



# Grow your business. One server at a time.

HP ProLiant DL320e Gen8 Server



## Believe in the power of one

As a growing organization, you've seen firsthand what it takes to make your business run with ease on a day to day basis. You've perhaps even juggled massive data growth with limited staff, fixed IT budgets, and space constraints—all while maintaining an environment of efficiency and productivity. At HP, we like to make things simpler. We believe the current size of your organization should not dictate the relevance of technology that you use. So whether your workload is limited to email, or Web pages, or even to the use of stand-alone applications, the DL320e Gen8 is a server that can match your every need.

The HP ProLiant DL320e Gen8 Server with its one processor (1P), and 1U rack form factor design, is an ideal server to run single applications or dedicated IT services. The ProLiant DL320e Gen8 Server is not only affordable but is more powerful by enabling quad-core processor computing performance with faster memory and larger storage capacity, all in a small package. Occupying very little space, this rack server delivers enhanced innovations in reliability and management serviceability to give you a comprehensive solution that allows you to focus on your growing business.

The ProLiant DL320e Gen8 Server supports:

- The HP Integrated Lights-Out 4 (iLO 4) Management Engine, a complete set of embedded management features that assist throughout the complete lifecycle of the server, from initial deployment, through ongoing management, to service alerting
- The latest technology, such as Intel® Xeon® E3, Core i3 and Pentium® processors, PCIe Gen3, DDR3 1600 MHz memory, up to 12 TB internal storage, RAID solution, as well as a high-efficiency hot-plug redundant power supply kit

## Key features and benefits

Features	Benefits
Up to 94 percent Platinum Plus high-efficiency hot-plug redundant power supply <sup>1</sup>	For smoother, quicker, and efficient failovers For lower IT expenses
Up to 32 GB memory with 1600 MHz speed	For faster caching and better performance
50 percent increase in storage capacity, supporting up to 12 TB internal storage <sup>2</sup>	For simultaneous data center growth as your business grows
Fast-access PCIe riser solutions and HP SmartMemory	For enhanced serviceability

<sup>1</sup> HP Integration System test, April, 2012. To see HP Common Slot power supplies that meet the 80 PLUS requirements for Platinum certification, visit: [80plus.com](http://80plus.com)

<sup>2</sup> As compared to HP ProLiant DL120 G7 Server that supported 8 TB storage capacity

## Adapt hassle-free server management

HP ProActive Insight Architecture embedded inside each ProLiant Server, allows you to gain insights into server assets and health status, and use a rich set of capabilities that automate and simplify system provisioning, troubleshooting and firmware, as well as software updates. The HP iLO 4 Management Engine provides a complete set of embedded management features to assist the server throughout its lifecycle:

- **HP Intelligent Provisioning**—removes manual steps for faster system configuration, deployment, and updates. HP Intelligent Provisioning is a single embedded tool for all server set-up and configuration tasks. All firmware, drivers, and tools are built into Gen8 servers, without having to input CDs and DVDs.
- **HP Active Health System**—proactively manages server health by predicting and avoiding failures that could lead to unplanned downtime. HP Active Health provides 24x7 continuous agentless health monitoring and alerting, and 100 percent configuration change logging. Start problem analysis faster using unified diagnostic tools with secure data transfer to HP Service and Support.

ProLiant servers also ease firmware and system software management with HP Smart Update Manager.

- **HP Smart Update Manager**—updates your firmware and system software with a simple, intuitive user interface and one-click simplicity that guides you through repository definition, device discovery, analysis and updates.

### Improve efficiency and control over energy costs

- Delivers efficient power management with up to 94 percent high-efficiency Platinum Plus, hot-plug, redundant power supply.

- Lowers the energy needs of the infrastructure with the HP Sea of Sensors technology making the overall facility more efficient and reducing its carbon footprint.

### Create a data center environment no matter the budget

- Includes essential, integrated management capabilities with the HP iLO 4 Management Engine, at an affordable price that brings down the cost of server deployment, health monitoring, and server power and temperature control
- Allows easy configuration for various budget and application demands

