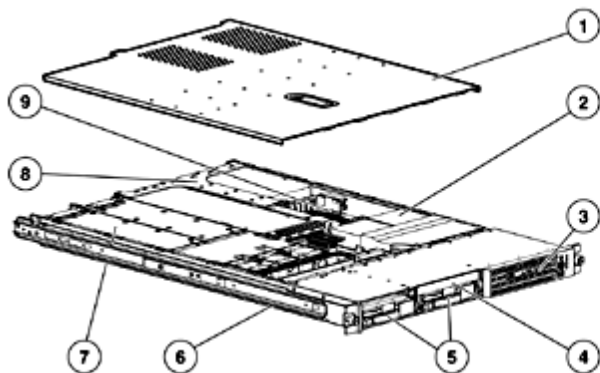


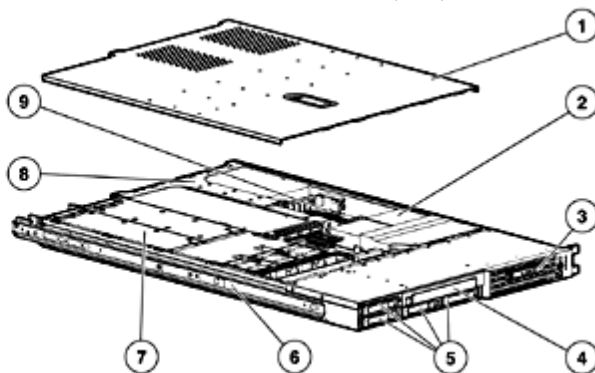
### Overview

Ultra320 SCSI and SATA Model



1. Removable server hood
2. Up to two Intel Xeon™ processors
3. Removable processor fan assembly with front and secure internal USB ports
4. Removable media bay
5. Two Ultra320 hot plug drive bays; or  
Two SATA pluggable drive bays; or  
Four Serial Attached SCSI hot plug drive bays

Serial Attached SCSI (SAS) Model



6. Sliding rails standard for in rack servicing
7. Redundant power supplies
8. 1 full length and 1 half length PCI-X slots (optional PCI Express)
9. Up to 12 GB DDR2 PC2-3200 SDRAM

### What's New

- 2.8 GHz dual-core Intel® Xeon™ processors are now available with the powerful HP ProLiant DL360 G4p Serial Attached SCSI (SAS) model. Offering up to a 50% performance increase over single core processors, the dual-core Intel Xeon offers a 2x2MB L2 cache and 64-bit capability.
- 3.8 GHz Intel® Xeon™ processors are available now available with robust HP ProLiant DL360 G4p SCSI and SAS models and includes 2MB L2 cache and 64-bit support.
- Introducing Xeon™ 3.0 GHz low voltage processor for performance per watt optimization in dense server environments

### Overview

### At A Glance

- Enterprise-class ultra dense server combining compute power, integrated Lights-Out management, and essential fault tolerance, The HP ProLiant DL360 G4p is optimized for space constrained data center installations.
- HP ProLiant DL360 G4p offers concentrated compute power for best performance per rack, reliability, and manageability
- Built in reliability and availability features: embedded RAID, redundant fans, redundant power option, pre-failure notifications, and Lights-Out Management
- 64-bit Intel® Xeon™ processors supporting 64-bit extension and 64-bit Microsoft Windows and Linux operating systems
- Up to 12 GB of PC2-3200 DDR2 400 SDRAM; with 2-way interleaving
- Advanced ECC memory standard; optional Online Spare Memory
- Two 64-bit/133 MHz PCI-X slots
- Optional PCI-X to PCI-Express conversion kit
- Integrated Lights-Out (iLO) remote management embedded on every HP ProLiant DL360 G4p
- Optional Integrated Lights-Out support for Power Regulator for ProLiant and introducing support for the draft DMTF System Management Architecture for Server Hardware Command Line Protocol standard
- HP Power Regulator for ProLiant delivering server level, policy based power management with industry leading energy efficiency and savings on system power and cooling costs
- Support for iLO Shared Network Port enables access to the iLO management processor through one of the embedded system NICs
- Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
- Fan redundancy, standard
- Hot plug power supply with optional 1+1 redundancy
- 1U Rack form factor (1.75")
- Sliding rails for in rack servicing ship standard; optional ambidextrous cable management arm
- ProLiant Essential Foundation Pack standard, including HP Systems Insight Manager, SmartStart, SmartStart Scripting Toolkit, Subscriber's Choice and ROM Based Setup Utility (RBSU).
- SAS Model - best performance:
  - Up to 2.8 GHz Dual-core and 3.8 GHz single-core Intel Xeon processor options
  - Smart Array P600 RAID Controller with 256MB transportable battery backed cache
  - Up to four Small Form Factor (SFF) Serial Attached SCSI (SAS) hot plug hard drives or four SFF Serial ATA (SATA) hard drives
- SCSI Model - best price/performance:
  - Up to 3.8 GHz single-core processor Intel Xeon processor options
  - Embedded Smart Array 6i RAID Controller with optional 128MB transportable battery backed cache (SCSI models)
  - Up to two HP Universal SCSI hot plug disk drives
- SATA Model - best priced:
  - Up to 3.6 GHz single-core processor Intel Xeon processor options
  - Embedded 2 Port SATA Controller (SATA models)
  - Up to two pluggable Serial ATA disk drives
- Protected by HP Services and a worldwide network of resellers and service providers. Three-year Next Business Day, on-site limited global warranty. Certain restrictions and exclusions apply. Pre-Failure Notification on processors, memory, and SCSI hard drives. SATA hard drives have a one-year warranty.

### Standard Features

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

**Processor** Intel Xeon Processor 2.8 GHz/800MHz -2MB L2  
**One of the following depending on Model** Intel Xeon Processor 3.0 GHz/800MHz -2MB L2  
Intel Xeon Processor 3.0 GHz/800MHz -2MB L2, Low Voltage  
Intel Xeon Processor 3.2 GHz/800MHz -2MB L2  
Intel Xeon Processor 3.4 GHz/800MHz -2MB L2  
Intel Xeon Processor 3.6 GHz/800MHz -2MB L2  
Intel Xeon Processor 3.8 GHz/800MHz -2MB L2

Dual-core Intel Xeon Processor 2.8 GHz/800MHz - 2x2MB L2

**NOTE:** Dual Core processor is supported on HP ProLiant DL360 G4p Serial Attached SCSI (SAS) models only.

---

**Processor Cache** 2MB Level 2 cache memory

---

**Upgradeability** Upgradeable to dual processing

---

**Chipset** Intel chipset is E7520

---

**Memory Protection & Functionality** Advanced ECC (multi-bit error protection)  
Online spare  
2-way interleaving

---

<b>Memory</b>	Type	PC2-3200 DDR2 400 SDRAM
	Standard	1 GB (2 x 512 MB)
	Standard (on some models)	2 GB (2 x 1024 MB)
	Maximum	12 GB

---

**Network Controller** Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter

---

### Standard Features

Expansion Slots	Slot Number	Bus Speed	Bus Number*	Device Number**	Hot Plug	PCI Voltage
	1	64-bit/133MHz PCI-X	7	0	no	3.3 Volt
	1	x8 PCI Express (option)	3	0	no	n/a
	2	64-bit/133MHz PCI-X	10	0	no	3.3 Volt
	2	x8 PCI Express (option)	13	0	no	n/a

\*NOTE: Default bus assignment. Inserting cards with PCI bridges may alter the actual bus assignment number.

\*\*NOTE: Slots are enumerated differently based on OS. MS OS's enumerate from lowest to highest Device ID by bus (starting with the lowest bus).

NOTE: For more information regarding PCI-X, please see the following URL:

<http://www.hp.com/servers/pci-x>.

NOTE: All slots can accept universal keyed PCI cards.

---

**Manageability** Integrated Lights-Out (iLO) Management (integrated on motherboard)

---

**Storage Controllers**

SAS Models HP Smart Array P600 Controller with 256MB Cache (installed in PCI-X slot)  
NOTE: The Smart Array P600 controller offers an external 4X SAS port for additional storage expansion.

SCSI Models HP Smart Array 6i Controller (embedded)  
NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.

SATA Models HP embedded 2 Port SATA Controller (integrated on system board)  
NOTE: The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs.  
NOTE: SATA RAID 0, 1 is available with the optional purchase of the HP 8-port SAS HBA (347786-B21) and HP SAS/SATA Cable Kit (398307-B21) - hot-plug drive functionality and drive activity LEDs not supported.

---

**Storage**

Optical Drives Ejectable CD-ROM (Standard in most models), DVD-ROM, or DVD-RW drives, or Slimline floppy  
NOTE: Slimline Floppy Diskette Drive is not supported in SCSI and SATA models.

Diskette Drive 1.44 MB Diskette Drive  
NOTE: Standard in SCSI models; optional in SATA models; not available in SAS models.

Drive Bays SAS Model: 4 Small Form Factor  
SCSI Model: 2 HP Universal SCSI  
SATA Model: 2 Pluggable SATA

---

### Standard Features

Maximum Internal Storage Type	SAS Model	292 GB SAS	4 x 72.8 GB Serial SCSI
		240 GB SATA	4 x 60 GB Serial ATA
	SCSI Model	600 GB	2 x 300 GB Ultra320 SCSI
	SATA Model	1 TB	2 x 500 GB Serial ATA

Interfaces	Serial	1	
	Pointing Device (Mouse)	1	
	Graphics	1	
	Hot Plug Keyboard	1	
	USB	3 (rear, front, internal)	
			<b>NOTE:</b> Please see the following URL for additional information regarding USB support: <a href="http://h18004.www1.hp.com/products/servers/platforms/usb-support.html">http://h18004.www1.hp.com/products/servers/platforms/usb-support.html</a> .
	Network RJ-45	2	
iLO remote management port	1		

Graphics	Integrated ATI RAGE XL Video Controller with 8-MB SDRAM Video Memory
----------	--

Form Factor	Rack (1U), (1.75 in/4.45 cm)
-------------	------------------------------

ProLiant Essentials Foundation Pack Software	HP Systems Insight Manager	HP's new HP Systems Insight Manager (HP SIM) helps maximize system uptime and performance and reduce system maintenance costs by providing proactive notification of problems before those problems result in unplanned downtime or reduced productivity. HP SIM are both easy to set up work with the Insight Management Agents, integrated Lights-Out and Remote Insight Lights-Out Edition, and Version Control Agents to deliver robust fault, configuration, and asset management as well as remote administration. With HP SIM customers will also be able to take advantage of role-based security; the ability to manage ProLiant, Integrity, and HP 9000 systems; and plug-ins for storage, client, printer, and power management as well as server rapid deployment, performance management, and workload management. For more details on HP SIM visit <a href="http://www.hp.com/go/hpsim">http://www.hp.com/go/hpsim</a> .
	SmartStart	SmartStart is a tool that simplifies server setup, providing a rapid way to deploy reliable and consistent server configurations. For more information, please visit the SmartStart Web site at <a href="http://www.hp.com/servers/smartstart">http://www.hp.com/servers/smartstart</a> . SmartStart version supported (minimum): SmartStart 7.2.
	Management Agents	The Management Agents form the foundation for HP's Intelligent Manageability strategy. They provide direct, browser-based access to in-depth instrumentation built into HP servers, workstations, desktops, and portables, and send alerts to HP System Insight Manager and other enterprise management applications in case of subsystem or environmental failures. For additional information about the Management Agents and other management products from HP, please visit the management Web site at <a href="http://www.hp.com/servers/manage">http://www.hp.com/servers/manage</a> .

### Standard Features

Subscriber's Choice	Subscriber's Choice Driver and Support Alerts/Notifications is a web-based email subscription service that provides automatic delivery of software and driver change notifications for ProLiant products. Sign up at <a href="http://www.hp.com/go/subscriberschoice">http://www.hp.com/go/subscriberschoice</a> and customize your profile to receive various new alerts as they become available, on a weekly or monthly basis.
ROMPaq, support software, and configuration utilities	The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options available in SmartStart or downloadable from Software and Drivers download pages: <a href="http://www.hp.com/go/support">http://www.hp.com/go/support</a>
Insight Diagnostics Online Edition	The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips, available in SmartStart.
Optional ProLiant Essentials Value Packs	Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems and needs: <ul style="list-style-type: none"><li>• Rapid Deployment Pack - an automated solution for multi-server deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands.</li><li>• Workload Management Pack - provides easier management of complex environments, improving overall server utilization and enabling Windows® 2000 customers for the first time to confidently deploy multiple applications on a single multiprocessor ProLiant Server.</li><li>• Integrated Lights-Out Advanced Pack - upgrades the Integrated Lights-Out processor to full virtual presence and control with graphical console and virtual media.</li><li>• Performance Management Pack - a performance management solution that identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources.</li><li>• Intelligent Networking Pack - detects and analyzes network bottlenecks or broken network linkages and steers traffic to the optimum route based on network conditions, plus it provides an extra layer of protection. The virus throttle feature of the solution slows the propagation of fast spreading virus</li><li>• Vulnerability and Patch Management Pack - identifies and remediates software security vulnerabilities due to missing patches as well operating system configurations that can be exploited by viruses, worms, and other blended threats</li><li>• Virtual Machine Management Pack - provides central management and control of virtual machines from Microsoft and VMware. Integrated approach provides the ability to manage both physical and virtual resources from a single management console.</li><li>• Server Migration Pack - The Server Migration Pack automates the manual processes required for migrating servers between physical or virtual platforms (P2V, V2P, and V2V).</li></ul>

**NOTE:** Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <http://www.hp.com/servers/proliantessentials> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

**NOTE:** For more information regarding ProLiant Essentials Software, please see the following URL: <http://www.hp.com/servers/proliantessential>.

