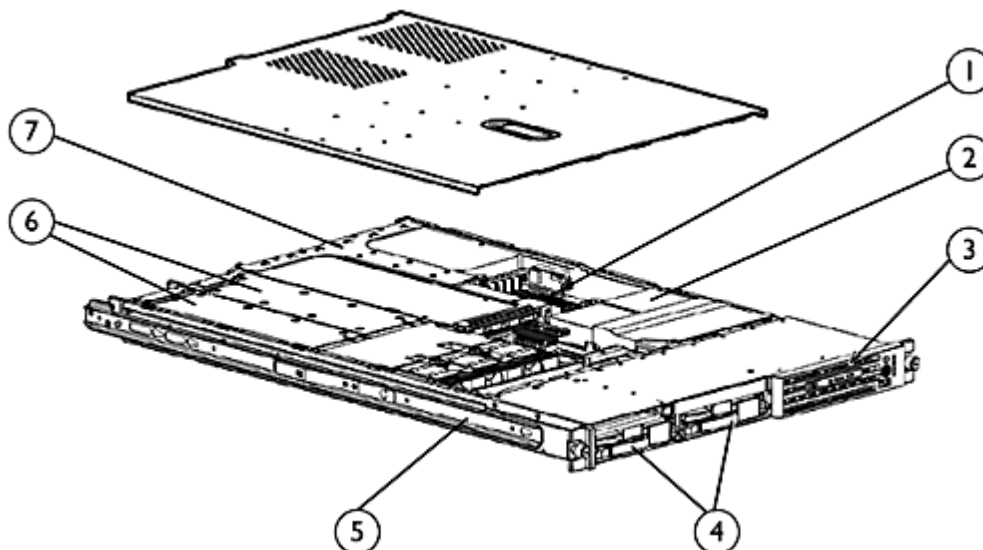


Overview



1. Up to 8 GB PC2700 SDRAM Memory
2. Up to two Xeon processors with 800MHz FSB
3. Redundant fans standard
4. Two U320 hot plug drive bays (SATA models also available)
5. Sliding rails standard for in rack servicing
6. Optional redundant power supplies
7. 1 full length and 1 half length PCI-X slots (optional PCI Express)

At A Glance

- Combining concentrated 1U compute power, integrated Lights-Out management, and essential fault tolerance, the HP ProLiant DL360 is optimized for space constrained data center installations
- Up to 2 Intel Xeon 3.0 GHz/1MB, 3.4 GHz/1MB and 3.6 GHz/1MB Processors with 800MHz front side bus
- Intel E7520 chipset
- 64-bit Intel® Xeon™ processors with 32-bit & 64-bit computing
- Up to 8 GB of PC2700 DDR 333 SDRAM; system can be configured for 2:1 interleaving
- Advanced ECC memory standard; optional Online Spare Memory
- Two 64 bit/133 MHz PCI-X slots (one full length slot and one half length); optional PCI-Express
- Fan redundancy, standard
- 460-Watt hot plug power supply with optional 1+1 redundancy
- 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
- Integrated Lights-Out featuring new firmware v 1.70 with support for Power Regulator for ProLiant and introducing support for the draft DMTF System Management Architecture for Server Hardware Command Line Protocol standard
- Integrated Lights-Out (iLO) remote management embedded on every HP ProLiant DL360
- Support for new iLO Shared Network Port enables access to the iLO management processor through one of the embedded system NICs
- Embedded Smart Array 6i RAID Controller with optional 128MB transportable BBWC
- Embedded NC7782 Dual Port NIC
- Supports up to two Ultra320 hot plug hard drives; Serial ATA models also available
- Three USB ports available: rear, front, internal
- 1U Rack form factor (1.75")
- New spring-loaded Universal 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)
- Protected by HP Services and a worldwide network of resellers and service providers. Three-year Next Business Day, on-site

Overview

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 3.0 GHz/800MHz -1MB L2
One of the following depending on Model	Intel Xeon Processor 3.4 GHz/800MHz -1MB L2
	Intel Xeon Processor 3.6 GHz/800MHz -1MB L2