## HP ProLiant Gen8 and G7 server comparison

	<b>DL320e Gen8 built on HP ProActive Insight Architecture</b>	<b>DL120 G7</b>
<b>Compute</b>	Intel Xeon E3-1200v2, 2/4 Cores   PCIe 3.0	Intel Xeon E3-1200, 2/4 Cores   PCIe 2.0
<b>Memory</b>	(4) DDR3, up to 1600 MHz (32 GB max)	(4) DDR3, up to 1333 MHz (32 GB max)
<b>HP SmartMemory</b>	✓	✗
<b>Storage</b>	HP Dynamic Smart Array B120i 8 SFF/4 LFF max HDD/SSD	HP Smart Array B110i 8 SFF/4 LFF max HDD
<b>HP SmartDrives</b>	✓	✗
<b>Networking</b>	2x1GbE	2x1GbE
<b>Embedded management</b>	HP iLO 4	HP iLO 3
<b>HP Intelligent Provisioning</b>	✓	✗
<b>Active Health System</b>	✓	✗
<b>HP Agentless Management</b>	✓	✗
<b>Cloud-based management</b>	HP Insight Management 7	None
<b>HP Insight Control (agentless)</b>	✓	✗
<b>HP Insight Online</b>	✓	✗
<b>Power and cooling</b>	Platinum Plus RPS option (94% efficiency) available	RPS option not as efficient as Platinum Plus
<b>3D Sea of Sensors</b>	✓	✗

## ProLiant DL320e Gen8 Server offers multiple build-to-order model configurations

<b>Entry model 675420-xx1 (US/Japan/PRC/AP/EU)</b>	<b>Base model 675421-xx1 (US/Japan/PRC/AP/EU)</b>	<b>Performance model 675422-xx1 (US/Japan/AP/EU)</b>
<ul style="list-style-type: none"> <li>• (1) Intel Pentium G2120 3.1 GHz/2C</li> <li>• 2 GB DDR3 UDIMM memory</li> <li>• Embedded HP B120i Storage Controller</li> <li>• Dual 1GbE ports</li> <li>• (2) PCIe slots</li> <li>• (4) bay NHP LFF Drive Cage</li> <li>• (1) 350 W power supply</li> <li>• Rail kit (fixed)</li> <li>• (1) 500 GB HDD (NHP SATA)</li> </ul>	<ul style="list-style-type: none"> <li>• (1) Intel Xeon E3-1220v2 3.1 GHz/4C</li> <li>• 4 GB DDR3 UDIMM memory</li> <li>• Embedded HP B120i Storage Controller</li> <li>• Dual 1GbE ports</li> <li>• (2) PCIe slots</li> <li>• (4) bay HP LFF Drive Cage</li> <li>• (1) 350 W power supply</li> <li>• Rail kit (fixed)</li> </ul>	<ul style="list-style-type: none"> <li>• (1) Intel Xeon E3-1240v2 3.4 GHz/4C</li> <li>• 8 GB DDR3 UDIMM memory</li> <li>• HP Smart Array P222 Storage Controller with 512 MB FBWC</li> <li>• Dual 1GbE ports</li> <li>• (1) PCIe slot available</li> <li>• (4) bay HP LFF Drive Cage</li> <li>• (1) 350 W power supply</li> <li>• Rail kit (fixed)</li> </ul>

