)	1	1			(16)			24 (40)	4 (8)	208 Gb/s
	HP 5800-24G-PoE+ Switch (JC099A)	1	1			(16)	24		(16)	4 (8)	208 Gb/s
	HP 5800-24G-PoE+TAA-compliant Switch (JG254A)	1	1			(16)	24		(16)	4 (8)	208 Gb/s
	HP 5800-24G Switch (JC100A)	1	1			24 (40)			(16)	4 (8)	208 Gb/s
	HP 5800-24G TAA-compliant Switch (JG255A)	1	1			24 (40)			(16)	4 (8)	208 Gb/s
	HP 5800 Switch Series at a glance										

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.)

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

Transceivers and cables



Data Center Switches (continued)

Blade Switch and Virtual Connect

		Height (RU)	1 Gb downlink ports	1 Gb/10 Gb downlink ports	10/100/1000 uplink ports	1 Gb/10 Gb uplink ports	40 Gb uplink ports	10 Gb cross connect	Switching capacity
HP 6125 Switch Series									
BE ON PASSA	HP 6125G Ethernet Blade Switch (658247-B21)	Single bay	16		8			1	48 Gb
	HP 6125G/XG Ethernet Blade Switch (658250-B21)	Single bay	16		4	4		1	120 Gb
	HP 6125XLG Ethernet Blade Switch (711307-B21)	Single bay		16		8	4	4	880 Gb

HP 6125 Switch Series at a glance..

Designed for the HP BladeSystem c-Class enclosure, the HP 6125 series provides three distinct edge switches providing the same level of Comware features available $on HP \ Networking \ data center switches worldwide. The HP 6125G \ Blade Switch provides 16 1-GbE \ downlinks and four copper 1 GbE \ plus four 1-GbE \ SFP \ uplinks, two lines are the sum of the$ 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. The HP 6125XLG Blade Switch provides 16 1Gb/10Gb downlinks and eight 10GbE SFP+ uplinks plus four 40GbE uplinks and four 10GbE IRF cross-connect ports. All three units have a 10GbE internal cross-connect for connectivity or IRF. Supports L2/L3/L4, RIP/OSPF/BGP, IRF, IPv4/IPv6.

$Modules \ and \ accessories (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp.com/networking.)$

HP 6125 Switch Series

Transceivers

- HP X120 1G SFP LC SX 850nm Transceiver (JD118B)
- HP X120 1G SFP LC LX 1310nm Transceiver (JD119B)
- HP X125 1G SFP LC LH40 1310nm Transceiver (JD061A)
- HP X120 1G SFP LC LH40 1550nm Transceiver (JD062A)
- HP X125 1G SFP LC LH70 1550nm Transceiver (JD063B)
- HP X120 1G SFP LC RJ45 T Transceiver (JD089B)
- HP X130 10G SFP+ LC SR 850nm Transceiver (JD092B)
- HP X130 10G SFP+ LC LRM 1310nm Transceiver (JD093B)
- HP X130 10G SFP+ LC LR 1310nm Transceiver (JD094B)
- HP X130 10G SFP+ LC ER 1550nm Transceiver (JG234A)
- HP X140 40G QSFP+ MP0 SR4 850nm Transceiver (JG325B)
- HP X240 10G SFP+ SFP+ 0.65m DAC Cable (JD095C)
- HP X240 10G SFP+ SFP+ 1.2m DAC Cable (JD096C)
- HP X240 10G SFP+ SFP+ 3m DAC Cable (JD097C) HP X240 10G SFP+ SFP+ 5m DAC Cable (JG081C)
- HP X240 10G SFP+ SFP+ 7m DAC Cable (JC784C)
- HP X240 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable (JG326A)
- HP X240 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable (JG327A)
- HP X240 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable (JG328A)
- HP X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable (JG329A)
- HP X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable (JG330A)
- HP X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable (JG331A)

Data Center Switches (continued)

Blade Switch and Virtual Connec	t (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
HP 6120 Switch Series										
-	HP 6120XG Blade Switch (516733-B21)	1							8 uplinks, 16 internal	480 Gb/s
Design Control of the last of	UD 6120 Switch Sovies at a glance									

Designed for the HP BladeSystem c-Class enclosure, the HP 6120 series provides an edge switch 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.

HP Virtual Connect Modules



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

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.

$Modules \ and \ accessories, For the most complete \ listing \ of \ modules, transceivers, power options, and other \ accessories, visit \ hp.com/networking.)$

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)

- 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 6120XG Switch CEE License (608074-B21)

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)

- 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)

Data Center Routers



		Height (RU)	Module slots	SDRAM (included/availa	Compact Flash slot	Hardware hot-swap	Routing performance (P	Routing/Switching capa	Routing table size
HP 8800 Router Series									
	HP 8812 Router Chassis (JC150B)	17	12 + 2 slots	2/4 GB	1	Yes	864 million	1.44 Tb/s	3 million entries
	HP 8808 Router Chassis (JC149B)	21	8 + 2 slots	2/4 GB	1	Yes	576 million	960 Gb/s	3 million entries
	HP 8805 Router Chassis (JC148B)	11	5 + 2 slots	2/4 GB	1	Yes	360 million	600 Gb/s	3 million entries

Routers with up to 12 I/O slots, 1.44 Tb/s switching capacity. Series provides carrier-class H-QoS, dynamic routing, MPLS, IPv4/IPv6, multicast, security, and

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

availability. Supports IPv6 and IPv4-to-IPv6 transition technologies.

HP 8800 Router Series at a glance.

HP 8800 Router Series

- 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)

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 (IC135B)
- 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 (IC485A)
- 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

Data Center Routers (continued)

HP HSR6800 Router Series		Height (U)	Moduleslots	Memory Size (default/max)	Compact Flash (include + external)	Hardware hot-swap	Routing performance (MPPS)	Routing table size (entries)
in instance series	HP HSR6802 Router Chassis (JG361A)	2 MPU	2 SAP or 4 HIM, or 8 MIM	4G/4G	1+1	Yes	120	4 million
115 16	HP HSR6804 Router Chassis (JG362A)	2 MPU	4 SAP or 8 HIM, or 16 MIM	4G/4G	1+1	Yes	240	4 million
	HP HSR6808 Router Chassis (JG363A)	2 MPU	1 SF; 8 SAP or 16 HIM, or 32 MIM	4G/4G	1+1	Yes	420	4 million

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 Tb/s 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.)

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 (IC170A)
- 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 VI P DDR3 SDRAM Memory (IG482A)

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)

		Virtual CPUs	Routingperformance	IPSec performance
HP VSR1000 Virtual Services Rou	iter Series			
1	HP VSR1001 Comware 7 Virtual Services Router E-LTU (JG811AAE)	1	183 Kpps (VMware), 133 Kpps (KVM)	1518 bytes (with VMware hypervisor) up to 268 Mb/s
	HP VSR1004 Comware 7 Virtual Services Router E-LTU (JG812AAE)	4	227 Kpps (VMware), 172 Kpps (KVM)	1518 bytes (with VMware hypervisor) up to 580 Mb/s
	HP VSR1008 Comware 7 Virtual Services Router	8	200 Kpps (VMware), 95 Kpps (KVM)	1518 bytes (with VMware hypervisor)

HP VSR1000 Virtual Services Router Series at a glance...

The HP VSR1000 Router Series is a virtualized application that provides advanced router functionality on a virtual machine on an industry-standard x86-based server. The VSR1000 series enables significant operational savings as a result of its agility and ease of deployment. Resources on the VSR1000 series can be dynamically allocated and upgraded on demand as performance requirements grow. In addition, the series provides critical network services associated with today's enterprise routers such as VPN gateway, firewall, and other security and traffic management functions. The VSR1000 series is ideal for deployment scenarios such as enterprise branch CPE routing and cloud offloading of small- to medium-sized workloads.

 $Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP VSR1000 Virtual Services Router Series

This product has no accessories.

Campus-Branch Switches



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
HP 10500 Switch Series										
COMPANY OF THE PARK OF THE PAR	HP 10512 Switch Chassis (JC748A)	18	20			576		576	576	11.5 Tb/s
	HP 10508-V Switch Chassis (JC611A)	20	8			384		384	384	7.7 Tb/s
	HP 10508 Switch Chassis (JC612A)	14	8			384		384	384	7.7 Tb/s
	HP 10504 Switch Chassis (JC613A)	8	4			192		192	192	3.8 Tb/s
10000000	UD 10500 Switch Corios at a glanco									

 $Next-generation\ enterprise\ network\ core\ switches\ setting\ a\ new\ benchmark\ for\ performance, low\ latency, reliability,\ and\ future-proof\ scalability,\ as\ well\ as\ green\ proof\ performance\ performance\$

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.)

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 48-port 10GDE 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 (1C763A)
- 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)

- HP 1030

- 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 000Gbps 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 720Gbps Type A Fab
- 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)
 The state of the s
- 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

Campus-Branch Switches (continued)

FlexCampu

Core/Distribution (continued)

HP 7500 Switch Series

		Height (R	Modules	10/100 p	10/100 Pc	10/100/1	10/100/1	SFP (1001	SFP (1000	10GBASE	Switching
HP 7510 Switch Chas	ssis (JD238B)	16	10+2	480	480	504	480	504	504	84	1.152 Tb/s
HP 7506-V Switch Cl	nassis (JD241B)	21	6+2	288	288	312	288	312	312	52	768 Gb/s
HP 7506 Switch Chas	ssis (JD239B)	13	6+2	288	288	312	288	312	312	52	768 Gb/s
HP 7503-S Switch Ch	assis (JD243B)	4	2+1	96	96	120	116	120	120	16	144 Gb/s
HP 7503 Switch Chas	ssis (JD240B)	10	3+2	144	144	168	144	168	168	28	480 Gb/s
HP 7502 Switch Chas	ssis (JD242B)	4	2+2	96	96	96	96	96	96	16	192 Gb/s
	48-port Gig-T PoE+ Module and 2 XFP ports (JG507A)	10	3+2	144	144	168	144	168	168	28	480 Gb/s
	2 48-port Gig-T PoE+ Modules and 2 XFP ports (JG508A)	13	6+2	288	288	312	288	312	312	52	768 Gb/s
HP 7510 Switch with 768Gbps MPU (JG5	2 48-port Gig-T PoE+ Modules and 09A)	16	10+2	480	480	504	480	504	504	84	1.152 Tb/s

Cost-effective 10-Gigabit Ethernet port density. 10-, 6-, 6-V, 3-, 3-S, and 2-slot switches with up to 1.152 Tb/s 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

ots (max)

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Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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 (IC668A)
- 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)

series has 40G as well as unified wired and wireless capabilities.

HP 7500 4-port 40GbE CFP SC Module (JG373A)

Security module

• HP 7500 Load Balancing Module (JD252A)

- 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)

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)

- 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 248-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)

000 PoE ports (max)

3ASE-FX) (max)

)BASE-X) (max)

(max)

000 ports (max)

oE ports (max)

(max)

- 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 78–83 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 (Gb/s)	Switching capacity/ with v2 modules (Gb/s)
HP 8200 zl Switch Series												
OpenFlow	HP 8212-92G-PoE+/2XG-SFP+ v2 zl Switch with Premium Software (J9639A)	9	12	288	288	288	288	288	288	96	645.6	1123.2
	HP 8212 zl Switch with Premium Software (J9641A)	9	12	288	288	288	288	288	288	96	645.6	1123.2
	HP 8206-44G-PoE+/2XG-SFP+ v2 zl Switch with Premium Software (J9638A)	6	6	144	144	144	144	144	144	48	322.8	561.6
THE REAL PROPERTY.	HP 8206 zl Switch with Premium Software (J9640A)	6	6	144	144	144	144	144	144	48	322.8	561.6
The second second	HP 8200 zl Switch Series at a glance											

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

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 8200 zl Switch Series

- 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 Advanced Services v2 zl Module with HDD (J9857A)
- · HP Advanced Services v2 zl Module with SSD (J9858A)

Power supplies

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

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

HP MSM765zl Mobility Controller (J9370A)

Fan trays

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

Transceivers and cables

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 (ma	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity (Gb/s)	Switching capacity/with v2 modules (Gb/s)
HP 5400 zl Switch Series												
OpenFlow	HP 5412-92G-PoE+/4G-SFP v2 zl Switch with Premium Software (J9540A)	7	12	288	288	288	288	288	288	96	645.6	758.4
	HP 5412-92G-PoE+/2XG-SFP+ v2 zl Switch with Premium Software (J9532A)	7	12	288	288	288	288	288	288	96	645.6	758.4
	HP 5412 zl Switch with Premium Software (J9643A)	7	12	288	288	288	288	288	288	96	645.6	758.4
	HP 5406-44G-PoE+/4G-SFP v2 zl Switch with Premium Software (J9539A)	4	6	144	144	144	144	144	144	48	322.8	379.2
	HP 5406-44G-PoE+/2XG-SFP+ v2 zl Switch with Premium Software (J9533A)	4	6	144	144	144	144	144	144	48	322.8	379.2
	HP 5406 zl Switch with Premium Software (J9642A)	4	6	144	144	144	144	144	144	48	322.8	379.2
	HP 5406 8p 10GBASE-T 8p 10GbE SFP+ v2 zl Switch with Premium Software (J9866A)	4	6	144	144	144	144	144	144	48	322.8	379.2
	HP 5400 zl Switch Series at a glance	·										

$Modules \ and \ accessories (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

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)

connectivity, enterprise-class performance and security, and HP Services zl module integration.

- 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 24-port Gig-1 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 Advanced Services v2 zl Module with HDD (J9857A)
- HP Advanced Services v2 zl Module with SSD (J9858A)

ower supplies

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

EPS/RPS

 $Core, distribution, and advanced access \ layer switch with \ Layer \ 2\ to \ Layer \ 4\ and intelligent \ edge \ feature \ set \ with \ OpenFlow \ support, \ scalable \ 10/100/1000\ and \ 10GbE$

• 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

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
HP 3800 Switch Series											
C-0 -1	HP 3800-48G-PoE+-4SFP+ Switch (J9574A)	1	1				48			4	176 Gb/s
OpenFlow	HP 3800-48G-PoE+-4XG Switch (J9588A)	1	1				48			4	176 Gb/s
e manth	HP 3800-48G-4SFP+ Switch (J9576A)	1	1			48				4	176 Gb/s
The second second second	HP 3800-48G-4XG Switch (J9586A)	1	1			48				4	176 Gb/s
	HP 3800-24G-PoE+-2SFP+ Switch (J9573A)	1	1				24			2	88 Gb/s
	HP 3800-24G-PoE+-2XG Switch (J9587A)	1	1				24			2	88 Gb/s
A COLUMN TWO IS NOT THE OWNER.	HP 3800-24G-2SFP+ Switch (J9575A)	1	1			24				2	88 Gb/s
	HP 3800-24G-2XG Switch (J9585A)	1	1			24				2	88 Gb/s
	HP 3800-24SFP-2SFP+ Switch (J9584A)	1	1						24	2	88 Gb/s

 $Next-generation\ managed\ 1U\ fixed-configuration\ Gigabit\ Ethernet\ switches\ with\ 10G\ uplinks\ and\ meshed\ stacking\ technology.\ With\ Layer\ 2/3/4\ features,$ 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.)

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)

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

Campus-Branch Switches (continued)



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
HP 5500-48G-4SFP HI Switch with 2 Interface Slots (JG312A)	1	2			48 (64)		4 (20)	4 (20)	2 (6)	224 Gb/s
HP 5500-24G-4SFP HI Switch with 2 Interface Slots (JG311A)	1	2			24 (40)		4 (20)	4 (20)	2 (6)	176 Gb/s
HP 5500-24G-PoE+-4SFP HI Switch with 2 Interface Slots (JG541A)	1	2			0 (8)	24	4 (12)		2 (6)	176 Gb/s
HP 5500-48G-PoE+-4SFP HI Switch with 2 Interface Slots (JG542A)	1	2			0 (16)	48	4 (20)	4 (20)	2 (6)	224 Gb/s
HP 5500-24G-SFP HI Switch with 2 Interface Slots (JG543A)	1	2			4		24 (32)	24 (32)	2 (6)	176 Gb/s

HP 5500 HI Switch Series at a glance..

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.

