

Data sheet

Product overview

The HP 3600 EI Switch Series delivers premium levels of intelligent and resilient performance, security, and reliability for robust switching at the enterprise network edge. The series consists of Layer 3 Fast Ethernet and PoE/PoE+ switches, with advanced features that can accommodate the most demanding applications. Secure, resilient connectivity and the latest traffic-prioritization technologies enhance converged networks. Designed for increased flexibility and scalability, HP 3600 EI series switches come with 24 or 48 10/100 ports, four active SFP-based Gigabit Ethernet ports for stacking and uplinks, and a 24-port 100BASE-FX switch with two or four Gigabit Ethernet SFP slots.

Key features

- Robust switching at the enterprise network edge
- Advanced Layer 3 and multicast routing
- IRF-automated stack and switching fabric setup
- Integrated and distributed security enforcement
- Enterprise-level nonblocking performance



Specifications (continued)

	HP 3600-48 El Switch (JD333A)	HP 3600-24-SFP El Switch (JD334A)	HP 3600-24-PoE+ v2 El Switch (JG301A)
Ports	48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);	24 SFP 100 Mbps ports	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type
	Duplex: half or full	2 SFP 1000 Mbps ports	100BASE-TX, IEEE 802.3at PoE+); Duplex: half or full
	4 SFP 1000 Mbps ports	2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type	4 SFP 1000 Mbps ports
	1 RJ-45 serial console port	100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	2 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)
		1 RJ-45 serial console port	1 RJ-45 serial console port
Physical characteristics			
Dimensions	10.24(d) x 17.32(w) x 1.72(h) in. (26 x 44 x 4.36 cm) (1U height)	10.24(d) x 17.32(w) x 1.72(h) in. (26 x 44 x 4.36 cm) (1U height)	16.54(d) x 17.32(w) x 1.72(h) in. (42 x 44 x 4.36 cm) (1U height)
Weight	8.82 lb. (4 kg)	7.72 lb. (3.5 kg)	22.05 lb. (10 kg)
Memory and processor			
	64 MB SDRAM, 16 MB flash; packet buffer size: 32 MB	64 MB SDRAM, 16 MB flash; packet buffer size: 32 MB	256 MB SDRAM, 128 MB flash; packet buffer size: 2 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
Performance			
	< 10 µs	< 10 µs	
100 Mb Latency			< 6 µs
1000 Mb Latency			< 5 µs
Throughput Routing/Switching capacity	11.8 million pps	9.5 million pps	9.5 million pps
Routing table size	17.6 Gbps 8448 entries	12.8 Gbps 8448 entries	12.8 Gbps 8448 entries
Environment			
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 122°F (0°C to 50°C)
Operating relative humidity	10% to 90%, noncondensing	10% to 90%, noncondensing	5% to 95%, noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing
Acoustic	one to yone, hencendenbing		Low-speed fan: 44.7 dB, High-speed fan: 53.8 dB
Electrical characteristics			
Maximum heat dissipation	171 BTU/hr (180.41 kJ/hr)	222 BTU/hr (234.21 kJ/hr)	143 BTU/hr (150.86 kJ/hr)
Voltage	100-240 VAC	100-240 VAC	100-240 VAC
DC voltage	-48 to -60 VDC	-48 to -60 VDC	-52 to -55 VDC
Maximum power rating	50 W	65 W	795 W
PoE power			720 W
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). With AC input, the maximum power consumption is 465 W; PoE is 370 W. With DC input, the maximum power consumption is 795 W; PoE is 720 W.
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance

Specifications (continued)

