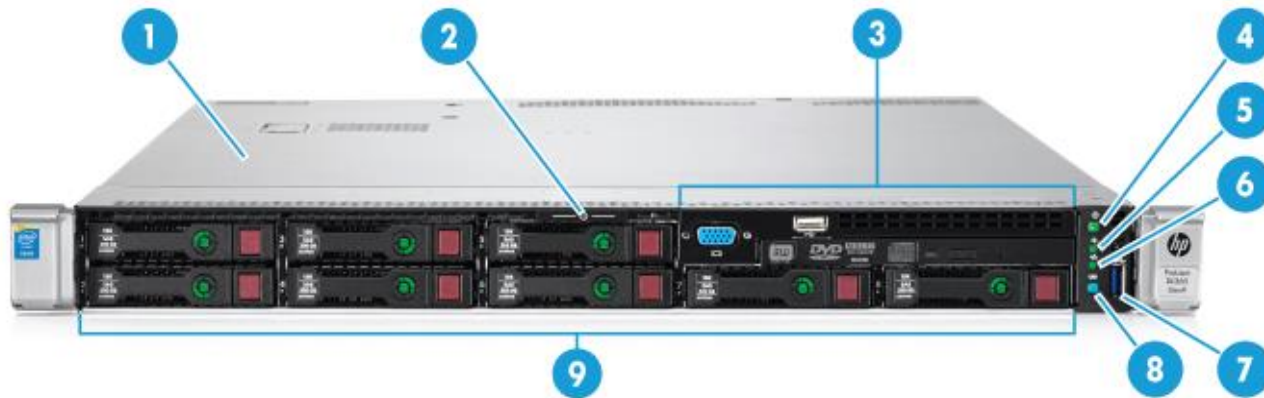


### Overview

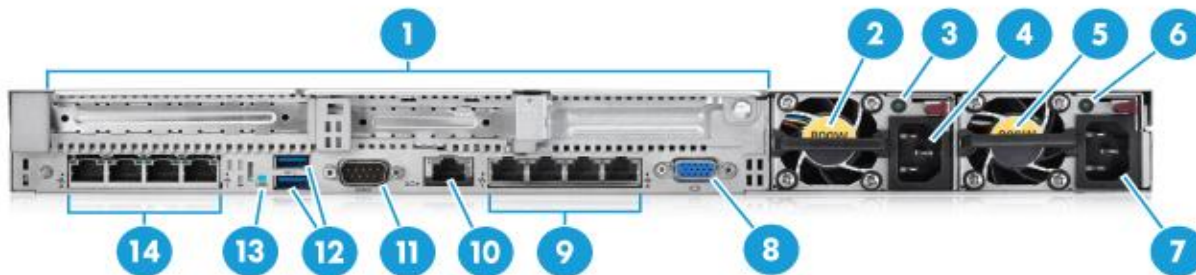
### HP ProLiant DL360 Generation9 (Gen9)

HP's leading server for dense general-purpose computing, the HP ProLiant DL360 Gen9 Server delivers increased performance with the best memory and I/O expandability packed in a 1U dense rack design. Reliability, serviceability and always on availability, backed by a comprehensive warranty, make it ideal for the most space constrained server workloads.



#### Front View

1. Access Panel
2. Serial Label Pull Tab
3. HP Universal Media Bay  
**NOTE:** Shown w/VGA, USB 2.0 and DVD-RW option.  
Alternative options 2 SFF HDDs or VGA and USB 2.0.
4. Power On/Standby button and system power LED button
5. Health LED
6. NIC Status LED
7. USB 3.0 Connector
8. Unit Identification Button & LED
9. SAS/SATA/SSD Drive Bays  
**NOTE:** 8SFF Model shown, 4LFF and 8 + 2SFF Models available.

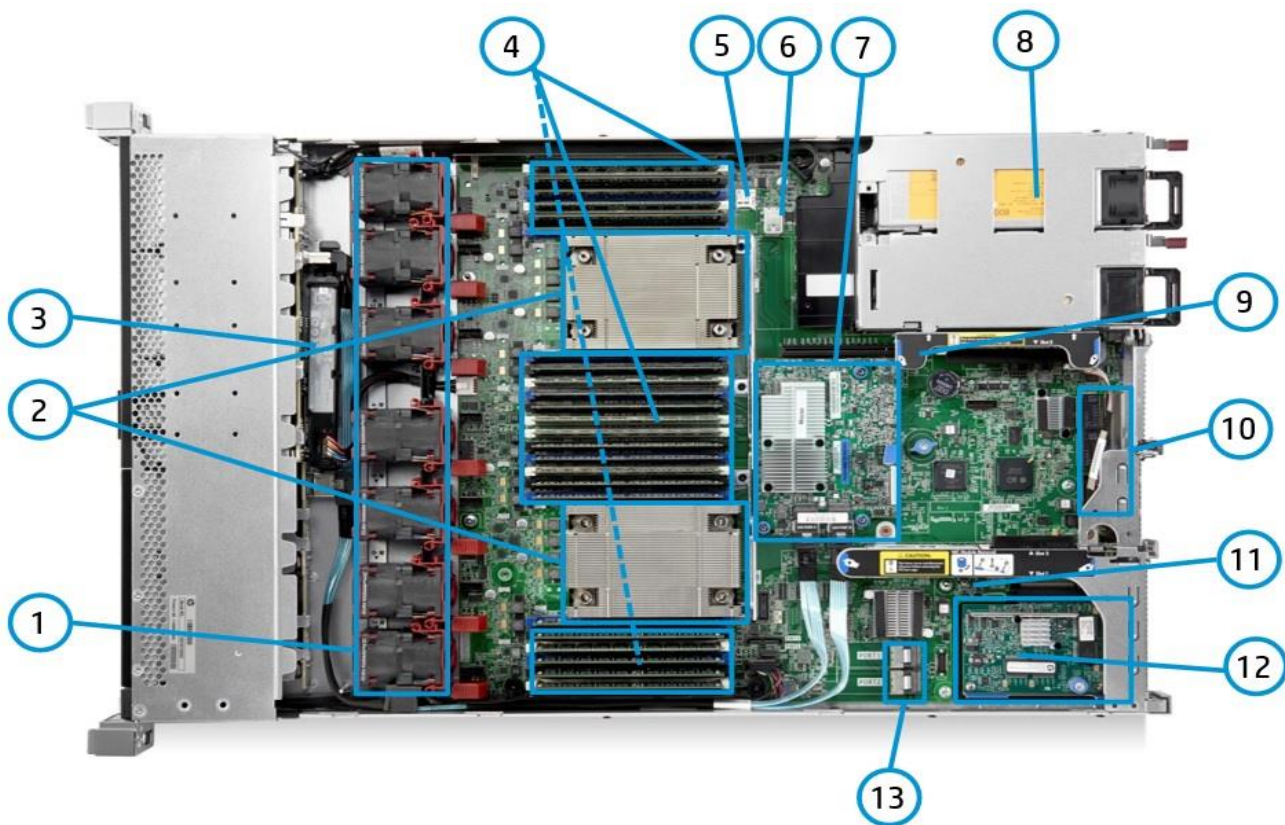


#### Rear view

1. PCIe 3.0 Slots 1-3  
**NOTE:** Slot 1 and 2 Riser Ships Standard, Slot 3 Optional  
1 FH / ¾ length and two Low Profile slots available (shown) or two FH / ¾ length slots.

### Overview

2. HP Flexible Slot Power Supply Bay 2
  3. Power Supply 2 Status LED
  4. Power Supply 2 C13 Connection
  5. HP Flexible Slot Power Supply Bay 1
  6. Power Supply 1 Status LED
  7. Power Supply 1 C13 Connection
  8. Video Connector
  9. Embedded 4x1GbE Network Adapter
  10. Dedicated iLO 4 connector
  11. Serial Port Connector (Optional)
  12. USB 3.0 Connectors (2)
  13. Unit Identification LED
  14. FlexibleLOM bay (Optional)
- NOTE:** Shown: 4x1GbE.



### Internal View

1. 5 Standard Fans Ship for 1P and 7 Standard Fans Ship for 2P  
**NOTE:** High Performance Fans also available as an option.
2. 2 Processors with HP Smart Socket Guide
3. HP Smart Storage Battery (Optional)
4. 24 DDR4 DIMM slots (12 per processor)
5. MicroSD card slot
6. Dual Internal USB 3.0 connector
7. HP Flexible Smart Array or Smart HBA (Optional)  
**NOTE:** H240ar shown and P440ar available.
8. 2 HP Flexible Slot Power supplies

## Overview

9. Secondary PCIe 3.0 riser for PCIe slot 3 (requires CPU 2)
10. Embedded 4x1Gbe NIC
11. Primary PCIe 3.0 riser for PCIe slots 1 & 2
12. FlexibleLOM Bay (Optional)
13. Embedded SATA Controller ports

### What's New

- New OneView Hardware bundle skus
  - New High Performance Heatsinks
  - New HDD options
-

### Standard Features

**NOTE:** For more information regarding Intel Xeon processors, please see the following <http://www.intel.com/xeon>.

Intel® Xeon® processor E5-2600 v3 product family is designed to deliver the best combination of performance, built-in capabilities, and cost-effectiveness.

Processor	Model	CPU frequency	Cores	L3 Cache	Power	QPI	DDR4 Hz
	E5-2699v3	2.3GHz	18	45MB	145W	9.6GT/s	2133
	E5-2698v3	2.3GHz	16	40MB	135W	9.6GT/s	2133
	E5-2697v3	2.6GHz	14	35MB	145W	9.6GT/s	2133
	E5-2695v3	2.3GHz	14	35MB	120W	9.6GT/s	2133
	E5-2690v3	2.6GHz	12	30MB	135W	9.6GT/s	2133
	E5-2687Wv3	3.1GHz	10	25MB	160W	9.6GT/s	2133
	E5-2683v3	2.0GHz	14	35MB	120W	9.6GT/s	2133
	E5-2680v3	2.5GHz	12	30MB	120W	9.6GT/s	2133
	E5-2670v3	2.3GHz	12	30MB	120W	9.6GT/s	2133
	E5-2667v3	3.2GHz	8	20MB	135W	9.6GT/s	2133
	E5-2660v3	2.6GHz	10	25MB	105W	9.6GT/s	2133
	E5-2650v3	2.3GHz	10	25MB	105W	9.6GT/s	2133
	E5-2650Lv3	1.8GHz	12	30MB	65W	9.6GT/s	2133
	E5-2643v3	3.4GHz	6	20MB	135W	9.6GT/s	2133
	E5-2640v3	2.6GHz	8	20MB	90W	8.0GT/s	1866
	E5-2637v3	3.5GHz	4	15MB	135W	9.6GT/s	2133
	E5-2630v3	2.4Ghz	8	20MB	85W	8.0GT/s	1866
	E5-2630Lv3	1.8GHz	8	20MB	55W	8.0GT/s	1866
	E5-2623v3	3.0GHz	4	10MB	105W	8.0GT/s	1866
	E5-2620v3	2.4GHz	6	15MB	85W	8.0GT/s	1866
	E5-2609v3	1.9GHz	6	15MB	85W	6.4GT/s	1600
	E5-2603v3	1.6GHz	6	15MB	85W	6.4GT/s	1600

**Chipset** Intel® C610 Series Chipset  
 Intel® E5-2600v3 Processor Family  
**NOTE:** For more information regarding Intel® chipsets, please see the following URL:  
<http://www.intel.com/products/server/chipsets/>.

**On System Management Chipset** HP iLO (Firmware HP iLO4 2.0) 4GB NAND  
**NOTE:** 1GB USB user space configurable via UEFI and accessible via iLO. Read and learn more in the [iLO QuickSpecs](#).

**Memory** Type:  
 One of the following depending on model HP SmartMemory  
 DDR4 Registered (RDIMM) or Load Reduced (LRDIMM)  
 DIMM Slots Available 24 (12 DIMM slots per processor, 4 channels per processor, 3 DIMMs per channel)  
 Maximum Capacity (LRDIMM) 1.5TB (24 x 64GB LRDIMM @2133MHz)  
 Maximum Capacity (RDIMM) 384GB (24 x 16GB RDIMM @2133MHz)  
**NOTE:** 64GB LRDIMMs, feature support to be available early 2015.

**Memory Protection** Advanced ECC Advanced ECC uses single device data correction to detect and correct single and all multibit error that occurs within a single DRAM chip.  
 Online spare Memory online spare mode detects a rank that is degrading and switches operation to the spare rank.

### Standard Features

#### Expansion Slots

Primary Riser	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
	1	PCIe 3.0	x16	x16		Full Height, ¾ Length (up to 9.5") Slot	Processor 1
	2	PCIe 3.0	x8	x8		Low profile slot	Processor 1

**NOTE:** Bus Width indicates the number of physical electrical lanes running to the connector.

Secondary Riser	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Device Number	Form Factor	Notes
	3	PCIe 3.0	x16	x16			Low Profile	Processor 2
	3	PCIe 3.0	x16	x16			Full Height, ¾ Length (up to 9.5") Slot	Processor 2*

\*PCI-E Slot 2 cannot be used in conjunction with the FH/¾ Length option kit (744644-B21)

Storage Controller	Entry Models	HP Dynamic Smart Array B140i Controller
One of the following depending on model	Base Models	HP H240ar Smart Host Bus Adapter
	Performance Models	HP Flexible Smart Array P440ar/2GB

Internal Storage Devices	Optical Drives	8 SFF with optional Universal Media bay <b>NOTE:</b> Option Kit 764632-B21 VGA, USB 2.0, and DVD-RW kit. 4 LFF <b>NOTE:</b> Two option kits available for optical drive: 726536-B21 or 726537-B21; Optical cable kit required for optical drives: 766203-B21.
One of the following depending on model	Hard Drives	None ship standard
	Hard Drive Bays	8 SFF with optional Universal Media bay 4 LFF 10 SFF; 8 SFF Model with optional 2 SFF SAS/SATA kit: 764630-B21 <b>NOTE:</b> HP ProLiant DL360 Series servers offer both SFF and LFF versions in CTO. <b>NOTE:</b> All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HP SFF Hard Drive Blank Kit or P/N 666986-B21: HP LFF Hard Drive Blank Kit. These part numbers for single HDD blanks below are also provided should the customer require replacement HDD blanks for their server.