### Standard Features

<b>Industry Standard Compliance</b>	ACPI 1.0b Compliant PCI 2.2 Compliant Microsoft® Logo certifications USB 1.1 and 2.0 Compliant
-------------------------------------	---

---

<b>Remote Manageability</b>	Integrated Lights-Out (iLO) Standard Management: <ul style="list-style-type: none"><li>• Virtual Text Remote Console</li><li>• Virtual Power Button Control</li><li>• Dedicated &amp; shared LAN Connectivity</li><li>• Browser and command line access</li><li>• Automatic IP Configuration via DHCP/DNS/WINS</li><li>• Industry Standard 128-bit Secure Sockets Layer (SSL) and Secure Shell Security</li><li>• IML and iLO Event Logging</li><li>• Support for 12 user accounts with customizable access privilege</li></ul> Integrated Lights Out Advanced Pack (optional) Remote Lights out Edition II (optional)
-----------------------------	--

---

<b>Intelligent Manageability</b>	HP Systems Insight Manager SmartStart Remote Insight Lights-Out Edition II (optional) ROM-Based Setup Utility (RBSU) Remote-Flash Redundant ROM Integrated Management Log (IML) Server Health logging Automatic Server Recovery-2 (ASR-2) System Interconnect Status Indicators Dynamic sector repairing and drive parameter tracking (with Smart Array controllers) Hot Spare Boot <b>(NOTE: Upon the event of a failed processor or VRM in a multi-processing environment, the system will automatically reboot and use the remaining good processor(s).)</b> Power Down Utility Pre-Failure Warranty (covers processors, as well as SCSI hard drives and memory)
----------------------------------	--

---

<b>Security</b>	Power-on password Keyboard password Diskette drive control Diskette boot control QuickLock, Network Server Mode Removable CD and Diskette Drive Assembly Serial interface control Administrator's password Disk configuration lock Integrated Lights-Out has 12 customizable user accounts and SSL encryption Integrated Lights-Out can be disabled via a Global Setting
-----------------	--

---

<b>Server Power Cords</b>	High line cord ships standard with all part numbers, an additional low line cord for US and Japan
---------------------------	---

---

### Standard Features

<b>UPS Power Cord Matrix</b>	Please see the UPS Power Cord Matrix for cable descriptions, requirements, and specifications for UPS units: <a href="ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf">ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf</a> .
<b>Power Supply</b>	SAS Models: 535W Optional (1 + 1 redundant) power supply <b>NOTE:</b> PN 389830-B21 contains the optional power supply and an IEC power cable only; purchase if connecting to PDU/UPS that supports IEC cables. PN 389830-001 contains a low line (NEMA) power cord only.  SCSI & SATA Models: 460W Optional (1 + 1 redundant) power supply <b>NOTE:</b> PN 354587-B21 contains the optional power supply and an IEC power cable only; purchase if connecting to PDU/UPS that supports IEC cables. PN 354587-001 contains a low line (NEMA) power cord only.
<b>System Fans</b>	7 fans ship standard; Fan redundancy standard
<b>Required Cabling</b>	For required cabling information, refer to the Web site at <a href="http://h18000.www1.hp.com/products/servers/proliantdl360/">http://h18000.www1.hp.com/products/servers/proliantdl360/</a> .
<b>OS Support</b>	Microsoft Windows 2000 Server Microsoft Windows Server 2003 Novell NetWare Linux (Red Hat, SuSE, UnitedLinux) Solaris VMware Virtualization Software <b>NOTE:</b> SAS, SCSI and SATA models may have different OS support. Please see OS Support Matrix. <b>NOTE:</b> For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix page at: <a href="http://www.hp.com/go/supportos">http://www.hp.com/go/supportos</a> . <b>NOTE:</b> For more complete and up-to-date information on how to buy server operating systems from HP please visit the OS product site at: <a href="http://h18004.www1.hp.com/products/servers/software/OEM.html">http://h18004.www1.hp.com/products/servers/software/OEM.html</a> <b>NOTE:</b> For a listing of the latest drivers available for the HP ProLiant DL360, please see: <a href="http://h18023.www1.hp.com/support/files/server/us/index.html">http://h18023.www1.hp.com/support/files/server/us/index.html</a> . <b>NOTE:</b> For a more complete and up-to-date information on Linux support, please visit HP Linux Web site at <a href="http://h18000.www1.hp.com/products/servers/linux/hpLinuxcert.html">http://h18000.www1.hp.com/products/servers/linux/hpLinuxcert.html</a> . <b>NOTE:</b> For more information on HP's Certified and Supported ProLiant Servers, please visit the VMware Server Support Matrix at: <a href="http://h18004.www1.hp.com/products/servers/software/vmware/hpvmwarecert.html">http://h18004.www1.hp.com/products/servers/software/vmware/hpvmwarecert.html</a> .



### Standard Features

#### Rack Airflow Requirements

##### Rack 10000 series Cabinets

The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The 10000 Series Racks provide enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

**CAUTION:** If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment:

- **Front and rear doors:** If your 42U server rack includes closing front and rear doors, you must allow 830 square inches (5,350 sq cm) of hole evenly distributed from top to bottom to permit adequate airflow (equivalent to the required 64 percent open area for ventilation).
- **Side:** The clearance between the installed rack component and the side panels of the rack must be a minimum of 2.75 inches (7 cm).

**CAUTION:** Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels results in improper cooling that can lead to thermal damage.

**NOTE:** For additional information, refer to the Setup and Installation Guide or the Documentation CD provided with the server, or to the server documentation located in the Support section at the following URL: <http://h18000.www1.hp.com/products/servers/proliantdl360/index.html>.

#### Factory Express Portfolio for Servers and Storage

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Integrity, HP ProLiant, HP ProLiant Server Blades, HP BladeSystem, HP 9000 servers as well as the MSA1000, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

For more information on Factory Express services for your specific server model please contact your sales representative or go to <http://www.hp.com/go/factory-express>.

#### Customer Builder

Please see the Enterprise Configurator for configuration assistance at: <http://www.hp.com/products/configurator>.

### Standard Features

#### Service and Support

This product is covered by a global limited warranty and supported by HP Services and a worldwide network of resellers and service providers. 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. Additional support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services or customized service agreements.

**NOTE:** Limited warranty includes 3 year parts, 3 year labor, 3-year on-site support.

**NOTE:** SATA drives have a 1 year warranty.

Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

A full range of HP Care Pack hardware and software services are available including:

- Installation and start up
- Education courses
- Extended onsite hardware coverage hours from same business day 13 hours, 5 day to 24 hours, 7 days call window with options including 4-hour response or 6-hour Call To Repair
- Comprehensive range of software technical support for Microsoft, Linux, ProLiant Essentials and VMWare-based IT solutions helping to deliver high level of application availability. Response times range from 30 mins for critical problems to 2 hours.
- System Management, Performance Services and Mission Critical Support Solution

HP Care Pack services include coverage for the HP branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as 22" and smaller external monitors and tower UPS options up to 3kVA; these items will be covered at the same service level and for the same coverage period as the server. Coverage of UPS Battery is not included, standard warranty terms & conditions apply. For servers or storage systems installed within a rack, service also covers all HP qualified rack options installed within the same rack.

**NOTE:** For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our worldwide Web site on the internet at: <http://www.hp.com/hps/carepack>

**NOTE:** For more complete information on HP Services offerings, customers and resellers, please visit us at: <http://www.hp.com/hps>

**NOTE:** Additional information regarding worldwide limited warranty and technical support is available at: <http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

### Models

#### SAS Models

DL360R04p Dual-core  
X2.8-2x2MB/800, 1GB  
SAS  
408579-xx1

Processor	(1) Dual-core Intel Xeon Processor 2.8 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	HP Smart Array P600 Controller
Hard Drives	None ship standard; system supports up to four Serial SCSI or Serial ATA drives.
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 535W power supply (redundant power supply optional)
Optical Drive	Slimline CD-ROM Drive
PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.
Form Factor	Rack (1U), (1.75 in/4.45 cm)

DL360R04p X3.0-  
2MB/800, 1GB SAS  
389820-xx1

Processor	(1) Intel Xeon Processor 3.0 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	HP Smart Array P600 Controller
Hard Drives	None ship standard; system supports up to four Serial SCSI or Serial ATA drives.
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 535W power supply (redundant power supply optional)
Optical Drive	Slimline CD-ROM Drive
PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.
Form Factor	Rack (1U), (1.75 in/4.45 cm)

### Models

DL360R04p X3.2-2MB/800, 2GB SAS RPS 389821-xx1	Processor	(1) Intel Xeon Processor 3.2 GHz/800MHz standard (up to 2 supported)	
	Cache Memory	2MB level 2 cache	
	Memory	2 GB (2 x 1024 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM	
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter	
	Storage Controller	HP Smart Array P600 Controller	
	Hard Drives	None ship standard; system supports up to four Serial SCSI or Serial ATA drives.	
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)	
	Power Supply	Two 535W power supplies (1 + 1 redundant)	
	Optical Drive	Slimline CD-ROM Drive	
	PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.	
	Form Factor	Rack (1U), (1.75 in/4.45 cm)	
	<hr/>		
	DL360R04p X3.4-2MB/800, 2GB SAS RPS 389822-xx1	Processor	(1) Intel Xeon Processor 3.4 GHz/800MHz standard (up to 2 supported)
Cache Memory		2MB level 2 cache	
Memory		2 GB (2 x 1024 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM	
Network Controller		Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter	
Storage Controller		HP Smart Array P600 Controller	
Hard Drives		None ship standard; system supports up to four Serial SCSI or Serial ATA drives.	
Remote Management		Integrated Lights-Out (iLO) Standard Management (embedded)	
Power Supply		Two 535W power supplies (1 + 1 redundant)	
Optical Drive		Slimline CD-ROM Drive	
PCI-X Slots		1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.	
Form Factor		Rack (1U), (1.75 in/4.45 cm)	

### Models

DL360R04p X3.6-2MB/800, 2GB SAS RPS 389823-xx1	Processor	(1) Intel Xeon Processor 3.6 GHz/800MHz standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	2 GB (2 x 1024 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	HP Smart Array P600 Controller
	Hard Drives	None ship standard; system supports up to four Serial SCSI or Serial ATA drives.
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	Two 535W power supplies (1 + 1 redundant)
	Optical Drive	Slimline CD-ROM Drive
	PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.
	Form Factor	Rack (1U), (1.75 in/4.45 cm)

DL360R04p X3.8-2MB/800, 2GB SAS RPS 394919-xx1	Processor	(1) Intel Xeon Processor 3.8 GHz/800MHz standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	2 GB (2 x 1024 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	HP Smart Array P600 Controller
	Hard Drives	None ship standard; system supports up to four Serial SCSI or Serial ATA drives.
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	Two 535W power supplies (1 + 1 redundant)
	Optical Drive	Slimline CD-ROM Drive
	PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot <b>NOTE:</b> Full length slot is occupied with HP Smart Array P600 Controller and is not available.
	Form Factor	Rack (1U), (1.75 in/4.45 cm)

### Models

#### SCSI Models

DL360R04p X3.8- 2MB/800, 2GB SCSI, RPS 376235-xx1	Processor	(1) Intel Xeon Processor 3.8 GHz/800MHz standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	2 GB (2 x 1 GB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.</b>
	Hard Drives	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The HP ProLiant DL360 G4p SCSI models only support U320 Universal Hot Plug drives.</b>
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	Two 460W power supplies
	Optical Drive	24x IDE CD-ROM Drive (Low-profile)
	Diskette Drive	1.44 MB Diskette Drive
	PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
	Form Factor	Rack (1U), (1.75 in/4.45 cm)
	<hr/>	
DL360R04p X3.6- 2MB/800, 1GB SCSI 376236-xx1	Processor	(1) Intel Xeon Processor 3.6 GHz/800MHz standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.</b>
	Hard Drives	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The HP ProLiant DL360 G4p SCSI models only support U320 Universal Hot Plug drives.</b>
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	One 460W power supply (redundant power supply optional)
	Optical Drive	24x IDE CD-ROM Drive (Low-profile)
	Diskette Drive	1.44 MB Diskette Drive
	PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
	Form Factor	Rack (1U), (1.75 in/4.45 cm)

### Models

<b>DL360R04p X3.6-2MB/800, 2GB SCSI, RPS 378705-xx1</b>	<b>Processor</b>	(1) Intel Xeon Processor 3.6 GHz/800MHz standard (up to 2 supported)
	<b>Cache Memory</b>	2MB level 2 cache
	<b>Memory</b>	2 GB (2 x 1 GB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	<b>Network Controller</b>	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	<b>Storage Controller</b>	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.</b>
	<b>Hard Drives</b>	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The HP ProLiant DL360 G4 SCSI models only support U320 Universal Hot Plug drives.</b>
	<b>Remote Management</b>	Integrated Lights-Out (iLO) Standard Management (embedded)
	<b>Power Supply</b>	Two 460W power supplies (1 +1 redundant)
	<b>Optical Drive</b>	24x IDE CD-ROM Drive (Low-profile)
	<b>Diskette Drive</b>	1.44 MB Diskette Drive
	<b>PCI-X Slots</b>	1 full length and 1 half length 64bit/133MHz PCI-X slot
	<b>Form Factor</b>	Rack (1U), (1.75 in/4.45 cm)

<b>DL360R04p X3.4-2MB/800, 2GB SCSI, RPS 380079-xx1</b>	<b>Processor</b>	(1) Intel Xeon Processor 3.4 GHz/800MHz standard (up to 2 supported)
	<b>Cache Memory</b>	2MB level 2 cache
	<b>Memory</b>	2 GB (2 x 1-GB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	<b>Network Controller</b>	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	<b>Storage Controller</b>	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The ProLiant DL360 G4p does not offer an external SCSI port.</b>
	<b>Hard Drives</b>	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The ProLiant DL360 G4p SCSI models only support U320 Universal Hot Plug drives.</b>
	<b>Remote Management</b>	Integrated Lights-Out (iLO) Standard Management (embedded)
	<b>Power Supply</b>	Two 460W power supply (1 +1 redundant)
	<b>Optical Drive</b>	24x IDE CD-ROM Drive (Low-profile)
	<b>Diskette Drive</b>	1.44 MB Diskette Drive
	<b>PCI-X Slots</b>	1 full length and 1 half length 64bit/133MHz PCI-X slot
	<b>Form Factor</b>	Rack (1U), (1.75 in/4.45 cm)