HP 5500 EI Switch Series

HP 5500 HI Switch Series



HP 5500-48G-PoE+ EI Switch with 2 Interface Slots (JG240A)	1	2			48 PoE+	4 (8)	0 (4)	196 Gb/s
HP 5500-48G-PoE+ EI TAA-compliant Switch with 2 Slots (JG253A)	1	2			48 PoE+	4 (8)	0 (4)	196 Gb/s
HP 5500-48G EI Switch with 2 Interface Slots (JD375A)	1	2		48		4 (8)	0 (4)	196 Gb/s
HP 5500-48G EI TAA-compliant Switch with 2 Interface Slots (JG251A)	1	2		48		4 (8)	0 (4)	196 Gb/s
HP 5500-24G-SFP EI TAA-compliant Switch with 2 Interface Slots (JG249A)	1	2		48		4 (8)	0 (4)	196 Gb/s
HP 5500-24G-PoE+ El Switch with 2 Interface Slots (JG241A)	1	2			24 PoE+	4 (8)	0 (4)	144 Gb/s
HP 5500-24G-PoE+ EI TAA-compliant Switch with 2 Slots (JG252A)	1	2			24 PoE+	4 (8)	0 (4)	144 Gb/s
HP 5500-24G-SFP EI Switch with 2 Interface Slots (JD374A)	1	2		8		24 (28	0 (4)	144 Gb/s
HP 5500-24G EI Switch with 2 Interface Slots (JD377A)	1	2		24		4 (8)	0 (4)	144 Gb/s
HP 5500-24G EI TAA-compliant Switch with 2 Interface Slots (JG250A)	1	2		24		4 (8)	0 (4)	144 Gb/s
HP 5500-24G DC El Switch (JD373A)	1	2		24		4 (8)	0 (4)	144 Gb/s

HP 5500 EI Switch Series at a glance...

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/0SPF. 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.)

HP 5500 HI Switch Series

Modules HP 5500/5120 2-port 10GBASE-T Module (JG535A)

- 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 78–83 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 El Switch Series

Modules

- HP 5500/5120 2-port 10GBASE-T Module (JG535A)
- 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

Campus-Branch Switches (continued)



Access (continued)

		Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (r	10/100/1000 ports	10/100/1000 PoE p	SFP (100BASE-FX) (SFP (1000BASE-X) (10GBASE-X (max)	Switching capacity
HP 5500 SI Switch Series											
	HP 5500-48G-PoE+ SI Switch with 2 Interface Slots (JG239A)	1	2				48 PoE+		4 DP—4 (8)	0 (4)*	192 Gb/s
	HP 5500-48G SI Switch with 2 Interface Slots (JD370A)	1	2			48			4 (8)	0 (4)	192 Gb/s
	HP 5500-24G-PoE+ SI Switch with 2 Interface Slots (JG238A)	1	2				24 PoE+		4 DP—4 (8)	0 (4)*	144 Gb/s
	HP 5500-24G SI Switch with 2 Interface Slots (JD369A)	1	2			24			4 (8)	0 (4)	144 Gb/s

HP 5500 SI Switch Series at a glance..

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

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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

orts (max)

(max)

See pages 78–83 for the HP Networking Transceiver Matrix.

(max)

^{*} Using 2 modules

Campus-Branch Switches (continued)



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 (ma	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (max)	Switching capacity
HP 5120 El Switch Series											
	HP 5120-48G-PoE+ El Switch with 2 Interface Slots (JG237A)	1	2				48 PoE+		4 DP—4 (8)	(4)	196 Gb/s
	HP 5120-48G-PoE+ EI TAA-compliant Switch with 2 Slots (JG248A)	1	2				48 PoE+		4 DP—4 (8)	(4)	196 Gb/s
	HP 5120-48G EI Switch with 2 Interface Slots (JE069A)	1	2			48			4 DP—4 (8)	(4)	196 Gb/s
	HP 5120-48G EI TAA-compliant Switch with 2 Interface Slots (JG246A)	1	2			48			4 DP—4 (8)	(4)	196 Gb/s
	HP 5120-48G EI Switch (JE067A)	1				48			4		96 Gb/s
	HP 5120-24G-PoE+ El Switch with 2 Interface Slots (JG236A)	1	2				24 PoE+		4 DP—4 (8)	(4)	144 Gb/s
	HP 5120-24G-PoE+ EI TAA-compliant Switch with 2 Slots (JG247A)	1	2				24 PoE+		4 DP—4 (8)	(4)	144 Gb/s
	HP 5120-24G EI Switch with 2 Interface Slots (JE068A)	1	2			24			4 DP—4 (8)	(4)	144 Gb/s
	HP 5120-24G EI TAA-compliant Switch with 2 Interface Slots (JG245A)	1	2			24			4 DP—4 (8)	(4)	144 Gb/s
	HP 5120-24G El Switch (JE066A)	1				24			4		48 Gb/s
	HP 5120 El Switch Series at a glance										

HP 5120 SI Switch Series



HP 5120-48G SI Switch (JE072A)	1		48		4	104 Gb/s
HP 5120-24G-PoE+ (370W) SI Switch (JG091A)	1			24 PoE+	4	56 Gb/s
HP 5120-24G-PoE+ (170W) SI Switch (JG092A)	1			24 PoE+	4	56 Gb/s
HP 5120-24G SI Switch (JE074A)	1		24		4	56 Gb/s
HP 5120-16G SI Switch (JE073A)	1		16		4	40 Gb/s

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

HP 5120 SI Switch Series at a glance...

Note: DP = Dual-personality ports

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.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 5120 EI Switch Series

Modules

- HP 5500/5120 2-port 10GBASE-T Module (JG535A)
- 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)

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

Transceivers and cables

See pages 78-83 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

Campus-Branch Switches (continued)



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
HP 4200 vl Switch Series											
	HP 4208-96 vl Switch (J8775B)	5	8	192		192		32	32	4 (X2)	76.8 Gb/s
	HP 4208-68G-4SFP vl Switch (J9030A)	5	8	192		192		32	32	4 (X2)	76.8 Gb/s
	HP 4208 vl Switch Chassis (J8773A)	5	8	192		192		32	32	4 (X2)	76.8 Gb/s
	HP 4204-44G-4SFP vl Switch (J9064A)	3	4	96		96		16	16	4 (X2)	38.4 Gb/s
	HP 4204 vl Switch Chassis (J8770A)	3	4	96		96		16	16	4 (X2)	38.4 Gb/s
	HP 4202-72 vl Switch (J8772B)	3	2	120		48		8	8	2 (X2)	33.6 Gb/s
	HP 4200 vl Switch Series at a glance					_					

 $Access layer switch with Layer \ \ 2 \ with Layer \ \ 3 \ static \ IP \ routing feature set, scalable \ 10/100/1000 \ connectivity, and \ 10GbE \ uplinks.$

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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 78–83 for the HP Networking Transceiver Matrix.

HP 3800 Switch Series

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

Campus-Branch Switches (continued)



12.8 Gb/s

Access (continued)

HP 3600

		Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (10/100/1000 ports	10/100/1000 Po E p	SFP (100BASE-FX)	SFP (1000BASE-X)	10GBASE-X (max)	Switching capacity
O El Switch Series											
	HP 3600-48-PoE+ v2 El Switch (JG302B)	1			48 PoE+				4		17.6 Gb/s
	HP 3600-48 v2 EI Switch (JG300A)	1		48					4 (2 DP)		17.6 Gb/s
	HP 3600-24-PoE+ v2 El Switch (JG301B)	1			24 PoE+				4 (2 DP)		12.8 Gb/s
	HP 3600-24-SFP v2 EI Switch (JG303A)	1		24					4 (2 DP)		12.8 Gb/s

HP 3600-24 v2 EI Switch (JG299A) HP 3600 El Switch Series at a glance.

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 Gb/s 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).

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Note: DP = Dual-personality ports

HP 3600 SI Switch Series



HP 3600-48-PoE+ v2 SI Switch (JG307B)	1		48 PoE+		4 (2 DP)	17.6 Gb/s
HP 3600-24-PoE+ v2 SI Switch (JG306B)						
HP 3600-48 v2 SI Switch (JG305A)	1	48			4 (2 DP)	17.6 Gb/s
HP 3600-24 v2 SI Switch (JG304A)	1	24			4 (2 DP)	12.8 Gb/s

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).

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 3600 EI Switch Series

• 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 78–83 for the HP Networking Transceiver Matrix.

HP 3600 SI Switch Series

· HP 3600 Switch SFP Stacking Kit (JD324B)

Power supplies

orts (max)

(max)

4 (2 DP)

(max)

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

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

Transceivers and cables

Campus-Branch Switches (continued)



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
HP 3500 yl Switch Series											
OpenFlow	HP 3500-48G-PoE+ yl Switch (J9311A)	1	1				48		4 DP	4	149.8 Gb/s
-	HP 3500-24G-PoE+ yl Switch (J9310A)	1	1				24		4 DP	4	101.8 Gb/s

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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)

- 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

Campus-Branch Switches (continued)



Access (continued)

HP 3100 El 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
Manage and the same of the sam	HP 3100-48 V2 Switch (JG315A)	1		48					4		17.6 Gb/s
	HP 3100-24-PoE V2 EI Switch (JD313B)	1			24				2 DP		8.8 Gb/s
	HP 3100-24 V2 El Switch (JD320B)	1		24					2 DP		8.8 Gb/s
	HP 3100-8 V2 El Switch (JD318B)	1		8					1 DP		3.6 Gb/s
	HP 3100-16 V2 EI Switch (JD319B)	1		16					2 DP		7.2 Gb/s

HP 3100 El 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

HP 3100 SI Switch Series



HP 3100-24 V2 SI Switch (JG223A)	1	24			2 DP	8.8 Gb/s
HP 3100-16 V2 SI Switch (JG222A)	1	16			2 DP	7.2 Gb/s
HP 3100-8 V2 SI Switch (JG221A)	1	8			1 DP	3.6 Gb/s

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.)

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 78–83 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

Campus-Branch Switches (continued)



Access (continued)

HP 2920 Switch Series		Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoEports (max)	10/100/1000 ports (max)	10/100/1000 PoE ports (m	SFP (100BASE-FX) (max)	SFP (1000BASE-X) (max)	10GBASE-X (тах)	Switching capacity
	HP 2920-24G Switch (J9726A)	1	3			24			4 DP	0 (4)	128 Gb/s
OpenFlow	HP 2920-24G-PoE+ Switch (J9727A)	1	3				24		4 DP	0 (4)	128 Gb/s
	HP 2920-48G Switch (J9728A)	1	3			48			4 DP	0 (4)	176 Gb/s
	HP 2920-48G-PoE+ Switch (J9729A)	1	3				48		4 DP	0 (4)	176 Gb/s
	HP 2920-48G-PoE+ 740W Switch (J9836A)	1	3				48		4 DP	0 (4)	176 Gb/s

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

HP 2915 Switch Series



HP 2915-8-PoE Switch (J9562A)	1			8	2 DP	20 Gb/s

HP 2915 Switch Series 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

$Modules\ and\ accessories\ (For\ the\ most\ complete\ listing\ of\ modules,\ transceivers,\ power\ options,\ and\ other\ accessories,\ visit\ hp.com/networking.)$

HP 2915-8G-PoE Switch

Mounting kit

HP X510 1U Cable Guard (J9700A)

Transceivers and cables

See pages 78–83 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)
- HP 640 EPS/RPS 1m Cable (J9806A)

Power supply

HP 640 External/Redundant Power Supply Shelf (J9805A)

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 X332 1050W 110-240VAC to 54VDC Modular Power Supply (J9837A)

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 X332 1050W 110-240VAC to 54VDC Modular Power Supply (J9837A)

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

- HP X332 575W 100-240VAC to 54VDC Modular Power Supply (J9738A)
- HP X332 1050W 110-240VAC to 54VDC Modular Power Supply (J9837A)

Transceivers and cables

Campus-Branch Switches (continued)



5.6 Gb/s

Access (continued)

		Height (RU)	Module slots (max)	10/100 ports (max)	10/100 PoE ports (ma	10/100/1000 ports (n	10/100/1000 PoE por	SFP (100BASE-FX) (m	SFP (1000BASE-X) (m	10GBASE-X (max)	Switching capacity
HP 2620 Switch Series											
	HP 2620-48-PoE+ Switch (J9627A)	1			48 PoE+	2			2		17.6 Gb/s
	HP 2620-48 Switch (J9626A)	1		48		2			2		17.6 Gb/s
	HP 2620-24-PPoE+ Switch (J9624A)	1		12	12 PoE+	2			2		12.8 Gb/s
	HP 2620-24-PoE+ Switch (J9625A)	1			24 PoE+	2			2		12.8 Gb/s
	HP 2620-24 Switch (J9623A)	1		24		2			2		12.8 Gb/s

HP 2620 Switch Series at a glance..

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.

HP 2615 Switch Series



HP 2615-8-PoE Switch (J9565A)
HP 2615 Switch Series at a glance

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, limited lifetime warranty! (see page 84), and software updates when and if available. Fanless for quiet operation, and compact form factor for wall, surface, or rack mounting.

8

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.)

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 78–83 for the HP Networking Transceiver Matrix.

HP 2615 Switch Series

Mounting kit

HP X510 1U Cable Guard (J9700A)

Transceivers and cables

See pages 78–83 for the HP Networking Transceiver Matrix.

2 DP

Campus-Branch Switches (continued)



Access (continued)

HP 2530 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
	HP 2530-48G-PoE+ Switch (J9772A)	1					48		4		104 Gb/s
	HP 2530-24G-PoE+ Switch (J9773A)	1					24		4		56 Gb/s
	HP 2530-8G-PoE+ Switch (J9774A)	1					8		2 DP		20 Gb/s
A. Dina	HP 2530-48G Switch (J9775A)	1				48			4		104 Gb/s
	HP 2530-24G Switch (J9776A)	1				24			4		56 Gb/s
	HP 2530-8G Switch (J9777A)	1				8			2 DP		20 Gb/s
	HP 2530-48-PoE+ Switch (J9778A)	1			48	2			2		17.6 Gb/s
	HP 2530-24-PoE+ Switch (J9779A)	1			24	2			2		12.8 Gb/s
	HP 2530-8-PoE+ Switch (J9780A)	1			8				2 DP		5.6 Gb/s
	HP 2530-48 Switch (J9781A)	1		48		2			2		17.6 Gb/s
	HP 2530-24 Switch (J9782A)	1		24		2			2		12.8 Gb/s
	HP 2530-8 Switch (J9783A)	1		8					2 DP		5.6 Gb/s

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.

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

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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)

Transceivers and cables

Campus-Branch Switches (continued)



Access (continued)

		Dimensions	10/100BASE-TX ports	10/100/1000BASE-TX ports	RJ-45 pass-through ports	Powered by PoE	PoE forwarding	Managed
HP IntelliJack Gigabit Swi	itch Series							
	HP NJ2000 1Gb IntelliJack Switch (JD057A)	5.1 x 3.2 x 1.6 in. (13 x 8 x 4 cm)		5	2	PoE Enhanced PoE	Yes	Yes

HP IntelliJack Gigabit Switch Series at a glance...

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.

$Modules \ and \ accessories, For the most complete \ listing \ of \ modules, \ transceivers, power options, \ and \ other \ accessories, \ visit \ hp.com/networking.)$

HP IntelliJack Gigabit Switch Series

Power supplies

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

Mounting kit

HP NJ1000/2000 IntelliJack Desktop Stand (JD056A)

Routers



Routers

HP HSR6800 Router Series

Refer to the FlexFabric — Data Center Routers—on page 16.

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

 $The HP HSR6600 \, Router \, Series \, is \, made \, up \, of \, high-performance \, WAN \, routers \, that \, are \, ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, that \, are ideal \, for \, small-to-medium \, campus \, WAN \, edge/aggregation \, and \, high-end \, branch \, routers \, router$ 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.)

HP HSR6600 Router Series

Power supplies

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

• 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)

HP X610 2G VLP DDR3 SDRAM Memory (JG482A)

Routers (continued)



2 million entries

1 million entries

		Height (U)	Module slots	Compact Flash slot	Hardware hot-swap	Routing performance (PPS)	Routing table size
HP 6600 Router Series							
	HP 6616 Router Chassis (JC496A)	20	16 HIM	1	Yes	Up to 252 million	2 million entries
	HP 6608 Router Chassis (JC177B)	7	8 HIM	1	Yes	Up to 108 million	2 million entries

5

1

HP 6600 Router Series at a glance...

HP 6604 Router Chassis (JC178B)

HP 6602 Router (JC176A)

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.

4 НІМ

2 HIM

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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)

Yes

- 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)

Up to 36 million

4.5 million

- 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)

Wireless



UD SOO Series Unified Controlle d M = d .. l a

HP 800 Series Unified Controllers	s and Module								
		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
HP 870 Unified Wired-WLAN Switch	h Series								
550/444/1957/	HP 870 Unified Wired-WLAN Appliance (JG723A)	24	0	256	1536	Yes	Yes	Yes	1:1, N+1, N+N
	HP 870 Unified Wired-WLAN TAA-compliant Appliance (JG725A)	24	0	256	1536	Yes	Yes	Yes	1:1, N+1, N+N
	The second term of the second								

HP 870 Unified Wired-WLAN Switch Series at a glance...