Maximum Internal Storage	CAPACITY	CONFIGURATION
Hot Plug SFF SAS SSD	16.0TB	10x1.6TB
Hot Plug SFF SATA SSD	8.0TB	10x800GB
Hot Plug LFF SATA SSD	3.2TB	4x800GB
Hot Plug LFF SAS SSD	6.4TB	4x1.6TB
Hot Plug SFF SAS	12.0TB	10x1.2TB
Hot Plug SFF SATA	10.0TB	10x1TB
Hot Plug LFF SAS	24.0TB	4x6TB
Hot Plug LFF SATA	24.0TB	4x6TB

Power Supply	HP 500W Flex Slot Platinum Hot Plug Power Supply HP 800W Flex Slot Platinum Hot Plug Power Supply HP 1400W Flex Slot Platinum Plus Hot Plug Power Supply
One of the following depending on model	<b>NOTE:</b> Mixing of power supplies in the same server is not supported. All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server.  HP Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HP ProLiant Gen9 Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

### Standard Features

All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the [ProLiant Power Cables web page](#).

To review the power requirements for your selected system, please use the HP Power Advisor Tool located at <http://www.hp.com/go/hppoweradvisor>.

Power specifications and technical content for all HP Server power supplies can be found at <http://www.hp.com/go/proliant/powersupply>.

System Fans		Non-redundant	Redundant
One of the following depending on model	1P model	N/A	5 fans
	2P model	N/A	7 fans

**NOTE:** The second processor option kit contains two fans.  
**NOTE:** High Performance Fan Kit, 766201-B21, is available to meet some extended ambient operating temperatures above 35° C. Qualifications for extended ambient configurations are detailed at: <https://www.hp.com/servers/ashrae>.

Interfaces		
Serial	1	
<b>NOTE:</b> Optional kit: 764646-B21.		
Video	1 rear (Standard) 1 front (Optional)	
<b>NOTE:</b> Front VGA options available for 8SFF and 4LFF models as detailed in the core options section of this QuickSpecs.		
Network RJ-45 (Ethernet)	Both the SFF and LFF Chassis have an embedded 4x1GB NIC and a FlexibleLOM bay. (See HP Networking section below for more details and options).	
HP iLO Remote Management Network Port	1Gb Dedicated	
SD Connector	1 micro SD Internal	
<b>NOTE:</b> The SD slot is not a hot-pluggable device. Customers should not attempt to plug an SD card into the SD slot while the server is powered.		
USB 3.0	5 total: 2 rear, 1 front, 2 internal	

Operating Systems and Virtualization Software Support for ProLiant Servers	
	<a href="#">Microsoft Windows Server</a> <a href="#">Canonical Ubuntu</a> <a href="#">Red Hat Enterprise Linux (RHEL)</a> <a href="#">SUSE Linux Enterprise Server (SLES)</a> <a href="#">Oracle Solaris</a> <a href="#">VMware</a> <a href="#">Citrix XenServer</a>
<b>NOTE:</b> For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server including how to purchase from HP, please visit our OS Support Site at: <a href="http://www.hp.com/go/ossupport">http://www.hp.com/go/ossupport</a> and our driver download page.	

Upgradeability	
	Upgradeable to two processors (36 Cores) Up to 24 DIMM slots available for higher Memory capacity Up to 10 SFF Hard Drive Bays; or 4 LFF Hard Drive Bays FlexibleLOM slot for 1Gigabit or 10 Gigabit Ethernet or QDR/FDR InfiniBand networking options 3 PCIe 3.0 I/O slots for additional communications and storage expansion <b>NOTE:</b> Slot 1 and 2 Riser Shipped Standard, Slot 3 Optional 1 FH / ¾ length and two Low Profile slots available (shown) or two FH/ ¾ length slots. Redundant Power Supplies Optical Drive supported via Universal Media Bay <b>NOTE:</b> 8SFF Chassis via VGA, USB 2.0 and DVD-RW Option kit: 764732-B21; 4LFF Chassis via DVD-RW 726537-B21, DVD 726536-B21 and the Optical Cable: 766203-B21.



### Standard Features

<b>Industry Standard Compliance</b>	<p>ACPI 2.0b Compliant          PCIe 3.0 Compliant          PXE Support          WOL Support          Microsoft® Logo certifications          USB 3.0 Support          Energy Star          ASHRAE A3/A4</p> <p><b>NOTE:</b>          The DL360 Gen9 is now one of the first HP ProLiant Gen9 Servers with Extended Ambient Support up to 45 C for data center infrastructures designed for better energy efficiency such as but not limited to fresh air cooling. For additional technical thermal details regarding ambient temperatures, humidity and features support please visit <a href="https://www.hp.com/servers/ashrae">https://www.hp.com/servers/ashrae</a>.</p>
<b>Graphics</b>	<p>Integrated Matrox G200 video standard</p> <ul style="list-style-type: none"> <li>• 1280 x 1024 (32 bpp)</li> <li>• 1920 x 1200 (16 bpp)</li> </ul>
<b>HP Server UEFI/Legacy ROM</b>	<p><b>HP Server UEFI /Legacy ROM</b>          Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration while interacting with your server at boot time. HP ProLiant Gen9 platform defaults to UEFI and can be factory or field configured for Legacy BIOS Boot Mode.</p> <p><b>NOTE:</b> The UEFI System Utilities function is analogous to the HP ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit <a href="http://www.hp.com/go/proliantuefi/docs">http://www.hp.com/go/proliantuefi/docs</a>.</p> <p>UEFI enables numerous new capabilities specific to HP ProLiant servers such as:</p> <ul style="list-style-type: none"> <li>• Secure Boot</li> <li>• Operating system specific functionality</li> <li>• Support for &gt; 2.2 TB (using GPT) boot drives</li> <li>• USB 3.0 Stack</li> <li>• Embedded UEFI Shell</li> <li>• Mass Configuration Deployment Tool using HP RESTful API.</li> <li>• PXE boot support for IPv6 networks</li> <li>• Boot support for option cards that only support a UEFI option ROM</li> </ul> <p><b>For more information please visit <a href="http://www.hp.com/go/proliant/uefi">http://www.hp.com/go/proliant/uefi</a>.</b></p> <p><b>NOTE:</b> For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.</p> <p><b>NOTE:</b> HP UEFI FIO Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory.</p>
<b>Form Factor</b> One of the following depending on model	<p>1U Rack form factor</p> <p>8 SFF Drive Bay Version and 10 SFF Drive Bay Version:          1.7" (4.32cm) Height x 17.11" (43.47cm) Width x 27.5" (69.85cm) Length</p> <p>4 LFF Drive Bay Version:          1.7" (4.32cm) Height x 17.11" (43.47cm) Width x 29.5" (74.67cm) Length</p>
<b>Embedded Management</b>	<p><b>HP Integrated Lights-Out (HP iLO)</b> Monitor your servers for ongoing management, service alerting, reporting and remote management with iLO. Learn more at <a href="http://www.hp.com/go/ilo">http://www.hp.com/go/ilo</a>.</p> <p><b>UEFI</b> Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI). Learn more at <a href="http://www.hp.com/go/ProLiant/uefi">http://www.hp.com/go/ProLiant/uefi</a>.</p>

### Standard Features

<b>HP RESTful API</b>	RESTful API is an application programming interface. RESTful Web Service API served by iLO's web server. Learn more at <a href="http://www.hp.com/go/restfulapi">http://www.hp.com/go/restfulapi</a> .
<b>Intelligent Provisioning</b>	Provision servers by discovering and deploying 1 to few servers with Intelligent Provisioning. Learn more at <a href="http://www.hp.com/go/intelligentprovisioning">http://www.hp.com/go/intelligentprovisioning</a> .
<b>Embedded Remote Support</b>	HP's embedded remote support, used with Insight Online direct connect or HP Insight Remote Support, allows HP ProLiant servers to transmit hardware events directly to HP or an HP Authorized Partner for automated phone home support. Learn more at <a href="http://www.hp.com/go/insightonline/info">http://www.hp.com/go/insightonline/info</a> .

### Server utilities

<b>HP Smart Update</b>	Optimize firmware and driver updates with HP Smart Update solutions. Learn more at <a href="http://www.hp.com/go/smartupdate">http://www.hp.com/go/smartupdate</a> .
<b>HP Systems Insight Manager (HP SIM)</b>	HP SIM allows you to monitor the health of your HP ProLiant Servers and HP Integrity Servers, and also provides you with basic support for non-HP servers. HP SIM also integrates with HP SUM to provide quick and seamless firmware updates. Learn more at <a href="http://www.hp.com/go/sim">http://www.hp.com/go/sim</a> .
<b>HP OneView Standard</b>	HP OneView Standard can inventory, monitor, alert, and report on your G6, G7, Gen8, and Gen9 servers, while using the HP OneView user interface. Annual support is optionally available. Learn more at <a href="http://www.hp.com/go/oneview">http://www.hp.com/go/oneview</a> .
<b>Scripting Tool Kit and Windows PowerShell</b>	Provision 1 to many servers using your own scripts to discover and deploy them with HP Scripting Tool Kit for Windows and Linux or HP Scripting Tools for Windows PowerShell. Learn more at <a href="http://www.hp.com/go/ProLiantSTK">http://www.hp.com/go/ProLiantSTK</a> or <a href="http://www.hp.com/go/powershell">http://www.hp.com/go/powershell</a> .
<b>HP RESTful Interface Tool</b>	HP RESTful Interface tool is a scripting tool to provision servers using RESTful API Interface to discover and deploy servers at scale. Learn more at <a href="http://www.hp.com/go/restfulapi">http://www.hp.com/go/restfulapi</a> .
<b>HP iLO Mobile Application</b>	Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: <a href="http://www.hp.com/go/ilo/mobileapp">http://www.hp.com/go/ilo/mobileapp</a> .
<b>HP Insight Online</b>	HP Insight Online, available at no additional cost as part of your HP warranty, Care Pack or contractual support agreement with HP, is a personalized dashboard for simplified tracking of IT operations and support information from anywhere, anytime. Learn more at <a href="http://www.hp.com/go/insightonline/info">http://www.hp.com/go/insightonline/info</a> .

### Security

Power-on password  
 Keyboard password  
 QuickLock, Network Server Mode  
 Serial interface control  
 Administrator's password  
 iLO 4 (Integrated Lights-Out 4) has 12 customizable user accounts and SSL encryption  
 iLO 4 can be disabled via a Global Setting  
 iLO Advanced supports directory services integration  
 TPM 1.2  
 UEFI

### Warranty

This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.



### Optional Features

<b>Server Management</b>	<b>HP Insight Control</b>	HP Insight Control, lets you deploy, migrate, monitor, remote control, and optimize your IT infrastructure through a single, simple management console. For more information, see <a href="http://www.hp.com/go/insightcontrol">http://www.hp.com/go/insightcontrol</a> .
	<b>HP OneView Advanced</b>	HP OneView Advanced is converged management that eliminates infrastructure complexity with automation simplicity. This modern architecture is designed to accelerate your IT operations across servers, storage, and network resources using software-defined approaches and automation, see <a href="http://www.hp.com/go/oneview">http://www.hp.com/go/oneview</a> .
	<b>HP Insight Cluster Management Utility (CMU)</b>	HP Insight Cluster Management Utility is a hyperscale-optimized management framework that includes software for the provisioning, control, performance management and monitoring of groups of nodes and infrastructure. Learn more at <a href="http://www.hp.com/go/cmu">http://www.hp.com/go/cmu</a> .

**Rack and Power Infrastructure** HP Rack and Power Infrastructure products and services create highly efficient and intelligent solutions for existing or new IT data centers. HP Rack and Power infrastructure solutions – rack infrastructure, power protection and management, performance optimized data centers (PODs) – are the foundation you are looking for to help secure your long-term IT success. These products are designed to help you react to changes in the industry. They deliver efficient, easy-to-use capabilities to manage, monitor, deploy and provision infrastructure from entry to enterprise. As an industry leader, HP is uniquely positioned to address the key concerns of power, cooling, cable management and system access. Learn more at [HP Rack and Power Infrastructure](#).

<b>High Performance Clusters</b>	<b>HP Insight Cluster Management Utility (CMU)</b>	HP Insight Cluster Management Utility is a Hyperscale management framework that includes software for the centralized provisioning, management and monitoring of nodes and infrastructure. Learn more at <a href="http://www.hp.com/go/cmu">http://www.hp.com/go/cmu</a> .
----------------------------------	--	--

**HPC Interconnects** **NOTE:** High Performance Computing (HPC) interconnect technologies are available for this server under the HP Cluster Platform product portfolio. These high-speed interconnects are fully supported by HP when they are part of these configure to order clusters. Solutions can be defined with a lot of flexibility with the help of configuration tools. Please visit the following URL to configure HPC Clusters with InfiniBand Interconnects: <http://www.hp.com/techservers/clusters/ucp/index.html>.

**Storage Software** Whether you need to solve a specific data protection, archiving, or storage command and control challenge, or deliver on strategic consolidation, compliance, or continuity initiatives, look no further than HP storage software. Our storage software helps you reduce costs, simplify storage infrastructure, protect vital assets and respond faster to business opportunities. Storage software that gets the job done:

- **Data Protection and Recovery Software**  
Whether you're a large enterprise or a smaller business, HP data protection and recovery software will cost-effectively protect you against disaster and ensure business continuity.
- **Data Archive and Migration Software**  
HP's storage software enables you to comply with data retention and retrieval requirements, improve application performance, and reduce costs by efficiently migrating infrequently accessed or less valuable data to lower cost storage.
- **Storage Resource Management Software (SRM)**  
HP's storage resource management software reduces operational costs and provides the command and control foundation you need to efficiently manage and visualize your physical and virtual environments.
- **Data Replication Software**  
HP offers array-based and host-based replication software for use in disaster recovery, testing, application development and reporting.
- **Storage Device Management Software**  
Maximize your investment in HP storage and networking with software that enables hardware-specific configuration, performance tuning and connectivity management.

### Optional Features

- **HP StoreVirtual VSA**

With HP StoreVirtual VSA you can use the power of virtualization to create a virtual array within your host server. Manage it as a single pool of shared storage capacity, and scale it to match your evolving needs. HP ProLiant Gen9 servers include a 3-year limited license for HP StoreVirtual VSA software with 1TB of capacity at no extra cost. Simply select to install HP StoreVirtual VSA software during server setup within Intelligent Provisioning. More information, instructional videos, and free console management software are available at <http://www.hp.com/go/vsa1TB>.

**NOTE:** For more information about Storage Software including QuickSpecs, please see: <http://www.hp.com/go/storage/software>.