### Models

DL360R04p X3.4-  
2MB/800, 1GB SCSI  
376237-xx1

Processor	(1) Intel Xeon Processor 3.4 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.</b>
Hard Drives	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The HP ProLiant DL360 G4 SCSI models only support U320 Universal Hot Plug drives.</b>
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 460W power supply (redundant power supply optional)
Optical Drive	24x IDE CD-ROM Drive (Low-profile)
Diskette Drive	1.44 MB Diskette Drive
PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)

DL360R04p X3.2-  
2MB/800, 1GB SCSI  
379753-xx1

Processor	(1) Intel Xeon Processor 3.2 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE: The HP ProLiant DL360 G4p does not offer an external SCSI port.</b>
Hard Drives	None ship standard; system supports up to two hot plug U320 drives <b>NOTE: The HP ProLiant DL360 G4 SCSI models only support U320 Universal Hot Plug drives.</b>
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 460W power supply (redundant power supply optional)
Optical Drive	24x IDE CD-ROM Drive (Low-profile)
Diskette Drive	1.44 MB Diskette Drive
PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)



### Models

DL360R04p X3.0-  
2MB/800, 1GB SCSI  
380325-xx1

Processor	(1) Intel Xeon Processor 3.0 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	U320 Smart Array 6i Controller (embedded on system board) <b>NOTE:</b> The HP ProLiant DL360 G4p does not offer an external SCSI port.
Hard Drives	None ship standard; system supports up to two hot plug U320 drives <b>NOTE:</b> The HP ProLiant DL360 G4 SCSI models only support U320 Universal Hot Plug drives.
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 460W power supply (redundant power supply optional)
Optical Drive	24x IDE CD-ROM Drive (Low-profile)
Diskette Drive	1.44 MB Diskette Drive
PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)

### SATA Models

DL360R04p X3.6-  
2MB/800, 1GB SATA  
378704-xx1

Processor	(1) Intel Xeon Processor 3.6 GHz/800MHz standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
Storage Controller	Embedded SATA controller <b>NOTE:</b> The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs. <b>NOTE:</b> SATA RAID 0, 1 is available with the optional purchase of the HP 8-port SAS HBA (347786-B21) and HP SAS/SATA Cable Kit (398307-B21) - hot-plug drive functionality and drive activity LEDs not supported.
Hard Drives	None ship standard; system supports up to two Serial ATA drives
Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
Power Supply	One 460W power supply (redundant power supply optional)
Optical Drive	Optional CD, DVD on SATA Models
Diskette Drive	Optional floppy on SATA Models
PCI-X Slots	1 full length and 1 half length 64bit/133MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)

### Models

DL360R04p X3.4- 2MB/800, 1GB SATA 380078-xx1	Processor	(1) Intel Xeon Processor 3.4 GHz/800MHz standard
	Cache Memory	2MB level 2 cache
	Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	Embedded SATA controller <b>NOTE:</b> The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs. <b>NOTE:</b> SATA RAID 0, 1 is available with the optional purchase of the HP 8-port SAS HBA (347786-B21) and HP SAS/SATA Cable Kit (398307-B21) - hot-plug drive functionality and drive activity LEDs not supported.
	Hard Drives	None ship standard; system supports up to two Serial ATA drives
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	One 460W power supply (redundant power supply optional)
	Optical Drive	Optional CD, DVD, CD-RW/DVD combo on SATA Models
	Diskette Drive	Optional floppy on SATA Models
	PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)	

DL360R04p X3.2- 2MB/800, 1GB SATA 379752-xx1	Processor	(1) Intel Xeon Processor 3.2 GHz/800MHz standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
	Network Controller	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
	Storage Controller	Embedded SATA controller <b>NOTE:</b> The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs. <b>NOTE:</b> SATA RAID 0, 1 is available with the optional purchase of the HP 8-port SAS HBA (347786-B21) and HP SAS/SATA Cable Kit (398307-B21) - hot-plug drive functionality and drive activity LEDs not supported.
	Hard Drives	None ship standard; system supports up to two Serial ATA drives
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	One 460W power supply (redundant power supply optional)
	Optical Drive	Optional CD, DVD on SATA Models
	Diskette Drive	Optional floppy on SATA Models
	PCI-X Slots	1 full length and 1 half length 64bit/133 MHz PCI-X slot
Form Factor	Rack (1U), (1.75 in/4.45 cm)	

### Models

DL360R04p X3.0-  
2MB/800, 1GB SATA  
380324-xx1

<b>Processor</b>	(1) Intel Xeon Processor 3.0 GHz/800MHz standard (up to 2 supported)
<b>Cache Memory</b>	2MB level 2 cache
<b>Memory</b>	1 GB (2 x 512 MB) Standard to 12 GB (Maximum) of PC2-3200 DDR2 400 SDRAM
<b>Network Controller</b>	Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter
<b>Storage Controller</b>	Embedded SATA controller <b>NOTE:</b> The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs. <b>NOTE:</b> SATA RAID 0, 1 is available with the optional purchase of the HP 8-port SAS HBA (347786-B21) and HP SAS/SATA Cable Kit (398307-B21) - hot-plug drive functionality and drive activity LEDs not supported.
<b>Hard Drives</b>	None ship standard; system supports up to two Serial ATA drives
<b>Remote Management</b>	Integrated Lights-Out (iLO) Standard Management (embedded)
<b>Power Supply</b>	One 460W power supply (redundant power supply optional)
<b>Optical Drive</b>	Optional CD, DVD combo on SATA Models
<b>Diskette Drive</b>	Optional floppy on SATA Models
<b>PCI-X Slots</b>	1 full length and 1 half length 64bit/133 MHz PCI-X slot
<b>Form Factor</b>	Rack (1U), (1.75 in/4.45 cm)

### Country Code Key

XX=00  
XX=20  
XX=29  
XX=37  
XX=42  
XX=AA

### Rack Code Key

US  
Brazil  
Japan  
APD  
EURO  
PRC

### Configuration Information - Factory Integrated Models (North America only)

**NOTE:** For Configure to Order requirements within EMEA region, please consult local Sales Contact.

**NOTE:** HP does not allow factory integration of options into standard models listed above.

Configure-to-order servers must start with a CTO Chassis.

**NOTE:** This product offering does not support HP Factory Express Server Configuration Level 1.

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

Models	HP ProLiant DL360G4p SATA Rack CTO Chassis (North America)	382146-405
	<b>Factory Integrated Model ships with:</b> Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit NIC Embedded SATA Controller (SATA RAID functionality is available via OS) Integrated Lights-Out (iLO) embedded 1 full length and 1 half length 64-bit/133 MHz PCI-X slot 7 fans; N+1 fan redundancy Rack (1U), (1.75 in/4.45 cm)	
	HP ProLiant DL360G4p SCSI Rack CTO Chassis (North America)	382147-405
	<b>Factory Integrated Model ships with:</b> Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit NIC Smart Array 6i Controller (Ultra320 SCSI, RAID, embedded) Integrated Lights-Out (iLO) embedded 1 full length and 1 half length 64-bit/133 MHz PCI-X slots 1.44MB Diskette Drive 7 fans; N+1 fan redundancy Rack (1U), (1.75 in/4.45 cm)	
	HP ProLiant DL360G4p SAS Rack CTO Chassis (North America)	389831-405
	<b>Factory Integrated Model ships with:</b> Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit NIC Integrated Lights-Out (iLO) embedded 1 full length and 1 half length 64-bit/133 MHz PCI-X slots 7 fans; N+1 fan redundancy Rack (1U), (1.75 in/4.45 cm)	

### Step 1A: If SAS Model, Choose SAS Starter Kit or Controller (only one of the following)

SAS Controller	HP Smart Array P600 Controller	337972-B21
	<b>NOTE:</b> This is a required selection if one of the two following SAS Starter Kits is not selected. If choosing this part number, 2.5" SAS hard drives must still be selected under Step 4.	
SAS Starter Kit	<b>NOTE:</b> SAS Starter Kits are not compatible with the SCSI or SATA models.	
	SAS Starter Kit - 36GB	396221-B21
	<b>NOTE:</b> Includes Smart Array P600 Performance Array Controller with 256MB BBWC and (2) 36 GB 2.5" SAS Universal Hard Drives.	
	SAS Starter Kit - 72GB	396220-B21
	<b>NOTE:</b> Includes Smart Array P600 Performance Array Controller with 256MB BBWC and (2) 72 GB 2.5" SAS Universal Hard Drives.	

### Configuration Information - Factory Integrated Models (North America only)

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

Processors	Intel Dual-core X2.8GHz/800-2x2MB DL360G4 FIO processor	408585-L21
	Intel X2.8GHz/800-2MB DL360G4 FIO processor	399042-L21
	Intel X3.0GHz/800-2MB DL360G4 FIO processor	380327-L21
	Intel X3.0GHz/800-2M LV DL360G4 FIO processor	394921-L21
	Intel X3.2GHz/800-2MB DL360G4 FIO processor	379817-L21
	Intel X3.4GHz/800-2MB DL360G4 FIO processor	376243-L21
	Intel X3.6GHz/800-2MB DL360G4 FIO processor	376242-L21
	Intel X3.8GHz800-2M DL360G4 FIO processor	376241-L21
	<b>NOTE:</b> Dual-core processor is supported on HP ProLiant DL360 G4p Serial Attached SCSI (SAS) model only.	
Base Memory	1 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB)	343055-B21
	2 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 1 GB)	343056-B21
	4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 2 GB)	343057-B21
Optical Drive (may or may not be required. See notes)	<b>NOTE:</b> Optical Drives are OPTIONAL if choosing the (389831-405) SAS Rack CTO Chassis Model or (382146-405) SATA Rack CTO Chassis Model in Step 1.	
	<b>NOTE:</b> An Optical Drive is REQUIRED if choosing the 382147-405 SCSI Rack CTO Chassis Model in Step 1.	
	Slimline CD-ROM Drive 24X	356963-B21
	<b>NOTE:</b> This CD-ROM Drive (PN 356963-B21) is for SAS, SCSI, and SATA models.	
	Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21
	<b>NOTE:</b> This CD-RW/DVD-ROM Drive (PN 331903-B21) is for SAS and SCSI models. It is not supported in SATA models.	
Slimline DVD-ROM Drive (8X/24X) Option Kit	264007-B21	
<b>NOTE:</b> This DVD-ROM Drive (PN 264007-B21) is for SAS and SCSI models. It is not supported in SATA models.		

#### Step 3: Choose Additional Factory Integratable Options

Diskette Drive	Slimline Ejectable Floppy Drive	390164-B21
	<b>NOTE:</b> This Diskette Drive is for SAS (389831-405) models.	
	1.44 MB Diskette drive	354588-B21
	<b>NOTE:</b> This Diskette Drive is for SATA (382146-405) models	
Optical Drive	<b>NOTE:</b> Optical Drives are OPTIONAL if choosing the (389831-405) SAS Rack CTO Chassis Model or (382146-405) SATA Rack CTO Chassis Model in Step 1.	
	<b>NOTE:</b> An Optical Drive is REQUIRED if choosing the 382147-405 SCSI Rack CTO Chassis Model in Step 1.	
	Slimline CD-ROM Drive 24X	356963-B21
	<b>NOTE:</b> This DVD-ROM Drive (PN 264007-B21) is for SAS and SCSI models. It is not supported in SATA models.	
	Slimline DVD-ROM Drive (8X/24X) Option Kit	264007-B21
	<b>NOTE:</b> This DVD-ROM Drive (PN 264007-B21) is for SAS and SCSI models. It is not supported in SATA models.	
Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21	
<b>NOTE:</b> This CD-RW/DVD-ROM Drive (PN 331903-B21) is for SAS and SCSI models. It is not supported in SATA models.		

### Configuration Information - Factory Integrated Models (North America only)

Power Supply	460W HP redundant power supply with IEC cord only <b>NOTE:</b> For SCSI and SATA Models.	354587-B21
	535W HP redundant power supply with IEC cord only <b>NOTE:</b> For SAS Models.	389830-B21
	535W HP redundant power supply with NEMA or Japan cord only <b>NOTE:</b> for SAS Models.	389830-001

---

### Step 4: Choose Additional Options for Factory Integration

**NOTE:** For additional options, please refer to the "Options" section below.

### Options

**NOTE:** Some options may not be factory integratable. Please contact your local sales representative for additional information.

