



**Hewlett Packard HPE Support Center Enterprise**

# HP E3800 Switch Series - Specifications

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## Physical specifications

Description									
Specification	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP+2SFP+ Switch (J9584A)
Dimensions (D X W X H)	46.74 x 44.27 x 4.32 cm (18.4 x 17.43 x 1.7 in) (1U height)								
Weight <sup>1</sup>	7.21 kg (15.9 lb)	7.64 kg (16.84 lb)	6.92 kg (15.25 lb)	7.26 kg (16 lb)	7.17 kg (15.8 lb)	7.42 kg (16.35 lb)	7.46 kg (16.45 lb)	7.82 kg (17.25 lb)	7.26 kg (16 lb)

**NOTE:** 1. Switch chassis with 1 power supply and fan tray installed.

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## Technical specifications

Description									
Specification	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP+2SFP+ Switch (J9584A)
Fan tray	<ul style="list-style-type: none"> <li>• 1 x J9582A</li> <li>• 1 fan tray slot</li> </ul>								
Memory and processor	HP ProVision ASIC/ARM @ 350 Mhz Freescale PowerPC @ 1200 MHz, 4 GB flash, 2 GB SDRAM								
Packet buffer size:	18MB dynamic	36MB dynamic	18MB dynamic	36MB dynamic	18MB dynamic	36MB dynamic	18MB dynamic	36MB dynamic	18MB dynamic
Ports	<ul style="list-style-type: none"> <li>• 24 RJ-45 autos ensin g 10/10 0/100 0 PoE+ ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 48 RJ-45 autos ensin g 10/10 0/100 0 PoE+ ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 24 RJ-45 autos ensin g 10/10 0/100 0 ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 48 RJ-45 autos ensin g 10/10 0/100 0 ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 24 RJ-45 autos ensin g 10/10 0/100 0 ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 48 RJ-45 autos ensin g 10/10 0/100 0 ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 24 RJ-45 autos ensin g 10/10 0/100 0 PoE+ ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 48 RJ-45 autos ensin g 10/10 0/100 0 PoE+ ports (IEEE 802.3 Type 10BA SE-T, IEEE 802.3 u Type 100B ASE-TX,</li> </ul>	<ul style="list-style-type: none"> <li>• 24 SFP 100/1000 Mb/s ports (IEEE 802.3 u Type 100B ASE-T)</li> </ul>

Description									
Specification	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
	TX, IEEE 802.3 ab Type 1000 BASE-T, IEEE 802.3 at PoE+)	TX, IEEE 802.3 ab Type 1000 BASE-T, IEEE 802.3 at PoE+)	IEEE 802.3 ab Type 1000 BASE-T) • Duplex: 10BA SE-T/100 BASE-TX: half or full only	IEEE 802.3 ab Type 1000 BASE-T) • Duplex: 10BA SE-T/100 BASE-TX: full only	IEEE 802.3 ab Type 1000 BASE-T) • Duplex: 10BA SE-T/100 BASE-TX: full only	IEEE 802.3 ab Type 1000 BASE-T) • Duplex: 10BA SE-T/100 BASE-TX: full only	TX, IEEE 802.3 ab Type 1000 BASE-T, IEEE 802.3 at PoE+)	TX, IEEE 802.3 ab Type 1000 BASE-T, IEEE 802.3 at PoE+)	• Duplex: 100B ASE-TX: half or full only • 1000 BASE-T: full only
	2 fixed 1000/10000 SFP+ ports	4 fixed 1000/10000 SFP+ ports	2 fixed 1000/10000 SFP+ ports	4 fixed 1000/10000 SFP+ ports	• 2 RJ-45 10-GbE ports IEEE 802.3 an-2006 Type 10GB ASE-T	• 4 RJ-45 10-GbE ports IEEE 802.3 an-2006 Type 10GB ASE-T	• 2 RJ-45 10-GbE ports IEEE 802.3 an-2006 Type 10GB ASE-T	• 4 RJ-45 10-GbE ports IEEE 802.3 an-2006 Type 10GB ASE-T	2 fixed 1000/10000 SFP+ ports
	1 RJ-45 serial console port								
	1 RJ-45 out-of-band management port								
	1 Stacking module slot								

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## Electrical specifications