The IEEE 802.11ac-ready HP 870 Unified Wired-WLAN Appliance and TAA-compliant version deliver enterprise-scale features, capacity, and high reliability, as well as substantial data processing capacity for wireless networks

HP 830 Unified Wired-WLAN Switch S



i Jerres								
HP 830 24-Port PoE+ Unified Wired-WLAN Switch (JG640A)	24	4	24	60	Yes	Yes	Yes	N+1, N+N
HP 830 8-Port PoE+ Unified Wired-WLAN Switch (JG641A)	8		12	24	Yes	Yes	Yes	N+1, N+N
HP 830 24-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG646A)	24	1	24	60	Yes	Yes	Yes	N+1, N+N
HP 830 8-Port PoE+ Unified Wired-WLAN TAA-compliant Switch (JG647A)	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.

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

HP 870 Unified Wired-WLAN/WLAN TAA-compliant Switch Series

Power supplies

- HP X351 300W 100-240VAC to 12VDC Power Supply (JG527A)
- HP Unified Wired-WLAN 32 AP E-LTU (JG774AAE)
- HP Unified Wired-WLAN 128 AP E-LTU (JG649AAE)
- HP Unified Wired-WLAN 128 AP Redundant E-LTU (JG902AAE)

- 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 X110 100M SFP LC LH40 Transceiver (JD090A)
- 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 X110 100M SFP LC FX Transceiver (JD102B)
- HP X120 1G SEP LC SX Transceiver (JD118B)
- HP X120 1G SFP LC LX Transceiver (JD119B)
- HP X110 100M SFP LC LX Transceiver (JD120B)
- HP X130 10G SFP+ LC ER 40km Transceiver (JG234A)

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 38).

Wireless (continued)



HP 800 Series Unified Controllers and Module (continued)

HP 800 Series Unified Controlle	rs and Module (continued)								
		10/100/1000	PoE/PoE+ (IEEE 802.3af/at) ports	AP managed (Std)	APs managed (max)	Layer 3 roaming support	Fastroamingsupport	Embedded server for authentication	Redundancy support
HP 10500/7500 Unified Wired-WI	LAN Modules								
	HP 10500/7500 20G Unified Wired-WLAN TAA-compliant Module (JG645A)			128	1024	Yes	Yes	Yes	1+1, N+1, N+N
	HP 10500/7500 20G Unified Wired-WLAN Module (JG639A)			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.)

HP 10500/7500 Unified Wired-WLAN Modules

HP Unified Wired-WLAN 32 AP E-LTU (JG774AAE) HP Unified Wired-WLAN 128 AP E-LTU (JG649AAE) HP Unified Wired-WLAN 128 AP Redundant E-LTU (JG902AAE)

Wireless (continued)



l antennas (optional)

lantennas (standard)

.11a/b/g/n

Access Points Series

	10/100/1	PoE/PoE ports	Number	Virtual A (max)	Wireless (WDS) Br	Wi-Fi cer	IEEE 802	Internal	External
Point Series									
HP MSM466 Dual Radio 802.11n Access Point (WW) (J9622A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466 Dual Radio 802.11n Access Point (TAA) (J9656A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466 Dual Radio 802.11n Access Point (AM) (J9621A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466 Dual Radio 802.11n Access Point (JP) (J9620A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466 Dual Radio 802.11n AP (IL) (J9619A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466-R Dual Radio 802.11n AP (AM) (J9715A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466-R Dual Radio 802.11n AP (WW) (J9716A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466-R Dual Radio 802.11n AP (JP) (J9717A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + a/b/g/n	0	6
HP MSM466-R Single Radio 802.11n AP (IL) (J9718A) [Note: Due to Israeli regulations, only 2.4 GHz can be used outdoors.]	1	1	450 Mb/s	16	Yes	Yes	b/g/n	0	3
HP MSM460 Dual Radio 802.11n Access Point (WW) (J9591A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM460 Dual Radio 802.11n Access Point (TAA) (J9655A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM460 Dual Radio 802.11n Access Point (AM) (J9590A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM460 Dual Radio 802.11n Access Point (JP) (J9589A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM460 Dual Radio 802.11n Access Point (IL) (J9618A)	1	1	2 (450 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM430 Dual Radio 802.11n Access Point (WW) (J9651A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM430 Dual Radio 802.11n Access Point (TAA) (J9654A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM430 Dual Radio 802.11n Access Point (AM) (J9650A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM430 Dual Radio 802.11n Access Point (JP) (J9652A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0
HP MSM430 Dual Radio 802.11n Access Point (IL) (J9653A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	6	0

:+ (IEEE 802.3af/at)

1000

s Distribution System

AP/multiple SSID

MSM466-R Dual Radio Outdoor

MSM466 Dual Radio Access Point with external antennas

HP MSM 802.11n Dual Radio Acces



dilla di A

802.11n Access Point

MSM460 Dual Radio **Access Point**



MSM430 Dual Radio **Access Point**

The access points (MSMAPs) bring intelligence to the network edge, providing scalable, seamless, secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access points (MSMAPs) and the secure wireless access from more places, anytime, either access from more places, anytime, either access from the secure wireless from the secure wireless access from the secure wireless from theautonomously or centrally controlled by HP wireless controllers (MSM controllers and HP 800 Series Unified Controllers and Module). 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 Mb/s 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.

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

HP MSM 802.11n Dual Radio Access Point Series

Power supply HP 1-port Power Injector (J9407B)

Adapter

Optional HP 501 Wireless Client Bridge (J9835A)

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)
- HP Single-Port 802.3at Gig PoE In-Line Power Supply (J9867A)

Wireless (continued)



Access Points Series (continued)

		10/100/1000	PoE/PoE+(IEEE802.3a ports	Number of radios	Virtual AP/multiple SS (max)	Wireless Distribution (WDS) Bridging	Wi-Fi certification	IEEE 802.11a/b/g/n/ac	Internal antennas (sta	External antennas (op
HP 560 802.11ac Dual Radi	o Access Point Series									
/ III	HP 560 Wireless Dual Radio 802.11ac (AM) Access Point (J9845A)	1	1	2 (450 Mb/s) + 1300 Mb/s	32	Yes	Yes	a/n/ac + b/g/n	6	0
	HP 560 Wireless Dual Radio 802.11ac (WW) Access Point (J9846A)	1	1	2 (450 Mb/s) + 1300 Mb/s	32	Yes	Yes	a/n/ac + b/g/n	6	0
	HP 560 Wireless Dual Radio 802.11ac (JP) Access Point (J9847A)	1	1	2 (450 Mb/s) + 1300 Mb/s	32	Yes	Yes	a/n/ac + b/g/n	6	0
	HP 560 Wireless Dual Radio 802.11ac (IL) Access Point (J9848A)	1	1	2 (450 Mb/s) + 1300 Mb/s	32	Yes	Yes	a/n/ac + b/g/n	6	0

HP 560 802.11ac Dual Radio Access Point Series at a glance...

The HP 560 access points bring high-speed IEEE 802.11ac (1300 Mb/s) intelligence to the network edge, providing scalable, seamless, secure wireless access from more places anytime—centrally controlled by HP wireless controllers (HP 800 Series Unified Controllers and Module). These 3x3:3 MIMO access points support 450 Mb/s at 2.4 GHz and 1300 Mb/s at 5 GHz.

af/at)

HP 425 802.11n Dual Radio Access Point Series



oint Series									
HP 425 Wireless Dual Radio 802.11n (AM) Access Point (JG653A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4
HP 425 Wireless Dual Radio 802.11n (WW) Access Point (JG654A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4
HP 425 Wireless Dual Radio 802.11n (JP) Access Point (JG655A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4
HP 425 Wireless Dual Radio 802.11n (IL) Access Point (JG656A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4
HP 425 Wireless Dual Radio 802.11n (AM) 8 unit Eco-pack Access Points (JG687A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4
HP 425 Wireless Dual Radio 802.11n (WW) 8 unit Eco-pack Access Points (JG688A)	1	1	2 (300 Mb/s)	32	Yes	Yes	a/n + b/g/n	4	4

HP 425 802.11n Dual Radio Access Point Series at a glance...

The HP 425 access points bring high performance and a low-entry price to the cost-sensitive customer. They also deliver IEEE 802.11n (300 Mb/s) intelligence to the network edge, providing scalable, seamless, secure wireless access from more places anytime—centrally controlled by HP wireless controllers (HP 800 Series Unified Controllers and Module). These 2x2:2 MIMO access points support 300 Mb/s at 2.4 GHz and 300 Mb/s at 5 GHz.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 560 802.11ac Dual Radio Access Point Series

Power supplies

- HP 1-port Power Injector (J9407B)
- HP Single-Port 802.3at Gigabit PoE In-Line Power Supply (J9867A)

HP 425 802.11n Dual Radio Access Point Series

Power supplies

- HP 1-port Power Injector (J9407B)
- HP Gigabit IntelliJack 48V Power Supply (JD055B)

External antenna

 HP Indoor Omnidirectional Dual Band 2.5/6dBi MIMO 4 Element Antenna (JG696A)

Wireless (continued)



Access Points Series (conti	nued)	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/ac	Internal antennas (standard)	External antennas (optional)
HP MSM 802.11n Access Point	t Series HP MSM410 Access Point WW (J9427B)	1	1	300 Mb/s	16 SSIDs	Yes	Yes	a/b/g/n	3	
	HP MSM410 Access Point US (J9426B)	1	1	300 Mb/s	16 SSIDs	Yes	Yes	a/b/g/n	3	
1	HP MSM410 Access Point JP (J9529B)	1	1	300 Mb/s	16 SSIDs	Yes	Yes	a/b/g/n	3	
M. M.	HP MSM410 Access Point IL (J9616A)	1	1	300 Mb/s	16 SSIDs	Yes	Yes	a/b/g/n	3	
	HP MSM 802.11n Access Point Series at a glance Full-n-speed access points with legacy a/b/g suppowell as in autonomous mode.		t IEEE 802.3	af PoE with full 3	3x3 MIMO. The	MSM410 se	eries work	s with the M	SM contro	ollers as

HP MSM317 Access Device Series



HP MSM317 Access Device US (J9422A)	4 (10/100) 1 pass-through	1	54 Mb/s	16 SSIDs	Yes	b/g	2	
HP MSM317 Access Device WW (J9423A)	4 (10/100) 1 pass-through	1	54 Mb/s	16 SSIDs	Yes	b/g	2	

HP MSM317 Access Device Series at a glance...

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.)

HP MSM 802.11n Access Point Series

Power supply

• HP 1-port Power Injector (J9407B)

Adapter

Optional HP 501 Wireless Client Bridge (J9835A)

HP MSM317 Access Device Series

Power supply

HP 1-port Power Injector (J9407B)

Wireless (continued)

HP MultiService (MSM) Controller S



edundancy support

MSM Controller Series

	7	2 2	¥	¥	۳	E.	교 편	ž
Series								
HP MSM775 zl Premium Controller Module (J9840A)	2 (10GbE)		40	200¹	Yes	Yes	Yes	Yes¹
HP MSM765zl Mobility Controller (J9370A)	2 (10GbE)		40	200¹	Yes	Yes	Yes	Yes¹
HP MSM760 Mobility Controller (J9420A)	2 (1GbE)		40	200¹	Yes	Yes	Yes	Yes¹
HP MSM760 Access Controller (J9421A)	2 (1GbE)		40	200¹	Yes²	Yes	Yes	Yes ^{1,2}
HP MSM720 Premium Mobility Controller (WW) (J9694A) ³	4 (1GbE); 2 DP		10	404	Yes	Yes	Yes	Yes ⁴
HP MSM720 Access Controller (WW) (J9693A) ³	4 (1GbE); 2 DP		10	404	Yes²	Yes	Yes	Yes ^{2,4}

oE/PoE+ (IEEE 802.3af/at)

)/100/Gigabit/10G ports

HP MultiService (MSM) Controller Series at a glance.

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

- 1 Up to 5 MSM760 or MSM765 or MSM765 Premium Mobility Controllers (a team must consist of the same product type) can be teamed to support up to 800 APs in a redundant configuration through a single management interface.
- ² With Premium Mobility controller upgrade.
- ³ TAA SKU is available for this product.
- 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.)

HP MultiService (MSM) Controller Series

HP MSM765 zl (J9370A) and MSM775 zl (J9840A) **Premium Mobility Controllers**

- HP MSM Additional 10 Access Point E-LTU (J9697AAE)
- HP MSM Additional 40 Access Point E-LTU (J9371AAE)

HP MSM760 Premium Mobility Controller (J9420A)

- HP MSM Additional 10 Access Point E-LTU (J9697AAE)
 HP MSM Additional 40 Access Point E-LTU (J9371AAE)

HP MSM760 Access Controller (J9421A)

- HP MSM760 Premium E-LTU (J9491AAE)
- HP MSM Additional 10 Access Point E-LTU (J9697AAE) HP MSM Additional 40 Access Point E-LTU (J9371AAE)
- HP MSM720 Premium Mobility Controller (WW) (J9694A)

HP MSM Additional 10 Access Point E-LTU (J9697AAE)

HP MSM720 Access Controller (WW) (J9693A)

- HP MSM720 Premium E-LTU (J9698AAE)
- HP MSM Additional 10 Access Point E-LTU (J9697AAE)

Transceivers and cables

 HP X121 1G SFP LC SX Transceiver (J4858C) HP X121 1G SFP LC LX Transceiver (J4859C)

yer 3 roaming support

managed (max)

managed (std)

ast roaming support

mbedded server for uthentication

- 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)

Wireless (continued)



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/ac	Internal antennas (standard)
Mobility Integrated Service	es Access Point Series								
Mobility integrated Service		2 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	0
Modificy integrated Service	HP MSM313 Access Point WW (J9350B)	2 (10/100)	1	1 (0/0/9/	10 33103	103		-, -, 5	0
Mobility integrated Service	HP MSM313 Access Point WW (J9350B) HP MSM313 Access Point US (J9346B)	2 (10/100)	1	1 (a/b/g)	16 SSIDs	Yes	Yes	a/b/g	0

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

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

The "WW" model is for all locations outside the United States.

- 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 501 Wireless Client Bridge (J9835A)

FlexCampus

FlexBranch

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/ac	Internal antennas (standard)	External antennas (optional)
HP 501 Wireless Client Bridge	e Series									
	HP 501 Wireless Client Bridge (J9835A)	1	1	1 (1300 Mb/s)			Yes	a/n/g/n/ ac	0	3
A										



HP 501 Wireless Client Bridge Series at a glance..

The HP 501 Wireless Client Bridge has a dual-band 802.11a/b/g/n/ac radio and bridges an Ethernet client or LAN segment to an infrastructure via any IEEE 802.11 wireless access point. The 501 wireless bridge can be used to bridge devices such as Ethernet workstations, point-of-sale terminals, medical equipment, and printers that do not have a Wi-Fi radio built in across a secure wireless connection via IEEE 802.1X authentication and up to WPA2 security.

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

HP 501 Wireless Client Bridge Series

Power supplies

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

External antennas

- HP Antenna Lightning Arrester (J8996A)
- HP Outdoor Omnidirectional 6dBi at 2.4GHz MIMO 3 Element Antenna (J9719A)
- · HP Outdoor Omnidirectional 8dBi at 5GHz MIMO 3 Element Antenna (J9720A)
- HP Indoor-Outdoor Point-to-Point Dual Band 10/13dBi MIMO 3 Element Antenna (J9170A)

Wireless (continued)



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 (standa	External antennas (option	
HP RF Manager Mobility Security	IDS/IPS System Series										
	HP MSM415 RF Security Sensor (J9522A)	1 (1GbE)	1	1				a, b, g, n	3	No	
	HP RF Manager for VMware 50 Sensor E-LTU (J9838AAE)				50	250		a, b, g, n			

HP RF Manager Mobility Security IDS/IPS System Series at a glance...

 $802.11a/b/g/n\ sensor, a\ highly\ scalable\ WIPS\ manager, and\ site\ planning\ software\ protect\ the\ network\ and\ users\ from\ unauthorized\ wireless\ access\ 24x7,$ enforce comprehensive wireless and "no-wireless" policies, and provide extensive compliance reporting.

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

HP RF Manager Mobility Security IDS/IPS System Series

Supported sensors

HP MSM415 RF Security Sensor (J9522A)

- 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)
HP RF Planner										
	HP RF Planner (J9400A)							a, b, g, n		

 $HP\ RF\ Planner\ accurately\ models\ WLAN\ coverage\ by\ factoring\ in\ variables\ such\ as\ physical\ features,\ building\ materials,\ and\ WLAN\ equipment\ characteristics.\ It\ also\ provides\ that\ the provides\ provides$ facilitates deployment by assessing security risks and generating equipment lists.