<p><b>HP ProLiant DL360 G4 and ProLiant DL360 G4p Unique Options</b></p>	<p>Intel Xeon Dual-core 2.8 GHz/800MHz-2x2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 408585-B21) supports the HP ProLiant DL360 G4p SAS only.</p> <p>Intel Xeon 2.8G Hz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 399042-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.0 GHz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 380327-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.0 GHz/800MHz-2MB Low Voltage Processor Option Kit <b>NOTE:</b> This processor option kit (PN 394921-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.2 GHz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 379817-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.4 GHz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 376243-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.6 GHz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 376242-B21) supports the HP ProLiant DL360 G4p only.</p> <p>Intel Xeon 3.8 GHz/800MHz-2MB Processor Option Kit <b>NOTE:</b> This processor option kit (PN 376241-B21) supports the HP ProLiant DL360 G4p only.</p> <p>PCI-e Riser option (to convert one or both PCI-X to PCI-e slots)</p> <p>Ambidextrous cable management arm <b>NOTE:</b> Package contains two cable management arms</p> <p>Fixed Cord Extension Bars for 1U servers (2 PDU sticks per kit)</p> <p>460W HP redundant power supply with IEC cord only</p> <p>460W HP redundant power supply with US or Japanese NEMA cord only <b>NOTE:</b> The HP ProLiant DL360 G4p ships with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For stand-alone deployments or installation without a rack, country-specific power cord options are available. U.S., Japan, &amp; APD models ship with two power cords: IEC-IEC and NEMA cords.</p> <p>535W HP redundant power supply with IEC cord only</p> <p>535W HP redundant power supply with US or Japanese NEMA cord only <b>NOTE:</b> The HP ProLiant DL360 G4p ships with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For stand-alone deployments or installation without a rack, country-specific power cord options are available. U.S., Japan, &amp; APD models ship with two power cords: IEC-IEC and NEMA cords.</p> <p>Telco Rack Kit, ProLiant DL360 G4, Japan</p>	<p>408585-B21</p> <p>399042-B21</p> <p>380327-B21</p> <p>394921-B21</p> <p>379817-B21</p> <p>376243-B21</p> <p>376242-B21</p> <p>376241-B21</p> <p>354589-B21</p> <p>365403-B21</p> <p>351655-B21</p> <p>354587-B21</p> <p>354587-001</p> <p>389830-B21</p> <p>389830-001</p> <p>385938-291</p>
--	---	---

### ProLiant Essentials Value Pack Software

### ProLiant Essentials Integrated Lights-Out Advanced Pack

<p>ProLiant Essentials Integrated Lights-Out Advanced Pack, 1 server <b>Featuring:</b> sophisticated virtual administration features for ultimate control of servers in the data centers and remote sites.</p>	<p>263825-B21</p>
--	-------------------

### Options

**NOTE:** For additional ProLiant Integrated Light-Out Advanced Pack License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/11052\\_div/11052\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11052_div/11052_div.HTML)

#### **ProLiant Essentials Intelligent Networking Pack**

ProLiant Essentials Intelligent Networking Pack - Windows Edition, Single Server License 372906-B21

**NOTE:** For use with a single server. Contains one license with a unique license activation key and documentation.

**NOTE:** For additional ProLiant Intelligent Networking Pack License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/12062\\_div/12062\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/12062_div/12062_div.HTML)

ProLiant Essentials Intelligent Networking Pack - Linux Edition, Single Server License 397004-B21

**NOTE:** For additional ProLiant Intelligent Networking Pack - Linux License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/12327\\_div/12327\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/12327_div/12327_div.HTML)

#### **ProLiant Essentials Performance Management Pack**

ProLiant Essentials Performance Management Pack, Single-Server License 306696-B21

**NOTE:** For use with a single server. Contains one license with a unique license activation key, HP Management CD and documentation.

**NOTE:** The most recent version of the software can always be downloaded at <http://www.hp.com/products/pmp>.

**NOTE:** For additional ProLiant Performance Management Pack License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/11925\\_div/11925\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11925_div/11925_div.HTML)

#### **ProLiant Essentials Rapid Deployment Pack Windows Edition and Linux Edition Release**

Rapid Deployment Pack, Single-Server License 267196-B21

**NOTE:** This license allows 1 server to be deployed and managed via RDP.

Rapid Deployment Pack, Single-Server License (Japan) 267196-291

**NOTE:** This license allows 1 server to be deployed and managed via RDP.

**NOTE:** For additional ProLiant Essentials Rapid Deployment Pack License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/11053\\_div/11053\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11053_div/11053_div.HTML)

[http://h18000.www1.hp.com/products/quickspecs/11713\\_div/11713\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11713_div/11713_div.HTML)

#### **ProLiant Essentials Workload Management Pack**

ProLiant Essentials Workload Management Pack, Single Server License 303284-B21

**NOTE:** For additional ProLiant Workload Management Pack License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/11452\\_div/11452\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11452_div/11452_div.HTML)

#### **ProLiant Essentials Virtualization Management Software**

ProLiant Essentials Virtual Machine Management Pack, Single-Server License 372214-B21

**NOTE:** For use with a single server. Contains one license with a unique license activation key and documentation.

ProLiant Essentials Server Migration Pack, Single-Migration License 375345-B21

**NOTE:** Contains one license, enabling 1 server migration, with a unique license activation key and documentation.



### Options

**NOTE:** This license allows 1 server to be migrated from a physical server to a virtual machine. Or this license can be used to migrate a virtual machine from one virtualization layer i.e. VMware GSX to a different virtualization layer such as VMware ESX or Microsoft Virtual Server 2005.

**NOTE:** For additional ProLiant Essentials Virtualization Management Software License Kits please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/12328\\_div/12328\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/12328_div/12328_div.HTML)

#### ProLiant Essentials Vulnerability and Patch Management Pack

ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License 371645-B21

**NOTE:** For use with a single server. Contains one license with a unique license activation key and documentation.

**NOTE:** For additional ProLiant Vulnerability and Patch Management Pack License Kits, please see the QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/12111\\_div/12111\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/12111_div/12111_div.HTML)

**NOTE:** Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <http://www.hp.com/servers/proliantessentials> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

**NOTE:** For more information regarding ProLiant Essentials Software, please see the following URL: <http://www.hp.com/servers/proliantessentials>.

<b>ProLiant Software Maintenance Subscription</b>	ProLiant Software Maintenance Subscription	355060-B21
	ProLiant Software Maintenance Single Release	356573-B21
	ProLiant Foundation Pack Single Release	356604-B21
	<b>NOTE:</b> Please see the SmartStart QuickSpecs for additional information regarding the subscription purchase: <a href="http://h18000.www1.hp.com/products/quickspecs/Division/11073.html">http://h18000.www1.hp.com/products/quickspecs/Division/11073.html</a> (Worldwide) <a href="http://h18000.www1.hp.com/products/quickspecs/North_America/11073.html">http://h18000.www1.hp.com/products/quickspecs/North_America/11073.html</a> (North America)	

<b>Processor</b>	Intel Xeon Dual-core 2.8 GHz/800MHz-2x2MB Processor Option Kit	408585-B21
	<b>NOTE:</b> This processor option kit (PN 408585-B21) supports the HP ProLiant DL360 G4p SAS only.	
	Intel Xeon 2.8 GHz/800MHz-2MB Processor Option Kit	399042-B21
	<b>NOTE:</b> This processor option kit (PN 399042-B21) supports the HP ProLiant DL360 G4p only.	
	Intel Xeon 3.0 GHz/800MHz-2MB Processor Option Kit	380327-B21
	<b>NOTE:</b> This processor option kit (PN 380327-B21) supports the HP ProLiant DL360 G4p only.	
Intel Xeon 3.0 GHz/800MHz-2MB Processor Option Kit, Low Voltage	394921-B21	
<b>NOTE:</b> This processor option kit (PN 394921-B21) supports the HP ProLiant DL360 G4p only.		
Intel Xeon 3.2 GHz/800MHz-2MB Processor Option Kit	379817-B21	
<b>NOTE:</b> This processor option kit (PN 379817-B21) supports the HP ProLiant DL360 G4p only.		
Intel Xeon 3.4 GHz/800MHz-2MB Processor Option Kit	376243-B21	
<b>NOTE:</b> This processor option kit (PN 376243-B21) supports the HP ProLiant DL360 G4p only.		

### Options

Intel Xeon 3.6 GHz/800MHz-2MB Processor Option Kit 376242-B21  
**NOTE:** This processor option kit (PN 376242-B21) supports the HP ProLiant DL360 G4p only.

Intel Xeon 3.8 GHz/800MHz-2MB Processor Option Kit 376241-B21  
**NOTE:** This processor option kit (PN 376241-B21) supports the HP ProLiant DL360 G4p only.

**Memory (DIMMs)**

1 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB) 343055-B21  
 2 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 1 GB) 343056-B21  
 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Single Rank Memory Kit (2 x 2 GB) 343057-B21  
 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Dual Rank Memory Kit (2 x 2 GB) 375004-B21

**Optical Drives**

Slimline CD-RW/DVD-ROM Combo Option Kit 331903-B21  
**NOTE:** This CD-RW/DVD-ROM Drive (PN 331903-B21) is for SCSI and SAS models only. It is not supported in SATA models.

Slimline DVD-ROM Drive (8X/24X) Option Kit (Servers) 264007-B21  
**NOTE:** This DVD-ROM Drive (PN 264007-B21) is supported on SCSI and SAS models.

Slimline CD-ROM Drive 24X 356963-B21  
**NOTE:** This CD-ROM Drive (PN 356963-B21) is for SAS, SCSI, and SATA models.  
**NOTE:** Ships standard in some SCSI and SAS models.

HP DVD+R/RW 8X Slim 383975-B21  
**NOTE:** This DVD+R/RW 8X Slim (PN 383975-B21) is supported on SCSI and SAS models.

**Diskette Drive**

Slimline Ejectable Floppy drive 390164-B21  
**NOTE:** This Diskette Drive is for SAS models only.

1.44 MB Diskette Drive 354588-B21  
**NOTE:** This 1.44MB Diskette Drive (PN 354588-B21) is supported on SCSI and SATA models only.  
**NOTE:** Ships standard in SCSI models.

### Options

#### Hard Drives

##### Ultra320 – Hot Plug

**NOTE:** The HP ProLiant DL360 G4p SCSI models support U320 Universal Hot Plug drives.

HP 300GB U320 10K Universal HDD	350964-B22
HP 146GB U320 10K Universal HDD	286716-B22
HP 72GB U320 10K Universal HDD	286714-B22
HP 146GB U320 15K Universal HDD	347708-B22
HP 72GB U320 15K Universal HDD	286778-B22
HP 36GB U320 15K Universal HDD	286776-B22

**NOTE:** Please see the Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:

[http://h18000.www1.hp.com/products/quickspecs/11531\\_div/11531\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11531_div/11531_div.HTML)  
(Worldwide)

[http://h18000.www1.hp.com/products/quickspecs/11531\\_na/11531\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/11531_na/11531_na.HTML)  
(North America)

##### Serial-ATA (SATA) Hot Plug Hard Drive (For use with SATA Models)

**NOTE:** The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs.

**NOTE:** SATA drives have a 1 year warranty.

HP 500GB 1.5G SATA 7.2K 3.5" HDD	395473-B21
HP 250GB 1.5G SATA 7.2K 3.5" HDD	349239-B21
HP 160GB 1.5G SATA 7.2K 3.5" HDD	349238-B21
HP 80GB 1.5G SATA 7.2K 3.5" HDD	349237-B21
HP 60GB 1.5G SATA 5.4K SFF HDD	

**NOTE:** Please see the SATA Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:

[http://h18000.www1.hp.com/products/quickspecs/11940\\_div/11940\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11940_div/11940_div.HTML)  
(Worldwide)

[http://h18000.www1.hp.com/products/quickspecs/11940\\_na/11940\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/11940_na/11940_na.HTML)  
(North America)

##### Serial Attached SCSI (SAS) SFF Hot Plug (For use with SAS Models)

HP 36GB 3G SAS 10K SFF HDD	375859-B21
HP 72GB 3G SAS 10K SFF HDD	375861-B21

**NOTE:** All SFF SAS Universal Hard Drives are supported ONLY by HP ProLiant DL360 G4p SAS models.

**NOTE:** Please see the SAS Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:

[http://h18000.www1.hp.com/products/quickspecs/12224\\_div/12224\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/12224_div/12224_div.HTML)  
(Worldwide)

[http://h18000.www1.hp.com/products/quickspecs/12224\\_na/12224\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/12224_na/12224_na.HTML)  
(North America)

#### Storage Controllers

##### SCSI Controllers

128MB Battery Backed Write Cache Enabler Option Kit	346914-B21
---	------------

**NOTE:** Upgrade for Smart Array 6i Controller.

### Options

Smart Array 6402/128 Controller	273915-B21
<b>NOTE:</b> For support of external drives only.	
Smart Array 6404/256 Controller	273914-B21
<b>NOTE:</b> For support of external drives only.	
Smart Array 642 Controller	291967-B21
<b>NOTE:</b> For support of external drives only.	
128MB Battery-Backed Cache Enabler	351580-B21
<b>NOTE:</b> This 128MB BBWC supports the Smart Array 641 Controller and Smart Array 642 Controller.	
64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21
64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B21
<b>NOTE:</b> For support of external drives only.	
Ultra320 Expansion Module for SA-6402	273911-B21
<b>NOTE:</b> For support of external drives only.	
64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2	374654-B21
<b>NOTE:</b> Please see the following Controller or SCSI Adapter QuickSpecs for Technical Specifications such as PCI Bus, PCI Peak Data Transfer Rate, SCSI Protocols supported, SCSI Peak Data Transfer Rate, Channels, SCSI Ports, Drives supported, Cache, RAID support, and additional information: <a href="http://h18000.www1.hp.com/products/quickspecs/12030_div/12030_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12030_div/12030_div.HTML</a> (Smart Array 6i) <a href="http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML</a> (Smart Array 6400 Series) <a href="http://h18000.www1.hp.com/products/quickspecs/11563_div/11563_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11563_div/11563_div.HTML</a> (Smart Array 642) <a href="http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML">http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML</a> (SCSI Adapter) <a href="http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML</a> (U320 Adapter) <a href="http://h18000.www1.hp.com/products/quickspecs/11943_div/11943_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11943_div/11943_div.HTML</a> (U320 SCSI HBA)	
<b>SAS Controller</b>	
HP Smart Array P600 Controller	337972-B21
512MB DDR BBWC Upgrade	372538-B21
<b>NOTE:</b> Ships standard with SAS model.	
<b>NOTE:</b> Please see the following Controller QuickSpecs for Technical Specifications such as PCI Bus, PCI Peak Data Transfer Rate, SCSI Protocols supported, SCSI Peak Data Transfer Rate, Channels, SCSI Ports, Drives supported, Cache, RAID support, and additional information: <a href="http://h18000.www1.hp.com/products/quickspecs/12247_div/12247_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12247_div/12247_div.HTML</a> (Smart P600 Controller)	
<b>SAS HBA</b>	
HP 8 Internal Port SAS HBA with RAID	347786-B21
<b>NOTE:</b> Supports SAS/SATA models. RAID 0,1 supported.	
<b>NOTE:</b> Please see the HBA QuickSpecs for additional information: <a href="http://h18000.www1.hp.com/products/quickspecs/12332_div/12332_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12332_div/12332_div.HTML</a>	
HP SATA/SAS 1U Cable Kit	398307-B21
<b>NOTE:</b> Required for HP SAS/SATA HBA use with HP ProLiant DL360 G4p SAS or SATA models.	