---

#### **One Config Simple (SCE)**

SCE is a guided self service tool to help sales and non technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use in your existing ordering processes. If you require "custom" rack configuration or configuration for products not available in SCE, please contact HP's Customer Business Center or an Authorized Partner for assistance. <http://www.hp.com/products/configurator>.

---

### Service and Support

**HP Technology Services** HP Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HP to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

**Protect your business beyond warranty with HP Care Pack Services** HP Care Pack Services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.

**Optimized Support recommendation** **HP Proactive Care - Call to Repair commitment, 24x7 coverage, three year Care Pack Service**  
Prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to HP. Includes enhanced escalation management and the industry's highest level of hardware support commitment – hardware will be returned to operating conditions within six (6) hours after you open your case. Comes with collaborative software call management with two hour call back to reduce troubleshooting.

As a leading global support provider for Microsoft, Red Hat, VMware, SUSE and other operating systems, HP is able to simplify and shorten your time to resolution with one call for hardware or software questions. <http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

**HP ProLiant Server Hardware Installation**

Help ensure your new HP ProLiant hardware is installed smoothly, efficiently and with minimal disruption to your IT and business operations. <http://h20195.www2.hp.com/v2/GetPDF.aspx/5981-9356EN.pdf>

**Standard Support recommendation** **HP Proactive Care - 24x7 coverage, three year Care Pack Service**  
This service helps prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to HP. Includes four hour response for hardware, and collaborative call management for software with a two hour callback. <http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

**HP ProLiant Hardware Installation**

Help ensure your new HP ProLiant hardware is installed smoothly, efficiently and with minimal disruption to your IT and business operations. <http://h20195.www2.hp.com/v2/GetPDF.aspx/5981-9356EN.pdf>

**Related Services** **Data Center Platform Consulting Services**  
These services help modernize key systems and leverage new technology to support a changing business climate and prepare you for the new style of IT. HP understands the needs of the data center of the future and will serve as your guide for the journey. <http://www.hp.com/services/consulting>

**Data Privacy Services**

Protect your data through better media management. HP Data privacy services help manage and protect sensitive data. <http://www.hp.com/services/dataprivacy>

**Factory Express for Servers and storage**

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Choose how your factory solutions are built, tested, integrated, shipped and deployed. <http://www.hp.com/go/factory-express>

**HP Foundation Care**

Hardware and software support services provide easy connection to HP to resolve support issues quickly. Includes collaborative call management for industry leading software; full software support may also be purchased, giving you one place to call for help. <http://www.hp.com/services/foundationcare>

Additional HP Care Pack services can be found at: <http://www.hp.com/go/cpc>

**Parts and Materials** HP will provide HP-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

## Service and Support

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction.

### Pre-configured Models

For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

1. Pre-configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.
2. HP does not allow factory integration of options into pre-configured models. Any additional options purchased will be shipped separately.
3. If you desire a custom configuration please see "Configuration Information - Factory Integrated Models" section of this QuickSpecs.
4. Not all models are available in all regions. Check with your local country HP offices for availability.

**NOTE:** All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HP SFF Hard Drive Blank Kit or P/N 666986-B21: HP LFF Hard Drive Blank Kit.

**NOTE:** All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the [ProLiant Power Cables](#) web page.

**Caution:** HP recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

	Entry Models		Base Models
<b>[SKU Number]</b>	755260-B21	755261-B21	755262-B21
<b>Model Name</b>	HP ProLiant DL360 Gen9 E5-2603v3 1P 8GB-R B140i 500W PS Entry SATA Server	HP ProLiant DL360 Gen9 E5-2603v3 1P 8GB-R H240ar 500W PS Entry SAS Server	HP ProLiant DL360 Gen9 E5-2630v3 1P 16GB-R P440ar 500W PS Base SAS Server
<b>Processor</b>	Intel® Xeon® E5-2603v3		Intel® Xeon® E5-2630v3
<b>Number of Processors</b>	One		
<b>Memory</b>	8GB (1x8GB Registered DIMMs, 2133 MHz) <b>NOTE:</b> The DIMM will operate at 1600 MHz with the E5-2603v3 Processor.		16GB (1x16GB Registered DIMMs, 2133 MHz) <b>NOTE:</b> The DIMM will operate at 1866 MHz with the E5-2603v3 Processor.
<b>Network Controller</b>	HP Embedded 1Gb Ethernet 4-port 331i Adapter		
<b>Storage Controller</b>	HP Dynamic Smart Array B140i	HP H240ar Smart Host Bus Adapter	HP Flexible Smart Array P440ar/2GB
<b>Hard Drive</b>	None ship standard <b>NOTE:</b> Only Supports SATA HDD unless HP Smart HBA or HP Smart Array Controller is added.	None ship standard	
<b>Internal Storage</b>	8 SFF HDD Bays		
<b>Optical Drive Bay</b>	Optional via Universal Media Bay		
<b>PCI-Express Slots</b>	2 Standard (1-FH/¾ L, 1-LP) PCIe 3.0		
<b>Power Supply</b>	(1) HP 500W Flex Slot Platinum Power Supply		
<b>Fans</b>	5 Standard hot plug fans, redundant		
<b>Management</b>	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Control (optional), HP OneView (optional)		
<b>Form Factor</b>	Rack (1U), HP Easy Install Rails		
<b>Warranty</b>	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response		

	Performance Models	
<b>[SKU Number]</b>	755263-B21	795236-B21
<b>Model Name</b>	HP ProLiant DL360 Gen9 E5-2650v3 2P 32GB-R P440ar 800W RPS Performance SAS Server	HP ProLiant DL360 Gen9 E5-2670v3 2P 32GB P440ar 8SFF 2x10Gb-T 2x800W OneView Server
<b>Processor</b>	Intel® Xeon® E5-2650v3	Intel® Xeon® E5-2670v3
<b>Number of Processors</b>	Two	
<b>Memory</b>	32GB (2x16GB Registered DIMMs, 2133 MHz)	64GB (4x16GB Registered DIMMs, 2133 MHz)
<b>Network Controller</b>	HP Embedded 1Gb Ethernet 4-port 331i Adapter	HP Embedded 4x1Gb, plus 2x10Gb FLR-T FlexFabric Flexible LOM
<b>Storage Controller</b>	HP Flexible Smart Array P440ar/2GB	
<b>Hard Drive</b>	None ship standard	
<b>Internal Storage</b>	8 SFF HDD Bays	

### Pre-configured Models

<b>Optical Drive Bay</b>	Optional via Universal Media Bay	
<b>PCI-Express Slots</b>	2 Standard (1-FH/¾ L, 1-LP) PCIe 3.0	3 Standard (1-FH/HL, 2-LP) PCIe 3.0
<b>Power Supply</b>	(2) HP 800W Flex Slot Platinum Power Supply	
<b>Fans</b>	7 standard hot plug fans, redundant	
<b>Management</b>	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (standard), HP OneView (optional)	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (standard), HP OneView Advanced (Standard)
<b>Energy Star</b>	Meets Energy Star requirements	
<b>Form Factor</b>	Rack (1U), HP Easy Install Rails	
<b>Warranty</b>	Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response	

<b>Country Code Key</b>	xx1 = B21	Worldwide
	xx1 = 291	Japan
	xx1 = AA1	PRC



### Configuration Information - Factory Integrated Models

This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

1. Factory Integrated Models must start with a CTO Server.
2. FIO indicates that this option is only available as a factory installable option.
3. All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.
4. Some options may not be integrated at the factory. Contact your local sales representative for additional information.

### Step 1: Base Configuration (choose one of the following configurable models)

<b>[Chassis]</b>	HP ProLiant DL360 Gen9 4LFF Configure-to-order Server	HP ProLiant DL360 Gen9 8SFF Configure-to-order Server
<b>SKU Number</b>	755259-B21	755258-B21
<b>Processor</b>	2 (optional) x HP Smart Socket Guides	
<b>DIMM Slots</b>	24 DIMM slots for RDIMM, LRDIMM DDR4 Memory	
<b>Storage Controller</b>	HP Dynamic Smart Array B140i	
<b>PCIe</b>	2 PCIe 3.0 Slots: Slot 1, FH / ¾ Length; Slot 2, Low Profile	
<b>Drive Cage</b>	4LFF Hot Plug	8SFF Hot Plug
<b>Network Controller</b>	HP Embedded 1Gb Ethernet 4-port 331i Adapter	
<b>Fans</b>	5 Standard hot plug fans, redundant	
<b>Management</b>	iLO Management (standard), Intelligent Provisioning (standard), iLO Advanced (optional), Insight Control (optional), HP OneView (optional)	
<b>USB</b>	1 front, 2 internal, 2 rear	
<b>Ears</b>	HP Quick Release Ears	

**NOTE:** This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

**NOTE:** Factory Integrated Models must start with a CTO Server.

**NOTE:** FIO indicates that this option is only available as a factory installable option.

**NOTE:** All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.

**NOTE:** 4LFF CTO Chassis includes 1 SATA Cable, option kit: 766213-B21, which attaches to the B140i controller.

**NOTE:** 8SFF CTO Chassis includes two 4 x Mini-SAS Cables, option kit: 766209-B21, which attaches to an optional HP Smart HBA H240ar or HP Smart Array P440ar controller.

### Step 2: Choose Required Options (only one of the following from each list unless otherwise noted)

#### HP Processors

Select one or two processors from Core options-Processor section below,

- If one processor is desired, select one xxxxxx-L21
- If two processors are desired, select one xxxxxx-L21 and one xxxxxx-B21.
- Up to 2 processors supported. Mixing different processor models is not supported.
- DDR4 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs installed.

For the Intel® C610 Chipset E5-2600 Series, the letter preceding the model number indicates the Product Line (E3, E5, E7); 2600x v#, 2 = number of CPUs in a Node, 6 is socket/segment designation, 00 = Processor SKU, x = L for low power SKUs and v# (not yet designated) = version number.

#### HP Memory

Select one or more memory from Core options-Memory section below,

- LRDIMM, RDIMM are all distinct memory technologies and cannot be mixed within a server. The majority of ProLiant Gen9 servers support LRDIMM and RDIMM.
- If only one processor is installed, only half of the total DIMM slots are available. When populating with two processors all DIMM slots are available.

### Configuration Information - Factory Integrated Models

- Depending on the memory configuration and processor model, the memory speed may run at 2133MHz, 1866MHz or 1600MHz. Please see Memory Population Table or the Online Memory Configuration Tool at: <http://www.hp.com/go/ddr4config>.

#### HP Power Supplies

Select one or more power supplies from Core Options-Power Supplies section below:

- Prior to selecting a power supply option, it is highly recommended that you review your server configuration in the HP Power Advisor tool to determine the right size power supply for your server configuration. The HP Power Advisor is located at: <http://www.hp.com/go/hppoweradvisor>.
- Mixing of power supplies in the same server is not supported. All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server.

### Step 3: Choose Additional Factory Integratable Options

#### HP Unique Options

Select one or more Unique options from Core options section below.

- This section may contain FIO options, please see the Unique options section below.
- FIO indicates that this option is only available as a factory installable option.

#### HP Drives

Select one or more drives from Core options-HP Drives section below:

- The components of a storage subsystem (e.g. the drive, the HBA/controller, firmware, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.
- Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.
- The HP ProLiant Gen9 Smart Storage solutions are equipped with Small Form Factor (SFF 2.5 in) and Large Form Factor (LFF 3.5 in) hot plug carriers for HP Qualified Hard Drives and Solid State Drives.

#### HP Flexible LOM

Select a FlexibleLOM from Core options-Networking section below,

- Only one FlexibleLOM can be added to the server. These options are upgradeable and can be changed from the original configuration after the server is shipped.
- For 10Gb adapters, a minimum of two Gigabytes (2 GB) of server memory is required per each adapter.
- Please see the QuickSpecs for Technical Specifications and additional information: <http://www.hp.com/go/ProLiantNICs>.

#### HP Networking

Select a standup NIC adapter from Core options-Networking section below,

- Please see the QuickSpecs for Technical Specifications and additional information: <http://www.hp.com/go/ProLiantNICs>.
- These options are upgradeable and can be changed from the original configuration after the server is shipped.
- For 10Gb adapters, a minimum of two Gigabytes (2 GB) of server memory is required per each adapter.

#### HP Storage Controllers

Select one or more Storage options from Additional options section below.

- The embedded B140i controller will operate in UEFI only mode. For legacy support an additional controller will be needed, and for CTO orders please also select the Legacy mode settings part, 758959-B22
- This section may contain FIO options, please see HP Storage Controllers section below.
- FIO indicates that this option is only available as a factory installable option.

#### HP Graphics Options

Select one or more graphics adapter from Additional options section below.

- Please see the HP Power Advisor for estimated power consumption of your individual system configuration prior to installing GPUs. The HP Power Advisor is located at: <http://www.hp.com/go/hppoweradvisor>.

### Configuration Information - Factory Integrated Models

- This section may contain FIO options, please see HP Computation & Graphics Accelerators section below.

**HP I/O Expansion Options** Select one or more Riser Kit options from Core options section below.

- To take advantage of the additional PCI slot upgrade, the second processor must be installed.
- This section may contain FIO options, please see HP I/O Expansion Options section below.
- FIO indicates that this option is only available as a factory installable option.

**HP Cooling Options** Select one or more Fan Kits from Core options section below.

- This section may contain FIO options, please see HP Cooling Options section below.
- FIO indicates that this option is only available as a factory installable option.

**HP Rail Kits** Select one type of rail kit from Additional options section below.

- Please take a moment to review the installation documentation that comes with the server to help you with the installation of your Gen9 server.
- To assist in the installation of the server into the rack, an optional installation tool is available by contacting your local services representative (p/n 695539-001).
- See HP Rack Options in Additional Options section of this QuickSpecs for more rack kit choices.

**Caution:** HP recommends that a minimum of two people are required for all Rack Server installations. Please refer to your installation instructions for proper tools and number of people to use for any installation.

### Core Options

**NOTE:** Some options may not be integrated at the factory. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for additional information.

