QuickSpecs

Overview

HPE 1620 Switch series

Models

HP 1620-8G Switch	JG912A
HP 1620-24G Switch	JG913A
HP 1620-48G Switch	JG914A

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
- HPE Limited Lifetime Warranty

Product overview

The HPE 1620 Switch Series is 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 operation 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 cords removing the need to manage external power adapters. The 8- and 24 port models are fanless for silent operation. All models come with the HPE Limited Lifetime Warranty.

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, v3

enables 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)

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synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clockdependent 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

provides 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-/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 4096 simultaneous VLAN IDs.
- **Jumbo frame support** supports up to 10 kilobyte frame size to improve the performance of large data transfers.

Overview

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 **<u>http://www.hpe.com/networking/warrantysummary</u>** for warranty and support information included with your product purchase.

Configuration

Build To Order: BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

HP 1620-8G Switch • 8 RJ-45 autosensing 10/100/1000 ports • 1U - Height	JG912A See Configuration NOTE: 1
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP) 	JG912A#B2B
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (ROW) 	JG912A#B2C
 High Volt Switch/Router to Wall Power Cord NEMA L6-20P Cord (NA/MEX/JP/TW) 	JG912A#B2E
HP 1620-24G Switch • 24 RJ-45 autosensing 10/100/1000 ports • 1U - Height	JG913A See Configuration NOTE: 1
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP) 	JG913A#B2B
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (ROW) 	JG913A#B2C
 High Volt Switch/Router to Wall Power Cord NEMA L6-20P Cord (NA/MEX/JP/TW) 	JG913A#B2E
HP 1620-48G Switch • 48 RJ-45 autosensing 10/100/1000 ports • 1U - Height (Desktop Model?)	JG914A See Configuration NOTE: 1
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP) 	JG914A#B2B
 PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (ROW) 	JG914A#B2C
 High Volt Switch/Router to Wall Power Cord NEMA L6-20P Cord (NA/MEX/JP/TW) 	JG914A#B2E

Configuration

Note 1

Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) or #B2E. (See Localization Menu)

Internal Power Supplies

Power supplies included

Remarks Drop down under power supply should offer the following options and results: Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO) Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO) High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Technical Specifications

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		
Additional ports and slots	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)	
	Weight	2.2 lb (1 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB f	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb	
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included), wall mount	
Performance	100 Mb Latency	< 7 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 11.9 Mpps (64-byte packets)	
	Switching capacity	48 Gbps	
	MAC address table size	8192 entries	
Reliability	MTBF (years)	138.89	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	5% to 95%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing	
	Altitude	up to 16,404 ft (5 km)	
	Acoustic	No Fan	
Electrical characteristics	Frequency	50/60 Hz	
	AC Voltage	100 - 240 VAC	
	Maximum power rating	7 W	
	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.	
Safety	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		
Services	Refer to the Hewlett Packa	ard Enterprise website at http://www.hpe.com/networking/services for	
		descriptions and product numbers. For details about services and response contact your local Hewlett Packard Enterprise sales office.	

HP 1620-24G Switch (JG913A)

I/O ports and slots24 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

slots

Technical Specifications

Additional ports and slots	1 RJ-45 console port to acc	cess limited CLI port	
Physical characteristics	Dimensions	17.32(w) x 6.81(d) x 1.73(h) in (43.99 x 17.3 x 4.39 cm) (1U height)	
	Weight	4.85 lb (2.2 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB f	flash, 128 MB SDRAM; packet buffer size: 4.1 Mb	
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 7 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 35.7 Mpps (64-byte packets)	
	Switching capacity	48 Gbps	
	MAC address table size	8192 entries	
Reliability	MTBF (years)	123.46	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	5% to 95%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing	
	Altitude	up to 16,404 ft (5 km)	
	Acoustic	No Fan	
Electrical characteristics	Frequency	50/60 Hz	
	AC Voltage	100 - 240 VAC	
	Maximum power rating	15 W	
	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.	
Safety	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		
Services	Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.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 Hewlett Packard Enterprise sales office.		
HP 1620-48G Switch (JG	914A)		
I/O ports and slots	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	1 RJ-45 console port to acc	cess limited CLI port	

Physical characteristics	Dimensions	17.32(w) x 9.37(d) x 1.73(h) in (43.99 x 23.8 x 4.39 cm)
	Weight	7.28 lb (3.3 kg)
Memory and processor	MIPS @ 650 MHz, 32 MB f	lash, 128 MB SDRAM; packet buffer size: 12 Mb

Technical Specifications

Mounting and enclosure Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)

Performance	100 Mb Latency	< 7 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 71.4 Mpps (64-byte packets)
	Switching capacity	96 Gbps
	MAC address table size	16384 entries
Reliability	MTBF (years)	81.30
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
	Acoustic	Power: 49.7 dB, Pressure: 49.7 dB; ISO 7779
Electrical characteristics	Frequency	50/60 Hz
	AC Voltage	100 - 240 VAC
	Maximum power rating	28.2 W
	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.
Safety	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	
Services	Refer to the Hewlett Packard Enterprise website at http://www.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 General protocols

(applies to all products in IEEE 802.1D MAC Bridges

series)

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

Date	Version History	Action	Description of Change:
01-Dec-2015	From Version 1 to 2	Changed	Overview and Technical Specifications updated

Summary of Changes



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