### Options

<b>Communications</b>	HP NC150T PCI 4-port Gigabit 1000T Combo Switch Adapter	367132-B21
	HP NC310F PCI-X 1000SX Gigabit Server Adapter	368169-B21
	HP NC320T PCI Express 1000T Gigabit Server Adapter	367047-B21
	HP NC370F PCI-X Multifunction 1000SX Gigabit Server Adapter	374193-B22
	HP NC370T PCI-X Multifunction 1000T Gigabit Server Adapter	374191-B22
	HP NC1020 PCI 1000T Gigabit Server Adapter	353377-B21
	HP NC7170 PCI-X Dual Port 1000T Gigabit Server Adapter	313881-B21
	HP NC7771 PCI-X 1000T Gigabit Server Adapter	290563-B21
	<b>NOTE:</b> A minimum of 1 GB of memory is required for NC370x adapters, with a maximum of two NC370x adapters permitted in a server.	
	<b>NOTE:</b> Any NIC (except the NC1020) on the option list can be used for redundancy with the embedded NC7782 Dual Port Network Controller. When teaming with other NICs or with the embedded NIC, the lack of Jumbo Frames and LSO features on the NC1020 will cause high end NICs to have those features disabled. (e.g. incompatibility issues with the other option NICs for that platform).	
	HP NC570C PCI-X Dual-port 4x Fabric Adapter	376158-B21
	HP NC571C PCI Express Dual-port 4x Fabric Adapter	376160-B21
	HP 24-Port 4x Fabric Copper Switch	376227-B21
	HP 1m 4x Fabric Copper Cable	376232-B21
HP 3m 4x Fabric Copper Cable	376232-B22	
HP 5m 4x Fabric Copper Cable	376232-B23	

<b>Management Options</b>	Remote Insight Lights-Out Edition II (NA, LA)	227251-001
	Remote Insight Lights-Out Edition II (EMEA)	227251-021
	Remote Insight Lights-Out Edition II (ROW)	227251-371

<b>High Performance Solutions</b>	HPCC Myrinet Fiber NIC	257894-006
-----------------------------------	------------------------	------------

### Tape Drives

**NOTE:** For the complete listing of Tape Drive offerings, please see: <http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html>

For recommended tape drive offerings for this ProLiant server see the following:

#### USB Tape Drives

HP StorageWorks DAT 40 USB External Tape Drive (Carbonite)	DW023A
HP StorageWorks DAT 72 USB External Tape Drive (Carbonite)	DW027A

#### Ultrium Tape Drives - External, Rack-Mount and Array

HP StorageWorks Ultrium 232 External Tape Drive (Carbonite)	DW065B
HP StorageWorks Ultrium 232 Internal Tape Drive (Carbonite)	DW064A

**NOTE:** No internal tape drives fit inside the HP ProLiant DL360 G4p. The internal drive shown here is for the 1U or 3U Rack-mount Kit.

HP StorageWorks Ultrium 448 External Tape Drive (Carbonite)	DW017B
---	--------

### Options

**NOTE:** Please see the HP StorageWorks Ultrium Tape Drive QuickSpecs for additional options such as controllers, media, and other related items:  
[http://h18006.www1.hp.com/products/quickspecs/11739\\_div/11739\\_div.html](http://h18006.www1.hp.com/products/quickspecs/11739_div/11739_div.html)  
 (Worldwide)  
[http://h18006.www1.hp.com/products/quickspecs/11739\\_na/11739\\_na.html](http://h18006.www1.hp.com/products/quickspecs/11739_na/11739_na.html)  
 (North America)  
[http://h18006.www1.hp.com/products/quickspecs/12128\\_div/12128\\_div.html](http://h18006.www1.hp.com/products/quickspecs/12128_div/12128_div.html)  
 (Worldwide)  
[http://h18006.www1.hp.com/products/quickspecs/12128\\_na/12128\\_na.html](http://h18006.www1.hp.com/products/quickspecs/12128_na/12128_na.html)  
 (North America)

For an up-to-date listing of the latest O/S and software support details for HP Ultrium tape drives, please visit: <http://www.hp.com/go/connect>

#### DAT Drives - External, Rack-Mount and Array Module

HP StorageWorks DAT 72 SCSI External Tape Drive (Carbon)	Q1523B
HP StorageWorks 1U Rack-mount kit with one DAT 72 (Carbon)	A7443A

**NOTE:** Please see the DAT Tape Drive QuickSpecs for controllers, media, and other options:  
[http://h18000.www1.hp.com/products/quickspecs/11883\\_div/11883\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11883_div/11883_div.HTML)  
 (Worldwide)  
[http://h18000.www1.hp.com/products/quickspecs/11883\\_na/11883\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/11883_na/11883_na.HTML)  
 (North America)

For an up-to-date listing of the latest O/S and software support details for HP DAT drives, please visit: <http://www.hp.com/go/connect>

#### Rack-Mount Tape Drive Enclosures

HP StorageWorks 1U Rack-Mount Kit	A7445B
-----------------------------------	--------

**NOTE:** The 1U Rack-mount Kit can support up to 2 half-height tape drives and is compatible with multiple Single-Ended and LVD SCSI tape drives including DAT 24, DAT 40, DAT 72, DLT VS80, DLT VS160, Ultrium 215, Ultrium 232, and Ultrium 448 tape drives.

HP StorageWorks 1U USB Rack-Mount Kit	A8007A
1U USB Cable Option Kit	396114-B21

**NOTE:** Converts a 1U SCSI rack-mount kit to a USB interface to support the USB tape drives.

HP StorageWorks 3U Rack-Mount Kit	274338-B22
-----------------------------------	------------

**NOTE:** The 3U Rack-mount Kit can support up to (2) full-height or (4) half-height tape drives and compatible with multiple Single-Ended and LVD SCSI tape drives including DAT 24, DAT 40, DAT 72, DLT VS80, DLT VS160, SDLT 320, SDLT 600, Ultrium 215, Ultrium 230, Ultrium 232, Ultrium 460, Ultrium 448 and Ultrium 960 tape drives.

**NOTE:** Please see the Rack-Mount Tape Drive Kits QuickSpecs for additional information regarding these kits:  
[http://h18000.www1.hp.com/products/quickspecs/10854\\_div/10854\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/10854_div/10854_div.HTML)  
 (Worldwide)  
[http://h18000.www1.hp.com/products/quickspecs/10854\\_na/10854\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/10854_na/10854_na.HTML)  
 (North America)

### Options

#### Tape Autoloaders

##### DAT Autoloader

HP StorageWorks DAT 72x6 Autoloader (External)

Q1567A

**NOTE:** Please see the DAT 72x6 Tape Autoloader QuickSpecs for additional options such as host bus adapters, controllers and media:

[http://h18006.www1.hp.com/products/quickspecs/11905\\_div/11905\\_div.html](http://h18006.www1.hp.com/products/quickspecs/11905_div/11905_div.html)  
(Worldwide)

[http://h18006.www1.hp.com/products/quickspecs/11905\\_na/11905\\_na.html](http://h18006.www1.hp.com/products/quickspecs/11905_na/11905_na.html)  
(North America)

##### HP StorageWorks 1/8 Tape Autoloader

HP StorageWorks 1/8 Ultrium 960 Tape Autoloader

AF204A

HP StorageWorks 1/8 Ultrium 448 Tape Autoloader

AF203A

HP StorageWorks 1/8 Ultrium 232 Tape Autoloader

AF202A

1/8 Tape Autoloader Rackmount Kit

C9268R

**NOTE:** Required to install the 1/8 tape autoloader in a standard 19-inch rack.

**NOTE:** Please reference the 1/8 Tape Autoloader QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

#### Tape Libraries

##### HP StorageWorks MSL2024 Tape Library

HP StorageWorks MSL2024 1 Ultrium 960 Drive Library

AG115A

HP StorageWorks MSL2024 1 Ultrium 448 Drive Library

AG116A

HP StorageWorks MSL2024 2 Ultrium 448 Drive Library

AG117A

##### HP StorageWorks MSL6000 Tape Library

###### Ultrium 960 technology

HP StorageWorks MSL6030 1 Ultrium 960 Dr LVDS Library

AD606A

HP StorageWorks MSL6030 1 Ultrium 960 Dr FC Library

AD608A

HP StorageWorks MSL6030 2 Ultrium 960 Dr LVDS Library

AD607A

HP StorageWorks MSL6030 2 Ultrium 960 Dr FC Library

AD609A

###### Ultrium 460 technology

HP StorageWorks MSL6030 1 Ultrium 460 Dr LVDS Library

AD598A

HP StorageWorks MSL6030 1 Ultrium 460 Dr FC Library

AD600A

HP StorageWorks MSL6030 2 Ultrium 460 Dr LVDS Library

AD599A

HP StorageWorks MSL6030 2 Ultrium 460 Dr FC Library

AD601A

**NOTE:** Please reference the MSL2024 and MSL6000 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

### Options

Magneto-Optical Jukeboxes	HP StorageWorks 9.1 GB Optical Jukeboxes	
	600mx, 4 drive, 64 slot jukebox	C1160M
	1200mx, 4 drive, up to 128 slots	C1104M
	2200mx, 6 drive, up to 238 slots	C1107M
	<p><b>NOTE:</b> Please see the HP StorageWorks Magneto-Optical Products data sheet for a complete listing of available jukeboxes at:  <a href="http://www.hp.com/products1/storage/products/archivalprod/brochures/MO_family_pb.pdf">http://www.hp.com/products1/storage/products/archivalprod/brochures/MO_family_pb.pdf</a></p> <p><b>NOTE:</b> Please reference the Magneto-Optical Jukebox data sheets at  <a href="http://www.hp.com/go/optical">http://www.hp.com/go/optical</a> for additional information needed to create a complete solution.</p>	
Ultra Density Optical Jukeboxes	1900ux, 4 drive, 64 slot jukebox	AA966A
	3800ux, 4 drive, 128 slot jukebox	AA969A
	7100ux, 6 drive, 238 slot jukebox	AA971A
	<p><b>NOTE:</b> Please see the HP StorageWorks Ultra Density Optical Jukeboxes QuickSpecs for a complete listing of available jukeboxes at:  <a href="http://h18006.www1.hp.com/products/quickspecs/11944_div/11944_div.html">http://h18006.www1.hp.com/products/quickspecs/11944_div/11944_div.html</a></p> <p><b>NOTE:</b> Please reference the Ultra Density Optical Jukebox QuickSpecs at  <a href="http://www.hp.com/go/optical">http://www.hp.com/go/optical</a> for additional information needed to create a complete solution</p>	
Power Cords	<p><b>NOTE:</b> The HP ProLiant DL360 G4p ships with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For stand-alone deployments or installation without a rack, country-specific power cord options are available. U.S. &amp; Japan models will ship with two power cords: IEC-IEC (142257-002) and North American C13-Nema 5-15P (103541-001) cords.</p>	
	Power Cord, Euro, 10A 250 V Straight (12 ft/3.7 m)	157215-021
	Power Cord, UK, 10A 250 V Straight (12 ft/3.7 m)	157216-031
	Power Cord, Danish, 10A 250 V Straight (12 ft/3.7 m)	157218-081
	Power Cord, Swiss, 10A 250 V Straight (12 ft/3.7 m)	157219-111
	Power Cord, Italian, 10A 250 V Straight (12 ft/3.7 m)	157217-061
	Power Cord, South Africa, 10A 250 V Straight (12 ft/3.7 m)	157220-AR1
	HP StorageWorks Modular Smart Array 20	HP StorageWorks Modular Smart Array 20
<p><b>NOTE:</b> Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies.</p>		
HP StorageWorks Modular Smart Array 20 Starter Kit		366172-B21
<p><b>NOTE:</b> Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies. Includes Smart Array 6402/128 Controller.</p> <p><b>NOTE:</b> The Modular Smart Array Enclosure 20 Family supports the SATA 1.5Gb/s 3.5" Hot Plug Hard Drives.</p>		



### Options

HP StorageWorks Modular Smart Array 30	HP StorageWorks Modular Smart Array 30 SB <b>NOTE:</b> Rack-mountable 14 drive enclosure with single bus, redundant power supplies HP StorageWorks Modular Smart Array 30 DB <b>NOTE:</b> Rack-mountable 14 drive enclosure with dual bus, redundant power supplies <b>NOTE:</b> The Modular Smart Array Enclosure 30 Family supports the Wide Ultra3, Ultra320 Hot Plug Hard Drives.	302969-B21  302970-B21
HP StorageWorks Modular Smart Array 50	HP StorageWorks Modular Smart Array 50 Enclosure <b>NOTE:</b> Please see the Modular Smart Array 50 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: <a href="http://h18000.www1.hp.com/products/quickspecs/12245_na/12245_na.HTML">http://h18000.www1.hp.com/products/quickspecs/12245_na/12245_na.HTML</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/12245_div/12245_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12245_div/12245_div.HTML</a> (Worldwide)	364430-B21
HP StorageWorks Modular Smart Array 500	HP StorageWorks Modular Smart Array 500 Generation 2 <b>NOTE:</b> Please see the Modular Smart Array 500 Generation 2 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: <a href="http://h18000.www1.hp.com/products/quickspecs/11956_na/11956_na.HTML">http://h18000.www1.hp.com/products/quickspecs/11956_na/11956_na.HTML</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11956_div/11956_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11956_div/11956_div.HTML</a> (Worldwide)	335880-B21
HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000 <b>NOTE:</b> Please see the Modular Smart Array 1000 QuickSpecs for additional options and configuration information at <a href="http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML">http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML</a> (Worldwide)	201723-B22
HP StorageWorks Modular Smart Array 1500 cs	Modular Smart Array 1500 Controller Shelf <b>NOTE:</b> Please see the StorageWorks Modular SAN Array 1500 cs QuickSpecs for additional options and configuration information at: <a href="http://www.hp.com/go/MSA1500cs">http://www.hp.com/go/MSA1500cs</a>	AA986A