<b>HP Unique Options</b>	<p>HP DL360 Gen9 2SFF SAS/SATA Universal Media Bay Kit <span style="float: right;">764630-B21</span>  <b>NOTE:</b> Required when upgrading an 8SFF config to a 10SFF config, not supported in 4LFF Chassis; when this option kit is installed it cannot be used in conjunction with the optical drive or USB 2.0/VGA option kits.  <b>NOTE:</b> Adds 2SFF drives to the 8SFF model for a total of 10SFF SAS/SATA drives. This kit comes with the cable needed to attach the 2 drives to the internal B140i SATA controller. For SAS, an alternate storage controller and its associated cable kit are required.</p> <p>HP DL360 Gen9 SFF DVD/USB Universal Media Bay Kit <span style="float: right;">764632-B21</span>  <b>NOTE:</b> DVD RW (Drive Included), USB 2.0, and VGA; when this option kit is installed it cannot be used in conjunction with the 2 SFF SAS/SATA option kit.</p> <p>HP DL360 Gen9 SFF USB/VGA Universal Media Bay Kit <span style="float: right;">764634-B21</span>  <b>NOTE:</b> Front USB 2.0 and VGA, when this option kit is installed it cannot be used in conjunction with the 2 SFF SAS/SATA option kit.</p> <p>HP DL360 Gen9 Location Discovery Services Ear Kit <span style="float: right;">764757-B21</span>  <b>NOTE:</b> Requires ProLiant Location Discovery Services Infrastructure within server racks.</p> <p>HP DL360 Gen9 Serial Cable <span style="float: right;">764646-B21</span></p> <p>HP DL360 Gen9 SFF Systems Insight Display Kit <span style="float: right;">764636-B21</span>  <b>NOTE:</b> For the 8SFF or 10SFF models, adds a System Insight Display for improved diagnosis capabilities.</p> <p>HP DL360 Gen9 LFF USB/VGA Kit <span style="float: right;">764638-B21</span>  <b>NOTE:</b> Adds front VGA and USB 2.0 ports to LFF.</p> <p>HP DL360 Gen9 LFF Systems Insight Display Kit <span style="float: right;">764640-B21</span>  <b>NOTE:</b> For the 8SFF or 10SFF models, adds a System Insight Display for improved diagnosis capabilities.  <b>NOTE:</b> Options noted with "DL360 Gen9 SFF..." are options only compatible with the 8 SFF Chassis; and Options noted with "DL360 Gen9 LFF..." are options only compatible with the 4LFF Chassis.</p> <p>HP DL360 Gen9 High Efficiency Heat Sink Kit <span style="float: right;">795235-B21</span>  <b>NOTE:</b> These are included in some higher Watt processors (see processor section), but may be added to lower power processors to reduce fan power consumption.</p>
--------------------------	---

### HP Processors

#### Entry Processors - E5-2600v3 series Processors

HP DL360 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) FIO Processor Kit <span style="float: right;">755374-L21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor Kit <span style="float: right;">755374-B21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) FIO Processor Kit <span style="float: right;">755378-L21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor Kit <span style="float: right;">755378-B21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	

#### Base Processors - E5-2600v3 series Processors

HP DL360 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) FIO Processor Kit <span style="float: right;">755382-L21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2620v3 (2.4GHz/6-core/15MB/85W) Processor Kit <span style="float: right;">755382-B21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-core/10MB/105W) FIO Processor Kit <span style="float: right;">755376-L21</span> <b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2623v3 (3GHz/4-core/10MB/105W) Processor Kit <span style="float: right;">755376-B21</span>	

### Core Options

<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) FIO Processor Kit	755384-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2630v3 (2.4GHz/8-core/20MB/85W) Processor Kit	755384-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) FIO Processor Kit	755404-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2637v3 (3.5GHz/4-core/15MB/135W) Processor Kit	755404-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) FIO Processor Kit	755386-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2640v3 (2.6GHz/8-core/20MB/90W) Processor Kit	755386-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) FIO Processor Kit	764097-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2630Lv3 (1.8GHz/8-core/20MB/55W) Processor Kit	764097-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
<b>Performance Processors - E5-2600v3 series Processors</b>	
HP DL360 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) FIO Processor Kit	755406-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2643v3 (3.4GHz/6-core/20MB/135W) Processor Kit	755406-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) FIO Processor Kit	755388-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2650v3 (2.3GHz/10-core/25MB/105W) Processor Kit	755388-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) FIO Processor Kit	755390-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2660v3 (2.6GHz/10-core/25MB/105W) Processor Kit	755390-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) FIO Processor Kit	755408-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2667v3 (3.2GHz/8-core/20MB/135W) Processor Kit	755408-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) FIO Processor Kit	755392-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2670v3 (2.3GHz/12-core/30MB/120W) Processor Kit	755392-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) FIO Processor Kit	755394-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2680v3 (2.5GHz/12-core/30MB/120W) Processor Kit	755394-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	

### Core Options

HP DL360 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) FIO Processor Kit	755398-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2683v3 (2GHz/14-core/35MB/120W) Processor Kit	755398-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) FIO Processor Kit	755396-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2690v3 (2.6GHz/12-core/30MB/135W) Processor Kit	755396-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) FIO Processor Kit	755400-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2695v3 (2.3GHz/14-core/35MB/120W) Processor Kit	755400-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) FIO Processor Kit	755402-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2697v3 (2.6GHz/14-core/35MB/145W) Processor Kit	755402-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) FIO Processor Kit	764099-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2698v3 (2.3GHz/16-core/40MB/135W) Processor Kit	764099-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) FIO Processor Kit	780003-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2699v3 (2.3GHz/18-core/45MB/145W) Processor Kit	780003-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) FIO Processor Kit	764101-L21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2650Lv3 (1.8GHz/12-core/30MB/65W) Processor Kit	764101-B21
<b>NOTE:</b> Ships with a standard Heatsink. A Performance Heatsink can be added to help reduce power consumption (795235-B21)	
HP DL360 Gen9 Intel® Xeon® E5-2687Wv3 (3.1GHz/10-core/25MB/160W) FIO Processor Kit	755410-L21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
HP DL360 Gen9 Intel® Xeon® E5-2687Wv3 (3.1GHz/10-core/25MB/160W) Processor Kit	755410-B21
<b>NOTE:</b> Ships with a performance Heatsink as standard	
<b>NOTE:</b> Processor XXXXXX-B21 option kits include 1 heat sink and two additional fans for 2P configs.	

### HP Memory

<b>Registered DIMMs (RDIMMs) for E5-2600v3 Series</b>	
HP 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726718-B21
HP 4GB (1x4GB) Single Rank x8 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726717-B21
HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726719-B21
HP 8GB (1x8GB) Dual Rank x8 DDR4-2133 CAS-15-15-15 Registered Memory Kit	759934-B21
<b>Load Reduced DIMMs (LRDIMMs) for E5-2600v3 Series</b>	
HP 32GB (1x32GB) Quad Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit	726722-B21
HP 16GB (1x16GB) Dual Rank x4 DDR4-2133 CAS-15-15-15 Load Reduced Memory Kit	726720-B21
<b>NOTE:</b> Memory speeds will vary by processor model, please see memory section of QuickSpecs.	

### HP Optical Drives

HP 9.5mm SATA DVD-ROM JackBlack Gen9 Optical Drive	726536-B21
<b>NOTE:</b> Supported only with the 4LFF Models & requires cable kit 766203-B21.	
HP 9.5mm SATA DVD-RW JackBlack G9 Optical Drive	726537-B21
<b>NOTE:</b> Supported only with the 4LFF Models & requires cable kit 766203-B21.	
HP DL360 Gen9 LFF Optical Cable	766203-B21
HP DL360 Gen9 SFF DVD/USB Universal Media Bay Kit	764632-B21



### Core Options

**NOTE:** Front DVD-RW, USB 2.0 and VGA, and optical cable.

HP Mobile USB Non Leaded System DVD RW Drive

701498-B21

**NOTE:** External USB Drive.

### HP Drives

#### **SAS Hot Plug SFF (2.5-inch) Enterprise (ENT) Drives**

HP 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781518-B21
HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive	718162-B21
HP 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785069-B21
HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652589-B21
HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759212-B21
HP 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781516-B21
HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652583-B21
HP 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759210-B21
HP 450GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652572-B21
HP 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759208-B21
HP 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785067-B21
HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652564-B21
HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652605-B21

#### **SAS Hot Plug SFF (2.5-inch) Midline (MDL) Drives**

HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652749-B21
HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652745-B21

#### **SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives**

HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	765424-B21
HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737394-B21
HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737261-B21

#### **SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives**

HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765259-B21
HP 6TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	761477-B21
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765257-B21
HP 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	695510-B21
HP 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652766-B21
HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652757-B21
HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652753-B21

#### **SATA Hot Plug SFF (2.5-inch) Midline (MDL) Drives**

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655710-B21
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655708-B21

#### **SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives**

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765255-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	753874-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765253-B21
HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	693687-B21
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	628061-B21
HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658079-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	657750-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658071-B21

#### **12G SAS Hot Plug SFF (2.5-inch) Enterprise Performance Solid State Drives**

HP 800GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive	741159-B21
--	------------

### Core Options

HP 400GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive	741155-B21
HP 200GB 12G SAS High Endurance SFF 2.5-in SC Enterprise Performance 3yr Wty Solid State Drive	741151-B21
<b>12G SAS Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives</b>	
HP 1.6TB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779176-B21
HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779172-B21
HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	741146-B21
HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779168-B21
HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	741142-B21
HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779164-B21
HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	741138-B21
<b>12G SAS Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives</b>	
HP 1.6TB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	762263-B21
HP 800GB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	762261-B21
<b>12G SAS Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives</b>	
HP 1.6TB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	762272-B21
HP 800GB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	762270-B21
<b>6G SATA Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives</b>	
HP 800GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691868-B21
HP 400GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691866-B21
HP 200GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691864-B21
HP 100GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691862-B21
<b>6G SATA Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives</b>	
HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	757339-B21
HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717973-B21
HP 600GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739898-B21
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717971-B21
HP 300GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739888-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717969-B21
<b>6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value G1 Solid State Drives</b>	
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756657-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756636-B21

### Core Options

HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756621-B21
HP 960GB 6G SATA Light Endurance SFF 2.5-in SC Enterprise Light 3yr Wty G1 Solid State Drive	756601-B21
<b>6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value M1 Solid State Drives</b>	
HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764929-B21
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764927-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764925-B21
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764923-B21
<b>6G SATA Hot Plug SFF (2.5-inch) Enterprise Boot Solid State Drives</b>	
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive	717965-B21
HP 80GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive	734360-B21
<b>6G SATA Hot Plug LFF (3.5-inch) Enterprise Mainstream Solid State Drives</b>	
HP 800GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691860-B21
HP 400GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691856-B21
HP 200GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691854-B21
HP 100GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691852-B21
<b>6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value G1 Solid State Drives</b>	
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756660-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756639-B21
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756624-B21
<b>6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value M1 Solid State Drives</b>	
HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764945-B21
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764943-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764941-B21
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764939-B21
<b>6G SATA Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives</b>	
HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	757342-B21
HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718189-B21
HP 600GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	739900-B21
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718183-B21
HP 300GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	739890-B21

### Core Options

HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718177-B21
<b>6G SATA Hot Plug LFF (3.5-inch) Enterprise Light G1 Solid State Drives</b>	
HP 960GB 6G SATA Light Endurance LFF 3.5-in SC Converter ENT Light 3yr Wty G1 Solid State Drive	756604-B21
<b>6G SATA Hot Plug LFF (3.5-inch) Enterprise Boot Solid State Drives</b>	
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive	718171-B21
HP 80GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive	734362-B21
<b>Hard Drive Blank Kits</b>	
HP Large Form Factor Hard Drive Blank Kit	666986-B21
HP Small Form Factor Hard Drive Blank Kit	666987-B21
<b>Hard Drive Kits</b>	
HP DL360 Gen9 2SFF SAS/SATA Universal Media Bay Kit	764630-B21
<b>NOTE:</b> Not supported in the 4LFF Chassis, required for 10SFF config, when added to the 8SFF Chassis.	

### HP Networking

#### 1 Gigabit Ethernet adapters

HP Ethernet 1Gb 4-port 331T Adapter	647594-B21
HP Ethernet 1Gb 2-port 361T Adapter	652497-B21
HP Ethernet 1Gb 2-port 332T Adapter	615732-B21

#### 10 Gigabit Ethernet adapters

HP Ethernet 10Gb 2-port 530T Adapter	656596-B21
HP Ethernet 10Gb 2-port 561T Adapter	716591-B21
HP Ethernet 10Gb 2-port 530SFP Adapter	652503-B21
HP Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21

**NOTE:** A minimum of two Gigabytes (2 GB) of server memory is required per each adapter.

**NOTE:** Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. See cables/options below.

#### FlexibleLOM Adapters

HP FlexFabric 10Gb 2-port 533FLR-T Adapter	700759-B21
HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter	700751-B21
HP FlexFabric 10Gb 2-port 556FLR-SFP+ Adapter	727060-B21
HP Ethernet 10Gb 2-port 561FLR-T Adapter	700699-B21
HP Ethernet 1Gb 4-port 331FLR Adapter	629135-B22
HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	665243-B21
HP Ethernet 1Gb 4-port 366FLR Adapter	665240-B21

**NOTE:** For the following FlexibleLOM Network Adapters, only 1 FlexibleLOM can be added to the server, which is selected in Step 2 of the "Configuration Information - Factory Integrated Models" section. These options are for upgrade or change from original configuration after the server is shipped.

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information: <http://www.hp.com/go/ProLiantNICs>.

### HP InfiniBand

HP InfiniBand FDR 2-port 545QSFP Adapter	702211-B21
HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	764284-B21
HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	764285-B21
HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	764286-B21
QLogic InfiniBand 4X QDR PCI-E G2 Dual Port HCA	583211-B21

**NOTE:** Please see the QuickSpecs for additional information:

[http://h18000.www1.hp.com/products/quickspecs/13078\\_div/13078\\_div.html](http://h18000.www1.hp.com/products/quickspecs/13078_div/13078_div.html).

### HP I/O Expansion Options

HP DL360 Gen9 Low Profile PCIe Slot CPU2 Kit	764642-B21
--	------------

### Core Options

**NOTE:** After installation server will have 1 FH / ¾ Length, and 2 Low Profile PCIe 3.0 Slots, requires second CPU.

HP DL360 Gen9 Full Height PCIe Slot CPU2 Kit with GPU Power Cable 764644-B21

**NOTE:** After installation the server will have 2 FH / ¾ Length PCIe 3.0 Slots, requires second CPU.

**NOTE:** Includes GPU power cable and bracket; when this option kit is installed the Low Profile PCIe3.0 riser is not useable.