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

This product has no modules or accessories.

Switches

Wireless



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 El 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 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 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 Switch Series

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

HP 2530 Switch Series

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

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 36.

HP MSM 802.11n Dual Radio Access Point Series

Refer to FlexCampus — Wireless—on page 38.

HP 560 802.11ac Dual Radio Access Point Series

Refer to FlexCampus — Wireless—on page 39.

HP MSM 802.11n Access Point Series

Refer to FlexCampus — Wireless—on page 40.

HP MSM317 Access Device Series

Refer to FlexCampus — Wireless—on page 40.

HP MultiService (MSM) Controller Series

Refer to FlexCampus — Wireless—on page 41.

Standalone Wireless

HP Mobility Integrated Services Access Point Series

Refer to FlexCampus — Wireless—on page 42.

Adapters

HP 501 Wireless Client Bridge Series

Refer to FlexCampus — Wireless—on page 42.

Wireless Security

HP RF Manager Mobility Security IDS/IPS System Series

Refer to FlexCampus — Wireless—on page 43.

Wireless RF Planning

HP RF Planner

Refer to FlexCampus — Wireless—on page 43.

Routers



HP MSR4000 Router Series		Height (RU)	Moduleslots	Included ports	USB ports	SDRAM (Included/ Available)	Compact Flash (Internal fixed)	Compact Flash slot	Power supply slots	Routing performance (PPS)	IPSec throughput (bps)
ands I made	HP MSR4080 Router Chassis (JG402A)	5	2 main processing unit (MPU) slots 1 service processing unit						4		
			(SPU) slot 8 HMIM slots								
	HP MSR4060 Router Chassis (JG403A)	4	2 main processing unit (MPU) slots						4		
			1 service processing unit (SPU) slot								
			6 HMIM slots								
	HP MSR4000 MPU-100 Main Processing Unit (JG412A)	1		1 GE management port		2 GB/4 GB	512 MB	1			
	HP MSR4000 SPU-100 Service Processing Unit (JG413A)	1		4 GE (Combo)	2	2 GB				10 M	3.8 G
	HP MSR4000 SPU-200 Service Processing Unit (JG414A)	1		4 GE (Combo), (1) 10 GE SFP+	2	2 GB				20 M	8 G
	UD MCD4000 Dawton Contract of										

HP MSR4000 Router Series at a glance...

The HP MSR4000 Router Series features a modular design that delivers unmatched application services for extra-large branch offices, headquarters, and campuses while reducing complexity, and simplifying configuration, deployment, and management. The MSR4000 router series provides a full-featured, resilient routing platform, including IPv6 and MPLS, up to 20 Mpps forwarding capacity, and 8 Gbps of IPSec VPN encrypted throughput. The MSR4000 router series leverages separated data and control planes, dual main processing units (MPUs), and support for up to four power supplies, which provides outstanding performance and reliability.

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

HP MSR4000 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 Auxiliary Router Cable (JD508A)
- HP X260 E1 RJ45 3m Router Cable (JD509A)
- HP X260 E1 RJ45 20m Router Cable (JD517A) HP X260 E1 (2) BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 E1 2 BNC 75 ohm 40m Router Cable (JD516A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)
- HP X260 T1 Router Cable (JD518A)
- HP X260 T1 Voice Router Cable (JD535A)
- HP X260 8E1 BNC 75 ohm 3m Router Cable (JD512A)
- HP X260 T3/E3 Router Cable (JD531A)
- HP X260 E3-30 E3/T3 Router Cable (JD533A)

Power supplies

HP X351 300W 100-240VAC to 12VDC Power Supply (JG527A)

Router modules

- HP MSR4000 MPU-100 Main Processing Unit (JG412A)
- HP MSR4000 SPU-100 Service Processing Unit (JG413A)
- HP MSR4000 SPU-200 Service Processing Unit (JG414A)
- HP MSR G2 128-channel Voice Processing Module (JG417A)
- HP MSR 1-port E1 Voice HMIM Module (JG429A)
- HP MSR 2-port E1 Voice HMIM Module (JG431A)
- HP MSR 1-port T1 Voice HMIM Module (JG430A)
- HP MSR 4-port FXS HMIM Module (JG446A)
- HP MSR 4-port FXO HMIM Module (JG447A)
- HP MSR 4-port E and M HMIM Module (JG448A) · HP MSR 4-port Enhanced Sync / Async Serial HMIM Module (JG442A)
- · HP MSR 8-port Enhanced Sync / Async Serial HMIM Module (JG443A)
- · HP MSR 2-port E1 / CE1 / PRI HMIM Module (JG450A)
- HP MSR 4-port E1 / CE1 / PRI HMIM Module (JG451A)
- HP MSR 4-port E1 / Fractional E1 HMIM Module (JG453A)
- HP MSR 8-port E1 / CE1 / PRI (75ohm) HMIM Module (JG452A) • HP MSR 2-port T1 / CT1 / PRI HMIM Module (JG456A)
- HP MSR 4-port T1 / Fractional T1 HMIM Module (JG457A)
- HP MSR 1-port E3 / CE3 / FE3 HMIM Module (JG436A)
- HP MSR 1-port T3 / CT3 / FT3 HMIM Module (JG435A)

- HP MSR 1-port OC-3c / STM-1c POS HMIM Module (JG438A)
- HP MSR 0.5U HMIM Adapter Module (JG415A)
- HP MSR 1U HMIM Adapter Module (JG416A)

Memory

- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X600 256M Compact Flash Card (JC686A)
- HP X610 2GB DDR3 SDRAM UDIMM Memory (JG529A)
- HP X610 4GB DDR3 SDRAM UDIMM Memory (JG530A)

Routers (continued)



		Height (RU)	Module s lots	Included ports	USB ports	SDRAM (Included/ Available)	Compact Flash (Internal fixed)	Compact Flash slot	Power supply slots	Routing performance (PPS)	IPSec throughput (bps)
HP MSR3000 Router Series											
	HP MSR3012 AC Router (JG409A)	1	1 HMIM slot 2 SIC slots 1 VPM slot	3 GE (1 Combo)	1	1 GB	256 MB	0		2.6 M	1.9 G
	HP MSR3024 AC Router (JG406A)	1	2 HMIM slots 4 SIC slots or 2 DSIC slots 1 VPM slot	3 GE (1 Combo)	1	2 GB/ 4 GB	256 MB	1		2.6 M	1.9 G
	HP MSR3044 Router (JG405A)	2	4 HMIM slots 4 SIC slots or 2 DSIC slots 2 VPM slots	3 GE (2 Combo)	2	2 GB/ 4 GB	256 MB	1	2	3.5 M	1.9 G
	HP MSR3064 Router (JG404A)	3	6 HMIM slots 4 SIC slots or 2 DSIC slots 2 VPM slots	3 GE (2 Combo)	2	2 GB/ 4 GB	256 MB	1	2	5 M	3.3 G
	HP MSR3024 TAA-compliant AC Router (JG861A)	1	2 HMIM slots 4 SIC slots or 2 DSIC slots 1 VPM slot	3 GE (1 Combo)	1	2 GB/ 4 GB	256 MB	1		2.6 M	1.9 G
	HP MSR3000 Router Series at a glance										

and helps reduce capital and operating expenses. The MSR3000 series routers also support HP Open Application Platform (OAP) modules to deliver integrated industry-leading HP AllianceOne partner applications such as virtualization, UC&C, and application optimization capabilities

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

HP MSR3000 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 Auxiliary Router Cable (JD508A)
- HP X260 E1 RJ45 3m Router Cable (JD509A)
- HP X260 E1 RJ45 20m Router Cable (JD517A)
- HP X260 E1 (2) BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 E1 2 BNC 75 ohm 40m Router Cable (JD516A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)
- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 8E1 BNC 75 ohm 3m Router Cable (JD512A)
- HP X260 T1 Router Cable (JD518A)
- HP X260 T1 Voice Router Cable (JD535A)
- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)
- HP X260 T3/E3 Router Cable (JD531A)
- HP X260 E3-30 E3/T3 Router Cable (JD533A)
- HP X200 Transit Plug D25F MP8(S) Single Cable (JD636A)
- HP X200 Transit RJ45 0.5m Single Cable (JD641A)

Power supplies

- · HP RPS 800 Redundant Power Supply (JD183A)
- HP X351 300W 100-240VAC to 12VDC Power Supply (JG527A)

The HP MSR3000 router series features a modular design that delivers unmatched application services for medium- to large-sized branch offices while reducing complexity, and simplifying configuration, deployment, and management. The MSR3000 router series provides a full-featured, resilient routing platform, including IPv6 and MPLS, up to 5 Mpps forwarding capacity, and 3.3 Gb/s of IPSec VPN encrypted throughput. The MSR3000 router series offers lasting investment protection

Router modules

- HP MSR 9-port 10/100Base-T Switch DSIC Module (JD574B)
- HP MSR 4-port 10/100Base-T Switch SIC Module (JD573B)
- 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 1-port E1 Voice SIC Module (JD575A) • HP MSR 1-port T1 Voice SIC Module (JD576A)
- HP MSR 2-port FXS/1-port FXO SIC Module (JD632A)
- HP MSR 4-port FXS / 1-port FXO DSIC Module (JG189A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 1-port Enhanced Serial SIC Module (JD557A) HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 16-port Async Serial SIC Module (JG186A)
- HP MSR HSPA/WCDMA SIC Module (JG187A)
- HP MSR 1-port E1 Voice HMIM Module (JG429A)
- HP MSR 1-port T1 Voice HMIM Module (JG430A)
- HP MSR 2-port E1 Voice HMIM Module (JG431A) HP MSR 4-port FXS HMIM Module (JG446A)
- HP MSR 4-port FXO HMIM Module (JG447A)

- HP MSR 4-port E and M HMIM Module (JG448A)
- HP MSR 4-port Enhanced Sync / Async Serial HMIM Module (JG442A)
- HP MSR 8-port Enhanced Sync / Async Serial HMIM Module (JG443A)
- HP MSR 2-port E1 / CE1 / PRI HMIM Module (JG450A)
- HP MSR 4-port E1 / CE1 / PRI HMIM Module (JG451A)
- · HP MSR 4-port E1 / Fractional E1 HMIM Module (JG453A)
- HP MSR 8-port E1 / CE1 / PRI (75ohm) HMIM Module (JG452A)
- HP MSR 2-port T1 / CT1 / PRI HMIM Module (JG456A)
- HP MSR 4-port T1 / Fractional T1 HMIM Module (JG457A)
- HP MSR 1-port E3 / CE3 / FE3 HMIM Module (JG436A)
- HP MSR 1-port T3 / CT3 / FT3 HMIM Module (JG435A)
- HP MSR 1-port OC-3c / STM-1c POS HMIM Module (JG438A)
- HP MSR G2 128-channel Voice Processing Module (JG417A)
- HP MSR 1U HMIM Adapter Module (JG416A)
- HP MSR 0.5U HMIM Adapter Module (JG415A)

Power cord

HP X290 MSR30 1m RPS Cable (JD637A)

Memory

- HP X600 1G Compact Flash Card (JC684A)
- HP X600 512M Compact Flash Card (JC685A)
- HP X600 256M Compact Flash Card (JC686A)
- HP X610 2GB DDR3 SDRAM UDIMM Memory (JG529A)
- HP X610 4GB DDR3 SDRAM UDIMM Memory (JG530A)

Routers (continued)



HP MSR2000 Router Series		Height (RU)	Module slots	Included ports	USB ports	SDRAM (Included/ Available)	Compact Flash (Internal fixed)	Compact Flash slot	Power supply slots	Routing performance (PPS)	IPSec throughput (bps)
	HP MSR2003 AC Router (JG411A)	1	3 SIC slots or 1 DSIC slot and 1 SIC slot	2 GE WAN	1	1 GB	256 MB	0		1 M	400 M

HP MSR2000 Router Series at a glance...

The HP MSR2000 router series features a modular design that delivers unmatched application services for small- to medium-sized branch offices while reducing $complexity, and simplifying \ configuration, deployment, and \ management. \ The \ MSR2000 \ router series \ provides \ a full-featured, resilient \ routing \ platform, including \ platform, inclu$ Telephone and reliable routing, switching, SIP/voice, 3G/4G WAN, and security services all in one device.

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

HP MSR2000 Router Series

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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 Auxiliary Router Cable (JD508A)
- HP X260 E1 (2) BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 E1 BNC 20m Router Cable (JD514A)

- HP X260 E1 2 BNC 75 ohm 40m Router Cable (JD516A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)
- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 T1 Router Cable (JD518A)
- HP X260 T1 Voice Router Cable (JD535A)
- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)

Router modules

- HP MSR 9-port 10/100Base-T Switch DSIC Module (JD574B)
- HP MSR 4-port 10/100Base-T Switch SIC Module (JD573B)
- 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 2-port FXS/1-port FXO SIC Module (JD632A)
- HP MSR 4-port FXS / 1-port FXO DSIC Module (JG189A)
- HP MSR 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A)
- HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 1-port Enhanced Serial SIC Module (JD557A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 16-port Async Serial SIC Module (JG186A) HP MSR HSPA/WCDMA SIC Module (JG187A)

Routers (continued)



		Height (RU)	Module slots	Included ports	USB ports	SDRAM (Included/ Available)	Compact Flash (Internal fixed)	Compact Flash slot	Power supply slots	Routing performance (PPS)	IPSecthroughput (bps)
HP MSR1000 Router Series											
	HP MSR1003-8 AC Router (JG732A)	1	3 SIC slots or 1 DSIC slot and 1 SIC slot	2 GE WAN, 8 GE LAN	1	512 MB	256 MB	0		500 Kpps	190 M

HP MSR1000 Router Series at a glance...

The HP MSR1000 router series is a next-generation modular multiservices router designed to deliver unmatched application performance for small-sized branch offices. The MSR1000 series provides a flexible multiservice end point for small branch/office or departmental end points that quickly adapts to changing business requirements while delivering integrated, concurrent services on a single, easy-to-manage platform.

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

HP MSR1000 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 Auxiliary Router Cable (JD508A)
- HP X260 E1 RJ45 3m Router Cable (JD509A)
- HP X260 E1 2 BNC 75 ohm 40m Router Cable (JD516A)
- HP X260 E1 (2) BNC 75 ohm 3m Router Cable (JD175A)
- HP X260 E1 BNC 20m Router Cable (JD514A)
- HP X260 E1 RJ45 BNC 75-120 ohm Conversion Router Cable (JD511A)

- HP X260 2E1 BNC 3m Router Cable (JD643A)
- HP X260 T1 Voice Router Cable (JD535A)
- HP X260 T1 Router Cable (JD518A)
- HP X260 SIC-8AS RJ45 0.28m Router Cable (JD642A)
- HP X260 E1 RJ45 20m Router Cable (JD517A)
- HP X260 mini D-28 to 4-RJ45 0.3m Router Cable (JG263A)

Mounting kit

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

Router modules

- HP MSR 9-port 10/100Base-T Switch DSIC Module (JD574B)
- HP MSR 4-port 10/100Base-T Switch SIC Module (JD573B)
- HP MSR 1-port GbE Combo SIC Module (JD572A)
- HP MSR 1-port 10/100Base-T SIC Module (JD545B)
- HP MSR 1-port 100Base-X SIC Module (JF280A)
- 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 2-port ISDN-S/T Voice SIC Module (JF821A)
- HP MSR 1-port ADSL2+ SIC Module (JD537A)
- HP MSR 1-port ADSL over ISDN SIC Module (JG056B)
- HP MSR 1-port 8-wire G.SHDSL (RJ45) DSIC Module (JG191A)
- HP MSR 1-port E1/Fractional E1 (75ohm) SIC Module (JD634B)
- HP MSR 2-port E1/Fractional E1 (75ohm) SIC Module (JF842A) • HP MSR 1-port T1/Fractional T1 SIC Module (JD538A)
- HP MSR 1-port Enhanced Serial SIC Module (JD557A)
- HP MSR 1-port ISDN-S/T SIC Module (JD571A)
- HP MSR 16-port Async Serial SIC Module (JG186A)
- HP MSR 8-port Async Serial SIC Module (JF281A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (JF819A)
- HP MSR 802.11b/g/n Wireless Access Point SIC Module (NA) (JG211A)
- HP MSR 1-port E1/CE1/PRI SIC Module (JF253B)
- HP MSR 4-port FXS / 1-port FXO DSIC Module (JG189A)
- HP MSR HSPA/WCDMA SIC Module (JG187A)

HP VSR1000 Virtual Services Router Series

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

Routers (continued)



		Height (RU)	Module slots	Included ports	USB ports	SDRAM (included/ available)	Routing performance (PPS)	Flash
HP MSR93x Router Series								
	HP MSR930 Router (JG511A)	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 300 Kpps	128 MB
	HP MSR930 3G Router (JG513A)	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 300 Kpps	128 MB
* W. W	HP MSR931 Router (JG514A)	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 300 Kpps	128 MB
	HP MSR931 3G Router (JG515A)	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 300 Kpps	128 MB
	HP MSR931 Dual 3G Router (JG531A)	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 300 Kpps	128 MB
	HP MSR930 Wireless Router (JG512A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 802.11b/g/n + 2 antennas	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR930 4G LTE/3G CDMA Router (JG596A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 4G and 3G wireless + 2 antennas	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR933 Router (JG516A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 G.SHDSL (8-wire) port	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR933 3G Router (JG517A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 G.SHDSL (8-wire) port + 3G wireless + antenna	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR935 Router (JG518A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 ADSL 2+ ANNEX A/M port	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR935 Wireless Router (JG519A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 ADSL 2+ ANNEX A/M port + 802.11b/g/n + 2 antennas	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR935 3G Router (JG520A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 ADSL 2+ ANNEX A/M port + 3G wireless + antenna	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR936 Wireless Router (JG597A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 1 ADSL 2+ ANNEX B/J ISDN backup port + 802.11b/g/n + 2 antennas	1	256 MB DDR	up to 300 Kpps	128 MB
	HP MSR930 4G LTE/3G WCDMA Global Router (JG665A)	1	Fixed	1 RJ-45 autosensing 10/100/1000 WAN port + 4 RJ-45 autosensing 10/100/1000 LAN ports + 4G and 3G wireless + 2 antennas	1	256 MB DDR	up to 300 Kpps	128 MB

HP MSR93x Series at a glance.

