HP ProLiant DL320e Gen8 v2 Server



Compact single-application server suitable for deployment anywhere



If you're looking for a 1U compact rack server designed to give your organization a competitive edge, look no further than the HP ProLiant DL320e Gen8 v2 Server. This powerful single-processor server packs the latest computing technology and HP ProLiant Gen8 management features into a small unit at a low cost.

About half the size of the original HP ProLiant DL320e Gen8 Server, the HP ProLiant DL320e Gen8 v2 Server supports the latest Intel® Xeon® Processor E3-1200 v3 Product Family, as well as the most-affordable Intel Pentium® and Intel® Core™ i3 processors. It also offers two PCIe Gen3 I/O slots, up to 32 GB DDR3 1,600 MHz memory, and up to 8 TB of internal storage—all in a 15.07-inch short-depth chassis. Server reliability and quality are enhanced with HP SmartMemory and HP SmartDrive technologies, while the state-of-the-art HP Integrated Lights-Out (iLO) Management Engine makes the server easier to install, configure, manage, and maintain.

Enabling you to pack more servers into smaller space for less money, the HP ProLiant DL320e Gen8 v2 Server offers superior technology at an affordable price. Designed for outstanding flexibility and versatility, the HP ProLiant DL320e Gen8 v2 supports a wide range of configuration options to efficiently handle your workloads, such as file/print, Web serving/hosting, networking, and security. Whether your organization is a large corporation or a small company, you can easily configure the HP ProLiant DL320e Gen8 v2 Server to match your business needs.

The HP ProLiant DL320e Gen8 v2 Server offers:

- A compact design—A short-depth 15.07-inch server chassis meets mobility and space requirements, with easy access to system components.
- Flexible configuration options—Meeting a wide variety of computing needs with advanced technologies like:
- Intel Xeon Processor E3-1200 v3 Series family with support for up to 3.6 GHz and four cores and the processing power to handle a variety of workloads; the latest, budget-friendly Pentium and Core i3 processors are also available
- Outstanding configuration flexibility that supports either four small form factor (SFF) or two large form factor (LFF) drive configurations, four DDR3 UDIMMs, 300 W or 750 W power supplies, and enhanced deployment options via two PCIe slots and seven USB ports
- HP SmartMemory and HP SmartDrive technologies with advanced error handling to reduce data loss and downtime, while also boosting workload performance and improving serviceability
- HP Smart Array options that provide RAID mirroring and striping, along with flash-backed write cache (FBWC) to protect critical data indefinitely
- NEBS-compliance (requiring four SFF configurations and 750 W power supply) for ensuring high performance and reliability in Telecom environments
- Seamless network connectivity—Compatibility with the 24-port HP PS1810 Series switches extends the benefits of the HP Converged Infrastructure. HP PS1810 Series switches:
- Provide seamless connectivity
- Offer greater data availability
- Include features such as a user-friendly interface and link aggregation
- **Built-in HP ProLiant Gen8 technologies**—Helping businesses simplify their IT management and improve system uptime. Embedded inside each HP ProLiant server, the HP ProActive Insight Architecture provides deep insight into server assets and health status, and delivers a rich set of capabilities that automate and simplify system provisioning, troubleshooting, and firmware, as well as updating software.
- The HP Integrated Lights-Out 4 (iLO 4) management engine assists you throughout the HP ProLiant DL320e Gen8 v2 Server's entire lifecycle—from initial deployment through ongoing management to service alerting. A dedicated iLO connection makes data transmissions faster and more secure.
- HP iLO 4 features include:
 - **HP Intelligent Provisioning**—A single embedded tool for all server setup and configuration tasks, HP Intelligent Provisioning automates system configuration, deployment, and updates. All firmware, drivers, and tools are built into HP ProLiant Gen8 servers, so no CDs or DVDs are required for installation.
 - **HP Active Health System**—Avoids unplanned downtime by proactively managing server health. HP Active Health System predicts and avoids failures with continuous 24x7 agentless health monitoring and alerting. In addition, HP Active Health System logs 100 percent of configuration changes and conducts faster problem analysis with unified diagnostic tools that securely transfer data to HP Service and Support.

HP ProLiant Gen8 servers also feature the HP Smart Update Manager. With an intuitive user interface and one-click simplicity, HP Smart Update Manager updates your firmware and system software, and guides you through repository definition, device discovery, analysis, and updates.