### Options

StorageWorks Options	StorageWorks 2 Gb, 64-bit/133 MHz PCI-X-to-Fibre Channel Host Bus Adapter for Windows 2000, Windows Server 2003 and Linux <b>NOTE:</b> FCA2214 2 Gb Fibre Channel Host Bus Adapter is a single channel, 64-bit/133 MHz PCI-X-to Fibre Channel Host Bus Adapter (HBA) with an embedded multi-mode optical interface	281541-B21
	FCA2404DC - HP StorageWorks 2 Gb, Dual Channel, 133 MHz PCI-X-to-Fibre Channel Host Bus Adapter for Windows® 2000, and Windows Server 2003 <b>NOTE:</b> FCA2404DC HP StorageWorks 2 Gb Fibre Channel Host Bus Adapter is a dual channel, 133 MHz, PCI-X to Fibre Channel Host Bus Adapter (HBA) with an embedded multi-mode optical interface.	323264-B21
	FCA2404 - StorageWorks 2 Gb, single channel, 133 MHz PCI-X-to-Fibre Channel Host Bus Adapter for Windows 2000, Windows NT and Windows Server 2003 <b>NOTE:</b> FCA2404 StorageWorks 2 Gb, Fibre Channel Host Bus Adapter is a single channel, multi-path failover, 133 MHz, PCI-X to Fibre Channel Host Bus Adapter (HBA) with an embedded multi-mode optical interface for ProLiant Server connects	305573-B21
	StorageWorks 2 Gb, Dual Port, 64-Bit/133 MHz PCI-X-to-Fibre Channel Host Bus Adapter for W2K, Windows Server 2003 and Linux <b>NOTE:</b> FCA2214DC StorageWorks 2 Gb Dual Port, Fibre Channel Host Bus Adapter is a 64-bit/133 MHz, PCI-X-to Fibre Channel Host Bus Adapter (HBA) with an embedded multi-mode optical interface.	321835-B21

### Cluster Options

ProLiant Cluster Starter Kit	364023-B21
<b>NOTE:</b> For additional information regarding the ProLiant Cluster Starter Kit please see the following QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/11935_na/11935_na.html">http://h18000.www1.hp.com/products/quickspecs/11935_na/11935_na.html</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11935_div/11935_div.html">http://h18000.www1.hp.com/products/quickspecs/11935_div/11935_div.html</a> (Worldwide)	
HP HA/F200 for Entry SAN Cluster	364026-B22
HP HA/F200 for Entry SAN Cluster (Japan)	364026-292
<b>NOTE:</b> For additional information regarding the ProLiant Cluster for Entry Level SAN please see the following QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/11932_na/11932_na.html">http://h18000.www1.hp.com/products/quickspecs/11932_na/11932_na.html</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11932_div/11932_div.html">http://h18000.www1.hp.com/products/quickspecs/11932_div/11932_div.html</a> (Worldwide)	
ProLiant Cluster HA/F500 for the Enterprise SAN	364024-B21
<b>NOTE:</b> For additional information regarding the ProLiant Cluster HA/F500 for Enterprise SAN please see the following QuickSpecs at: <a href="http://h18000.www1.hp.com/products/quickspecs/11933_na/11933_na.html">http://h18000.www1.hp.com/products/quickspecs/11933_na/11933_na.html</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11933_div/11933_div.html">http://h18000.www1.hp.com/products/quickspecs/11933_div/11933_div.html</a> (Worldwide)	
HP Serviceguard for Linux ProLiant Cluster A.11.16 for SUSE SLES 9 and Red Hat EL & 4 (2 node license cluster kit)	305199-B26
HP Serviceguard for Linux A.11.16 for SUSE SLES9 and Red Hat EL 3 & 4 (single license version)	307754-B26
HP Serviceguard for Linux and Red Hat Global File System - 1 year subscription	T2798AA#001
HP Serviceguard for Linux and Red Hat Global File System - 3 years subscription	T2798AA#003

### Options

**NOTE:** For additional information regarding HP Serviceguard for Linux, please see the following QuickSpecs at:

[http://h18000.www1.hp.com/products/quickspecs/11518\\_na/11518\\_na.html](http://h18000.www1.hp.com/products/quickspecs/11518_na/11518_na.html)  
(North America)

[http://h18000.www1.hp.com/products/quickspecs/11518\\_div/11518\\_div.html](http://h18000.www1.hp.com/products/quickspecs/11518_div/11518_div.html)  
(Worldwide)

<b>Uninterruptible Power Systems – Rack Mountable</b>	HP UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)	204404-001
	HP UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'l)	204404-B31
	HP UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (Japan)	204404-291
	HP UPS R3000 XR (2880VA, 2700 Watt), Low Voltage (NA)	192186-001
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (NA)	192186-002
	HP UPS R3000 XR (2400VA, 2250 Watt), Low Voltage (Japan)	192186-291
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Japan)	192186-292
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Int'l - detachable cord)	192186-B31
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A IEC309 Plug)	192186-B32
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A CEE 7/7 SCHUKO Plug)	192186-B33
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A BS-546 Plug)	192186-AR1
	HP UPS R5500 XR, (5000VA, 4500 Watt), High Voltage (NA/Jpn)	326529-D71
	HP UPS R5500 XR, (6000VA, 5400 Watt), High Voltage (Int'l)	326529-B31
	HP UPS R12000 XR, N+ x (12KVA, 12KW) High Voltage (WW)	207552-B22

**NOTE:** UPS R12000 has a hardwired input and output connection.

<b>HP Monitored Power Distribution Unit (PDU)</b>	<b>HP Monitored Power Distribution Unit: Full Rack Version</b>	
	HP 17.3 kVA S2324 Monitored PDU- dual input, 3-phase, 24A (NA/JPN)	370959-D71
	HP 8.3 kVA S1324 Monitored PDU- single input, 3-phase, 24A (NA/JPN)	370960-D71
	HP 16.6 kVA S2140 Monitored PDU- dual input, 1-phase, 40A (NA/JPN)	370961-D71
	HP 8.6 S1140 Monitored PDU- single input, 1-phase, 40A (NA/JPN)	370962-D71
	HP 22.1 kVA S2316 Monitored PDU- dual input, 3-phase, 16A (INTL)	370963-B31
	HP 11 kVA S 1316 Monitored PDU- single input, 3-phase, 16A (INTL)	370964-B31
	HP 14.7 kVA S2132 Monitored PDU- dual input, 1-phase, 32A (INTL)	370965-B31
	HP 7.4 kVA S1132 Monitored PDU- single input, 1-phase, 32A (INTL)	370966-B31

### Options

<b>Modular PDUs 1U/0U</b> (Up to 32 outlets) <b>NOTE:</b> 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	Fixed Cord Extension Bars <b>NOTE:</b> Two extension bar sticks; each with (7) C13 plugs.	351655-B21
	Fixed Cord PDU (NA/JPN) <b>NOTE:</b> Four Fixed Cord Extension Bars, and one 24A, HV mPDU L6-30P core.	351655-D72
	Fixed Cord PDU (INTL) <b>NOTE:</b> Four Fixed Cord Extension Bars, and one 32A, HV mPDU IEC-309 core.	351655-B31
	HP Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan) <b>NOTE:</b> This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.	252663-D71
	HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan)	252663-D72
	HP Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)	252663-B31
	HP Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW) <b>NOTE:</b> This mPDU (252663-B21), 40A model has a hardwired input.	252663-B21
	HP Modular Power Distribution Unit(mPDU), High Volt Model, 16A (200-240 VAC) (WW)	252663-B24
	HP Modular Power Distribution Unit (mPDU), High Volt Model, 40A, Attached Cord, (NA/JPN)	252663-D73
	HP Modular Power Distribution Unit (mPDU), High Volt Model, 40A, Attached Cord, (Int'l) <b>NOTE:</b> This PDU has a detachable input power cord and allows for adaptability to country specific power requirements. This model may also be used with the high volt UPSs R3000 XR and R6000 For North America, need to order cable PN 340653-001. <b>NOTE:</b> Please see the following Modular Power Distribution Unit (Zero-U/1U Modular PDUs) QuickSpecs for additional options including shorter jumper cables and country specific power cords: <a href="http://h18000.www1.hp.com/products/quickspecs/11041_na/11041_na.HTML">http://h18000.www1.hp.com/products/quickspecs/11041_na/11041_na.HTML</a> (North America) <a href="http://h18000.www1.hp.com/products/quickspecs/11041_div/11041_div.HTML">http://h18000.www1.hp.com/products/quickspecs/11041_div/11041_div.HTML</a> (Worldwide)	252663-B32

---

<b>USB Options</b>	HP USB 2-Button Optical Scroll Mouse (Carbonite/Silver)	DC172B
	USB 1.44-MB External Diskette Drive (Carbonite)	DC141B
	256MB HP Drive Key II (USB 2.0)	PH657A

---

### Options

HP ProLiant DL360 G4p Deployment Options	460W HP redundant power supply with IEC cord only	354587-B21
	460W HP redundant power supply with US or Japanese NEMA cord only	354587-001
	<b>NOTE:</b> The HP ProLiant DL360 G4p ships with a single IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For stand-alone deployments or installation without a rack, country-specific power cord options are available. U.S., Japan, & APD models ship with two power cords: IEC-IEC and NEMA cords.	
	535W HP redundant power supply with IEC cord only	389830-B21
	535W HP redundant power supply with US or Japanese NEMA cord only	389830-001
	<b>NOTE:</b> The HP ProLiant DL360 G4p ships with an IEC-IEC power cord used for rack mounting with Power Distribution Units (PDUs). For stand-alone deployments or installation without a rack, country-specific power cord options are available. U.S., Japan, & APD models ship with two power cords: IEC-IEC and NEMA cords.	
	<hr/>	
Telco Rack Kit	Telco Rack Kit, ProLiant DL360 G4, Japan	385938-291
<hr/>		
Third Party Rack Kit	Rack Adapter Kit <b>NOTE:</b> This kit allows HP rack servers to fit in racks that are 24" wide.	332815-B21
<hr/>		
HP Rack 5000 Series (Graphite Metallic)	HP 5642 Rack Unassembled	358254-B21
<hr/>		
Rack Options for Rack 5000 Series	Stabilizer Kit for 5642 rack (Graphite Carbon) <b>NOTE:</b> The stabilizing kit is used to prevent rack from tipping over.	374493-B21
	Baying Kit for 5642 rack (Graphite Carbon) <b>NOTE:</b> The baying kit is used to join two or more HP 5642 racks.	374499-B21
<hr/>		
HP Rack 10000 G2 Series (Carbon/Graphite Metallic)	10642 G2 (42U) Rack Cabinet - Pallet	AF001A
	10642 G2 (42U) Rack Cabinet - Shock Pallet	AF002A
	10642 G2 (42U) Rack Cabinet - Crated	AF003A
	10642 G2 (42U) Rack Cabinet, with Extension - Shock Pallet	AF004A
	10642 G2 (42U) Rack Cabinet, without door - Shock Pallet	AF005A
	10642 G2 (42U) Rack Cabinet - with Extension, without door - Shock Pallet	AF006A
	10636 G2 (36U) Rack Cabinet - Pallet	AF011A
	10636 G2 (36U) Rack Cabinet - Shock Pallet	AF012A
	10636 G2 (36U) Rack Cabinet - Crated	AF013A
	10636 G2 (36U) Rack Cabinet , with Extension - Shock Pallet	AF014A
	10636 G2 (36U) Rack Cabinet, without door - Shock Pallet	AF015A
	10636 G2 (36U) Rack Cabinet, with Extension, without door - Shock Pallet	AF016A
	<b>NOTE:</b> It is mandatory to use a shock pallet when shipping racks with equipment installed.	
	<b>NOTE:</b> Please see the Rack 10000 G2 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color: <a href="http://h18000.www1.hp.com/products/quickspecs/12402_div/12402_div.HTML">http://h18000.www1.hp.com/products/quickspecs/12402_div/12402_div.HTML</a> (Worldwide)	

### Options

**NOTE:** For additional information regarding Rack Cabinets, please see the following URL: <http://www.hp.com/go/rackandpower>.

Rack Options for Rack 10000 G2 Series	HP 10642 G2 Front Door ALL	AF009A
	HP 10636 G2 Front Door ALL	AF019A
	10642 G2 (42U) Side Panels (set of two) (Graphite Metallic)	AF054A
	10636 G2 (36U) Side Panels (set of two) (Graphite Metallic)	AF056A
	10636 G2 Rear Extension Kit	AF060A
	600mm G2 Stabilizer Option Kit (Graphite)	AF062A
	600mm G2, Heavy Duty Stabilizer Option Kit (Graphite)	AF064A
	800mm G2 Stabilizer Option Kit (Graphite)	AF066A
	800mm G2, Heavy Duty Stabilizer Option Kit (Graphite)	AF068A
	HP 10000 G2 Rack Grounding Kit	AF074A
	600W 10K G2 Rack Tie Down	AF076A

**NOTE:** For additional information regarding Rack Options, please see the following URL: <http://www.hp.com/go/rackandpower>.