Description									
Specification	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
Power supplies (2 power supply slots 1 minimum power supply required includes)	1 x J9580A (HP X312 1000 W 100-240 V ac to 54 V dc power supply)	1 x J9580A (HP X312 1000 W 100-240 V ac to 54 V dc power supply)	1 x J9581A (HP X311 400 W 100-240 V ac to 12 V dc power supply)	1 x J9581A (HP X311 400 W 100-240 V ac to 12 V dc power supply)	1 x J9581A (HP X311 400 W 100-240 V ac to 12 V dc power supply)	1 x J9581A (HP X311 400 W 100-240 V ac to 12 V dc power supply)	1 x J9580A (HP X312 1000 W 100-240 V ac to 54 V dc power supply)	1 x J9580A (HP X312 1000 W 100-240 V ac to 54 V dc power supply)	1 x J9581A (HP X311 400 W 100-240 V ac to 12 V dc power supply)
Maximum heat dissipation	434 BTU/hr (457.87 kJ/hr)	635 BTU/hr (669.93 kJ/hr)	434 BTU/hr (457.87 kJ/hr)	635 BTU/hr (669.93 kJ/hr)	434 BTU/hr (457.87 kJ/hr)	635 BTU/hr (669.93 kJ/hr)	434 BTU/hr (457.87 kJ/hr)	635 BTU/hr (669.93 kJ/hr)	434 BTU/hr (457.87 kJ/hr)
Voltage	100-120/200-240 V ac		100-127/200-240 V ac		100-127/200-240 V ac		100-120/200-240 V ac		100-127/200-240 V ac
Current	9.4/7.8 A		6/3 A		9.4/7.8 A		9.4/7.8 A		6/3 A
Idle power	70 W	97 W	66 W	70 W		74 W	71 W	100 W	55 W
Maximum power rating	127 W	186 W	127 W	186 W	127 W	186 W	127 W	186 W	127 W
PoE power	720 W	1080 W	-	-	-	-	720 W	1080 W	-
Frequency	50/60 Hz								

	Description								
Specifications	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)

**NOTE:**

- Idle power is the actual power consumption of the device with no ports connected. 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.
- **J9573A/J9587A:** With a single power supply @ 120 V input, a maximum of 572 W of PoE power is available.
- **J9574A/J9588A:** With a single power supply @ 120 V input, a maximum of 514 W of PoE power is available. With a single power supply @ 240 V input, a maximum of 814 W of PoE power is available.

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**Environmental specifications**

	Description								
Specifications	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
Operating temperature	0° to 55°C (32° to 131°F); Max temperature is 45°C when transceivers are installed.				0° to 55°C (32° to 131°F)	0° to 55°C (32° to 131°F); Max temperature is 45°C when SFP+ Transceivers are installed.	0° to 55°C (32° to 131°F)	0° to 55°C (32° to 131°F); Max temperature is 45°C when SFP+ Transceivers are installed.	0° to 45°C (32° to 113°F)
Operating relative humidity	15% to 95% @ 40°C (104°F), noncondensing								
Nonoperating/Storage temperature	-40° to 70°C (-40° to 158°F)								
Nonoperating/Storage relative humidity	15% to 90% @ 65°C (149°F), noncondensing								
Altitude	Up to 3 km (10,000 ft)								
Acoustic	Power: 49 dB, Pressure: 33.7 dB	Power: 57 dB, Pressure: 41.2 dB	Power: 36 dB, Pressure: 26.4 dB	Power: 36 dB, Pressure: 25.4 dB	Power: 39 dB, Pressure: 25.5 dB	Power: 34 dB, Pressure: 24.5 dB	Power: 48 dB, Pressure: 32.6 dB	Power: 57 dB, Pressure: 41.5 dB	Power: 36 dB, Pressure: 25 dB

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**Performance specifications**

	Description								
Specifications	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
1000Mb latency	<2.8 μs (LIFO 64-byte packets)								
10 Gb/s latency	<1.9 μs (LIFO 64-byte packets)								
Throughput (64-byte packets)	65.4 million packets per sec	130.9 million packets per sec	65.4 million packets per sec	130.9 million packets per sec	65.4 million packets per sec	130.9 million packets per sec	65.4 million packets per sec	130.9 million packets per sec	65.4 million packets per sec
Switching capacity	88 Gb/s	176 Gb/s	88 Gb/s	176 Gb/s	88 Gb/s	176 Gb/s	88 Gb/s	176 Gb/s	88 Gb/s
Routing table size	10000 entries								
MAC address table size	65500 entries								