The HP MSR93x Series is a high-performance small branch router that delivers integrated routing, switching, security, SIP, IEEE 802.11n WLAN connectivity, and 4G LTE/3G in a single box. With its converged infrastructure, the MSR93x series enables faster time to service and enhanced performance while simplifying your network through single pane-of-glass management and zero-touch deployment.

The MSR93x series increases flexibility and agility by delivering extensive connectivity capabilities in a compact fixed form factor. Additionally, it is based on open standards for seamless integration within small branch deployments.

$Modules \ and \ accessories (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP MSR93x Series

External antennas

Accessories vary by product. Visit http://h17007.www1.hp.com/us/en/networking/products/routers/HP_MSR93x_Series/index.aspx#tab=TAB4 for more details.

Rack mount kits

Accessories vary by product. Visit http://h17007.www1.hp.com/us/en/networking/products/routers/HP_MSR93x_Series/index.aspx#tab=TAB4 for more details.

Cables

Routers (continued)



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

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

* MPIIG2

HP MSR50 Series at a glance...

forwarding up to 1280 Kpps.

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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)

- 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 R I45 0 28m Router Cable (ID642A)
- 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 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 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)

HP MSR50 Series Standard Version Router Software License

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

Transceivers

Routers (continued)



		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)
HP MSR30 Router Series										
	HP MSR30-60 PoE Router (JF804A)	3	6 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
	HP MSR30-60 Router (JF230A)	3	6 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
- TO FORM	HP MSR30-60 DC Router (JF801A)	3	6 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
	HP MSR30-40 PoE Router (JF803A)	2	4 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
	HP MSR30-40 Router (JF229A)	2	4 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
	HP MSR30-40 DC Router (JF287A)	2	4 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	360,000
	HP MSR30-20 PoE Router (JF802A)	1	2 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	3/1	300,000
	HP MSR30-20 Router (JF284A)	1	2 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	2/1	300,000
	HP MSR30-20 DC Router (JF235A)	1	2 MIM/4 SIC	2GbE	2	2	512/1024 MB	1	2/1	300,000
	HP MSR30-16 Router (JF233A)	1	1 MIM/4 SIC	2 x 10/100	1	2	256/768 MB	1	2/1	240,000
	HP MSR30-16 PoE Router (JF234A)	1	1 MIM/4 SIC	2 x 10/100	1	2	256/768 MB	1	2/1	240,000
	HP MSR30-11E Router (JG182A)	1	1 MIM/2 SIC	2 x 10/100 WAN, 24 x 10/100 LAN	1	1	256 MB	0	0/0	220,000
	HP MSR30-11F Router (JG183A)	1	1 MIM/2 SIC	2 x 10/100 WAN, 48 x 10/100 LAN	1	1	256 MB	0	0/0	220,000
	HP MSR30-10 DC Router (JG184A)	1	1 MIM/2 SIC	2 x 10/100	1	1	256 MB	0	1/0	220,000
	HP MSR30-10 Router (JF816A)	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.)

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)

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 FXO MIM Module (JD543A)
- HP MSR 4-port FXO 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 (750hm) 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 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 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 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 (ID608A)
- HP MSR Standard Network Data Encryption ESM Module (JD609A)

Power supplies

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

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

Transceivers and cables

Routers (continued)



		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)
HP MSR20 Router Series										
	HP MSR20-40 Router (JF228A)	1	4 SIC	2 x 10/100	1	2	256/384 MB	1	2/1	180,000
- Halles Toron	HP MSR20-21 Router (JD663B)	1	2 SIC	2 x 10/100 + 8 switched 10/100	1	1	256/384 MB	1	0	180,000
	HP MSR20-20 Router (JF283A)	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.)

HP MSR20 Series

Cables

- HP X260 Auxiliary Router Cable (JD508A)
- HP X260 SIC-8AS R I45 0 28m Router Cable (ID642A)
- HP X260 T1 Router Cable (JD518A)
- HP X500 T1/F1 Voice R J45 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 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)

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 (ID574B)
- HP MSR 1-port 10/100BASE-T SIC Module (JD545B) HP MSR 1-port 100BASE-X SIC Module (JE280A)
- 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 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)

Routers (continued)



		(n	lots	ports	10	ncluded/	Routing performance (PPS)
		Height (RU)	Module slots	Included ports	USB ports	SDRAM (included/ available)	Routing p (PPS)
HP MSR20-1x Router Series							
	HP MSR20-15 IW Multi-Service Router (JF238A)	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
	HP MSR20-15 A Multi-Service Router (JF237A)	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 AM	1	256/256 MB	160,000
	HP MSR20-15 AW Multi-Service Router (JF809A)	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 AM + 802.11b/g	1	256/256 MB	160,000
	HP MSR20-15 I Multi-Service Router (JF236A)	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100 + 1 x ISDN BRI	1	256/256 MB	160,000
	HP MSR20-15 Router (JF817A)	1	1 SIC	1 x ADSL2+ 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	HP MSR20-13 Router (JF240A)	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
	HP MSR20-13-W Router (JF808A)	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
	HP MSR20-13-W Router (NA) (JG210A)	1	1 SIC	1 x G.SHDSL+ 1 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256/256 MB	160,000
	HP MSR20-12 Router (JF241A)	1	1 SIC	1 x E1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	HP MSR20-12-T Router (JF806A)	1	1 SIC	1 x T1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	HP MSR20-12-T-W Router (NA) (JG209A)	1	1 SIC	1 x T1 + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	HP MSR20-12-W Router (JF807A)	1	1 SIC	1 x E1 + 1 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256/256 MB	160,000
	HP MSR20-11 Router (JF239A)	1	1 SIC	1 x Serial + 1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000
	HP MSR20-10 Router (JD431A)	1	1 SIC	1 x 10/100 + 4 switched 10/100	1	256/256 MB	160,000

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.)

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

Routers (continued)



		Height (RU)	Module slots	Included ports	USB ports	SDRAM (included/available)	Routing performance (PPS)	Flash
HP MSR900 Router Series	HP MSR920-W Router (JF815A)	1	Fixed	2 x 10/100 + 8 switched 10/100 + 802.11b/g	1	256 MB/ 256 MB	100,000	
III III	HP MSR920 Router (JF813A)	1	Fixed	2 x 10/100 + 8 switched 10/100	1	256 MB/ 256 MB	100,000	
	HP MSR900-W Router (JF814A)	1	Fixed	2 x 10/100 + 4 switched 10/100 + 802.11b/g	1	256 MB/ 256 MB	70,000	
	HP MSR900 Router (JF812A)	1	Fixed	2 x 10/100 + 4 switched 10/100	1	256 MB/ 256 MB	70,000	
	Un uspecial state of the state							

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.)

HP MSR900 Series

This product has no modules or accessories.

Management software

FlexManagement

Intelligent Management Center—Platforms									
	Maximum network size	Platform	External database support	Extensible for 3rd-party device support	Downloadable trial version	De ployment options	Additional node, user, or application licenses supported	Bulk agent updates	Bulk configuration
HP Intelligent Management Center Basic Software Platform									
HP IMC Basic Edition Software Platform with 50-node E-LTU (JG546AAE)	50 nodes	Windows®	No	Yes	Yes	Centralized	No	Yes	Enhanced
HP IMC Basic WLAN Manager Software Platform with 50 Access Points E-LTU (JG590AAE)	50 nodes	Windows	No	Yes	Yes	Centralized	Yes, WSM APs only	Yes	Enhanced
HP IMC Basic Software Platform at a glance HP IMC Basic Software is an entry-level platform providing fault, configu	uration, and per	formance management for sr	naller net	works.					
HP Intelligent Management Center Standard Software Platfor	m								
HP IMC Standard Software Platform with 50-node E-LTU (JG747AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed, hierarchical (child)	Yes	Yes	Enhanced
HP IMC Standard Software Platform at a glance HP IMC Standard Software Platform is next-generation management so advanced enterprise networks.	oftware that pro	vides a self-contained, compr	ehensive	managem	ent platfo	rm with the flexibility and s	calability to	meet the	needs of
HP Intelligent Management Center Enterprise Software Platfo	orm								
HP IMC Enterprise Software Platform with 50-node and 2-NTA-IMC node E-LTU (JG748AAE)	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	f thousands of r	modes by offering a hierarchic	al mode c	f deploym	ent.				
*IMC can support either Microsoft SQL, MySQL, or Oracle Database, depo	ending on the op	perating system in use.							
Intelligent Management Center—Modules		T			T	ı			
	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
HP IMC Application Performance Manager Software									
HP IMC Application Performance Manager Software Module with 25-monitor E-LTU (JG489AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC Application Performance Manager Software at a glance HP IMC Application Performance Manager Software Module monitors no	etwork impact to	o application performance.							
HP IMC Basic WLAN Manager Software Platform									
HP IMC Basic WLAN Manager Software Platform with 50 Access Point E-LTU (JG590AAE)	50 nodes 50 access points	Windows	No	Yes	Yes	Centralized	Yes	Yes	Yes
HP IMC Basic WLAN Manager Software Platform at a glance HP IMC Basic WLAN Manager is comprehensive wired and wireless mana	agement solutio	n.							

 ${}^{\star}\text{IMC can support either Microsoft SQL}, My \text{SQL}, or Oracle Database, depending on the operating system in use.}$

Management software (continued)

FlexManagemen

Intelligent Management Center—Modules (continued)	T					T			T
	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
HP IMC Branch Intelligent Management System Software									
HP IMC Branch Intelligent Management System Software Module with 50-node E-LTU (JG265AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
HP IMC Branch Intelligent Management System Software at a glance HP IMC Branch Intelligent Management System Software is based on TR		which allows the remote mana	agement (of custome	r nremise	equipment (CPF) in WANs			
	oos protocot,		agement (, cascoc	. premise	equipment (e. 2) III III III.			
HP IMC Endpoint Admission Defense (EAD) Software									
HP IMC Endpoint Admission Defense Software Module with 50-user E-LTU (JG754AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC Endpoint Admission Defense Software at a glance HP IMC Endpoint Admission Defense Software helps companies use HP I	MC to control a	nd secure their mission–critica	al data by	nrovidina r	obust Net	work Access Control (NAC)			
p				5					
HP IMC Extended API Software									
HP IMC Extended API E-LTU (JG399AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No		
HP IMC Extended API Software at a glance HP IMC Extended API Software offers a library of APIs, allowing external	applications to	interface with and leverage IM	1C configu	ıration fun	ctions.				
HP IMC Intelligent Analysis Reporter Software									
HP IMC Intelligent Analysis Reporter Software E-LTU (JG138AAE)	Unlimited	Windows	Yes*	Yes	Yes	Centralized, distributed	No		
HP IMC Intelligent Analysis Reporter Software at a glance HP IMC Intelligent Analysis Reporter Software extends reporting capabil	ities to include	customized reporting.							
HP IMC IPSec/VPN Manager Software									
HP IMC IPSec/VPN Manager Software Module with 25-node E-LTU (JG144AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
HP IMC IPSec/VPN Manager Software at a glance HP IMC IPSec VPN manages IPSec devices and provides detailed informa	tion regarding t	the private network and visibil	ity in the	topology.					
HP IMC MPLS VPN Software									
HP IMC MPLS VPN Software HP IMC MPLS VPN Software Module with 50-node E-LTU (JF410AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
HP IMC MPLS VPN Software at a glance						centralized, distributed	103		, , ,
HP IMC MPLS VPN Software provides MPLS VPN discovery, topology, mo	nitoring, auditir	ng, performance, and VPN dep	loyment f	for HP IMC.					
HP IMC Network Traffic Analyzer Software									
HP IMC Network Traffic Analyzer Software Module with 5-node E-LTU (JG750AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC Network Traffic Analyzer Software at a glance HP IMC Network Traffic Analyzer Software provides traffic analysis and v	isibility services	s for HP IMC.							

 $^{{}^{\}star}\text{IMC can support either Microsoft SQL}, My \text{SQL}, or \textit{Oracle Database}, depending on the operating system in use.}$

Management software (continued)

FlexManagement

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
HP IMC QoS Manager Software									
HP IMC QoS Manager Software Module E-LTU (JF408AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No		Yes
HP IMC QoS Manager Software at a glance HP IMC QoS Manager Software enables traffic classification and control,	and service-lev	el reporting for HP IMC.							
HP IMC Remote Site Manager Software									
HP IMC Remote Site Manager Software Module License with E-LTU (JG495AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes	Yes	Yes
HP IMC Remote Site Manager Software at a glance HP IMC Remote Site Manager Software provides secure remote manager	ment through t	he use of remote agents.							
HP IMC Service Health Manager Software									
HP IMC Service Health Manager Software Module E-LTU (JG398AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No		
HP IMC Service Health Manager Software at a glance HP IMC Service Health Manager Software offers end-to-end service mon	itoring and ass	urance.							
HP IMC Service Operation Management Software									
HP IMC Service Operation Management Software Module E-LTU (JG139AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No		
HP IMC Service Operation Management Software at a glance HP IMC Service Operation Management Software provides full workflow fault management.	management t	o ticket creation, resolution, a	nd knowledg	ge-based o	reation, a	nd integrates with IMC's co	nfiguration o	enter and	d
HP IMC Smart Connect Virtual Appliance Software									
HP IMC Smart Connect Edition Virtual Appliance Software E-LTU (JG766AAE)	100 nodes 200 users	Linux OS provided in VM	Database included	Yes	Yes	Centralized	Yes	Yes	Yes
HP IMC Smart Connect Virtual Appliance Software at a glance HP IMC Smart Connect is a self-contained virtual appliance providing cor	mplete BYOD m	anagement.							
HP IMC Smart Connect w/WLAN Manager Virtual Appliance Sof	tware								
HP IMC Smart Connect w/WLAN Manager Virtual Appliance Edition E-LTU (JG767AAE)	100 nodes 200 users	Linux OS provided in VM	Database included	Yes	Yes	Centralized	Yes	Yes	Yes
HP IMC Smart Connect w/WLAN Manager Virtual Appliance Software HP IMC Smart Connect w/ WLAN is a self-contained virtual appliance pro		e BYOD management for wired	d and wireles	s network	5.				

