Hewlett Packard Enterprise

Data sheet

HPE 1620 Switch Series

Key features

- Entry-level, smart-managed Layer 2 switches
- 8-, 24-, and 48-port gigabit models are rack-mount capable with included hardware
- 8- and 24-port models run quiet (fanless)
- All models include internal power supplies
- Limited Lifetime Warranty

Product overview

HPE 1620 Switch Series are entry-configurable switches for small business networking, a step up from unmanaged devices, with features to enhance network security, performance, and reliability.

These Gigabit switches are plug-and-play out of the box, yet network operations can be fine-tuned through features available from a simple Web browser-based GUI, if necessary. Enhance security using virtual LANs, link aggregation, or IGMP Snooping boost uplink performance, and loop prevention enhances network reliability.

The series consists of 8-, 24-, and 48-port 10/100/1000BASE-T models each providing non-blocking gigabit per port performance. All models can be rack mounted and include the necessary rack-mounting hardware; the 8-port model can also be wall mounted. All models come with internal power supplies and localized power cord removing the need to manage external power adapters. The 8- and 24-port models are fanless for silent operation.

Features and benefits

Management

- Simple Web management

  Allows easy management of devices by nontechnical users with its intuitive Web GUI with administrator and monitor privileges

- Secure Web GUI

  Provides a secure, easy-to-use graphical interface for configuring the switch via HTTPS

- SNMPv1, v2c, and v3

  Enable devices to be discovered and monitored from an SNMP management station

- Port mirroring

  Mirrors traffic on a port to be simultaneously sent to a network analyzer for monitoring

- Default DHCP Client mode

  Allows the switch to be directly connected to a network, enabling plug-and-play operation; in absence of a DHCP Server on the network, the switch will fall back to a static IP address

- Network Time Protocol (NTP)

  Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time

- Manual network time configuration

  Manually set the date and time on the switch in the absence of a NTP server

- Dual flash images

  Provide independent primary and secondary operating system files for backup while upgrading

Quality of service (QoS)

- IEEE 802.1p prioritization with DSCP

  Delivers data from the switch to devices based on the priority and type of traffic using Differentiated Services Code Point (DSCP)

- Broadcast control

  Allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

- Rate limiting

  Sets per-port ingress enforced maximums and per-port, per-queue minimums

Connectivity

- Auto-MDI/MDIX

  Automatically adjusts for straight-through or crossover cables on all ports

- IEEE 802.3X Flow Control

  Provides a flow throttling mechanism propagated through the network to prevent packet loss at a congested node

- Loopback detection

  If the switch detects a loop, it disables the source port from forwarding data packets originating from the switch to avoid broadcast storms

- Energy Efficient Ethernet

  Compliant with IEEE 802.3az standard requirements to save energy during periods of low data activity

- Port power save mode

  Enables a port to operate at the lowest transmission speed or go down during a specific time range on certain days of a week. The port resumes when the effective time period ends

- Cable test

  Performs a check on the status of the cable connected to an Ethernet port on the device. The test determines whether a short circuit or open circuit is present on the cable and the approximate length to the fault in the cable

Performance

- Half- and full-duplex auto-negotiating capability on every port doubles the throughput of every port

- IGMP Snooping, v1, v2, and v3

  Improves network performance through multicast filtering, instead of flooding traffic to all ports

Layer 2 switching

- VLAN support and tagging

  Supports IEEE 802.1Q with 4,096 simultaneous VLAN IDs

- Jumbo frame support

  Supports up to 10 kilobyte frame size to improve the performance of large data transfers

Resiliency and high availability

- Link aggregation

  Groups together multiple ports (up to a maximum of eight ports per trunk) automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks. Note: 8 port models support 4 trunks, 16 and 24 port models support 8 trunks, 48 port models support 16 trunks

Warranty and support

- Limited Lifetime Warranty

  See hpe.com/networking/warrantysummary for warranty and support information included with your product purchase.

HPE 1620 Switch Series

SPECIFICATIONS	HPE 1620-8G Switch (JG912A)	HPE 1620-24G Switch (JG913A)	HPE 1620-48G Switch (JG914A)
I/O ports and slots	8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
Additional ports and slots	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port
Physical characteristics			
Dimensions	10.47(w) x 6.38(d) x 1.73(h) in (26.59 x 16.21 x 4.39 cm) (1U height)	17.32(w) x 6.81(d) x 1.73(h) in (43.99 x 17.3 x 4.39 cm) (1U height)	17.32(w) x 9.37(d) x 1.73(h) in (43.99 x 23.8 x 4.39 cm)
Weight	2.2 lb (1 kg)	4.85 lb (2.2 kg)	7.28 lb (3.3 kg)
Memory and processor	MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb	MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb	MIPS @ 650 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 12 Mb
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included), wall mount	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance			
100 Mb Latency	< 7 µs	< 7 µs	< 7 µs
1000 Mb Latency	< 5 µs	< 5 µs	< 5 µs
Throughput	up to 11.9 Mpps (64-byte packets)	up to 35.7 Mpps (64-byte packets)	up to 71.4 Mpps (64-byte packets)
Switching capacity	48 Gbps	48 Gbps	96 Gbps
MAC address table size	8192 entries	8192 entries	16384 entries
Reliability			
MTBF (years)	138.89	123.46	81.30

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Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	5% to 95%, noncondensing	5% to 95%, 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
Altitude	up to 16,404 ft (5 km)	up to 16,404 ft (5 km)	up to 16,404 ft (5 km)
Acoustic	No Fan	No Fan	Power: 49.7 dB, Pressure: 49.7 dB; ISO 7779
Electrical characteristics			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
AC voltage	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC
Maximum power rating	7 W	15 W	28.2 W
	Note 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.
Safety	IEC 60950-1; EN 60950-1; CSA 22.2 60950-1; UL 60950-1 2nd Edition	IEC 60950-1; EN 60950-1; CSA 22.2 60950-1; UL 60950-1 2nd Edition	IEC 60950-1; EN 60950-1; CSA 22.2 60950-1; UL 60950-1 2nd Edition
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
Services	Refer to the Hewlett Packard Enterprise website at hpe.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 Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at hpe.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 Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at hpe.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 Hewlett Packard Enterprise sales office.

STANDARDS AND PROTOCOLS
(applies to all products in series)

General protocols	IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs	IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP)	IEEE 802.3az Energy Efficient Ethernet IEEE 802.3i 10BASE-T IEEE 802.3x Flow Control

Learn more at
hpe.com/networking

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