#### HP Power Supplies

##### HP Flex Slot Platinum Hot-plug Power supplies

HP 500W Flex Slot Platinum Hot Plug Power Supply Kit 720478-B21

HP 800W Flex Slot Platinum Hot Plug Power Supply Kit 720479-B21

HP 1400W Flex Slot Platinum Plus Hot Plug Power Supply Kit 720620-B21

**NOTE:** 1400W Power Supply contains intelligent power discovery feature.

**NOTE:** Mixing of power supplies in the same server is not supported. All power supplies must be of the same input voltage, output rating, and efficiency rating. If non-matching power supplies are installed, you may receive an error message and/or experience operational issues with your server.

**NOTE:** Prior to selecting a power supply option, it is highly recommended that you review your server configuration in the HP Power Advisor tool to determine the right size power supply for your server configuration. The HP Power Advisor is located at:

<http://www.hp.com/go/hppoweradvisor>.

#### HP Computation and Graphics Accelerators

HP NVIDIA Quadro K4200 Graphics Accelerator JOG90A

**NOTE:** HP DL360 Gen9 supports up to two K4200 GPU cards. A single K4200 card installed in the primary PCI-e slot requires the Gen9 GPU Cable for CPU1 Kit 766199-B21. Two cards installed in the both the primary and secondary PCI-e slots require an HP DL360 Gen9 Full Height PCIe Slot CPU2 Kit 764644-B21, and if the HDD need to be RAIDed, the HP Smart Array P440ar for two GPUS needs to be installed, option kit 726740-B21.

HP NVIDIA Quadro K2200 Graphics Accelerator JOG89A

**NOTE:** Supports up to two cards. Two cards installed in the both the primary and secondary PCI-e slots require an HP DL360 Gen9 Full Height PCIe Slot CPU2 Kit 764644-B21. If two K2200 GPU cards are installed it does not require HP Smart Array P440ar for two GPU option kits for RAIDed HDDs.

HP DL360 Gen9 GPU Cable for CPU1 Kit 766199-B21

**NOTE:** Includes GPU power cable and brackets.

HP DL360 Gen9 SFF USB/VGA Universal Media Bay Kit 764634-B21

HP DL360 Gen9 LFF USB/VGA Kit 764638-B21

**NOTE:** Only the above listed Graphics cards are HP standard supported options in this server.

**NOTE:** The NVIDIA Quadro modules are supported only on 64-bit versions of Linux and Windows operating systems as well as on Virtual Machine client operating systems. The supported bare metal operating systems are RHEL6, SLES 11 and Windows Server 2012 R2.

#### HP Cooling Options

HP DL360 Gen9 High Performance Fan Kit 766201-B21

**NOTE:** High Performance Fan Kit, is available to meet some extended ambient operating temperatures above 35° C. Qualifications for extended ambient configurations are detailed at: <https://www.hp.com/servers/ashrae>.

### Additional Options

**NOTE:** Some options may not be integrated at the factory. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for additional information.

#### HP Insight Software **HP Insight Control**

HP Insight Control including 1yr 24x7 Technical Support and Updates Single Server License C6N27A

HP Insight Control including 1yr 24x7 Technical Support and Updates Electronic License C6N28ABE

HP Insight Control Server Provisioning Media Kit BD883A

HP Insight Management Media Kit C6N31A

**NOTE:** Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

**NOTE:** Customer will receive a license entitlement certificate. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24x7 HP Software Technical Support and Update Service.

**NOTE:** Licenses ship without media. The HP Insight Control Media Kit can be ordered separately, or can be downloaded at: <http://www.hp.com/go/insightupdates>.

**NOTE:** For additional license options please see the QuickSpecs at: [http://h18000.www1.hp.com/products/quickspecs/12631\\_div/12631\\_div.html](http://h18000.www1.hp.com/products/quickspecs/12631_div/12631_div.html).

#### Embedded Management

##### HP iLO Advanced

HP iLO Advanced including 3yr 24x7 Technical Support and Updates E-LTU E6U64ABE

HP iLO Advanced 1 Server License with 3yr 24x7 Tech Support and Updates BD505A

HP iLO Advanced including 1yr 24x7 Technical Support and Updates Single Server License 512485-B21

HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle Single Server FIO License C6N36A

HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle FIO Electronic License C6N36ABE

HP iLO Advanced including 1yr 24x7 Technical Support and Updates E-LTU E6U59ABE

#### HP Converged Infrastructure Management Software

##### HP OneView Advanced (with HP iLO Advanced)

HP OneView incl 3yr 24x7 Supp Phys 1 Svr Lic E5Y34A

HP OneView incl 3yr 24x7 Supp Flex Qty E-LTU E5Y35AAE

HP OneView for ProLiant DL Server incl 3yr 24x7 Supp FIO Bundle Physical 1 Svr Lic E5Y43A

HP OneView incl 3yr 24x7 Supp Bundle 1 Svr E-LTU E5Y43AAE

##### HP OneView Advanced (without HP iLO Advanced)

HP OneView w/o iLO Adv incl 3yr 24x7 Supp Phys 1 Svr Lic E5Y38A

HP OneView w/o iLO Adv inc 3yr 24x7 Supp Flex Qty E-LTU E5Y39AAE

HP OneView Media Kit Phys No Lic E5Y37A

**NOTE:** Full licenses of HP OneView Advanced also provide the right-to-use HP Insight Control without additional charge.

**NOTE:** Server provisioning (via 'HP Insight Control server provisioning') is licensed as part of HP OneView Advanced and provides multi-server OS and driver provisioning. Media kit #BD883A can be ordered for a physical copy of this software (USB flash drive).

**NOTE:** Licenses ship without media. The HP OneView Media Kit can be ordered separately, or can be downloaded at: <http://www.hp.com/go/oneview>.

**NOTE:** Electronic and Flexible-Quantity licenses can be used to purchase multiple licenses with a single activation key.

#### High Performance Clusters

##### HP Cluster Management Utility

HP Insight Cluster Management Utility 1yr 24x7 Flexible License QL803B

HP Insight Cluster Management Utility 3yr 24x7 Flexible License BD476A

**NOTE:** These part numbers can be used to purchase one certificate for multiple licenses and support with a single activation key. Each license is for one node (server). Customer will receive a printed end user license agreement and license entitlement certificate via physical shipment. The license entitlement certificate must be redeemed online in order to obtain a license key. Customer also will receive a support agreement.



### Additional Options

HP Insight Cluster Management Utility Media BD477A  
**NOTE:** For additional license kits please see the QuickSpecs at  
[http://h18004.www1.hp.com/products/quickspecs/12612\\_div/12612\\_div.html](http://h18004.www1.hp.com/products/quickspecs/12612_div/12612_div.html).

#### HP PCIe Workload Accelerator Options

##### Value Endurance (VE) PCIe Workload Accelerators

HP 6.4TB FH/HL Value Endurance (VE) PCIe Workload Accelerator	763840-B21
HP 3.2TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763838-B21
HP 1.6TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763836-B21
HP 1.3TB HH/HL Value Endurance (VE) PCIe Workload Accelerator	763834-B21

##### Light Endurance (LE) PCIe Workload Accelerators

HP 5.2TB FH/HL Light Endurance (LE) PCIe Workload Accelerator	775672-B21
HP 2.6TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775670-B21
HP 1.3TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775668-B21
HP 1.0TB HH/HL Light Endurance (LE) PCIe Workload Accelerator	775666-B21

**NOTE:** Please see the QuickSpecs for Technical Specifications and additional information:  
[http://h18004.www1.hp.com/products/quickspecs/14528\\_div/14528\\_div.html](http://h18004.www1.hp.com/products/quickspecs/14528_div/14528_div.html)  
(Worldwide).

#### HP Security

HP 1U Security Bezel Kit	664918-B21
HP Trusted Platform Module Option	488069-B21

**NOTE:** The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2008. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server 2008 has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to: <http://www.hp.com/go/TPM>.

**NOTE:** ProLiant OS pre-installed units will come with the partition required for TPM deployment.

**NOTE:** The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.

#### HP Storage Controllers

##### SAS Controllers

##### HP Smart Array Controllers

HP Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller	726736-B21
--	------------

**NOTE:** Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.

HP Smart Array P440ar/2GB FBWC 12Gb 2-ports Int FIO SAS Controller	749974-B21
--	------------

**NOTE:** Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.

HP DL360 Gen9 Smart Array P840 SAS Card with Cable Kit	766205-B21
--	------------

**NOTE:** Includes the P840 Smart Array controller with 4GB integrated cache, HP Smart Storage Battery, and associated cabling to attach it to a 10SFF chassis configuration.

HP DL360 Gen9 Smart Array P440ar Controller for 2 GPU Configurations	726740-B21
--	------------

**NOTE:** This controller is specific for the DL360 Gen9 with 2 GPUs installed. It has a unique heatsink that will allow the 2<sup>nd</sup> GPU to fit.

HP Smart Array P441/4GB FBWC 12Gb 2-ports Ext SAS Controller	726825-B21
--	------------

HP Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller	726821-B21
---	------------

**NOTE:** Provides support for up to 8 internal SAS/SATA drives, consumes 1 PCIe slot.

**NOTE:** Includes the HP Smart Storage Battery.

HP Smart Array P440/4GB FBWC 12Gb 1-port Int FIO SAS Controller	761872-B21
---	------------

**NOTE:** Provides support for up to 8 internal SAS/SATA drives, consumes 1 PCIe slot.

**NOTE:** Includes the HP Smart Storage Battery.

HP Smart Array P840/4GB FBWC 12Gb 2-ports Int SAS Controller	726897-B21
--	------------

**NOTE:** When ordering controllers, please reference the HP Cable Options below for the required cable.

**NOTE:** FIO indicates factory integrated option via CTO.

### Additional Options

#### HP Smart Host Bus Adapters

HP H240ar 12Gb 2-ports Int Smart Host Bus Adapter	726757-B21
<b>NOTE:</b> Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.	
HP H240ar 12Gb 2-ports Int FIO Smart Host Bus Adapter	749976-B21
<b>NOTE:</b> Provides support for up to 8 internal SAS/SATA drives without using a PCIe slot.	
HP H240 12Gb 2-ports Int Smart Host Bus Adapter	726907-B21
HP H240 12Gb 2-ports Int FIO Smart Host Bus Adapter	761873-B21
HP H241 12Gb 2-ports Ext Smart Host Bus Adapter	726911-B21
<b>NOTE:</b> FIO indicates factory integrated option via CTO.	

#### HP Cable Options

HP DL360 Gen9 LFF Smart Array P440ar/H240ar SAS Cable	766211-B21
<b>NOTE:</b> Required for an upgrade from a B140i SATA controller to a HP Smart HBA 240ar or HP Smart Array P440ar.	
HP DL360 Gen9 SFF Embedded SATA Cable	766207-B21
<b>NOTE:</b> Needed only when attaching drive bays to the B140i controller in a 8 SFF Chassis.	
HP DL360 Gen9 SFF Smart Array P440/H240 SAS Cables	775927-B21
<b>NOTE:</b> Required for use with the HP Smart Array P440 (PCIe Controllers) 726821-B21 or 761872-B21, the option kit documentation details out cable placement with the HP Smart Array P440 in PCIe 3.0 Slots 1 or 2 connecting to the 8SFF backplane or the 2 SFF SAS/SATA option kit.	
HP DL360 Gen9 LFF Smart Array P440/H240 SAS Cables	775929-B21
<b>NOTE:</b> Required for use with the HP Smart Array P440 (PCIe Controllers) 726821-B21 or 761872-B21, the option kit documentation details out cable placement with the HP Smart Array P440 in PCIe 3.0 Slots 1 or 2 connecting to the 4LFF backplane.	
HP DL360 Gen9 SFF Smart Array P440ar/H240ar SAS Cable	766209-B21
HP DL360 Gen9 LFF Embedded SATA Cable	766213-B21
<b>NOTE:</b> Options noted with "DL360 Gen9 SFF..." are options only compatible with the 8 SFF Chassis; and Options noted with "DL360 Gen9 LFF..." are options only compatible with the 4LFF Chassis.	

#### Optional Upgrades

HP 96W Smart Storage Battery with 145mm Cable for DL/ML/SL Servers	727258-B21
--	------------

### HP Tape Backup

**NOTE:** For the complete range of tape drives, autoloaders, libraries and media see: <http://www.hp.com/go/tape>. For hardware and software compatibility of HP tape backup products see: <http://www.hp.com/storage/SPOCK> and <http://www.hp.com/go/ebs>.

#### Tape Drives

HP StoreEver LTO-6 Ultrium 6650 SAS External Tape Drive	EH964A
HP StoreEver 1/8 G2 LTO-6 Ultrium 6250 FC Tape Autoloader	COH19A
HP StoreEver LTO-6 Ultrium 6250 Tape Drive in 1U Rack-mount Kit	COL99A
HP StoreEver LTO-6 Ultrium 6250 External Tape Drive	EH970A
HP StoreEver LTO-5 Ultrium 3000 SAS Tape Drive in 1U Rack-mount	EJ014B
HP StoreEver LTO-5 Ultrium 3000 SAS External Tape Drive	EH958B
HP StoreEver LTO-5 Ultrium 3280 SAS Tape Drive in 3U Rack-mount	EJ013B
HP StoreEver LTO-5 Ultrium 3280 SAS External Tape Drive	EH900B
HP StoreEver LTO-4 Ultrium 1760 SAS (1) in 1U Rack-mount Kit	EH946C
HP StoreEver LTO-4 Ultrium 1760 SCSI External Tape Drive	EH922B
HP StoreEver LTO-4 Ultrium 1760 SAS External Tape Drive	EH920B
HP StoreEver LTO-3 Ultrium 920 SAS External Tape Drive	EH848B
HP StoreEver 1U SAS Rack-mount Kit	AE459B

#### HP Tape Storage Systems

##### HP StoreEver MSL6480

HP StoreEver MSL6480 Scaleable Expansion Module	QU626A
HP StoreEver MSL6480 Scalable Base Module	QU625A

### Additional Options

HP MSL2024 0-Drive Tape Library	AK379A
HP MSL4048 0-Drive Tape Library	AK381A
<b>NOTE:</b> Please see the QuickSpecs for Technical Specifications and additional information: <a href="http://h18000.www1.hp.com/products/quickspecs/14604_div/14604_div.html">http://h18000.www1.hp.com/products/quickspecs/14604_div/14604_div.html</a> (Worldwide).	