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

Management software (continued)

FlexManagemen

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
HP IMC TACACS+ Authentication Manager Software			I				I		
HP IMC TACACS+ Authentication Manager Software Module with 50-node E-LTU (JG764AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC TACACS+ Authentication Manager Software at a glance HP IMC TACACS+ Authentication Manager Software delivers authentication	ion, authorizatio	on, and accounting ba	sed on TACA	Cs protocol.					
HP IMC Unified Communications Health Manager Software									
HP IMC Unified Communications Health Manager SW Module w/2-monitor E-LTU (JG930AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Microsoft Lync	Yes	Centralized, distributed	Yes		
HP IMC Unified Communications Health Manager Software at a glan HP IMC UC Health Manager provides API-level monitoring capabilities for		environments.							
HP IMC User Authentication Management Software			I				I		
HP IMC User Authentication Management Software Module with 50-user E-LTU (JG752AAE)	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 to network users.	ng security and r	network management	with HP IMC	by providing a	access con	ntrol for users and device m	nanagement,	, extendir	ng management
HP IMC User Behavior Auditor Software Module		l							I
HP IMC User Behavior Auditor Software Module with 50-user E-LTU (JG760AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC User Behavior Auditor Software Module at a glance HP IMC User Behavior Auditor Software delivers intelligent logging and	network analysi	s of internal users, pro	oviding a beh	avioral audit	service for	r HP IMC.			
HP IMC VAN Fabric Manager Software									
HP IMC VAN Fabric Manager Software E-LTU (JG770AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC VAN Fabric Manager Software at a glance HP IMC VAN Fabric Manager Software simplifies the management of dat	a center and Fib	re Channel (FC) storag	je area netw	ork (SAN) fab	rics, as we	ll as supports SPB and TRIL	L.		
HP IMC Virtual Application Networking Software-defined Net	work Manager	Software							
HP IMC Virtual Application Networking Software Defined Network Manager E-LTU (JG827AAE)	Unlimited	Windows, Red Hat Linux	Yes*	No	Yes	Centralized, distributed	No		
HP IMC Virtual Application Networking Software-defined Network I HP IMC VAN SDN Manager Software provides visibility into a software-d			infrastructu	re, controller,	and applic	cation.			
HP IMC Virtual Application Network Connection Manager Soft	ware								
HP IMC VAN Connection Manager Software Module with E-LTU (JG494AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	Yes		
HP IMC Virtual Application Network Connection Manager Software of HP IMC Virtual Application Network Connection Manager Software accel		on deployment throug	jh automatic	on of server e	dge provis	ioning.			

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

Management software (continued)

FlexManagemen

Intelligent Management Center—Modul	les (continued)
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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
HP IMC Virtual Application Networking Resource Automation	Manager Soft	ware							
HP IMC Virtual Application Networking Resource Automation Manager Software E-LTU (JG826AAE)	Unlimited	Windows, Red Hat Linux	Yes*	Yes	Yes	Centralized, distributed	No		
UD IMC Vistual Application Naturalism Decourse Automation Mana	C-64	t a alama							

HP IMC Virtual Application Networking Resource Automation Manager Software at a glance...

HP IMC VAN Resource Automation Manager Software accelerates the deployment of services and applications.

HP IMC Virtualization Monitor Software								
HP IMC Virtualization Monitor Software with E-LTU (JG547AAE)	Unlimited	Linux OS included	Database included		Yes	Installs on virtual server		
HP IMC Virtualization Monitor Software at a glance HP IMC Virtualization Monitor Software is a virtual machine that monitor	s a virtual serve	er and provides Layer	4 through 7 t	raffic visibility	<i>/</i> .			

50-Access Point E-LTU (JF414AAE)

HP IMC Wireless Services Manager Software

HP IMC Wireless Services Manager Software Module with

Unlimited Windows, Red Hat Yes* Yes Centralized, distributed Yes Yes

Linux

HP IMC Wireless Services Manager Software at a glance...

HP IMC Wireless Service Manager Software delivers wired and wireless enterprise network management solutions for HP IMC.

FlexManagement

Wireless RF Planning

HP RF Planner

Refer to FlexCampus — Wireless—on page 43.

FlexManagement

Unified Wired and Wireless

HP 830 Unified Wired-WLAN Switch Series

Refer to FlexCampus — Wireless—on page 36.

Software-defined Networking Solutions

Software-defined Networking (SDN) Applications Platform required server **HP Network Optimizer SDN Application for Microsoft Lync**



HP Network Optimizer SDN Application 100 Concurrent HP VAN SDN Controller Software Clients E-LTU (J9985AAE)

3.0 GHz Intel® Xeon® or Intel Core™2 Ouad processor or equivalent

Ubuntu 12.04 LTS 64-hit

HP Network Optimizer SDN Application for Microsoft Lync at a glance...

HP Network Optimizer SDN Application for Microsoft Lync enables automated provisioning of network policy and quality of service to provide an enhanced

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

HP Network Optimizer SDN Application for Microsoft Lync

This product has no modules or accessories.

		Platform required server	Minimum system requirements server	Recommended software server
HP Network Protector SDN Applica	ition			
	HP Network Protector SDN Application 250 Concurrent Clients E-LTU (JL004AAE)	HP VAN SDN Controller Software	3.0 GHz Intel Xeon or Intel Core 2 Quad processor or equivalent	Ubuntu 12.04 LTS 64-bit
F (A)				



HP Network Protector SDN Application at a glance..

The Network Protector SDN Application running on the HP Virtual Application Networks (VAN) SDN Controller enables automated network posture assessment and real-time security across OpenFlow-enabled network devices like switches and routers.

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

HP Network Protector SDN Application

Licenses

- HP Network Protector RepDV Subscription 1000 Concurrent Clients 1 Year E-LTU (JL006AAE)
- · HP Network Protector RepDV Subscription 2000 Concurrent Clients 1 Year E-LTU (JL007AAE)
- · HP Network Protector RepDV Subscription 4000 Concurrent
- Clients 1 Year E-LTU (JL008AAE)
- HP Network Protector RepDV Subscription 250 Concurrent Clients 1 Year E-LTU (JL005AAE)

Software-defined Networking Solutions

Application Delivery Platforms and Solutions (continued)

HP Virtual Application Networks (VAN) SDN Controller



HP VAN SDN Controller Base Software with 50-node License E-LTU (J9863AAE) PostgreSQL 9.1 OpenJDK 7 JVM Keystone Identity

3.0 GHz Intel Xeon or Intel Core 2 Quad processor or equivalent

Ubuntu 12.04 LTS 64-bit

HP Virtual Application Networks (VAN) SDN Controller at a glance..

HP Virtual Application Networks (VAN) SDN Controller provides a unified control point in an OpenFlow-enabled network, simplifying management, provisioning, and orchestration.

Notes: Performance (single controller)

- Maximum new flows per second (cbench): 1.8 million
- Maximum OpenFlow ports: 80,000
- Maximum OpenFlow devices: 2,000
- Typical OpenFlow ports: 1,000–2,000
- Typical OpenFlow devices: 100-200

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

HP Virtual Application Networks (VAN) SDN Controller

Licenses

- HP VAN SDN Controller Additional 50-node License E-LTU (J9864AAE)
- HP VAN SDN Controller High Availability License E-LTU (J9865AAE)

Security Solutions

		Height (RU)	Slots	Fixed interfaces	Modularinterfaces	Stateful FW performance	Max virtual FWs	Max concurrent sessions	Max IPSec tunnels	VPN performance
HP TippingPoint Next Generation I	Firewall Series									
	HP S1050F NGFW Appliance (JC882A)	1U	4			500 Mb/s		0.25 million	1,024	250 Mb/s
	HP S3010F NGFW Appliance (JC883A)	2U	4			1 Gb/s		0.5 million	4,096	500 Mb/s
	HP S3020F NGFW Appliance (JC884A)	2U	4			2 Gb/s		1 million	4,096	1 Gb/s
	HP S8005F NGFW Appliance (JC885A)	2U	4			5 Gb/s		10 million	10,240	1.5 Gb/s
	HP S8010F NGFW Appliance (JC886A)	2U	4			10 Gb/s		20 million	10,240	3 Gb/s

HP TippingPoint Next Generation Firewall Series at a glance...

HP TippingPoint Next Generation Firewall (NGFW) Series enables you to take back control and proactively improve your organization's security posture without compromising network availability.

HP F5000 Firewall Standalone Chas	sis									
	HP F5000 Firewall Standalone Chassis (JG216A)	7U	5 slots 1 MPU, 4 SPU	2-GE (Mgmt. & HA)	12 GE 12 SFP 2 XFP	40 Gb/s	512	4 million	5,000	2 Gb/s
				2 USB (1 Host, 1 Device)						
	HP F5000-S VPN Firewall Appliance (JG370A)		1 slot	12-GE SFP ports		20 Gb/s	256	4 million	8,000	4 Gb/s
	HP 5000-C VPN Firewall Appliance (JG650A)		1 slot	12-GE SFP ports		12 Gb/s	256	4 million	6,000	3 Gb/s

${\bf HP\,F5000\,Firewall\,Standalone\,Chassis\,at\,a\,glance..}$

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.

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

HP TippingPoint Next Generation Firewall Series

- HP TP DVLabs DV for S1050F 1-yr E-LTU (JC887AAE)
- HP TP DVLabs DV for S3010F 1-yr E-LTU (JC889AAE)
- HP TP DVLabs RepDV for S3010F 1-yr E-LTU (JC890AAE)
- HP TP DVLabs DV for S3020F 1-yr E-LTU (JC891AAE)
- HP TP DVLabs DV for \$8005F 1-yr E-LTU (JC893AAE)
- HP TP DVLabs RepDV for S8005F 1-yr E-LTU (JC894AAE)
- HP TP DVLabs DV for S8010F 1-yr E-LTU (JC895AAE)
- HP TP DVLabs RepDV for S8010F 1-yr E-LTU (JC896AAE)
 HP vSMS VMware vSphere 1-host SW License (JC897A)
- HP VSMS VMware vsphere 1-nost SW License (JC898)
 HP SMS Add 20-node System License (JC898A)
- HP TippingPoint Quick Release Slide Kit (JC899A)
- HP TippingPoint 80mm Fan Module (JC900A)
- HP TippingPoint 750W AC Power Supply (JC901A)
- HP TippingPoint 32Gb CFast Card (JC903A)

HP F5000 Firewall Standalone Chassis

Modules

- HP F5000 8p GbE SFP/4p GbE Combo Module (JG212A)
- HP S5000-A5 VPN 2-Port 10GbE Module (JD264A)
- HP S5000-A5 VPN 12-Port GbE Module (JD263A)

Firewalls

• HP F5000 Firewall Main Processing Unit (JG215A)

Fan

HP F5000 Fan Assembly (JG217A)

HP F5000-S VPN Firewall Appliance (JG370A)

Module

 HP F5000-S/C 12-port 10/100/1000BASE-T/12-port GbE SFP/6port 10-GbE SFP+ Module (JG651A)

Power supplies

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

Fan

HP F5000-S/C VPN Firewall Fan Module (JG878A)

HP 5000-C VPN Firewall Appliance (JG650A)

Module

 HP F5000-S/C 12-port 10/100/1000BASE-T/12-port GbE SFP/6-port 10-GbE SFP+ Module (JG651A)

Power supplies

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

Fan

• HP F5000-S/C VPN Firewall Fan Module (JG878A)

Security Solutions

VPN-FW appliances, continued

		Height (RU)	Slots	Fixed interfaces	Modularinterfaces	Stateful FW performance	Max virtual FWs	Max concurrent sessions	Max IPSec tunnels	VPN performance
HP F1000-E VPN Firewall Appliance										
	HP F1000-E VPN Firewall Appliance (JD272A)	1U		4 Combo 2 USB (1 Host, 1 Device)	4 GE 8 GE	8 Gb/s	256	2 million	2,000	2 Gb/s

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.

HP F1000-EI VPN Firewall Appliance



HP F1000-EI VPN Firewall Appliance (JG214A)	1U	12 Combo 1 USB	4 SFP 2 XFP	4 Gb/s	128	1 million	4,000	600 Mb/s
		(Host)						

HP F1000-FI 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 firewall and rich VPN features such as IPSec/GRE/L2TP. Routing features such as BGP, RIP, and OSPF are supported.

HP F1000-S-EI VPN Firewall Appliance



HP F1000-S-EI VPN Firewall Appliance (JG213A)	1U	12 Combo	4 SFP	2 Gb/s	64	1 million	2,000	400 Mb/s
		1 USB	2 XFP					
		(Host)						

IP 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 firewall and rich VPN features such as IPSec/GRE/L2TP. Routing features such as BGP, RIP, and OSPF are supported.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP F1000-E VPN Firewall Appliance

- 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 4-port GbE SFP HIM Module (JC171A)

HP F1000-EI VPN Firewall Appliance

- HP F1000-S/A 2-port 10GbE SFP+ Module (JG317A)
- HP 5800/5500 150W AC Power Supply (JD362A)
- HP 5800/5500 150W DC Power Supply (JD366A)

HP F1000-S-EI VPN Firewall Appliance

- HP F1000-S/A 2-port 10GbE SFP+ Module (JG317A)
- HP 5800/5500 150W AC Power Supply (JD362A)
- HP 5800/5500 150W DC Power Supply (JD366A)



HP OfficeConnect Small Business Networking Solutions

HP Networking is a leading provider of networks for small businesses. HP OfficeConnect solutions 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.¹ 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.

¹ Sources: Dell'Oro last updated for Q2 2013.

Switches

HP 1910 Switch Series

OfficeConnect Switches — Smart Web Managed

Small Business

	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
UD 1010 1055 (t.) (UT0000)	1				40			4		104517
HP 1910-48G Switch (JE009A)	1				48			4		104 Gb/s
HP 1910-24G-PoE (365W) Switch (JE007A)	1					24		4		56 Gb/s
HP 1910-24G-PoE (170W) Switch (JE008A)	1					24		4		56 Gb/
HP 1910-24G Switch (JE006A)	1				24			4		56 Gb/
HP 1910-16G Switch (JE005A)	1				16			4		40 Gb/s
HP 1910-8G-PoE+ (180W) Switch (JG350A)	1RU/ Desktop					8		1		18 Gb/s
HP 1910-8G-PoE+ (65W) Switch (JG349A)	1RU/ Desktop					8		1		18 Gb/s
HP 1910-8G Switch (JG348A)	1RU/ Desktop				8			1		18 Gb/
HP 1910-48 Switch (JG540A)	1		48		2			2		17.7 Gb/s
HP 1910-24 Switch (JG538A)	1		24		2			2 DP		8.8 Gb/s
HP 1910-24-PoE+ Switch (JG539A)	1			24	2			2 DP		8.8 Gb/
HP 1910-8-PoE+ Switch (JG537A)	1RU/ Desktop			8	2			2 DP		5.6 Gb/
HP 1910-8 Switch (JG536A)	1RU/ Desktop		8		2			2 DP		5.6 Gb/

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 include state of contraction. Includes six PoF models. PoF model available for Voice over IP implementations. 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.)

HP 1910 Switch Series

Transceivers and cables

Switches (continued)

OfficeConnect Switches — Smart Web Managed (continued)

Small Business

HP 1810 Switch Series		100	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
iir toto switch series	HP 1810-48G Switch (J9660A)	1				48			4		104 Gb/s
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HP 1810-24G v2 Switch (J9803A)	1				24			2		52 Gb/s
	HP 1810-24 v2 Switch (J9801A)	1		22		2			2		12.4 Gb/s
	HP 1810-8G v2 Switch (J9802A)	1RU/ Desk				8					16 Gb/s
	HP 1810-8 v2 Switch (J9800A)	1RU/ Desk		7		1					3.4 Gb/s

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.

$Modules \ and \ accessories (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP 1810 Switch Series

Mounting kit

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

Transceivers and cables

See pages 78–83 for the HP Networking Transceiver Matrix.

${\bf Office Connect\ Switches-Unmanaged}$

		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
HP 1410 Small Office Switch Seri	es										
THE RESERVE OF THE PARTY OF THE	HP 1410-24G Switch (J9561A)	1				24			2 DP		48 Gb/s
2000 SAND SAND SAND SAND SAND SAND SAND SAND	HP 1410-24G-R Switch (JG708A)	1				24					48 Gb/s
	HP 1410-16G Switch (J9560A)	1				16					32 Gb/s
	HP 1410-8G Switch (J9559A)	0.5RU/ Desktop				8					16 Gb/s
	HP 1410-24-2G Switch (J9664A)	1		24		2					8.8 Gb/s
	HP 1410-24-R Switch (JD986B)	1		24							4.8 Gb/s
	HP 1410-24 Switch (J9663A)	1		24							4.8 Gb/s
	HP 1410-16 Switch (J9662A)	1		16							3.2 Gb/s
	HP 1410-8 Switch (J9661A)	0.5RU/ Desktop		8							1.6 Gb/s

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 advanced unmanaged Gigabit and Fast Ethernet switches (JG708A, J9663A, and J9662A) compliant with the IEEE 802.3az Energy Efficient Ethernet standard.

Note: DP = Dual-personality ports

$Modules \ and \ accessories (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp.com/networking.)$

HP 1410 Switch Series

Transceivers and cables

Switches (continued)

OfficeConnect Switches — Unmanaged (continued)

Small Business

HP 1405 Small Office Switch Seri	es	Height (RU)	10/100 ports	10/100/1000 ports	IEEE 802.1p prioritization
	HP 1405-16G Desktop Switch (JD844A)	Desktop		16	Yes
	HP 1405-8G V2 Switch (J9794A)	Desktop		8	Yes
	HP 1405-5G V2 Switch (J9792A)	Desktop		5	Yes
	HP 1405-16 Desktop Switch (JD858A)	Desktop	16		Yes
	HP 1405-8 V2 Switch (J9793A)	Desktop	8		Yes
	HP 1405-5 V2 Switch (J9791A)	Desktop	5		Yes

HP 1405 Small Office Switch Series at a glance...