## Technical specifications

<b>Processor family</b>	Intel Xeon E3-1200v2 product family Intel® Core™ i3: i3-3240, i3-3220T Intel Pentium: G2120, G2100T, G630
<b>Processor cache</b>	8 MB L3 (For Quad-core processors) 3 MB L3 (For Dual-core processors)
<b>Number of processors</b>	1
<b>Processor cores available</b>	4 or 2
<b>Max processor speed</b>	3.7 GHz
<b>Drive description</b>	(4) LFF SAS/SATA/SSD (8) SFF SAS/SATA/SSD
<b>Supported drives</b>	Non-hot-plug 3.5-inch SATA Non-hot-plug 3.5-inch SAS Hot-plug 3.5-inch SATA Hot-plug 3.5-inch SATA SSD Hot-plug 3.5-inch SAS Hot-plug 2.5-inch SATA Hot-plug 2.5-inch SATA SSD Hot-plug 2.5-inch SAS Hot-plug 2.5-inch SAS SSD
<b>Memory slots</b>	4 DIMM slots
<b>Memory max</b>	32 GB
<b>Memory type</b>	PC3-12800E UDIMMs DDR3 PC3L-10600E UDIMMs DDR3
<b>Memory protection features</b>	ECC Unbuffered ECC
<b>Network controller</b>	(1) 1Gb 330i Ethernet 2-port Additional options include various Gigabit and 10 Gigabit Ethernet Adapters
<b>Storage controller</b>	(1) HP Dynamic Smart Array B120i SATA RAID Performance BTO model also has (1) 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)
<b>Expansion slots</b>	2 PCIe: 1 PCIe x8 Gen2 (x4 speed), low profile 1 PCIe x16 Gen3 (x16 speed), half length, full height
<b>USB ports</b>	7 USB 2.0 ports: 4 rear, 2 front, 1 internal (optional)
<b>Management</b>	iLO Management Engine, Insight Control (optional)
<b>System fans features</b>	4 fans, non redundant
<b>Form factor chassis</b>	1U Rack form factor
<b>Power supply type</b>	Power supply: 350 W Standard. 460 W Common Slot Hot Plug power supplies optional
<b>OS support</b>	Microsoft® <ul style="list-style-type: none"> <li>• Microsoft Windows® Server 2008, Standard Edition (x86 and x64) – SP2 and R2 w/SP1</li> <li>• Microsoft Windows Server 2008, Enterprise Edition (x86 and x64) – SP2 and R2 w/SP1</li> <li>• Microsoft Windows Server 2008, Datacenter Edition (x86 and x64) – SP2 and R2 w/SP1</li> <li>• Microsoft Windows Server 2008, Web Server (x86 and x64) – SP2 and R2 w/SP1</li> <li>• Microsoft Windows HPC Server 2008 (x64) – SP2 and R2 w/SP1</li> <li>• Microsoft Windows Server 2008 for Embedded Systems (x86 and x64)</li> <li>• Microsoft Windows Server 2008 R2 for Embedded Systems (x64) – R2 w/SP1</li> <li>• Microsoft Windows Small Business Server 2011 (SBS V7) – base</li> <li>• Microsoft Windows Server 2011 Essentials (Aurora)</li> <li>• Microsoft Windows Hyper-V, R2 w/SP1</li> <li>• Microsoft Windows Multipoint Server 2011</li> <li>• Microsoft Windows Server 2012</li> </ul> Linux <ul style="list-style-type: none"> <li>• Red Hat Enterprise Linux 5 (x86 and EM64T/AMD64) (includes XEN &amp; KVM)</li> <li>• Red Hat Enterprise Linux 6 (x86 and EM64T/AMD64) (includes KVM)</li> <li>• SLES 10 (x86 and EM64T/AMD64) (Includes XEN)</li> <li>• SLES 11 (x86 and EM64T) (Includes XEN &amp; KVM)</li> </ul>
<b>Warranty standard statement</b>	Global limited warranty
<b>Warranty</b>	1-year parts, 1 year-labor, 1 year-onsite
<b>QuickSpecs URL</b>	<a href="http://h18000.www1.hp.com/products/quickspecs/14326_div/14326_div.html">http://h18000.www1.hp.com/products/quickspecs/14326_div/14326_div.html</a> <a href="http://h18000.www1.hp.com/products/quickspecs/14326_div/14326_div.pdf">http://h18000.www1.hp.com/products/quickspecs/14326_div/14326_div.pdf</a>

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## Financial services

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## Customer technical training

We offer a variety of training courses on ProLiant Servers, storage software, networking, archiving, and disk storage systems. Our classes are available in many delivery modalities—from traditional instructor-led courses at one of our 80 training centers worldwide to online and/or onsite training. Visit [hp.com/learn/storage](http://hp.com/learn/storage).

For more information on training courses for ProLiant Servers, visit [hp.com/learn/proliant](http://hp.com/learn/proliant).

## Learn more

Experience the difference that a single, powerful server can make to your business. Visit [hp.com/servers/dl320e-gen8](http://hp.com/servers/dl320e-gen8).

## Services and support

You can now get the support you need by choosing from one of a number of service packaged solutions designed to address your unique needs.

**HP Optimized Care** enables enhanced performance with HP ProLiant Server Hardware Installation, 3-Year 24-hour Support, and HP Proactive Care.

**HP Standard Care** helps maintain high levels of uptime with HP ProLiant Server Hardware Installation, 1-Year HP 24x7 4 hour Response, and HP Proactive Care.

**HP Basic Care** provides the minimum recommended support, HP ProLiant Server Hardware Installation, 1-Year HP 24x7 4 hour Response, and HP Collaborative Support.

**HP Proactive Support Services** helps to enhance performance, increase system uptime, and prevent problems before they cause outages or performance degradation. This service provides direct access to an advanced technical expert to help proactively avoid problems, deliver advanced technical response, enable remote hardware and software assistance, and support for HP Insight software automation management tools.

**HP Collaborative Support** offers a single point of contact for server problem diagnosis, hardware problem resolution, basic software problem diagnosis, fault isolation, and resolution if available to HP. In case the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, we contact the third-party vendor and create a problem incident on your behalf.

**Insight Remote Support** provides 24x7 remote monitoring, proactive notifications, and problem resolution. Learn more [hp.com/go/insightremotesupport](http://hp.com/go/insightremotesupport).

**HP ServiceONE:** With HP ServiceONE partnerships and a network of more than 70,000 channel partners around the world, we combine local expertise with our global resources—meeting your needs, your way.

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