#### HP Disk Backup

##### HP RDX Removable Disk Backup System

HP RDX1000 USB3.0 External Disk Backup System	B7B69A
HP RDX500 USB3.0 External Disk Backup System	B7B66A
HP RDX320 USB3.0 External Disk Backup System	B7B63A
HP RDX 2TB USB3.0 External Disk Backup System	E7X53A

**NOTE:** For the complete range of RDX drives and media see: <http://www.hp.com/go/rdx>.  
 For hardware and software compatibility of HP disk backup products see:  
<http://www.hp.com/storage/SPOCK>.

**NOTE:** Please see the QuickSpecs for additional part numbers, Technical Specifications, and additional information:  
[http://h18000.www1.hp.com/products/quickspecs/13036\\_div/13036\\_div.html](http://h18000.www1.hp.com/products/quickspecs/13036_div/13036_div.html)  
 (Worldwide).

#### HP Storage Options

##### Fibre Channel HBA

**NOTE:** The following is a list of all Fibre Channel Host Bus Adapters for Windows and Linux. For detailed compatibility information please see: <http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>.

##### Emulex Fibre Channel HBAs

HP 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AJ762B
HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ763B
HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	C8R38A
HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	C8R39A

##### QLogic Fibre Channel HBAs

HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AK344A
HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ764A
HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter	QW971A
HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter	QW972A

##### Converged Network Adapter

HP StoreFabric CN1100R Dual Port Converged Network Adapter	QW990A
HP StoreFabric CN1200E 10Gb Converged Network Adapter	E7Y06A

#### HP Disk Storage Systems

##### Disk Enclosures

HP D6000 Dual I/O Module Disk Enclosure	QQ695A
HP D6000 w/35 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 140TB Bundle	E7W30A
HP D6000 w/70 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 280TB Bundle	E7W31A
HP D6000 w/35 2TB 6G SAS 7.2K LFF Dual port MDL HDD 70TB Bundle	QQ697A
HP D6000 w/70 2TB 6G SAS 7.2K LFF Dual port MDL HDD 140TB Bundle	QQ698A
HP D6000 w/35 3TB 6G SAS 7.2K LFF Dual port MDL HDD 105TB Bundle	QQ699A
HP D6000 w/70 3TB 6G SAS 7.2K LFF Dual port MDL HDD 210TB Bundle	QQ700A
HP D2600 w/12 4TB 6G SAS 7.2K LFF Dual Port MDL HDD 48TB Bundle	E7W32A

#### HP Data Center Racks

##### HP 11000 G2 Series Racks

HP 11642 1075mm Pallet Universal Rack	H6J65A
HP 11642 1075mm Shock Universal Rack	H6J66A
HP 11642 1200mm Pallet Universal Rack	H6J67A
HP 11642 1200mm Shock Universal Rack	H6J68A

### Additional Options

HP 11636 1075mm Pallet Universal Rack	H6J77A
HP 11636 1075mm Shock Universal Rack	H6J78A
HP 11614 1075mm Shock Universal Rack	H6J82A
HP 11622 G2 1075mm Pallet Universal Rack	H6J83A
HP 11622 G2 1075mm Shock Universal Rack	H6J84A
HP 11648 1075mm Pallet Universal Rack	H6J87A
HP 11648 1075mm Shock Universal Rack	H6J88A

**NOTE:** Please see the [HP 11000 G2 Series Racks QuickSpecs](#) for information on additional racks options and rack specifications.

#### HP Intelligent Series Rack

HP 636 1075mm Pallet Intelligent Series Rack	BW895A
HP 636 1075mm Shock Intelligent Series Rack	BW896A
HP 642 1075mm Pallet Intelligent Series Rack	BW903A
HP 642 1075mm Shock Intelligent Series Rack	BW904A
HP 642 1200mm Pallet Intelligent Series Rack	BW907A
HP 642 1200mm Shock Intelligent Series Rack	BW908A
HP 647 1075mm Pallet Intelligent Series Rack	BW911A
HP 647 1075mm Shock Intelligent Series Rack	BW912A
HP 647 1200mm Pallet Intelligent Series Rack	BW913A
HP 647 1200mm Shock Intelligent Series Rack	BW914A
HP 842 1075mm Pallet Intelligent Series Rack	BW917A
HP 842 1075mm Shock Intelligent Series Rack	BW918A

**NOTE:** Please see the [HP Intelligent Series Racks QuickSpecs](#) for information on additional racks options and rack specifications.

#### HP Value Series Rack

HP V142 1075mm deep Pallet 100 series Rack	AF046A
--	--------

**NOTE:** Please see the [HP Value Series Rack QuickSpecs](#) for information on additional racks options and rack specifications.

### HP Power Distribution Units (PDUs)

#### HP Basic Power Distribution Unit (bPDU)

HP 1.9kVA 120 Volt L5-20 Input (12xNEMA 5-20R) NA/JP Basic PDU	H5M54A
HP 3.6kVA 200-240 Volt Detachable C20 Input ( 12xC13) WW Basic PDU	H5M56A
HP 2.8kVA 120 Volt L5-30 Input (18xNEMA 5-20R) NA/JP Basic PDU	H5M55A
HP 3.6kVA 200-240 Volt Detachable C20 Input (18xC13) WW Basic PDU	H5M57A
HP 4.9kVA 208 Volt L6-30 Input (20xC13) NA/JP Basic PDU	H5M58A
HP 7.3kVA 230 Volt IEC309 32A Input (20xC13) INTL Basic PDU	H5M68A
HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13) NA/JP Basic PDU	H5M61A
HP 4.9kVA 208 Volt L6-30 Input (24xC13/6xC19) NA/JP Basic PDU	H5M59A
HP 7.3kVA 230 Volt IEC309 32A Input (24xC13/6xC19) INTL Basic PDU	H5M70A
HP 8.3kVA 208 Volt CS8265C Input (30xC13/6xC19) NA/JP Basic PDU	H5M60A
HP 11kVA 230 Volt IEC309 63A Input (30xC13/6xC19) INTL Basic PDU	H5M71A
HP Hardwired 200-240 Volt Input (30xC13/6xC19) WW Basic PDU	H5M75A
HP 5.7kVA 208 Volt L21-20 3-Phase Input (24xC13/3xNEMA 5-20R) NA/JP Basic PDU	H5M63A
HP 8.6kVA 208 Volt L21-30 3-Phase Input (24xC13/3xC19/3xNEMA 5-20R) NA/JP Basic PDU	H5M64A
HP 8.6kVA 208 Volt L15-30 3-Phase Input (24xC13/6xC19) NA/JP Basic PDU	H5M62A
HP 11kVA 400 Volt IEC309 16A 3-Phase Input (30xC13/6xC19) INTL Basic PDU	H5M72A
HP 11kVA 400 Volt IEC309 16A 3-Phase Input (36xC13/6xC19) INTL Basic PDU	H5M73A
HP 11kVA 400 Volt IEC309 30A 3-Phase Input (36xC13/6xC19) NA Basic PDU	H5M67A
HP 13.2kVA 480 Volt IEC309 30A 3-Phase Input (15 Outlet) NA Basic PDU	H3X07A

## Additional Options

HP 19.9kVA 480 Volt IEC309 30A 3-Phase Input (30 Outlet) NA Basic PDU	H3X08A
HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer	H3X09A
HP 2.8kVA 24A Low Voltage NA/JP Modular Power Distribution Unit	252663-D71
HP 4.9kVA 24A High Voltage NA/JP Core Modular Power Distribution Unit	252663-D74
HP 8.3kVA 40A High Voltage NA/JP Core Modular Power Distribution Unit	252663-D75
HP 7.3kVA 32A High Voltage INTL Core Modular Power Distribution Unit	252663-B33
HP 9.2kVA 40A High Voltage INTL Core Modular Power Distribution Unit	252663-B34
HP 8.6kVA 24A Three Phase NA/JP Modular Power Distribution Unit	AF512A
HP 11kVA 16A Three Phase INTL Modular Power Distribution Unit	AF513A
HP 14.4kVA 40A Three Phase NA/JP Modular Power Distribution Unit	AF519A
HP 17.3kVA 48A Three Phase NA/JP Modular Power Distribution Unit	AF511A
HP 22kVA 32A Three Phase INTL Core Modular Power Distribution Unit	AF518A

**NOTE:** To learn more about HP Basic Power Distribution Units (bPDU), please visit the HP website at <http://www.hp.com/go/pdu>.

**HP Monitored Power Distribution Units (mPDU)**

HP 2.8kVA 120 Volt L5-30 Input (12xNEMA 5-20R)NA/JP Monitored PDU	D9N43A
HP 3.6kVA 200-240 Volt Detachable C20 Input (12xC13) WW Monitored PDU	D9N46A
HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU	D9N44A
HP 3.6kVA 200-240 Volt Detachable C20 Input (16xC13) WW Monitored PDU	D9N45A
HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU	G9Z05A
HP 7.3kVA 230 Volt IEC309 32A Input (12xC13) INTL Monitored PDU	G9Z06A
HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Monitored PDU	D9N47A
HP 7.3kVA 230 Volt IEC309 32A Input (20xC13/4xC19) INTL Monitored PDU	D9N48A
HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13/3xC19) NA/JP Monitored PDU	D9N51A
HP 5.7kVA 208 Volt L21-20 3-Phase Input (18xC13/3xNEMA 5-20R) NA/JP Monitored PDU	D9N52A
HP 8.6kVA 208 Volt L21-30 3-Phase Input (20xC13/3xC19/3xNEMA 5-20R) NA/JP Monitored PDU	D9N53A
HP 11kVA 400 Volt IEC309 16A 3-Phase Input (18xC13/3xC19) INTL Monitored PDU	D9N55A
HP 8.3kVA 208 Volt CS8265C Input (30xC13/3xC19) NA Monitored PDU	D9N49A
HP 7.3kVA 230 Volt IEC309 32A Input (32xC13/4xC19) INTL Monitored PDU	D9N50A
HP 11kVA 400 Volt IEC309 16A 3-Phase Input (30xC13/3xC19) INTL Monitored PDU	D9N57A
HP 14.4kVA 208 Volt CS8365C 3-Phase Input (12xC13/12xC19)NA Monitored PDU	D9N58A
HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (30xC13/3xC19) NA Monitored PDU	D9N61A
HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (12xC13/12xC19) NA Monitored PDU	D9N62A
HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (24xC13/3xC19) NA/JP Monitored PDU	D9N54A
HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (12xC13/12xC19) NA/JP Monitored PDU	D9N59A
HP 17.3kVA 208 Volt IEC309 60A 3-Phase Watertight Input (12xC13/12xC19) NA/JP Monitored PDU	G9Z07A
HP 19.9kVA 480 Volt 3-Phase (30 Outlet) NA Monitored PDU	D9N63A
HP 22kVA 400 Volt IEC309 32A 3-Phase Input (30xC13/3xC19) INTL Monitored PDU	D9N56A
HP 22kVA 400 Volt IEC309 32A 3-Phase Input (12xC13/12xC19) INTL Monitored PDU	D9N60A
HP 22kVA 400 Volt IEC309 32A 3-Phase Watertight Input (12xC13/12xC19) INTL Monitored PDU	G9Z08A
HP Environmental Sensor for Remote Monitored PDUs	E2D53A

**NOTE:** Please see the [HP Monitored Power Distribution Units QuickSpecs](#) for information on additional options and product specifications.

**HP Intelligent Power Distribution Units (iPDU)**

HP 4.9kVA 24A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF520A
HP 8.3kVA 40A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF521A
HP 8.6kVA 24A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF522A

### Additional Options

HP 17.3kVA 48A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF523A
HP 11.4kVA 16A 415V Three Phase L22-20 NA Core Intelligent Power Distribution Unit	AF900A
HP 17.3kVA 24A 415V Three Phase IEC309 NA Core Intelligent Power Distribution Unit	AF901A
HP 7.3kVA 32A Single Phase INTL Core Intelligent Modular Power Distribution Unit	AF525A
HP 11kVA 16A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF526A
HP 22kVA 32A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF527A
HP 17.3kVA 48A 208V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit	AF535A
HP 17.3kVA 24A 415V Three Phase 12 Outlet Core NA/JP Intelligent Power Distribution Unit	AF537A
HP 22kVA 32A 400V Three Phase 12 Outlet Core INTL Intelligent Power Distribution Unit	AF538A
HP 4.9kVA 24A Single Phase NA/JP Intelligent Modular Power Distribution Kit	AF531A
HP 8.6kVA 24A Three Phase NA/JP Intelligent Modular Power Distribution Kit	AF532A
HP 14.4kVA 40A Three Phase NA/JP Intelligent Modular Power Distribution Unit	AF533A
HP 7.3kVA 32A Single Phase INTL Intelligent Modular Power Distribution Kit	AF534A
HP 5xC13 Intelligent PDU Extension Bar G2 Kit	AF547A
HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar	AF528A

**NOTE:** Please see the [HP Intelligent Power Distribution Units QuickSpecs](#) for information on additional options and product specifications.

#### HP Managed Power Distribution Units (maPDU)

HP 2.8kVA 120 Volt L5-30 Input (24x NEMA 5-20) NA/JP Managed PDU	H8B48A
HP 3.6kVA 200-240 Volt Detachable C20 Input (7xC13/1xC19) WW Managed PDU	H8B49A
HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Managed PDU	H8B50A
HP 7.3kVA 200-240 Volt IEC309 32A Input (20xC13/4xC19) INTL Managed PDU	H8B51A
HP 8.6kVA 208 Volt L15-30 3 Phase Input (18xC13/6xC19) NA/JP Managed PDU	H8B52A
HP 8.6kVA 208 Volt L21-30 3 Phase Input (20xC13/3xC19/1x NEMA 5-20) NA/JP Managed PDU	H8B53A
HP 11kVA 400 Volt IEC309 16A 3 Phase Input (21xC13/3xC19) INTL Managed PDU	H8B54A
HP 14.4kVA 208V CS8365C 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B55A
HP 17.3kVA 208V IEC309 60A 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B56A

**NOTE:** Please see the [HP Managed Power Distribution Units QuickSpecs](#) for information on additional options and product specifications.