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.)

HP 1405 Small Office Switch Series

This product has no modules or accessories.

OfficeConnect Wireless

OfficeConnect Wireless

Small Business

		10/100/1000	PoE/PoE+(IEEE 802.3a) ports	Number of radios	Virtual AP/multiple SSI (max)	Wireless Distribution S (WDS) Bridging	Wi-Fi certification	IEEE 802.11a/b/g/n	Internal antennas	External antennas	
HP M220-802.11n Access Poir	nt Series										
	HP M220-802.11n AM Access Point (J9798A)	1	1	1	8	Yes	Yes	a/b/g/n	2	0	
	HP M220-802.11n WW Access Point (J9799A)	1	1	1	8	Yes	Yes	a/b/g/n	2	0	

HP M220-802.11n Access Point Series at a glance...

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 are 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 limited lifetime warranty.

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HP M200-802.11n Access Point Series H H

HP M200-802.11n Access Point (US) (J9467A)	1	1	1	4	Yes	a/b/g/n	a/b/g/n	3
HP M200-802.11n Access Point (WW) (J9468A)	1	1	1	4	Yes	a/b/g/n	a/b/g/n	3

HP M200-802.11n Access Point Series at a glance..

HP M200 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 are backward compatible for legacy IEEE 802.11a/b/g support.

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

HP M200 802.11n Access Point Series

Power supply

• HP 1-port Power Injector (J9407B)

Server Optimized Networking

OfficeConnect Server Optimized Networking Devices

Small Business

OfficeConnect Server Optimized	Networking Devices										
HP PS1810 Switch Series		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
HP P3 18 10 SWILCH Series											
	HP PS1810-8G Switch (J9833A)	Desktop				8					16 Gb/s
16	HP PS1810-24G Switch (J9834A)	1				24			2		52 Gb/s

HP PS1810 Switch Series at a glance...

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.

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

HP PS1810 Switch Series

Transceivers and cables

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See pages 78–83 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

Microsoft Lync Solutions

		Optimized f	Audio quali	Speakerpho	Sidetonesu	Headsetsul	Display	Power	Ethernet po	LLDP	CODEC supp
5											
	HP 4110 IP Phone (J9765A)	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
	HP 4120 IP Phone (J9766B)	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
	HP MSR Survivable Branch Communication Modules Series. Please see below for details.										

Aicrosoft Lync Solutions at a glance...

HP 4110 and HP 4120 IP Phones—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.

HP Survivable Branch Communication zl Module powered by Microsoft Lync—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.

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

Microsoft Lync Solutions

Power supply

HP IP Phone 5V Power Supply (J9767A)

HP Networking Unified Communications

HP Networking Unified Communications (continued)

		Processor	Memory	Hard disk drive	Flash	USB 2.0	Internal port	External port	Applicable chassis
HP MSR Survivable Branch Comm	nunication Module Series								
	HP MSR Small Survivable Branch Communication MIM Module powered by Microsoft Lync (JG587A)	Intel Atom N450 Processor (1.66 GHz)	2 GB DDR3	500 GB SATA 5400 rpm	512 MB	x 2	1GbE	1GbE	MSR30 series routers
	HP MSR Medium Survivable Branch Communication MIM Module powered by Microsoft Lync (JG588A)	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	1GbE	1GbE	MSR30 series routers
	HP MSR Large Survivable Branch Communication FIC Module powered by Microsoft Lync (JG589A)	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	1GbE	1GbE	MSR50 series routers
	UD MCD Curvinghla Pranch Communication	Modulos at a glanco							

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.

Modules and accessories (For the most complete listing of modules, transceivers, power options, and other accessories, visit 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 50 and 51, respectively.

HP Networking Unified Communications (continued)

		Optimized for Lync	Audio quality	Speakerphone	Headset support	Display	Ethernet ports	Maximum calls	Programmable buttons	Backlit	Energy Save Mode
HP 350x IP Phone Series											
	HP 3503 IP Phone (JC508A)	No	Wideband	Full duplex	Yes (RJ9)	5" (110.6 mm x 67.4 mm) Color	2	8	21	Yes	Yes
0	HP 3502 IP Phone (JC507A)	No	Wideband	Full duplex	Yes (RJ9)	4.3" (95 mm x 52 mm)	2	6	15	Yes	Yes
	HP 3500 IP Phone (JC504A)	No	Wideband	Full duplex	Yes (RJ9)	3.5" (85 mm x 28 mm)	2	2	2	No	Yes
S. Carrier	HP 3500B IP Phone (JC505A)	No	Wideband	Full duplex	Yes (RJ9)	3.5" (85 mm x 28 mm)	2	2	2	No	Yes
	HP 350x IP Phone Series at a glance										

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.)

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

Application Delivery Platforms	and Solutions							
		Processor	Memory	Hard disk drive	Operating system/ application	USB 2.0	Applicable chassis MSR3000 series and MSR4000 series	Number of Services zl Module in the chassis
HP MSR OAP MIM Module								
-	HP MSR Open Application Platform (OAP) with VMware vSphere MIM Module (JG532A)	Intel Core i7-620UE, 1060 MHz	4 GB DDR SDRAM	500 GB SATA	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)

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 MSR30-16 and above, as well as the MSR3000 and MSR4000 router series.

HP MSR Open Architecture Platform (OAP) with VMware vSphere Series



HP MSR Open Application	Intel Core	8 GB	500 GB SATA	VMware	Yes	MSR50	2 max (in any MSR50 series router)
Platform (OAP) with	i7-620LE,	DDR3		vSphere 5.0		series	
VMware vSphere FIC	2000 MHz	SDRAM					
Module (JG533A)							

HP MSR OAP FIC Modules at a glance...

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 MSR50-40 and MSR50-60 router series.

HP Advanced Services v2 zl Module with HDD



HP Advanced Services v2 zl	Intel Core	16 GB of	1 TB	VMware 5.5	Yes	5400/8200	Up to four service modules can be installed in
Module with HDD (J9857A)	i7-3612QE (6 MB cache,	DDR3- 1333	enterprise- class SATA	is supported but not			a 5406 zl chassis; there are no restrictions on where the modules can be placed in the chassis
	up to 3.10 GHz quad core)	channel memory	HDD	included; must be purchased separately			Up to three service modules can be installed in an 8206 zl chassis; there are no restrictions on where the modules can be placed in the chassis
							Up to six service modules can be installed in a 5412 or an 8212 zl chassis; there are no restrictions on where the modules can be placed in the chassis

HP Advanced Services v2 zl Modules with HDD at a glance..

The HP Advanced Services v2 zl Module hosts one or multiple VMware vSphere-compatible virtual applications in the HP 5400 or 8200 Switch Series. VMware vSphere is not included.

HP Advanced Services v2 zl Module with SSD



HP Advanced Services v2 zl	Intel Core	16 GB of	800 GB	VMware 5.5	Yes	5400/8200	Up to four service modules can be installed in
Module with SSD (J9858A)	i7-3612QE	DDR3-	enterprise-	is supported			a 5406 zl chassis; there are no restrictions on
	(6 MB cache,	1333	class SSD	but not			where the modules can be placed in the chassis
	up to 3.10 GHz quad core)	channel memory		included; must be purchased separately			Up to three service modules can be installed in an 8206 zl chassis; there are no restrictions on where the modules can be placed in the chassis Up to six service modules can be installed
							in a 5412 or an 8212 zl chassis; there are no restrictions on where the modules can be placed in the chassis

HP Advanced Services v2 zl Module with SSD at a glance..

The HP Advanced Services v2 zl Module hosts one or multiple VMware vSphere-compatible virtual applications in the HP 5400 or 8200 Switch Series.

$Modules \ and \ accessories \ (For the most complete \ listing \ of \ modules, \ transceivers, \ power \ options, \ and \ other \ accessories, \ visit \ hp. com/networking.)$

HP MSR OAP MIM Module

This product has no modules or accessories.

HP MSR OAP FIC Module

This product has no modules or accessories.

HP Advanced Services v2 zl Module with HDD

This product has no modules or accessories.

HP Advanced Services v2 zl Module with SSD

This product has no modules or accessories.

	WLAN		ialty rts		Resil	iency		9	Securit	у	Co	nverge	nce		Layer:	3	Lay	ver 2	IP	v6
Switches	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	EEE 802.1p prioritization	DSCP (DiffServ)	Voice VLAN	Static routes	RIP v1/v2	OSPF	Multicast filtering	Link aggregation	Pv6 management	IPv6 routing
Modular switches			,	4	-			4			_			01			_	_	_	
HP 12900 Switch Series						•				•				•						
HP 12500 Switch Series					•	•			•	•						•			•	
HP 11900 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			•		•		•		•	•	•	•		•			•	•		

		ialty rts		Resil	iency		9	Security	у	Coi	nverge	nce		Layer 3	3	Lay	yer 2	IP	v6
Switches	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	0.00 0.00 0.00 0.00
Fixed-port switches																			
HP 5930 Switch Series		•	•	•	•	•	•	•		•	•		•		•	•	•	•	
HP 5920 Switch Series		•	•		•	•	•				•		•			•	•		
HP 5900v Switch Series																			
HP 5900 Switch Series					•	•	•				•								
HP 5830 Switch Series					•	•	•		•		•								
HP 5820 Switch Series		•	•		•	•	•	•	•		•	•	•			•	•		٠,
HP 5800 Switch Series	•				•	•		•	•		•	•					•		
HP 5500 EI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	
HP 5500 HI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•	
HP 3800 Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	
HP 3500 yl Switch Series	•	•		•			•	•	•	•	•	•	•	•		•	•	•	
HP 3600 EI Switch Series	•		•	•			•	•	•	•	•	•	•	•	•	•	•	•	
HP 3600 SI Switch Series	•		•	•			•	•	•	•	•	•	•	•		•	•	•1	
HP 5500 SI Switch Series	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	•	
HP 5120 EI Switch Series	•	•	•	•			•	•	•	•	•	•	•			•	•	•	
HP 5120 SI Switch Series	•		•	•			•	•	•	•	•	•	•			•	•	•	
HP 2920 Switch Series	•	•	•	•			•	•	•	•	•	•	•	•		•	•	•	
HP 2915-8G-PoE Switch	•						•	•	•	•	•	•	•	•		•	•	•	
HP 2620 Switch Series	•			•			•	•	•	•	•	•	•	•		•	•	•	
HP 2615-8-PoE Switch	•						•	•	•	•	•	•	•	•		•	•	•	
HP 2530 Switch Series	•						•	•	•	•	•	•				•	•	•	
HP IntelliJack Gigabit Switch Series	•									•							•		
HP 3100 EI Switch Series	•			•			•	•	•	•	•					•	•	•	
HP 3100 SI Switch Series								•	•	•	•					•	•	•1	
HP 1910 Switch Series	•						•	•	•	•	•	•	•			•	•	•	
HP 1905 Switch Series	•						•	•		•	•	•				•	•		
HP 1810 Switch Series										•							•		
HP 1410 Switch Series										•									
HP 1405 Small Office Switch Series										•									
HP 830 Unified Wired-WLAN Switch								•	•		•	•					•	•	

¹ V2 switches only

	Н	ardwa	re	Resi	liency	S	ecurit	у	Cor	iverge	nce		ı	Routin	g		Unifi	ed OS a	nd Manag	jement
Routers	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
Routers																				
HP 8800 Router Series	•			•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
HP HSR6800 Router Series	•		•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
HP HSR6600 Router Series	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
HP 6600 Router Series	•			•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
HP MSR4000 Router Series	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSR3000 Router Series	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSR2000 Router Series	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSR1000 Router Series	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP VSR1000 Virtual Services Router Series						•	•	•	•				•	•	•	•	•	•	•	•
HP MSR50 Series	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
HP MSR30 Series	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP MSR20 Series	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
HP MSR20-1x Series	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
HP MSR93x Series	•	•			•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
HP MSR900	•	•			•	•	•	•	•	•			•	•	•	•	•	•	•	•

	Har	dware			Security				Manag	jement	
Wireless LAN	10G ports	PoE/PoE+ ports	SNMPv3 and SSH	RADIUS authentication	IEEE 802.1X support	EAP-TLS and EAPMDS, EAP-TTLA PEAP	WPA/WPA2	SNMPv1/v2/v3	Telnet support	HP IMC/WSM/PMM management	Web management and discovery wizard
Wireless controllers											
HP MultiService (MSM) Controller Series	•		•	•	•	•	•	•	•	•	•
Unified wired and wireless LAN											
HP 870 Unified Wired-WLAN Switch Series	•		•	•	•	•	•	•	•	•	•
HP 830 Unified Wired-WLAN Switch Series		•2	•	•	•	•	•	•	•	•	•
HP 10500/7500 Unified Wired-WLAN Module			•	•	•	•	•	•	•	•	•

² Optional for the HP 830 24-port switch

	_															_				
	Po	rts			Modes				Wi	reless	featur	res				Secu	ırity			
Wireless LAN (continued)	PoE/PoE+ ports	Multiple radio design	IEEE 802.11a (54 Mb/s)	IEEE 802.11b (11 Mb/s)	IEEE 802.11g (54 Mb/s)	IEEE 802.11n (300 Mb/s)	IEEE 802.11n (450 Mb/s)	IEEE 802.11ac (1300 Mb/s)	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-TTLA PEAP	WPA/WPA2	VPN initiation and termination	VPN pass-through
Wireless routers and access points																				
HP MSM 802.11n Dual Radio Access Point Series							•		•	•	•	•	•	•		•	•			
HP 560 802.11ac Dual Radio Access Point Series	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•			
HP 425 802.11n Dual Radio Access Point Series	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•		•
HP MSM 802.11n Access Point Series	•		•	•	•	•			•	•	•	•	•	•	•	•	•	•		•
HP MSM317 Access Device Series	•			•	•				•		•		•	•	•	•	•	•		•
HP MSM313 Integrated Services Access Point Series	•	•	•	•	•				•	•	•	•	•	•	•	•	•	•	•	•
HP M200 802.11n Access Point Series	•		•	•	•	•			•	•	•	•	•		•	•	•	•		
HP M220 802.11n Access Point Series	•		•	•	•	•			•	•	•	•	•		•	•	•			
HP 501 Wireless Client Bridge Series	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•			•
Wireless security, bridges																				
wireless security, bridges														_						
HP Networking Mobility Security IDS/IPS Series	•	•	•	•	•	•								•						
	•	•	•	•	•	•								•						

			Sec	urity feat	ures			н	IA		Manag	gement	
Security solutions	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
VPN-FW appliances													
HP TippingPoint Next Generation Firewall Series										•	•	•	•
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 55000-A5 VPN 2-Port 10GbE Module

HP 55000-A5 VPN 12-Port GbE Module

	Reso	urce m	nanage	ment		Perfor monit	mance toring	!		ration censin			Con	ıfigura	ition		V	Vireles	is
Management software	Discovery	Topology mapping	Monitoring	Inventory reports	Enhanced events and alarms	Scheduled tasks	Audit reports	Error and utilization reports	External database support	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	20 John 19 Joh
HP Intelligent Management Center (IMC)																			
HP IMC Basic Software Platform			•				•	•								•	•7	•7	
HP IMC Standard Software Platform								•	•			•	•						
HP IMC Enterprise Software Platform						•	•	•	•	•		•	•	•					
HP IMC Network Traffic Analyzer Software							•		•3				•						
HP IMC User Authentication Management Software				•		•	•	•	•3	•						•			
HP IMC User Behavior Auditor Software Module							•		•3	•									
HP IMC QoS Manager Software			•	•	•	•	•	•	•3						•	•			
HP IMC Endpoint Admission Defense Software			•	•			•	•	•3	•									T
HP IMC Wireless Services Manager Software		•	•	•	•	•	•	•	•3	•							•	•	
HP IMC MPLS VPN Software		•	•	•	•	•	•	•	•4	•				•		•			
HP IMC Voice Services Manager Software		•	•	•	•	•	•	•	•4	•		•							
HP IMC IPSec/VPN Manager Software	•	•	•	•	•	•	•	•	•3	•		•		•	•				
HP IMC Service Operation Management Software				•	•	•	•	•	•3										
HP IMC Branch Intelligent Management Software	•		•	•	•	•			•3	•		•		•	•	•			Ī
HP IMC Intelligent Analysis Reporter Software																			
HP IMC Service Health Manager Software		•	•		•	•	•	•	•										
HP IMC TACACS+ Authentication Manager Software					•	•	•	•	•	•						•5			
HP IMC Application Performance Manager Software	•	•	•		•	•	•	•	•										
HP IMC Extended API Software																			
HP IMC Virtual Application Network Manager Software Module			•						•							•			
HP IMC Remote Site Manager Software	•	•	•		•	•	•	•	•	•6		•	•	•	•				
HP IMC Smart Connect with Wireless Service Manager Virtual Appliance Software	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HP IMC Virtualization Monitor Software			•8	•8	•8	•8	•8		•3	•8			•8			•8			
HP IMC Virtual Application Networks Software-defined Networking Manager Software		•	•	•	•			•	•										
HP IMC VAN Resource Automation Manager Software		•	•	•	•				•				•		•				
HP IMC Unified Communications Health Manager Software	•	•	•	•	•			•	•	•			•			•			