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## Immunity specifications

Specification	Description								
	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
EN	EN 55024, CISPR 24								
ESD	IEC 61000-4-2								
Radiated	IEC 61000-4-3; 3 V/m								
EFT/Burst	IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)								
Surge	IEC 61000-4-5; 1 or 2 kV ac								
Conducted	IEC 61000-4-6; 3 V								
Power frequency magnetic field	IEC 61000-4-8; 1 A/m, 50 or 60 Hz								
Voltage dips and interruptions	IEC 61000-4-11; >95% reductions, 0.5 period; 30% reduction, 25 periods								
Harmonics	EN 61000-3-2, IEC 61000-3-2								
Flicker	EN 61000-3-3, IEC 61000-3-3								

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## Safety certifications

Certification	Description								
	HP E3800-24G-PoE+-2SFP+ Switch (J9573A)	HP E3800-48G-PoE+-4SFP+ Switch (J9574A)	HP E3800-24G-2SFP+ Switch (J9575A)	HP E3800-48G-4SFP+ Switch (J9576A)	HP E3800-24G-2XG Switch (J9585A)	HP E3800-48G-4XG Switch (J9586A)	HP E3800-24G-PoE+-2XG Switch (J9587A)	HP E3800-48G-PoE+-4XG Switch (J9588A)	HP E3800-24SFP-2SFP+ Switch (J9584A)
Safety	EN 60950/IEC 60950; UL 60950; CAN/CSA 22.2 No. 60950; EN 60825								
Emissions	FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A								

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## Standards and protocols

Standards and protocols	Description
Device management	<ul style="list-style-type: none"> <li>• RFC 1591 DNS (client)</li> <li>• HTML and telnet management</li> </ul>
General protocols	<ul style="list-style-type: none"> <li>• IEEE 802.1ad Q-in-Q</li> <li>• IEEE 802.1D MAC Bridges</li> <li>• IEEE 802.1p Priority</li> <li>• IEEE 802.1Q VLANs</li> <li>• IEEE 802.1s Multiple Spanning Trees</li> <li>• IEEE 802.1v VLAN classification by Protocol and Port</li> <li>• IEEE 802.1w Rapid Reconfiguration of Spanning Tree</li> <li>• IEEE 802.3ad Link Aggregation Control Protocol (LACP)</li> <li>• IEEE 802.3af Power over Ethernet</li> <li>• IEEE 802.3x Flow Control</li> <li>• RFC 768 UDP</li> <li>• RFC 783 TFTP Protocol (revision 2)</li> <li>• RFC 792 ICMP</li> <li>• RFC 793 TCP</li> <li>• RFC 826 ARP</li> <li>• RFC 854 TELNET</li> <li>• RFC 868 Time Protocol</li> <li>• RFC 951 BOOTP</li> <li>• RFC 1058 RIPv1</li> <li>• RFC 1350 TFTP Protocol (revision 2)</li> </ul>