**NOTE:** To learn more, please visit the [HP Uninterruptible Power Systems \(UPS\) web page](#).

#### HP Rack Mount Consoles, KVM Switches, and Keyboards

#### HP Location Discovery Services

HP 36U Location Discovery Kit	BW945A
HP 42U Location Discovery Kit	BW946A
HP 47U Location Discovery Kit	BW947A
HP Location Discovery Services LCD8500 Kit	TL052A

**NOTE:** Please see the [QuickSpecs for Technical Specifications and additional information: \[http://h18000.www1.hp.com/products/quickspecs/14429\\\_div/14429\\\_div.html\]\(http://h18000.www1.hp.com/products/quickspecs/14429\_div/14429\_div.html\)](#) (Worldwide)

#### HP Rack Mount Consoles

HP LCD8500 1U US Rackmount Console Kit	AF630A
HP LCD8500 1U UK Rackmount Console Kit	AF631A
HP LCD8500 1U DE Rackmount Console Kit	AF632A
HP LCD8500 1U FR Rackmount Console Kit	AF633A
HP LCD8500 1U JP Rackmount Console Kit	AF642A
HP LCD8500 1U RU Rackmount Console Kit	AF643A
HP LCD8500 1U INTL Rackmount Console Kit	AF644A
HP LCD8500 1U US TAA Rackmount Console Kit	AF645A
HP TFT7600 G2 KVM Console Rackmount Keyboard US Monitor	AZ870A



### Additional Options

HP TFT7600 G2 KVM Console Rackmount Keyboard UK Monitor	AZ871A
HP TFT7600 G2 KVM Console Rackmount Keyboard DE Monitor	AZ872A
HP TFT7600 G2 KVM Console Rackmount Keyboard FR Monitor	AZ873A
HP TFT7600 G2 KVM Console Rackmount Keyboard IT Monitor	AZ874A
HP TFT7600 G2 KVM Console Rackmount Keyboard ES Monitor	AZ875A
HP TFT7600 G2 KVM Console Rackmount Keyboard DK Monitor	AZ876A
HP TFT7600 G2 KVM Console Rackmount Keyboard NO Monitor	AZ877A
HP TFT7600 G2 KVM Console Rackmount Keyboard SE/FI Monitor	AZ878A
HP TFT7600 G2 KVM Console Rackmount Keyboard CH Monitor	AZ879A
HP TFT7600 G2 KVM Console Rackmount Keyboard PT Monitor	AZ880A
HP TFT7600 G2 KVM Console Rackmount Keyboard BE Monitor	AZ881A
HP TFT7600 G2 KVM Console Rackmount Keyboard JP Monitor	AZ882A
HP TFT7600 G2 KVM Console Rackmount Keyboard RU Monitor	AZ883A
HP TFT7600 G2 KVM Console Rackmount Keyboard Intl Monitor	AZ884A
HP TFT7600 G2 KVM Console Rackmount Keyboard US TAA Monitor	AZ885A

**NOTE:** Please see the [HP Rack Console QuickSpecs](#) for information on additional options and product specifications.

#### HP KVM Switches

HP Server Console 0x2x8 Port Analog Switch	AF616A
HP Server Console 0x2x16 Port Analog Switch	AF617A
HP TAA 0x2x16xKVM Server Console G2 Switch	AF626A
HP 0x1x8 G3 KVM Console Switch	AF651A
HP 0x2x16 G3 KVM Console Switch	AF652A
HP TAA 0x2x16 G3 KVM Console Switch	AF653A
HP USB Remote Access Key for G3 KVM Console Switches	AF650A
HP KVM Console USB Interface Adapter	AF628A
HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software	AF618A
HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software	AF619A
HP KVM Console USB 2.0 Virtual Media CAC Interface Adapter	AF629A
HP 1x4 USB/PS2 KVM Console Switch	AF611A
HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software	AF620A
HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software	AF621A
HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software	AF622A

**NOTE:** To learn more, please visit the [HP KVM Switches web page](#).

#### HP USB Keyboard and Mouse

HP USB BFR with PVC Free US Keyboard/Mouse Kit	631341-B21
HP USB BFR with PVC Free UK Keyboard/Mouse Kit	631344-B21
HP USB BFR with PVC Free FR Keyboard/Mouse Kit	631346-B21
HP USB BFR with PVC Free ES Keyboard/Mouse Kit	631348-B21
HP USB BFR with PVC Free DE Keyboard/Mouse Kit	631358-B21
HP USB BFR with PVC Free JP Keyboard/Mouse Kit	631360-B21
HP USB BFR with PVC Free IT Keyboard/Mouse Kit	631362-B21
HP USB BFR with PVC Free CN Keyboard/Mouse Kit	631364-B21
HP USB BFR with PVC Free AE Keyboard/Mouse Kit	638212-B21
HP USB BFR with PVC Free RU Keyboard/Mouse Kit	638214-B21
HP USB BFR with PVC Free IN Keyboard/Mouse Kit	672097-D63
HP USB BFR with PVC Free AP-Intl Keyboard/Mouse Kit	672097-373
HP USB BFR with PVC Free Intl Keyboard/Mouse Kit	672097-B33
HP USB BFR with PVC Free PT Keyboard/Mouse Kit	672097-133



### Additional Options

HP USB BFR with PVC Free TR Keyboard/Mouse Kit	672097-143
HP USB BFR with PVC Free CZ Keyboard/Mouse Kit	672097-223
HP USB BFR with PVC Free FI Keyboard/Mouse Kit	672097-353
HP USB BFR with PVC Free SE Keyboard/Mouse Kit	672097-103
HP USB BFR with PVC Free CH Keyboard/Mouse Kit	672097-113
HP USB BFR with PVC Free KR Keyboard/Mouse Kit	672097-KD3
HP 1U INT Rackmount Keyboard with USB	AG086A
HP 1U US Rackmount Keyboard with USB	AG072A
<b>NOTE:</b> Please see the <a href="#">HP USB Keyboard and Mouse QuickSpecs</a> for information on additional options and product specifications.	
<b>Rail Kits</b>	
HP 1U LFF Gen9 Easy Install Rail Kit	789388-B21
HP 1U Small Form Factor Easy Install Rail Kit	734807-B21
HP 1U Cable Management Arm for Easy Install Rail Kit	734811-B21
HP 1U Small Form Factor Ball Bearing Rail Kit	663201-B21
HP 1U Large Form Factor Ball Bearing Rail Kit	663202-B21
HP 1U Cable Management Arm for Ball Bearing Rail Kit	663203-B21
<b>HP Other Options</b>	
HP Rack LED Light Kit	BW939A
HP Kit LCD 1.83m Latch Display Port Cable	G7T29A

### HP Uninterruptible Power Systems (UPS)

#### HP DirectFlow Three Phase UPS Power Unit (1U UPS)

HP R12000 DirectFlow - 1U Rackmount Uninterruptible Power System	G9Y75A
HP R12000 DirectFlow - POD 1U Rackmount Uninterruptible Power System	AF478A

#### Input/Output Module Options for 1U UPS

HP 32A 400-415 Volt Three Phase INTL R12000 DirectFlow UPS IEC309 Input/Output Module	AF488A
HP 30A 400-415 Volt Three Phase NA R10000 DirectFlow UPS IEC309 Input/Output Module	AF489A
HP 32A 380 Volt Three Phase China R12000 DirectFlow UPS Unterminated Input/Output Module	AF490A
HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS L22-30 Input/Output Module	AF491A
HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module	AF492A
HP 30A 400-415 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module	G9Y76A

#### Power Unit (2U UPS)

HP R18000 DirectFlow - 2U Rackmount Uninterruptible Power System	AF479A
--	--------

#### Input/Output Module Options for 2U UPS

HP 32A 400-415 Volt Three Phase INTL R18000 DirectFlow UPS IEC309 Input/Output Module	AF483A
HP 30A 380 Volt Three Phase China R18000 DirectFlow UPS Unterminated Input/Output Module	AF485A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF486A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF487A
HP 30A 400 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	D9Q02A
HP 30A 400-415V Three Phase NA R18000 DirectFlow UPS 1:1 IEC309 Input/Output Module	AF484A

**NOTE:** All Input/Output Modules support dual output outlets except the AF484A.

#### Battery Pack Options

HP DirectFlow UPS - 1U Rackmount Lithium-ion Battery Pack	AF480A
HP DirectFlow UPS - 3U Rackmount VRLA Battery Pack	AF482A
HP WW DirectFlow Secondary Battery Cable	AF497A

### Additional Options

**NOTE:** Please see the [HP DirectFlow Three Phase Uninterruptible Power System QuickSpecs](#) for information on additional options and product specifications.

#### HP Tower UPS

##### HP T750 G4 UPS Models

HP T750 G4 NA/JP Uninterruptible Power System	J2P85A
HP T750 G4 INTL Uninterruptible Power System	J2P88A

##### HP T1000 G4 UPS Models

HP T1000 G4 NA/JP Uninterruptible Power System	J2P86A
HP T1000 G4 INTL Uninterruptible Power System	J2P89A

##### HP T1500 G4 UPS Models

HP T1500 G4 NA/JP Uninterruptible Power System	J2P87A
HP T1500 G4 INTL Uninterruptible Power System	J2P90A

##### HP T750 G2 UPS Models

HP T750 G2 750VA NA Tower Uninterruptible Power System	AF446A
HP T750 G2 750VA INTL Tower Uninterruptible Power System	AF447A
HP T750J JP Uninterruptible Power System	AF456A

##### HP T1000 G3 UPS Models

HP T1000 G3 1000VA INTL Tower Uninterruptible Power System	AF449A
--	--------

##### HP T1500 G3 UPS Models

HP T1500 G3 1400VA NA Tower Uninterruptible Power System	AF450A
HP T1500 G3 1400VA INTL Tower Uninterruptible Power System	AF451A

#### HP Rack/Tower UPS

##### HP R/T2200 G4 UPS Models

HP R/T2200 G4 NA/JP Uninterruptible Power System	J2R00A
--	--------

##### HP R/T3000 G4 UPS Models

HP R/T3000 G4 Low Voltage NA/JP Uninterruptible Power System	J2R01A
HP R/T3000 G4 High Voltage NA/JP Uninterruptible Power System	J2R02A
HP R/T3000 G4 High Voltage INTL Uninterruptible Power System	J2R04A

##### HP R/T3000 G2 Uninterruptible Power System (UPS)

HP R/T3000 G2 2U L530 Low Voltage NA/JP Uninterruptible Power System	AF466A
HP R/T3000 G2 2U L620 High Voltage NA/JP Uninterruptible Power System	AF467A
HP R/T3000 G2 2U Detachable Cord High Voltage INTL Uninterruptible Power System	AF468A

##### R1500 G4 Models

HP R1500 G4 NA Uninterruptible Power System	J2Q99A
HP R1500 G4 JP/TWN Uninterruptible Power System	J2R05A
HP R1500 G4 INTL Uninterruptible Power System	J2R03A

##### R1.5kVA G3 Models

HP R1.5kVA G3 1U NA Uninterruptible Power System	AF469A
HP R1.5kVA G3 1U JP/TW Uninterruptible Power System	AF470A
HP R1.5kVA G3 1U INTL Uninterruptible Power System	AF471A

##### R7000 Uninterruptible Power System (UPS)

HP R7KVA 4U 50A High Voltage NA/JP Uninterruptible Power System	AF462A
HP R7KVA 4U IEC-32A High Voltage INTL Uninterruptible Power System	AF463A

##### R5000 Uninterruptible Power System (UPS)

HP R5KVA 3U L630 High Voltage NA/JP Uninterruptible Power System	AF460A
HP R5KVA 3U IEC309-32A High Voltage INTL Uninterruptible Power System	AF461A

**NOTE:** Please see the [HP Line Interactive Single Phase UPS QuickSpecs](#) for information on additional options and product specifications.

#### HP UPS Options

### Additional Options

HP R/T2200 G4 Extended Runtime Module	J2R09A
HP R/T3000 G4 Extended Runtime Module	J2R10A
HP 2U Rack/Tower UPS Shipping Kit	L4Q11A
<b>NOTE:</b> To learn more, please visit the <a href="#">HP Uninterruptible Power Systems (UPS) web page</a> .	

#### HP USB and SD Options

##### HP Enterprise Mainstream Flash Media Kits for Memory Cards

HP 32GB microSD Enterprise Mainstream Flash Media Kit	700139-B21
HP 8GB microSD Enterprise Mainstream Flash Media Kit	726116-B21
HP 8GB USB Enterprise Mainstream Flash Media Drive Key Kit	737953-B21

#### HP Care Pack Services Installation & Start-up Services

HP Install ProLiant DL36x(p) Service	U4506E
HP Startup ProLiant DL36x(p) Service	U4507E

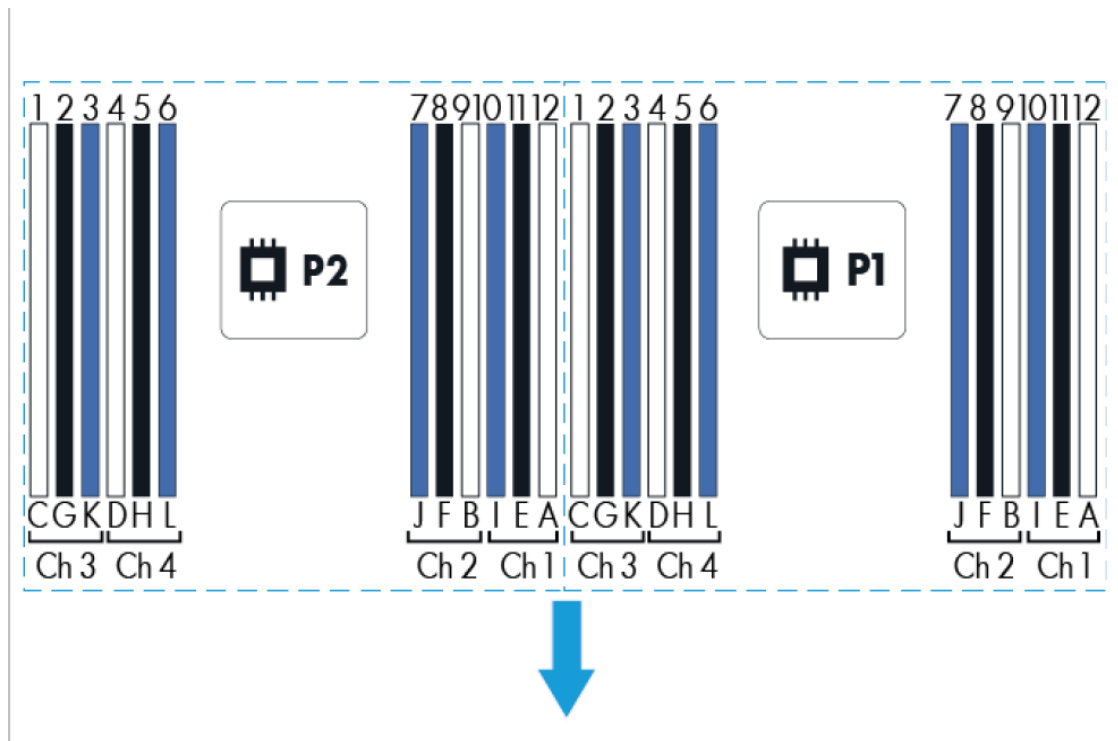
##### Proactive Care

HP 3 year 24x7 DL360 Gen9 w/IC Proactive Care Service	U5HM4E
HP 3 year 24x7 with Defective Media Retention DL360 Gen9 w/IC Proactive Care Service	U5HM5E
HP 3 year 24x7 w/Comprehensive Defective Material Retention DL360 Gen9 w/IC Proactive Care Service	U5HM6E
HP 3 year Call to Repair DL360 Gen9 w/IC Proactive Care Service	U5HN3E
HP 3 year Call to Repair with Defective Media Retention DL360 Gen9 w/IC Proactive Care Service	U5HN4E
HP 3 year CTR with Comprehensive Defective Material Retention DL360 Gen9 w/IC Proactive Care Service	U5HN5E
HP 3 year 24x7 DL360 Gen9 Proactive Care Service	U7AM2E
HP 3 year 24x7 with Defective Media Retention DL360 Gen9 Proactive Care Service	U7AM3E
HP 3 year 24x7 with Comprehensive Defective Material Retention DL360 Gen9 Proactive Care Service	U7AM4E
HP 3 year Call to Repair DL360 Gen9 Proactive Care Service	U7AM8E
HP 3 year Call to Repair with Defective Media Retention DL360 Gen9 Proactive Care Service	U7AM9E
HP 3 year CTR with Comprehensive Defective Material Retention DL360 Gen9 Proactive Care Service	U7AN0E

### Memory

**Memory Subsystem Architecture** Each Intel® Xeon® E5-2600v3 family processor socket contains four memory channels per installed processor with three DIMMs per channel for a total of twelve (12) DIMMs or a grand total of twenty-four (24) DIMMs for the server.