HP Rack 10000 Series (Graphite Metallic)	10642 (42U) Infrastructure Rack (Low Voltage)	379006-001
	10642 (42U) Infrastructure Rack (High Voltage)	379005-001
	HP Rack S10614 (14U) Rack Cabinet - Shock Pallet	292302-B22
	HP Rack 10842 (42U, 800mm wide) – Pallet	257415-B21
	HP Rack 10842 (42U, 800mm wide) – Shock Pallet	257415-B22
	HP Rack 10647 (47U) – Pallet	245160-B21
	HP Rack 10647 (47U) – Crated	245160-B23
	HP Rack 10642 (42U) – Pallet	245161-B21
	HP Rack 10642 (42U) – Shock Pallet	245161-B22
	HP Rack 10642 (42U) – Crated	245161-B23
	HP Rack 10636 (36U) – Pallet	245162-B21
	HP Rack 10636 (36U) – Shock Pallet	245162-B22
	HP Rack 10636 (36U) – Crated	245162-B23
	HP Rack 10622 (22U) – Pallet	245163-B21
	HP Rack 10622 (22U) – Shock Pallet	245163-B22
	HP Rack 10622 (22U) – Crated	245163-B23

**NOTE:** -B21 (pallet) used to ship empty racks shipped on a truck  
 -B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)  
 -B23 (crated) used for air shipments of empty racks

**NOTE:** It is mandatory to use a shock pallet in order to ship racks with equipment installed. Not all HP equipment is qualified to be shipped in the Rack 10000 series

### Options

**NOTE:** Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:

[http://h18000.www1.hp.com/products/quickspecs/10995\\_div/10995\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/10995_div/10995_div.HTML)  
(Worldwide)

[http://h18000.www1.hp.com/products/quickspecs/10995\\_na/10995\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/10995_na/10995_na.HTML)  
(North America)

**NOTE:** For additional information regarding Rack Cabinets, please see the following URL: <http://www.hp.com/go/rackandpower>

Rack Options for Rack 10000 Series	HP Rack Light Kit (Neon)	361589-B21	
	HP Rack Plinth Kit (Carbon)	251960-B21	
	42U Side Panel - Graphite Metallic	246099-B21	
	36U Side Panel - Graphite Metallic	246102-B21	
	47U Side Panel - Graphite Metallic	255486-B21	
	TFT7210R Rack Mounted 17" Monitor	348373-B21	
	<b>NOTE:</b> For a complete list of Monitors please view the following URL: <a href="http://www.hp.com/go/kvm">http://www.hp.com/go/kvm</a>		
	TFT5600 Rack Keyboard Monitor	221546-xx1	
	<b>NOTE:</b> For a complete list of Monitors please view the following URL: <a href="http://h18004.www1.hp.com/products/monitors/">http://h18004.www1.hp.com/products/monitors/.</a>		
	1U Rack Keyboard & Drawer (Carbon)	257054-xx1	
<b>Country Code Key</b> (for TFT5600 Rack Keyboard Monitor (PN 221546-xx1) and for 1U Rack Keyboard & Drawer (PN 257054-xx1))			
XX = 00	US	XX = 09	Norway
XX = 03	UK	XX = 10	Sweden/Finland
XX = 04	Germany	XX = 11	Switzerland
XX = 05	France	XX = 13	Portugal
XX = 06	Italy	XX = 18	Belgium
XX = 07	Spain	XX = 29	Japan
XX = 08	Denmark	XX = B3	International

**NOTE:** For additional information regarding Rack Cabinets, please see the following URL: <http://www.hp.com/go/rackandpower>.

### Options

HP KVM Switch Options	IP Console Switch Box (KVM/IP), 3 x 1 x 16	262586-B21
	IP Console Switch Box (KVM/IP), 1 x 1 x 16	262585-B21
	Server Console Switch (KVM), 0 x 1 x 8 port	336044-B21
	Server Console Switch (KVM), 0 x 2 x 16 port	336045-B21
	PS/2 Interface Adapter, 1 pack	262588-B21
	PS/2 Interface Adapter, 8 pack	262587-B21
	USB Interface Adapter, 1 pack	336047-B21
	Serial Interface adapter - 1 Pack with power supply	373035-B21
	<b>NOTE:</b> Cat5e cables are required to connect Interface Adapters to Console Switches. Cat5e cables can be found at the following URL: <a href="http://www.hp.com/go/kvm">http://www.hp.com/go/kvm</a> .	
	HP 1x 4 USB/PS2 KVM Switch, TT (NA/JPN)	371301-D71
	HP 1x 4 USB/PS2 KVM Switch, TT (AU/NZ)	371301-011
	HP 1x 4 USB/PS2 KVM Switch, TT (UK)	371301-031
	HP 1x 4 USB/PS2 KVM Switch, TT (EU)	371301-A21
HP 1x 4 USB/PS2 KVM Switch, RM (ALL)	371302-B21	
HP PS2 KVM Cable with audio, 6', 2-pack	371730-B21	
HP USB KVM Cable with audio, 6', 2-pack	371729-B21	

**NOTE:** For additional information regarding KVM switches, Serial Console servers, rack mount monitors, keyboards and all related options please see the following URL: <http://www.hp.com/go/kvm>.

---

HP Serial Console Server Options	HP 16 Port Serial Console Server (worldwide)	AF101A
	HP 48 Port Serial Console Server (worldwide)	AF102A
	Serial Adapter, RJ45-DB9 DCE Female, 1 Pack	AF103A
	Serial Adapter, RJ45-DB9 DCE Female, 8 Pack	AF110A

**NOTE:** Cat5e cables are required to connect Serial Adapters to Serial Console Servers. Additional Serial Adapters and Cat5e cables can be found at the following URL: <http://www.hp.com/go/kvm>.

**NOTE:** For additional information regarding KVM switches, Serial Console servers, rack mount monitors, keyboards and all related options please see the following URL: <http://www.hp.com/go/kvm>.



## Options

Service and Support Offerings (HP Care Pack Services)	<b>Hardware Services 4-Hour On-site Service</b>	
	4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	U4496E
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4497E
	<b>Hardware Services 6-Hour Call to Repair On-site Service</b>	
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4498E
	<b>Hardware Services Next Business Day On-Site Service</b>	
	Hardware Installation, Electronic	U4506E
	Installation & Start-Up of a ProLiant server and Microsoft or Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays, Electronic	U4507E
	<b>Support Plus</b>	
	Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays, Electronic	U4508E
<b>Support Plus 24</b>		
Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic	U4509E	
Onsite HW support 24x7, 4hr response and SuSE Linux SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic	U6310E	
Onsite HW support 24x7, 4hr response and Red Hat ES Linux SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic	U8332E	
<b>NOTE:</b> For more information, customer/resellers can contact <a href="http://www.hp.com/services/carepack">http://www.hp.com/services/carepack</a> .		

### Memory

**NOTE:** Memory configurations listed do not apply to "Factory Integrated Models".

#### HP ProLiant DL360 G4p Standard Models

##### Standard Memory

1 GB PC2-3200 DDR2 400 Registered SDRAM DIMM installed (2 x 512 MB SDRAM DIMM)

##### Upgrading Memory and Memory Interleaving

When upgrading memory, DIMMs 1A and 2A must match. DIMMs 3B and 4B, and DIMMs 5C and 6C must match and must be installed as a pair. When DIMMs 1A and 2A are populated the system is automatically configured for 2:1 interleaving. When four or six DIMMs are populated with identical DIMMs the system is automatically configured for bank interleaving.

##### Standard Memory Plus Optional Memory

Up to 9 GB memory is available with the standard memory of 1 GB and the optional installation of PC2-3200 DDR2 400 Registered SDRAM DIMM memory kits.

##### Standard Memory Replaced with Optional Memory

Up to 12 GB of memory is available with the removal of the standard 512 MB of memory and the optional installation of PC2-3200 DDR2 400 Registered SDRAM DIMM memory kits.

**NOTE:** Chart does not represent all possible configurations.

Memory		Slot					
		1	2	3	4	5	6
Standard	1 GB	512 MB	512 MB	Empty	Empty	Empty	Empty
Optional	9 GB	512 MB	512 MB	2 GB	2 GB	2 GB	2 GB
Maximum	12 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB

**NOTE:** In the online spare configuration, the ROM automatically configures the last populated bank as the spare memory. If only banks A and B are populated, bank B is the spare bank. If banks A, B, and C are populated, bank C is the spare bank, Online spare memory is configured through RBSU.

Following are memory options available from HP:

- 1 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB) 343055-B21
- 2 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 1 GB) 343056-B21
- 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Single Rank Memory Kit (2 x 2 GB) 343057-B21
- 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Dual Rank Memory Kit (2 x 2 GB) 375004-B21

### Memory

#### HP ProLiant DL360 G4p RPS Models

##### Standard Memory

2 GB PC3200 DDR 400 Registered SDRAM DIMM installed (2 x 1 GB SDRAM DIMM)

##### Upgrading Memory and Memory Interleaving

When upgrading memory, DIMMs 1A and 2A must match. DIMMs 3B and 4B, and DIMMs 5C and 6C must match and must be installed as a pair. When DIMMs 1A and 2A are populated the system is automatically configured for 2:1 interleaving. When four or six DIMMs are populated with identical DIMMs the system is automatically configured for bank interleaving.

##### Standard Memory Plus Optional Memory

Up to 10 GB memory is available with the standard memory of 2 GB and the optional installation of PC2-3200 DDR2 400 Registered SDRAM DIMM memory kits.

##### Standard Memory Replaced with Optional Memory

Up to 12 GB of memory is available with the removal of the standard 1 GB of memory and the optional installation of PC2-3200 DDR2 400 Registered SDRAM DIMM memory kits.

**NOTE:** Chart does not represent all possible configurations.

Memory		Slot					
		1	2	3	4	5	6
Standard	2 GB	1 GB	1 GB	Empty	Empty	Empty	Empty
Optional	10 GB	1 GB	1 GB	2 GB	2 GB	2 GB	2 GB
Maximum	12 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB

**NOTE:** In the online spare configuration, the ROM automatically configures the last populated bank as the spare memory. If only banks A and B are populated, bank B is the spare bank. If banks A, B, and C are populated, bank C is the spare bank, Online spare memory is configured through RBSU.

Following are memory options available from HP:

- 1 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB) 343055-B21
- 2 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Memory Kit (2 x 1 GB) 343056-B21
- 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Single Rank Memory Kit (2 x 2 GB) 343057-B21
- 4 GB Advanced ECC PC2-3200 DDR2 SDRAM DIMM Dual Rank Memory Kit (2 x 2 GB) 375004-B21

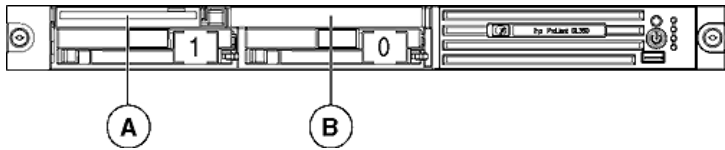
**NOTE:** Online Spare Memory is not supported when using 2-rank DIMMs. A total of 8 ranks are supported on the HP ProLiant DL360 G4p, A maximum of 4, 2-rank DIMMs can be populated. If you plan to mix DIMM types, 2-rank DIMMs must be installed in the first bank, 1 rank DIMMs can then be installed in subsequent banks.

The following is the memory population rules for the HP ProLiant ProLiant DL360 G4p.

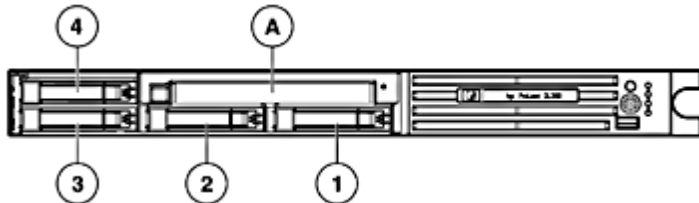
**Key:** S denotes single rank kit, D denotes Dual rank kit, and X denotes no install.

Bank A	Bank B	Bank C	NOTES:
S	X	X	
S	S	X	
S	S	S	
D	X	X	Online spare not supported
D	S	X	Online spare not supported
D	S	S	Online spare not supported
D	D	X	Online spare not supported

### Storage



- 1,0 2 x 1 inch Ultra320 Hot Pluggable Hard Drive Bays; SATA model also available
- A 1.44-MB Diskette Drive (removeable)
- B Low-Profile 24x IDE CD-ROM (ejectable)



- 1,2,3,4 4 x Small Form Factor Serial Attached SCSI Hot Pluggable Hard Drive Bays
- A Multibay: Slimline 24x CD-ROM (ejectable)

### Drive Support - SAS Models

	Quantity Supported	Position Supported	Controller
<b>Removable Media</b>			
Slimline 1.44-MB Diskette Drive	Up to 1	A	Integrated
Slimline 24x IDE CD-ROM Drive	Up to 1	A	Integrated IDE
Slimline DVD-Rom Drive (8x/24x) Option Kit (Servers)	Up to 1	A	Integrated IDE

### Drive Support - SCSI Models

	Quantity Supported	Position Supported	Controller
<b>Removable Media</b>			
1.44-MB Diskette Drive	Up to 1	A	Integrated
Slimline 24x IDE CD-ROM Drive	Up to 1	B	Integrated IDE
Slimline DVD-Rom Drive (8x/24x) Option Kit (Servers)	Up to 1	B	Integrated IDE

### Storage

#### Hard Drives

##### Ultra320 Hot Pluggable Drives

**NOTE:** The HP ProLiant DL360 G4p only supports U320 Universal drives.

	Quantity Supported	Position Supported	Controller
300GB U320 10K	Up to 2	0-1	Smart Array 6i Controller (integrated on system board)
146.8GB U320 10K			<b>NOTE:</b> The HP ProLiant DL360 G4p does not offer an external SCSI port.
72.8GB U320 10K			Smart Array 6402/128 Controller
146.8GB U320 15K			Smart Array 6404/256 Controller
72.8GB U320 15K			Smart Array 642 Controller
36.4GB U320 15K			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

#### SAS Hard Drive

	Quantity Supported	Position Supported	Controller
2.5-inch	4	1-4	Smart Array P600 Controller
36 GB 10,000 rpm			
72 GB 10,000 rpm			

#### Serial-ATA (SATA) Hard Drive

**NOTE:** The HP embedded 2 Port SATA controller does not support RAID, hot plug drive functionality or drive activity LEDs.