Remote server management options

We understand that cutting operational costs, improving service levels, and maintaining competitiveness are critical success factors for any business. To address these needs, we designed a complete set of HP Insight Management solutions, which provide the complete range of remote management capabilities—from single server setup to complete data center management—on all HP ProLiant servers.

To complete your enterprise solution, we recommend the HP iLO Advanced license; for smaller businesses that simply need remote access, the HP iLO Essentials license is a perfect match. To discover which iLO license is right for your environment, download the <u>HP iLO Family data sheet</u> or visit hp.com/go/icserverprovisioning.

Key HP ProLiant DL320e Gen8 v2 Server features and benefits

Features	Benefits
• Compact, short-depth rack design	 Ideal for budget-conscious customers with space constraints Meets mobility and space requirements
 Latest technology—Intel Xeon Processor E3-1200 v3 Product Family, Intel Core i3 processors, and Intel Pentium processors HP SmartDrive (up to 8 TB in 2 LFF Hot Plug configuration) and SmartMemory technologies 	• Higher performance in a short-depth server
• Two LFF or four SFF configurations, two PCIe Gen3 slots, and up to seven USB ports	 Improved flexibility for configuring the server to your exact needs
Built-in data protection features	• Reliability you can count on
• Embedded management features	• Easier installation, configuration, management, and maintenance

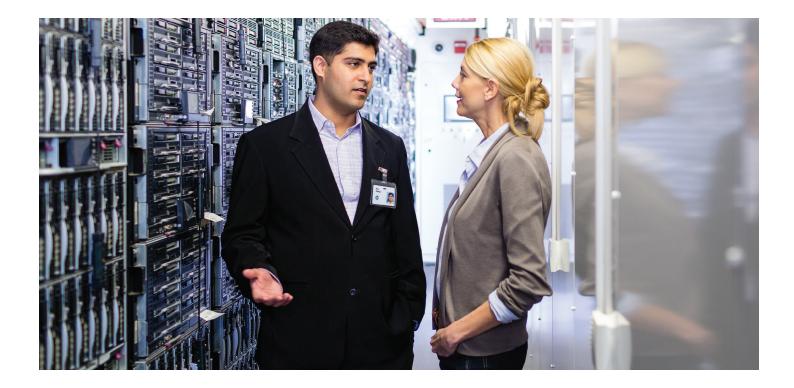


HP ProLiant DL320e Gen8 v2 and DL120 G7 Server comparison

	HP ProLiant DL320e Gen8 v2 Server built on HP ProActive Insight Architecture	HP ProLiant DL120 G7
Compute	Intel Xeon E3-1200 v3 Series, four cores PCIe 3.0, up to two available slots	Intel Xeon E3-1200 Series, two/four cores PCIe 2.0, up to two available slots
HP Smart Socket guide	No	No
Memory	(4) DDR3, up to 1,600 MHz (32 GB max)	(4) DDR3, up to 1,333 MHz (32 GB max)
SmartMemory	Yes	No
Storage (std.)	HP Dynamic Smart Array B120i Four SFF/two LFF max, HDD/SSD	HP Smart Array B110i Eight SFF/four LFF max, HDD
HP SmartDrive	Yes	No
FBWC	Up to two GB DDR3 1,333 MHz	Up to one GB DDR2 800 MHz
Networking	2x1GbE; HP Ethernet 1 Gb two-port NC332i adapter (x1)	2x1GbE; HP NC112i one-port Ethernet server adapter (x2)
FlexibleLOM	No	No
Embedded Management	HP Integrated Lights-Out 4 (iLO 4)	HP Integrated Lights-Out 3 (iLO 3)
Intelligent Provisioning	Yes	No
Active Health System	Yes	No
Agentless Management	Yes	No
Cloud-based management	HP Insight Management 7	None
HP Insight Control (agentless)	Yes	No
HP Insight Online	Yes	No
Power and cooling	Up to 94 percent	Up to 92 percent
3D Sea of Sensors	Yes	No

HP ProLiant DL320e Gen8 v2 Server offers multiple build-to-order (BTO) configurations