### Memory Population guidelines



DIMM population order												
	1st slot of channel			2nd slot of channel			3rd slot of channel					
	A	B	C	D	E	F	G	H	I	J	K	L
Number of DIMMs to install	4											
	8											
	12											

### General Memory Population Rules and Guidelines:

- White DIMM slots denote the first slot of a channel. For 1 DPC (DIMM per channel) populate white slots only.
- A minimum of one DIMM is required per server.
- Install DIMMs only if the corresponding processor is installed.
- When two processors are installed, balance the DIMMs across the two processors.
- Populate DIMMs from heaviest load (quad-rank) to lightest load (single-rank) within a channel. Heaviest load (DIMM with most ranks) within a channel goes furthest from the processor.
- Do not mix RDIMMs or LRDIMMs.
- DIMMs of different speeds may be mixed in any order; the server will select a common optimal speed.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the memory type and number of installed processors.
- HP memory from previous generation servers is not compatible with the DL360 Gen9 Server.
- For memory population rules and additional memory guidelines, please see the DL360 Gen9 user guide at <http://www.hp.com/support>.
- There are four (4) Memory channels per processor; eight (8) channels per 2 processor server.
- There are three (3) DIMM slots for each memory channel; twenty four (24) total slots for 2 processor server.

### Memory

Intel Gen9 Supported Memory Bandwidth for HP ProLiant Gen9 Intel® Xeon® E5-2600v3 Series Processor Family

Memory Bandwidth and Capacity				
[DIMM Type]	Registered Dimms (RDIMMs)			Load Reduced (LRDIMMs)
DIMM Rank	Single Rank		Dual Rank	Quad Rank
DIMM Capacity	4GB	8GB	16GB	32GB
Voltage	Std Voltage 1.2V			
<b>SLOTS THAT CAN BE POPULATED</b>				
24 slot servers	24			
<b>MAXIMUM CAPACITY (GB)</b>				
	96	192	384	768
<b>1 DIMM Per Channel</b>	2133			
<b>2 DIMM Per Channel</b>	2133			
<b>3 DIMM Per Channel</b>	1600	1600	1600	1600

**DIMM slot and configuration diagram** [DIMM slot and configuration diagrams](#)

- Population order; start with "A" first, "B" second, "C" third, etc.
- When one processor is installed, install DIMMs in sequential alphabetic order: A, B, C, D, E, F ...
- When two processors are installed, install DIMMs in sequential alphabetic order: CPU1-A, CPU2-A, CPU1-B, CPU2-B, CPU1-C, CPU2-C

Memory Speed by Processor Model	Processor Models	Supported Memory Speeds
	E5-2603v3, E5-2609v3,	1600MHz
	E5-2620v3, E5-2623v3, E5-2630v3, E5-2640v3, E5-2630Lv3,	1866MHz
	E5-2637v3, E5-2643v3, E5-2650v3, E5-2660v3, E5-2667v3, E5-2670v3, E5-2680v3, E5-2683v3, E5-2690v3, E5-2695v3, E5-2697v3, E5-2698v3, E5-2699v3, E5-2650Lv3, E5-2687Wv3,	2133MHz

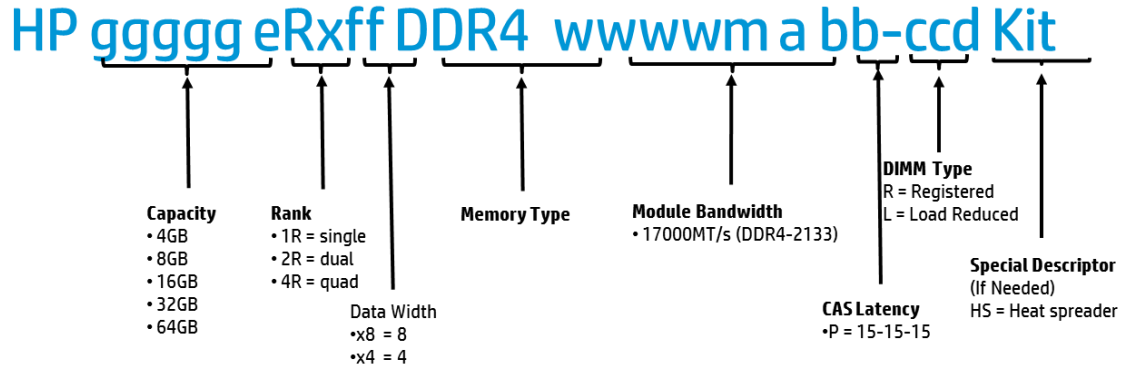
Standard and Maximum Memory Capacity (Pre-configured Models)	Pre-Configured Models	Standard Memory	Maximum Memory Plus Optional Memory	Standard Memory Replaced with Optional Memory
	E5-2603v3,	8GB (1x8GB)	376GB (23x16GB, 1x8GB)	768GB (24x32GB)
	E5-2630v3,	16GB (1x16GB)	384GB (23x16GB, 1x16GB)	768GB (24x32GB)
	E5-2650v3,	32GB (2x16GB)	384GB (22x16GB, 2x16GB)	768GB (24x32GB)
	E5-2670v3,	64GB (4x16GB)	384GB (20x16GB, 4x16GB)	768GB (24x32GB)

DDR4 memory options part number decoder

### Memory

**NOTE:** Capacity references are rounded to the common gigabyte (GB) values.

- 8GB = 8,192MB
- 16GB = 16,384MB
- 32GB = 32,768MB
- 64GB = 65,536MB

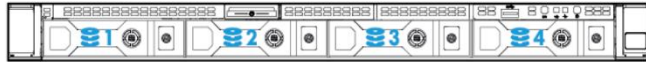


### Storage



1-8

8 x SFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays



1-4

4 x LFF SATA/SAS/SSD Hot Pluggable Hard Drives Bays



1-10

10 x SFF SATA/SAS/SSD Hot Pluggable Hard Drive Bays



### Technical Specifications

<b>System Unit</b>	<b>Dimensions</b> (H x W x D)	8 SFF and 10 SFF 1.7 x 17.1 x 27.5 inches (4.32 x 43.47 x 69.85 cm) 4 LFF - 1.7 x 17.1 x 29.5 inches (4.32 x 43.46 x 75.0 cm)
	<b>Weight</b> (approximate)	<p>Maximum: 8 SFF Chassis 33.3 lb. (15.31 kg) NOTE: Includes 2 SFF Option for a total of 10 SFF HDD all hard drives, power supply, and processor installed)</p> <p>4 LFF Chassis 37 lb. (16.78kg)</p> <p>Minimum: 8SFF Chassis 27 lb. (12.25 kg) (one hard drive, power supply, and processor installed)</p> <p>4 LFF Chassis 30.36 lb. (13.77 kg)</p>
	<b>Input Requirements</b>	Range Line Voltage 100 to 120 VAC 200 to 240 VAC
	<b>BTU Rating</b>	Maximum For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only For 500W Power Supply: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VAC) for China Only
	<b>Power Supply Output</b>	Rated Steady-State Power For 1400W Power Supply: 1400W (at 100 VAC), 1400W (at 240 VAC), 1400W (at 240 VAC) For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VAC) input for China only
		Maximum Peak Power For 1400W Power Supply: 1400W (at 100 to 127 VAC), 1400W (at 200 to 240 1VAC), 1400W (at 240 VAC) input for China only For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC) input for China only For 500W Power Supply: 500W (at 100 to 127 VAC), 500W (at 200 to 240 VAC), 500W (at 240 VAC) input for China only
	<b>System Inlet Temperature</b>	Standard Operating Support 10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. <b>NOTE: System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).</b>
		Extended Ambient Operating Support For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: <a href="http://www.hp.com/servers/ashrae">http://www.hp.com/servers/ashrae</a>  For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: <a href="http://www.hp.com/servers/ashrae">http://www.hp.com/servers/ashrae</a>  System performance may be reduced if operating in the extended ambient operating range or with a fan fault.
	<b>Relative Humidity</b>	Non-operating -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
		Operating Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.

### Technical Specifications

(non-condensing)	Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
<b>Altitude</b>	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
<b>Acoustic Noise</b>	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).	
	<b>Idle</b>	
	L WAd	(1P non-redundant) 4.6 A Average Bystander (2P redundant) 5.5 A Average Bystander
	L pAm	(1P non-redundant) 29 dBA (2P redundant) 37 dBA
	<b>Operating</b>	
	L WAd	(1P non-redundant) 4.6 A Average Bystander (2P redundant) 6.2 C Average Bystander
	L pAm	(1P non-redundant) 30 dBA (2P redundant) 46 dBA
	<b>NOTE:</b> 1P Configuration tested included two Intel E5-2630 v3, 2.3GHz processors, one 500GB SAS HDD, five standard hot plug fans, one 8GB DDR4 RDIMM's 2133MHz, one 500W power supply.	
	<b>NOTE:</b> 2P Configuration tested included two Intel E5-2650 v3, 2.6GHz processors, one 500GB SAS HDD, seven standard hot plug fans, two 16GB DDR4 RDIMM's 2133MHz, one 500W power supply, P440ar HDD controller PCI card with 2GB cache.	
	<b>NOTE:</b> Values are subject to change without notification and are for reference only.	
<b>NOTE:</b> Performance of system, options, and ancillary equipment will vary depending on the system configuration.		
<b>NOTE:</b> Levels presented do not account for non-Hewlett-Packard installed hardware.		
<b>Emissions Classification (EMC)</b>	FCC Rating	Class A
	Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1
<b>NOTE:</b> Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.		

<b>HP Dynamic Smart Array B140i Controller</b>	<b>Number of PCI links</b>	Four
	<b>PCI link rate</b>	4Gb/s
	<b>Storage protocol support</b>	SATA
	<b>SAS/SATA peak data transfer rate</b>	6Gb/s
	<b>Number of SAS/SATA links</b>	10 links
	<b>SAS/SATA connectivity</b>	2x4 connectors; 2x1 connectors
	<b>Expander support</b>	No
	<b>Drives supported (max)</b>	Up to 10 Internal Drives
	<b>RAID support</b>	0, 1, 10, 5 SATA
	<b>Software management</b>	HP SSA, SMH, SIM
	<b>Warranty</b>	Server warranty

### Technical Specifications

<b>HP Secure Encryption license</b>	Not Supported
<b>HP SmartCache License</b>	Not Supported
<b>HP Smart Storage Administrator</b>	Supported

<b>HP Ethernet 1Gb 4-port 331i Adapter</b>	<b>Network Interface</b>	10Base-T/100Base-TX/1000Base-TX		
	<b>Compatibility</b>	IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX		
	<b>Data Transfer Method</b>	PCI Express, two lanes (x2)		
	<b>Controller</b>	BCM5719		
	<b>Network Transfer Rate</b>	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined	
		10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined	
		100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined	
		100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined	
		1000Base-TX (Half and Full-Duplex)	1000Mb/s per port, 4000 Mb/s combined	
	1000Base-TX (Full-Duplex)	2000Mb/s per port, 8000 Mb/s combined		
<b>Connector</b>	Four RJ-45			
<b>Cable Support</b>	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)		
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)		

**Environment-friendly Products and Approach**   **End-of-life Management and Recycling**

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.



### Summary of Changes

Date	Version History	Action	Description of Change
02/17/2015	From Version 5 to 6	Added	Added Smart Buy models to the NA version only.
02/09/2015	From Version 4 to 5	Added	Added What's New section.  Added new HP Drives, Pre-configured Models, and G4 UPS models.
		Changed	HP Processors, HP Disk Backup, HP Tape Backup, HP Rack Mount Consoles, KVM Switches, and Keyboards, HP Uninterruptible Power Systems (UPS), and HP Computation and Graphics Accelerators sections were revised.
12/01/2014	From Version 3 to 4	Changed	Changes made throughout the QuickSpecs.
10/13/2014	From Version 2 to 3	Added	6G SATA Enterprise Value G1 Solid State Drives were added to Core Option section.  HP PCIe Workload Accelerator Options, HP USB and SD options were added to the Additional Options section.
		Changed	Call outs description for images, Standard Features, Optional Features, Pre-Configured Models, Configuration Information - Factory Integrated Models, Core Options, Additional Options, and Memory sections were revised.
9/22/2014	From Version 1 to 2	Changed	Changes made throughout the QuickSpecs.

© Copyright 2015 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel® and Xeon® are registered trademarks of Intel Corporation in the U.S. and other countries.

Microsoft®, Windows®, and Windows Server® are U.S. registered trademarks of the Microsoft group of companies.

For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less