Standards and protocols	Description
	<ul style="list-style-type: none"> <li>• RFC 1519 CIDR</li> <li>• RFC 1542 BOOTP Extensions</li> <li>• RFC 2030 Simple Network Time Protocol (SNTP) v4</li> <li>• RFC 2131 DHCP</li> <li>• RFC 2453 RIPv2</li> <li>• RFC 2548 (MS-RAS-Vendor only)</li> <li>• RFC 3046 DHCP Relay Agent Information Option</li> <li>• RFC 3576 Ext to RADIUS (CoA only)</li> <li>• RFC 3768 VRRP</li> <li>• RFC 4675 RADIUS VLAN &amp; Priority</li> <li>• UDLD (Uni-directional Link Detection)</li> </ul>
IP multicast	<ul style="list-style-type: none"> <li>• RFC 3376 IGMPv3 (host joins only)</li> <li>• RFC 3973 Draft 2 PIM Dense Mode</li> <li>• RFC 4601 Draft 10 PIM Sparse Mode</li> </ul>
IPv6	<ul style="list-style-type: none"> <li>• RFC 1981 IPv6 Path MTU Discovery</li> <li>• RFC 2375 IPv6 Multicast Address Assignments</li> <li>• RFC 2460 IPv6 Specification</li> <li>• RFC 2464 Transmission of IPv6 over Ethernet Networks</li> <li>• RFC 2710 Multicast Listener Discovery (MLD) for IPv6</li> <li>• RFC 2925 Remote Operations MIB (Ping only)</li> <li>• RFC 3019 MLDv1 MIB</li> <li>• RFC 3315 DHCPv6 (client only)</li> <li>• RFC 3484 Default Address Selection for IPv6</li> <li>• RFC 3587 IPv6 Global Unicast Address Format</li> <li>• RFC 3596 DNS Extension for IPv6</li> <li>• RFC 3810 MLDv2 (host joins only)</li> <li>• RFC 4022 MIB for TCP</li> <li>• RFC 4113 MIB for UDP</li> <li>• RFC 4251 SSHv6 Architecture</li> <li>• RFC 4252 SSHv6 Authentication</li> <li>• RFC 4253 SSHv6 Transport Layer</li> <li>• RFC 4254 SSHv6 Connection</li> <li>• RFC 4291 IP Version 6 Addressing Architecture</li> <li>• RFC 4293 MIB for IP</li> <li>• RFC 4294 IPv6 Node Requirements</li> <li>• RFC 4419 Key Exchange for SSH</li> <li>• RFC 4443 ICMPv6</li> <li>• RFC 4541 IGMP &amp; MLD Snooping Switch</li> <li>• RFC 4861 IPv6 Neighbor Discovery</li> <li>• RFC 4862 IPv6 Stateless Address Auto-configuration</li> <li>• RFC 5095 Deprecation of Type 0 Routing Headers in IPv6</li> <li>• RFC 5340 OSPFv3 for IPv6</li> <li>• RFC 5453 Reserved IPv6 Interface Identifiers</li> <li>• RFC 5722 Handling of Overlapping IPv6 Fragments</li> </ul>
MIBs	<ul style="list-style-type: none"> <li>• RFC 1213 MIB II</li> <li>• RFC 1493 Bridge MIB</li> <li>• RFC 1724 RIPv2 MIB</li> <li>• RFC 1850 OSPFv2 MIB</li> <li>• RFC 2021 RMONv2 MIB</li> <li>• RFC 2096 IP Forwarding Table MIB</li> <li>• RFC 2613 SMON MIB</li> <li>• RFC 2618 RADIUS Client MIB</li> <li>• RFC 2620 RADIUS Accounting MIB</li> <li>• RFC 2665 Ethernet-Like-MIB</li> <li>• RFC 2668 802.3 MAU MIB</li> <li>• RFC 2674 802.1p and IEEE 802.1Q Bridge MIB</li> <li>• RFC 2737 Entity MIB (Version 2)</li> <li>• RFC 2787 VRRP MIB</li> <li>• RFC 2863 The Interfaces Group MIB</li> <li>• RFC 2925 Ping MIB</li> </ul>
Network management	<ul style="list-style-type: none"> <li>• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</li> <li>• RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)</li> <li>• RFC 3176 sFlow</li> <li>• ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)</li> <li>• SNMPv1/v2c/v3</li> <li>• XRMON</li> </ul>

Standards and protocols	Description
OSPF	<ul style="list-style-type: none"><li>• RFC 2328 OSPFv2</li><li>• RFC 3101 OSPF NSSA</li><li>• RFC 5340 OSPFv3 for IPv6</li></ul>
QoS/CoS	<ul style="list-style-type: none"><li>• RFC 2474 DiffServ Precedence, including 8 queues/port</li><li>• RFC 2597 DiffServ Assured Forwarding (AF)</li><li>• RFC 2598 DiffServ Expedited Forwarding (EF)</li></ul>
Security	<ul style="list-style-type: none"><li>• IEEE 802.1X Port Based Network Access Control</li><li>• RFC 1492 TACACS+</li><li>• RFC 2865 RADIUS (client only)</li><li>• RFC 2866 RADIUS Accounting</li><li>• Access Control Lists (ACLs)</li><li>• MAC Authentication</li><li>• MAC Lockdown</li><li>• MAC Lockout</li><li>• Port Security</li><li>• Secure Sockets Layer (SSL)</li><li>• SSHv1/SSHv2 Secure Shell</li><li>• Web Authentication</li></ul>

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