³ IMC can support either Microsoft SQL, MySQL, or Oracle Database, depending on the operating system in use.
4 IMC can support either Microsoft SQL or Oracle Database, depending on the operating system in use.
5 TAM device support is vendor agnostic and supports devices that utilize the TACACs+ protocol.
6 RMS can manage up to 1,000 devices using node count licenses from the main IMC server.
7 With IMC Basic WLAN Manager Software Platform
8 Dependent on NTA

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		0	8	00	8	8800 Router				0 Router		6120 XG							0 EI	H	IS 0
Transceivers and cables	SKU	12900	12500	11900	10500	880	8200	7500	6800	0099	6200	612	5930	5920	5900	5830	5820	5800	5500	5500	2200
Transceivers and cables																					
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 X130 CX4 Optical Media Converter	J8439A																				
HP X111 100M SFP LC FX Transceiver	J9054C																				
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 X112 100M SFP LC BX-D Transceiver	J9099B								•												
HP X112 100M SFP LC BX-U Transceiver	J9100B								•												
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 X122 1G SFP LC BX-D Transceiver	J9142B								•												
HP X122 1G SFP LC BX-U Transceiver	J9143B								•												
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 X150 100G CFP LC LR4 10km SM XCVR Transceiver	JG829A	•		•					•												
HP X240 40G-CSR4 QSFP MPO 300M Transceiver	JG709A	•		•	•			•					•		•						
HP X115 100M SFP LC BX 10-D Transceiver	JD101A				•			•													
HP X110 100M SFP LC FX Transceiver	JD102B				•	•		•		•						•		•	•	•	

						8800 Router				6600 Router		9 X							ᇳ	=	-
Transceivers and cables	SKU	12900	12500	11900	10500	8800	8200	7500	6800	0099	6200	6120	5930	5920	5900	5830	5820	5800	5500	5500	0
Transceivers and cables																					
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					•															T
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 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												_			_					H
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		•		•																	-
HP X180 10G XFP LC LH 80km 1558.98nm DWDM Transceiver	JG230A							•											\vdash		+
	JG231A																		\vdash		+
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+ MP0 SR4 Transceiver	JG325B	•		•	•								•		•				\vdash		+
HP X140 40G QSFP+ LC LR4 SM XCVR	JG661A	•		•	•			•					•		•				\vdash		+
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	•		•									•		•		L	<u> </u>	\sqcup		1

		5400	5120 EI	5120 SI	4200	3800	3600 EI	3600 SI	3500	3100 EI	3100 SI	2920	2915	2910
Transceivers and cables	SKU	54	51	5	42	88	36	36	35	31	31	29	29	2
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 X130 CX4 Optical Media Converter	J8439A	•			•				•					
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 X110 100M SFP LC FX Transceiver	JD102B													

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Transceivers and cables	SKU	5400	5120 EI	5120 SI	4200	3800	3600 EI	3600 SI	3500	3100 EI	3100 SI	2920	2915	2910
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HP X120 1G SFP LC LH100 Transceiver	JD103A													
HP X135 SC ER XENPAK Transceiver	JD105A													
HP X135 SC SR XENPAK Transceiver	JD105A													
HP X130 SC ZR XFP Transceiver	JD100B													
HP X130 SC LR XFP Transceiver	JD107N													
HP X170 1G SFP LC LH70 1550 Transceiver	JD100B													
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	JD111A							•						
HP X170 1G SFP LC LH70 1470 Transceiver	JD112A						•	•						
HP X170 1G SFP LC LH70 1490 Transceiver	JD113A JD114A													
HP X170 1G SFP LC LH70 1510 Transceiver	JD114A JD115A						•							
HP X170 1G SFP LC LH70 1510 Transceiver	JD115A JD116A													
HP X130 LC SR XFP Transceiver	JD116A 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 JD121A						•			•	•			
HP X135 LC ER XFP Transceiver			•											
HP X124 1G SFP LC SX Transceiver	JD493A													
HP X124 1G SFP LC LX Transceiver	JD494A													
HP X130 SC LX4 XENPAK Transceiver	JD499A												—	
HP X130 CX4 XENPAK Transceiver	JD502A												—	
HP X130 CX4 XFP Transceiver	JD506A												<u> </u>	
HP X120 622M SFP LC LX 15km Transceiver	JF829A												<u> </u>	
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												<u> </u>	
HP X110 100M SFP LC FX Transceiver	JF833A												<u> </u>	
HP X240 SFP+ to SFP+ 5m DAC Cable	JG081C		•										<u> </u>	
HP X180 10G XFP LC LH 80km 1538.98nm DWDM Transceiver	JG226A													
HP X180 10G XFP LC LH 80km 1539.77nm DWDM Transceiver	JG227A												<u> </u>	
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	JG325B													
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													<u></u>
HP X240 40G QSFP+ to 4x10G SFP+ 3m DAC Cable	JG330A													<u> </u>
HP X240 40G QSFP+ to 4x10G SFP+ 5m DAC Cable	JG331A													

ransceivers and cables	SKU	2620	2615	2530	1910	PS1810	1810∵	1410**	MSM720	MSR4000	MSR3000	MSR2000	MSR1000	MSR900	MSR50	MSR30	MSR20-1x	or GOM
	140505	1			1				1				1					
HP X121 1G SFP LC SX Transceiver	J4858C	•	•	•	•	•	•	•	•									-
HP X121 1G SFP LC LX Transceiver	J4859C	•	•	•	•	•	•	•	•									H
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																	L
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																	Г
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																	Т
HP X130 SFP+ LC LRM Transceiver	JD093B									•								T
HP X130 SFP+ LC LR Transceiver	JD094B																	
HP X240 SFP+ to SFP+ 0.65 m Direct Attach Cable	JD095C									•								T
HP X240 SFP+ to SFP+ 1.2 m Direct Attach Cable	JD096C																	t
HP X240 SFP+ to SFP+ 3 m Direct Attach Cable	JD097C																	t
HP X120 1G SFP LC BX 10-U Transceiver	JD098B				•					•	•		•		•	•	•	t
HP X120 1G SFP LC BX 10-D Transceiver	JD099B														•			
HP X115 100M SFP LC BX 10-U Transceiver	JD100A																	t

^{** 24-} or 48-port version only.

						310	‡	±	720	MSR4000	MSR3000	MSR2000	MSR1000	006	0.0	000	MSR20-1x	07
Transceivers and cables	SKU	2620	2615	2530	1910	PS1810	1810∵	1410**	MSM720	MSR	MSR	MSR	MSR	MSR900	MSR50	MSR30	MSR	MSR20
HP X115 100M SFP LC BX 10-D Transceiver	JD101A																	
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 X130 SC LX4 XENPAK Transceiver	JD499A																	-
HP X130 CX4 XENPAK Transceiver	JD502A																	
HP X130 CX4 XENPAK Hansceiver	JD502A																	
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																		-
HP X120 100M/1G SFP LC LX Transceiver	JF831A																-	
	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																	<u> </u>
HP X130 10G SFP+ LC ER 40km Transceiver	JG234A									•								<u> </u>
HP X140 40G QSFP+ MPO SR4 Transceiver	JG325B																	<u> </u>
HP X240 40G QSFP+ to QSFP+ 1m DAC Cable	JG326A																	<u> </u>
HP X240 40G QSFP+ to QSFP+ 3m DAC Cable	JG327A																	Щ.
HP X240 40G QSFP+ to QSFP+ 5m DAC Cable	JG328A																	
HP X240 40G QSFP+ to 4x10G SFP+ 1m DAC Cable	JG329A																	Щ.
HP X240 40G QSFP+ to 4x10G SFP+ 3m DAC Cable	JG330A																	Щ.
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 limited lifetime warranty†. 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 to view the HP Hardware Warranty Statement with terms and conditions, and go to 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 https://px.ncm/networking/support for details on these support features, and visit hp.com/networking/contact-support for details on how to contact HP for technical support.

† See hp.com/networking/warrantysummary for warranty details.

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 scaleup 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

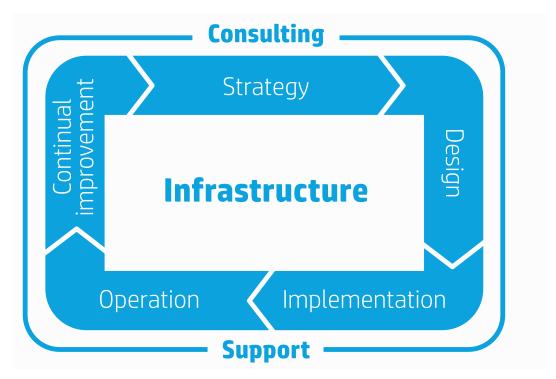
These services define the vision, current state, readiness, and pragmatic next steps for the future state of your network. The Connectivity Transformation Experience Workshop is a highly interactive, HP facilitated one-day session between your key stakeholders and senior HP consultants. This structured 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.

^{*} 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.

Technology Services—Networking Services and Solutions



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 Services 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, 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—extends your warranty and fixes network hardware and software problems.
- Proactive Care—helps optimize the availability and performance of your networking platform and keeps devices up to date.
- Datacenter Care—provides customized networking support, including business-critical multivendor environments.
- 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) that are 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 either repair or replacement by an onsite service technician or with a remote exchange option
- Software updates and firmware upgrades
- Standard business hours or 24x7 phone assistance for device-specific problem diagnosis and resolution

New HP Foundation Care services provide a simpler alternative with reactive support on HP networking products. You no longer need to decipher hardware, software, or combination support. The new streamlined Foundation Care services reactive support provides options based on the criticality of the supported equipment and coverage window requirements. For cases where hardware onsite options are needed, the following options are available:

- HP Foundation Care Call to Repair Service—24x7 coverage of hardware and software. Hardware is repaired within six hours of case opening, allowing staff to plan restoration activities. A two-hour callback is provided for software questions.
- HP Foundation Care 24x7 Service—24x7 coverage of hardware and software; four-hour onsite response for hardware issues. A two-hour callback is provided for software questions.
- HP Foundation Care Next Business Day Service—Monday-Friday (from 8 a.m. to 5 p.m.) coverage for hardware and software. Next-business-day response for hardware issues. A two-hour callback is provided for software questions.

There are also affordable remote services options:

- HP Foundation Care 4 hour Exchange Service—Exchange affected components within four hours of case opening and receive software support 24x7.
- HP Foundation Care Next Business Day Exchange Service— Exchange affected components the next business day and receive software support.

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

For more information

To get more details about the HP services available in your country, please visit: hp.com/networking/services

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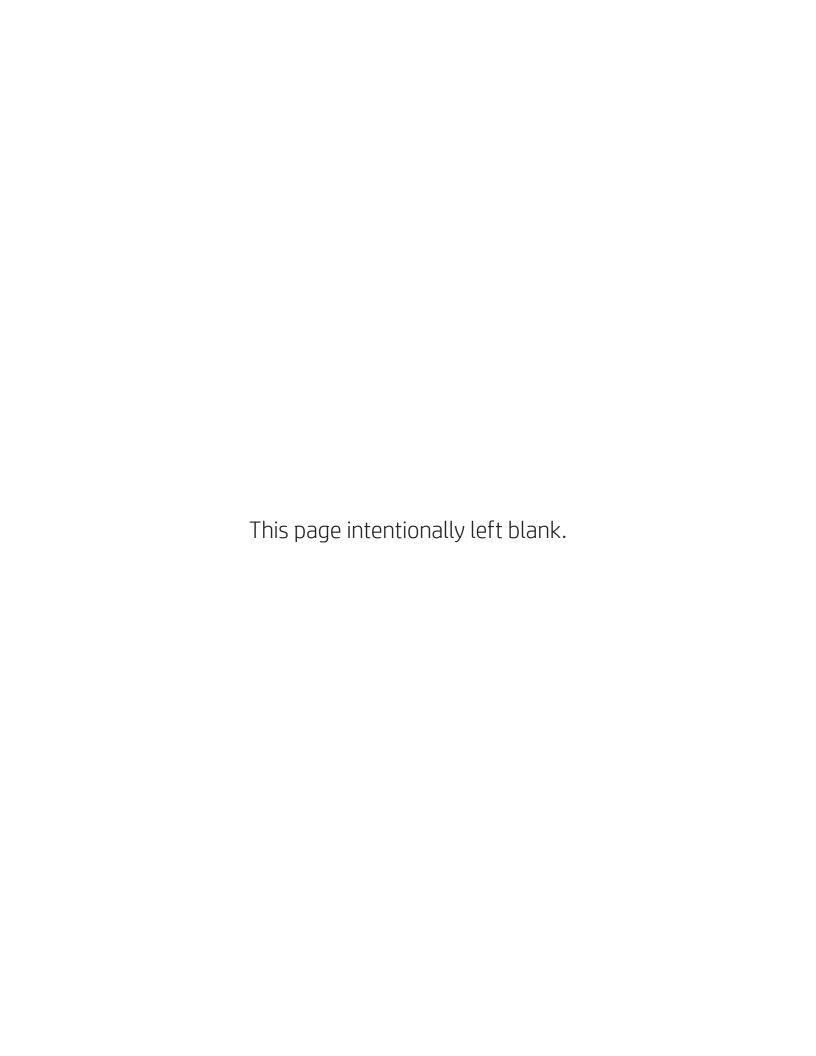
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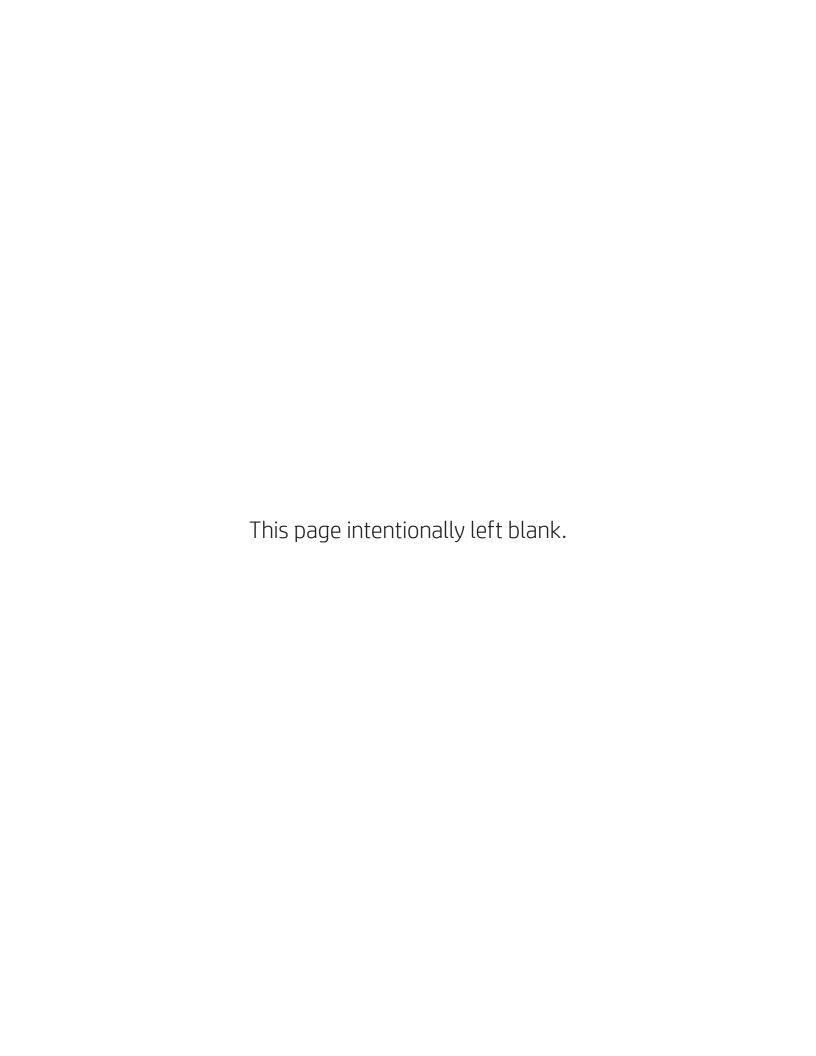
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