	HP 3600-48 El Switch (JD333A)	HP 3600-24-SFP EI Switch (JD334A)	HP 3600-24-PoE+ v2 El Switch (JG301A)
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-11; EN 61000-3-2: 2006; EN 61000-4-11; EN 61000-3-2: 2006; EN 61000-3:3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-1; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager	IMC - Intelligent Management Center; command-l interface; Web browser; SNMP Manager
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV822E) 3-year, 4-hour onsite, 24x7 coverage for hardware	3-year, 4-hour onsite, 13x5 coverage for hardware (UV822E) 3-year, 4-hour onsite, 24x7 coverage for hardware	3-year, 4-hour onsite, 13x5 coverage for hardwa (UV822E) 3-year, 4-hour onsite, 24x7 coverage for hardwa
	(UV825E)	(UV825E)	(UV825E)
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV828E)	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UV828E)	3-year, 4-hour onsite, 24x7 coverage for hardwa 24x7 SW phone support and SW updates (UV828E)
	3-year, 24x7 SW phone support, software updates (UV831E)	3-year, 24x7 SW phone support, software updates (UV831E)	3-year, 24x7 SW phone support, software updat (UV831E)
	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR589E)	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR589E)	1-year, post-warranty, 4-hour onsite, 13x5 coverc for hardware (HR589E)
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR590E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR590E)	1-year, post-warranty, 4-hour onsite, 24x7 coverc for hardware (HR590E)
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR591E)	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR591E)	1-year, post-warranty, 4-hour onsite, 24x7 coverc for hardware, 24x7 software phone support (HR591E)
	Installation with minimum configuration, system-based pricing (UX116E)	Installation with minimum configuration, system-based pricing (UX116E)	4-year, 4-hour onsite, 13x5 coverage for hardwa (UV823E)
	Installation with HP-provided configuration, system-based pricing (UX117E)	Installation with HP-provided configuration, system-based pricing (UX117E)	4-year, 4-hour onsite, 24x7 coverage for hardwo (UV826E)
	4-year, 4-hour onsite, 13x5 coverage for hardware (UV823E)	4-year, 4-hour onsite, 13x5 coverage for hardware (UV823E)	4-year, 4-hour onsite, 24x7 coverage for hardwa 24x7 software phone (UV829E)
	4-year, 4-hour onsite, 24x7 coverage for hardware (UV826E)	4-year, 4-hour onsite, 24x7 coverage for hardware (UV826E)	4-year, 24x7 SW phone support, software upda (UV832E)
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV829E)	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV829E)	5-year, 4-hour onsite, 13x5 coverage for hardwa (UV824E)
	4-year, 24x7 SW phone support, software updates (UV832E)	4-year, 24x7 SW phone support, software updates (UV832E)	5-year, 4-hour onsite, 24x7 coverage for hardwa (UV827E)
	5-year, 4-hour onsite, 13x5 coverage for hardware (UV824E)	5-year, 4-hour onsite, 13x5 coverage for hardware (UV824E)	5-year, 4-hour onsite, 24x7 coverage for hardwa 24x7 software phone (UV830E)
	5-year, 4-hour onsite, 24x7 coverage for hardware (UV827E)	5-year, 4-hour onsite, 24x7 coverage for hardware (UV827E)	5-year, 24x7 SW phone support, software updat (UV833E)
	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV830E)	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV830E)	3 Yr 6 hr Call-to-Repair Onsite (UW431E)
	5-year, 24x7 SW phone support, software updates (UV833E)	5-year, 24x7 SW phone support, software updates (UV833E)	4 Yr 6 hr Call-to-Repair Onsite (UW432E)
	3 Yr 6 hr Call-to-Repair Onsite (UW431E)	3 Yr 6 hr Call-to-Repair Onsite (UW431E)	5 Yr 6 hr Call-to-Repair Onsite (UW433E)
	4 Yr 6 hr Call-to-Repair Onsite (UW432E)	4 Yr 6 hr Call-to-Repair Onsite (UW432E)	1-year, 6 hour Call-To-Repair Onsite for hardwar (HR593E)
	5 Yr 6 hr Call-to-Repair Onsite (UW433E)	5 Yr 6 hr Call-to-Repair Onsite (UW433E)	1-year, 24x7 software phone support, software updates (HR592E)
	1-year, 6 hour Call-To-Repair Onsite for hardware (HR593E)	1-year, 6 hour Call-To-Repair Onsite for hardware (HR593E)	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchang (HS690E)
	1-year, 24x7 software phone support, software updates (HR592E)	1-year, 24x7 software phone support, software updates (HR592E)	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS691E)
	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS690E)	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS690E)	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchang (HS692E)
	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS691E)	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS691E)	3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS693E
	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS692E)	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS692E)	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchang (HS694E)
	3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS693E)	3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS693E)	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS695E)

Specifications (continued)