Entry model	Base model	Performance model
743490-xx1 (U.S., EU, Japan, China, AP)	717170-xx1 (U.S., EU, Japan, China, AP)	722547-xx1 (U.S., EU, AP)
• One Intel Pentium Processor G3220 (3.0 GHz/two core, 54 W)	• One Intel Xeon Processor E3-1220 v3 (3.1 GHz/four core, 80 W)	• One Intel Xeon Processor E3-1240 v3 (3.4 GHz/four core, 80 W)
• 2 GB DDR3 UDIMM memory	• 4 GB DDR3 UDIMM memory	• 8 GB DDR3 UDIMM memory
• Embedded HP Dynamic Smart Array B120i	• Embedded HP Dynamic Smart Array B120i	• HP Smart Array P222 Controller with 512 MB FBWC
Storage Controller	Storage Controller	• Dual 1GbE ports
• Dual 1GbE ports	• Dual 1GbE ports	• Two PCIe slots (one slot occupied by P222 controller)
• Two PCIe slots	• Two PCIe slots	Four-bay SFF Hot Plug drive cage
 Two-bay LFF Non Hot Plug drive cage 	• Two-bay LFF Hot Plug drive cage	 One 300 W power supply
• One 300 W power supply	• One 300 W power supply	



Technical specifications



Processor family	Intel Xeon Processor E3-1200 v3 Product Family Intel Core i3: i3-4130, i3-4130T Intel Pentium: G3220, G3420
Processor cache	8 MB L3 (for Quad-core processors) 3 MB L3 (for Dual-core processors)
Number of processors	One
Processor cores available	Four or two
Max processor speed	3.6 GHz
Drive description	Two LFF SAS/SATA/SSD (Applicable for Hot Plug; Non-Hot Plug two-LFF supports SATA drives) Four SFF SAS/SATA/SSD
Supported drives	Hot Plug 2.5-inch SAS Hot Plug 2.5-inch SATA Hot Plug 3.5-inch SAS Hot Plug 3.5-inch SATA Hot Plug 2.5-inch SAS SSD Hot Plug 2.5-inch SATA SSD Hot Plug 3.5-inch SATA SSD Non-Hot Plug 3.5-inch SATA
Memory slots	Four DIMM slots
Max memory	32 GB
Memory type	PC3-12800E UDIMMs DDR3 PC3L-12800E UDIMMs DDR3 PC3L-10600E UDIMMs DDR3
Memory protection features	Unbuffered ECC

Technical specifications (continued)

Network controller	One Ethernet 1 Gb two-port NC332i adapter Additional options include various Gigabit and 10 Gigabit Ethernet adapters
Storage controller	One HP Dynamic Smart Array B120i SATA RAID Performance BTO model also has one HP Smart Array P222 Storage Controller. Additional options include various controllers such as high-performance HP Smart Array SAS controllers (with up to 2 GB FBWC).
Expansion slots	Two PCIe: One PCIe 16X Gen3 (8X speed), half length, full height One PCIe 8X Gen3 (4X speed), low profile
USB ports	Five total USB 2.0 ports: two rear, two front, one internal (optional) USB 3.0 ports: two rear
Management	HP iLO Management Engine HP iLO Advanced (optional) HP iLO Essentials (optional) HP Insight Control software (optional)
System fans	Three non-redundant fan assemblies (two front and one center) ship standard
Form factor chassis	1U rack form factor (15.07-inch chassis depth)
Power supply type	300 W (80 percent efficiency) standard; 750 W DC common slot power supply (94 percent efficiency) optional
OS support	Microsoft® Windows® Server
	Red Hat Enterprise Linux
	SUSE Linux Enterprise Server
	Ubuntu
	VMware
Warranty standard statement	Global limited warranty
Warranty	One-year parts, one-year labor, one-year onsite

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Unlock your server's capacity with HP StoreVirtual VSA and gain fully-featured shared storage for your applications right on your server: hp.com/go/freeVSA

HP QuickSpecs

HP ProLiant DL320e Generation 8 (Gen8) v2 Server (HTML)

HP ProLiant DL320e Generation 8 (Gen8) v2 Server (PDF)

HP Factory Express

HP Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment. Visit hp.com/go/factoryexpress.

Customer technical training

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Get the support you need

You can get the support you need by choosing from a variety of packaged service solutions designed to address your unique needs:

HP Optimized Care—Enables enhanced performance with HP ProLiant server Hardware Installation, three-year 24-hour support, and HP Proactive Care Services.

HP Standard Care—Helps you maintain high levels of uptime with HP ProLiant server Hardware Installation, one-year 24x7 four-hour response, and HP Proactive Care Services.

HP Basic Care—Provides the minimum recommended support with HP ProLiant serve Hardware Installation, one-year 24x7 four-hour response, and HP Collaborative Support Service.

Get more detail on HP Services at: hp.com/services/proliant.

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4AA4-7136ENW, November 2013, Rev. 2