	Quantity Supported	Position Supported	Controller
80GB 1.5G SATA 7.2K	Up to 2	0-1	HP embedded 2 Port SATA Controller with RAID 0/1 support
160GB 1.5G SATA 7.2K			
250GB 1.5G SATA 7.2K			
500GB 1.5G SATA 7.2K			
60GB 1.5G SATA 5.4K	Up to 2	0-1	HP embedded 2 Port SATA Controller with RAID 0/1 support

#### External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 20 Family	Please see the Modular Smart Array 20 QuickSpecs to determine configuration requirements	External	Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Modular Smart Array 30 Family	Please see the Modular Smart Array 30 QuickSpecs to determine configuration requirements.	External	Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

### Storage

Modular Smart Array 50 Enclosure	2	External	HP Smart Array P600 Controller
Modular Smart Array 500 G2 System	1	External	Smart Array 642 Controller (used as Host Bus Adapter) Please see the Modular Smart Array 500 G2 QuickSpecs for the latest list of supported HBAs: <a href="http://www.hp.com/go/msa500">http://www.hp.com/go/msa500</a>
Modular Smart Array 1500 cs	Please see the Modular Smart Array 1500 cs QuickSpecs below to determine configuration requirements	External	Please see the Modular Smart Array 1500 cs QuickSpecs (URL below) for the latest list of supported HBAs
Modular Smart Array 1000	Please see the Modular Smart Array 1000 QuickSpecs below to determine configuration requirements	External	Please see the Modular Smart Array 1000 QuickSpecs (URL below) for the latest list of supported HBAs

Modular Smart Array 1000:

[http://h18000.www1.hp.com/products/quickspecs/11033\\_div/11033\\_div.HTML](http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML) (Worldwide)

[http://h18000.www1.hp.com/products/quickspecs/11033\\_na/11033\\_na.HTML](http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML) (North America)

Modular Smart Array 1500 cs: <http://www.hp.com/go/MSA1500cs>

### Tape Drives, Tape Autoloaders, & Tape Libraries

**NOTE:** For an up-to-date listing of the latest O/S Support details for each of the Tape Drives listed below, please see the following:

[http://h18000.www1.hp.com/products/quickspecs/North\\_America/10233.html](http://h18000.www1.hp.com/products/quickspecs/North_America/10233.html) (North America)

<http://h18000.www1.hp.com/products/quickspecs/Division/10233.html> (Worldwide)

**NOTE:** For an up-to-date listing of the latest O/S Support details for each of the Tape Autoloaders and Tape Libraries listed below, please see the following:

[http://h18000.www1.hp.com/products/quickspecs/North\\_America/10809.html](http://h18000.www1.hp.com/products/quickspecs/North_America/10809.html) (North America)

<http://h18000.www1.hp.com/products/quickspecs/Division/10809.html> (Worldwide)

**NOTE:** For complete listing of tape drive offerings see

<http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html>

	Quantity Supported	Position Supported	Controller
<b>HP StorageWorks Tape Drives, External</b>	Up to 2	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 232			
Ultrium 448			
Ultrium 460			
DAT 40			
DAT 72			
DLT VS80			
DLT VS160			
SDLT 320			

### Storage

<b>HP StorageWorks Tape Drives, External</b> DAT 24 USB DAT 40 USB DAT 72 USB	Up to 2	External	USB Port
<b>HP StorageWorks Tape Drives, External</b> Ultrium 960 SDLT 600	1	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
<b>HP StorageWorks Autoloaders, External</b> DAT 72x6 Tape Autoloader 1/8 Tape Autoloader	1 autoloader per SCSI channel	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
<b>HP StorageWorks Rack-mount Tape Drive Enclosures</b> 1U Rack-Mount Kit 3U Rack-Mount Kit 5U Rack-Mount Kit	1 per SCSI channel	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
<b>HP StorageWorks Tape Libraries, External</b> MSL2024 (Ultrium 960-based) MSL2024 (Ultrium 448-based) MSL6000 (Ultrium 960 - based) MSL6000 (SDLT 600-based) MSL6000 (Ultrium 460 - based) MSL5026S2 (SDLT 320-based) MSL5052S2 (SDLT 320-based)	Please reference the MSL Tape Library QuickSpecs to determine configuration requirements	External	Please consult the EBS connectivity matrix at <a href="http://www.hp.com/go/ebs">http://www.hp.com/go/ebs</a> for detailed connectivity information.

## Power Specifications

To review typical system power ratings use the Active Answers Power Calculator which is available via the online tool located at URL:  
<http://h30099.www3.hp.com/configurator/calc/Power%20Calculator%20Catalog.xls>

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: DL360 G4p
- Click on: "Power Calculator" link. (You may need to scroll down to see it)



### Technical Specifications

<b>System Unit</b>	<b>Dimensions (H x W x D)</b>	1.70 x 16.78 x 27.75 in (4.32 x 42.62 x 70.49 cm)
	<b>Weight</b>	Maximum (two hard drives installed, two power supply, two processor) 37 lb (16.78 kg) No hard drives installed, one power supply, one processor 27.5 lb (12.47 kg)
	<b>Input Requirements</b>	Rated Input Voltage 100 to 240 VAC Rated Input Current 5.85 Amps (100 V) to 2.85 Amps (200 V) Rated Input Frequency 50 to 60 Hz Rated Input Power 585 W (100VAC) to 565 W (200VAC) <b>NOTE: 585 W of Rated Input Power is for the Maximum Peak Output Power of 535 W.</b>
	<b>BTU Rating</b>	2000 BTU/HR <b>NOTE: The BTU rating listed is for the Rated Input Power of 585 W.</b>
	<b>Power Specifications</b>	To review typical system power ratings use the Power Calculator which is available via the online tool located at URL: <a href="http://h30099.www3.hp.com/configurator/calc/Power%20Calculator%20Catalog.xls">http://h30099.www3.hp.com/configurator/calc/Power%20Calculator%20Catalog.xls</a>  To drill down to calculators: - Click on: "ProLiant Servers" - Click on the Server of interest. Example: DL360 G4p - Click on: "Power Calculator" link. (You may need to scroll down to see it)
	<b>Power Supply Output Power (per power supply)</b>	Rated Steady-State Power 535 W
	<b>Temperature Range</b>	Operating 10° to 35°C at sea level with an altitude derating of 1.0°C per every 300m (1000ft) above sea level to a maximum of 3000m (10,000ft), no direct sustained sunlight. Maximum rate of change is 10°C/Hr. Storage -30° to 60°C - Maximum rate of change is 20°C/Hr.
	<b>Relative Humidity (non-condensing)</b>	Operating 10 to 90% relative humidity (Rh), 28°C maximum wet bulb temperature Storage 5 to 95% relative humidity (Rh), 38.7°C maximum wet bulb temperature
	<b>Maximum Wet Bulb Temperature</b>	38.7° C
	<b>SCSI Connectors</b>	No external VHDCI connector
	<b>Acoustic Noise</b>	Idle (Fixed Disk Drives Spinning) L <sub>WAd</sub> (BELS) 6.6

### Technical Specifications

L <sub>pAm</sub> (dBA)	50
Operating (Random Seeks to Fixed Disks)	
L <sub>wAd</sub> (BELS)	6.9 BELS
L <sub>pAm</sub> (dBA)	53 dBA

---

<b>Smart Array 6i Controller</b> (integrated on system board) (SCSI models)	<b>Data Compatible with all Smart Array Controllers</b>	Yes
	<b>Instant Upgrades to other Smart Array Controllers</b>	Yes
	<b>Consistent Software Manageability Tools</b>	Yes
	<b>PCI-X Bus</b>	64-bit up to 133 (integrated on system board)
	<b>PCI-X Peak Data Transfer Rate</b>	1066 MB/s
	<b>SCSI Protocols Supported</b>	Ultra320, Ultra3, Ultra2
	<b>SCSI Peak Data Transfer Rate</b>	320 MB/s
	<b>Channels</b>	1
	<b>SCSI Ports</b> (external/internal)	0/1
	<b>Drives Supported</b> (maximum)	2 drives
	<b>Cache</b>	64 MB Read Cache
	<b>Battery-Backed Write Cache</b>	Yes, with installation of Battery-Backed Write Cache Enabler, up to 128MB
	<b>RAID Support</b>	0, 1, 1+0, 5
	<b>Logical Drives</b> (maximum)	32 logical drives
	<b>Online Configuration</b>	Yes
	<b>Online Capacity Expansion</b>	Yes
	<b>Logical Drive Capacity Extension</b>	Yes
	<b>Online Stripe Size Migration</b>	Yes
	<b>Online RAID Level Migration</b>	Yes
	<b>Online Spare Support</b>	Yes
<b>Automatic Data Recovery</b>	Yes	
<b>Drive Roaming</b>	Yes	

---

### Technical Specifications

<b>Integrated Serial ATA Controller (SATA models)</b>	<b>Simultaneous drive transfer channels</b>	Support for up to 2 hard drives
	<b>Transfer rate synchronous (maximum theoretical)</b>	150 MB/s per channel; 300MB/s in RAID 0 pair
	<b>Protocol</b>	Serial ATA
	<b>Drive support</b>	HP Universal Serial ATA
	<b>Data transfer modes</b>	ATA data-transfer modes supported SATA 1.0, SATA II PIO modes 0-4 Multiword DMA modes 0-2 Ultra DMA modes 0-6
	<b>Feature</b>	Supports Pre-Failure Warranty of SATA Hard Drives Support for Systems Insight Manager Supports multiple logical volumes Setup through ROM based Array Configuration Utility Installation scripting support
	<b>OS Support</b>	Microsoft Windows 2000 Server Microsoft Windows Server 2003 Novell NetWare Linux (Red Hat, SuSE, UnitedLinux)

**NOTE:** This controller does not support LED functions. This controller does not support Hot Plug functions.

<b>Smart Array P600 Controller (SAS models only)</b>	<b>Disk Drive and Enclosure Protocol Support</b>	3 Gbps SAS (Serial Attached SCSI) 1.5 Gbps SATA (Serial Advanced Technology Attachment)
	<b>Architecture</b>	1.5 Gb SATA
	<b>SAS Connectors</b>	1 internal SFF8484 & 1 external SFF8470 / internal SFF8484 shared x4 Wide SAS Ports 12 Gbps per x4 Wide SAS Port (4 x 3 Gbps)
	<b>Data Transfer Method</b>	64-bit wide, PCIX 133 MHz (1 GB/s maximum bandwidth)
	<b>PCI Bus Speed</b>	PCIX-133 and 3.3 volt PCI compatibility only
	<b>Memory Bus Speed</b>	DDR-266 and 72 bit wide bus
	<b>PCI</b>	64-bit, 133-MHz PCI-X (1 GB/s maximum bandwidth)
	<b>Simultaneous Drive Transfer Ports</b>	PCI-X and 3.3 volt PCI compatibility only
	<b>Port Transfer Rate</b>	2 x4 Wide SAS Ports
	<b>Software upgradeable Firmware</b>	12 Gb/s per x4 Wide SAS Port (4 x 3 Gb/s)
	<b>Cache Memory</b>	Yes
	<b>Logical Drives Supported</b>	256 MB Read/Write (512-MB module upgrade available); ECC protection, battery-backed, and removable
	<b>Maximum Capacity</b>	Up to 32 logical drives Up to 2.2 TB per logical drive
	<b>Memory Addressing</b>	2.7 TB (38 x 72 GB) 64-bit, supporting servers memory greater than 4 GB

### Technical Specifications

<b>RAID Support</b>	RAID 6 (Advanced Data Guarding) RAID 5 (Distributed Data Guarding) RAID 1+0 (Striping & Mirroring) RAID 0 (Striping)
<b>Upgradeable Firmware Disk Drive and Enclosure Protocol Support</b>	4-MB flashable ROM 3 Gb SAS and 1.5 Gb SATA

---

<b>Embedded NC7782 Dual Port PCI-X 10/100/1000T Gigabit network adapter</b>	<b>Network Interface</b>	10/100/1000-T	
	<b>Compatibility</b>	EEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX	
	<b>Data Transfer Method</b>	64-bit/66MHz PCI-X	
	<b>Network Transfer Rate</b>	10Base-T (Half-Duplex)	10 Mb/s
		10Base-T (Full-Duplex)	20 Mb/s
		100Base-TX (Half-Duplex)	100 Mb/s
		100Base-TX (Full-Duplex)	200 Mb/s
	1000Base-TX (Half and Full-Duplex)	2000 Mb/s	
<b>Connector</b>	RJ-45		
<b>Cable Support</b>	10Base-T	Categories 3, 4 or 5 UTP up to 328 ft (100 m)	
	10/100/1000 Base-TX	Category 5 UTP up to 328 ft (100 m)	

---

© Copyright 2006 Hewlett-Packard Development Company, L.P.  
The information contained herein is subject to change without notice.

Microsoft and Windows NT are US registered trademarks of Microsoft Corporation. Intel is a US registered trademark of Intel Corporation.

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.

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