	HP 3600-48 El Switch (JD333A)	HP 3600-24-SFP EI Switch (JD334A)	HP 3600-24-PoE+ v2 El Switch (JG301A)
	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS694E)	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS694E)	5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS696E)
	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS695E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS696E)	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS695E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS696E)	5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS697E) Refer to the HP website at <u>www.hp.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
	5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS697E)	5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS697E)	
	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	Refer to the HP website at <u>www.hp.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
Standards and protocols (applies to all products in series)	Device management RFC 1157 SNMPv1/v2c RFC 1157 SNMPv1/v2c RFC 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II RFC 2573 (SNMPv3 Applications) RFC 2578-2580 SMIv2 RFC 2819 (RMON groups Alarm, Event, History and Statistics only) RFC 3410 (Management Framework) RFC 3416 (SNMP rotocol Operations v2) RFC 3417 (SNMP Transport Mappings) HTML and telnet management Multiple Configuration Files SNMP v3 and RMON RFC support SSHv1/SSHv2 Secure Shell General protocols IEEE 802.1 ad Q-in-Q IEEE 802.1 D AAC Bridges IEEE 802.1 p Priority IEEE 802.1 Q VLANS IEEE 802.1 w Rapid Reconfiguration of Spanning Tree IEEE 802.1 x PAE IEEE 802.1 x PAE IEEE 802.1 x PAE IEEE 802.3 Type 10BASE-T IEEE 802.3 Type 10BASE-T IEEE 802.3 ar low control IEEE 802.3 ar How Control IEEE 802.3 ar HOW Control IEEE 802.3 ar HOW Control	RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types RFC 3410 Applicability Statements for SNMP RFC 3410 Applicability Statements for SNMP RFC 3410 Applicability Statements for SNMP RFC 3411 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3) RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP) RFC 3416 Protocol Operations for SNMP RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP) IP multicast RFC 1112 (GMP RFC 2362 PIM Sparse Mode RFC 2363 BMUlticast Source Discovery Protocol (MSDP) RFC 1213 MIB II RFC 1213 MIB II RFC 1243 RIP2 MIB RFC 1757 Remote Network Monitoring MIB RFC 2233 Interfaces MIB RFC 2571 SNMP-Notification MIB RFC 2573 SNMP-Notification MIB RFC 2573 SNMP-Notification Client MIB RFC 2574 SNMP VSM MIB RFC 265 Ethernet-Like-MIB RFC 2674 802.1 p and IEEE 802.1 Q Bridge MIB RFC 2419 RMON MIB RFC	 RFC 1902 Structure of Management Information for Version 2 of the Simple Network Management Protocol (SNMPv2) RFC 1903 SNMPv2 Textual Conventions RFC 1905 SNMPv2 Protocol Operations RFC 1905 SNMPv2 Protocol Operations RFC 1905 SNMPv2 Protocol Operations RFC 2570 SNMPv3 Overview RFC 2571 An Architecture for Describing SNMP Management Frameworks RFC 2573 SNMP Applications RFC 2574 SNMPv3 User-based Security Model (USM) RFC 2575 SNMPv3 View-based Access Control Model (VACM) RFC 2579 Textual Conventions for SMIv2 RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) RFC 3414 SNMPv3 View-based Access Control Model (VACM) RFC 3415 SNMPv3 View-based Access Control Model VACM) RFC 1583 OSPFv2 RFC 2328 OSPFv2

HP 3600 El Switch Series accessories

Transceivers

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 RJ45 T Transceiver (JD089B) HP X110 100M SFP LC LH40 Transceiver (JD090A) HP X110 100M SFP LC LH80 Transceiver (JD091A) 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) HP X120 1G SFP LC LH100 Transceiver (JD103A) 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 X120 1G SFP LC SX Transceiver (JD118B) HP X120 1G SFP LC LX Transceiver (JD119B) HP X110 100M SFP LC LX Transceiver (JD120B)

Cables

HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A) HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A) HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A) HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A) HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A) HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A) HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A) HP 3600 Switch SFP Stacking Kit (JD324B)

NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable (BK837A)

NEW HP 1 m PremierFlex OM3+ LC/LC Optical Cable (BK838A)

NEW HP 2 m PremierFlex OM3+ LC/LC Optical Cable (BK839A)

NEW HP 5 m PremierFlex OM3+ LC/LC Optical Cable (BK840A)

NEW HP 15 m PremierFlex OM3+ LC/LC Optical Cable (BK841A)

NEW HP 30 m PremierFlex OM3+ LC/LC Optical Cable (BK842A)

NEW HP 50 m PremierFlex OM3+ LC/LC Optical Cable (BK843A)

Power Supply

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)

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

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