Cache Memory	1MB Level 2 cache
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Upgradeability	Upgradeable to dual processing
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Chipset	Intel chipset is E7520
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Memory Protection	Online spare Advanced ECC
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Memory	Type	PC2700 DDR 333 SDRAM
	Standard	1 GB (1 x 1024 MB)
	Maximum	8 GB

Network Controller	Embedded NC7782 Dual Port NIC
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Expansion Slots	Slot Number	Bus Speed	Bus Number*	Device Number**	Hot Plug	PCI Voltage	Notes
	1	64bit/133MHz PCI-X	7	0	no	3.3 Volt	
	1	PCI Express x8(optional)	3	0	no	n/a	
	2	64bit/133MHz PCI-X	10	0	no	3.3 Volt	
	2	PCI Express x8(optional)	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)
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Standard Features

Storage Controllers	SCSI Models	Smart Array 6i Controller (integrated on system board of SCSI models) NOTE: The HP ProLiant DL360 G4 does not offer an external SCSI port.	
	SATA Models	HP embedded 2 Port SATA Controller (integrated on system board of SATA models) NOTE: The HP ProLiant DL360 G4 does not offer an external SCSI port.	
Storage	Diskette Drive	1.44 MB Diskette Drive; optional in some models	
	Optical Drive	24x IDE CD-ROM Drive (Low-Profile) (ejectable); optional in some models	
Maximum Internal Storage Type	Hot Plug SCSI	600GB	2 x 300GB Ultra320
	SATA	1TB	2 x 500GB Serial ATA
Interfaces	Serial	1	
	Pointing Device (Mouse)	1	
	Graphics	1	
	Hot Plug Keyboard	1	
	USB	3 (rear, front, internal)	
	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 Light-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 http://www.hp.com/go/hpsim .	
	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 http://www.hp.com/servers/smartstart . SmartStart version supported (minimum): SmartStart 7.10.	

Standard Features

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 http://www.hp.com/servers/manage .
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 http://www.hp.com/go/subscriberschoice 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: http://www.hp.com/go/support
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">• Rapid Deployment Pack - an automated solution for multi-server deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands.• 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.• Integrated Lights-Out Advanced Pack - upgrades the Integrated Lights-Out processor to full virtual presence and control with graphical console and virtual media.• 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.• 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• 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• 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.• Server Migration Pack - The Server Migration Pack automates the manual processes required for migrating servers between physical or virtual platforms (P2V, V2P, and V2V).

Standard Features

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>.

Industry Standard Compliance

ACPI 1.0b Compliant
PCI 2.2 Compliant
Microsoft® Logo certifications
USB 1.1 and 2.0 Compliant

Remote Manageability

Integrated Lights-Out (iLO) Standard Management:

- Virtual Text Remote Console
- Virtual Power Button Control
- Dedicated & shared LAN Connectivity
- Browser and command line access
- Automatic IP Configuration via DHCP/DNS/WINS
- Industry Standard 128-bit Secure Sockets Layer (SSL) and Secure Shell Security
- IML and iLO Event Logging
- Support for 12 user accounts with customizable access privilege

Integrated Lights Out Advanced Pack (optional)

Remote Lights out Edition II (optional)

Intelligent Manageability

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
(**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).)
Power Down Utility
Pre-Failure Warranty (covers processors, as well as SCSI hard drives and memory)

Standard Features

Security	Power-on password Keyboard password Diskette drive control Diskette boot control QuickLock, Network Server Mode Removable CD and Floppy 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
Server Power Cords	High line cord ships standard with all part numbers, an additional low line cord for US and Japan
UPS and PDU Power Cord Matrix	Please see the UPS and PDU cable matrix that lists cable descriptions, requirements, and specifications for UPS and PDU units: ftp://ftp.compaq.com/pub/products/servers/ProLiantstorage/power-protection/powercordmatrix.pdf .
Power Supply	SCSI & SATA Models: 460W Optional (1+ 1 redundant) power supply NOTE: 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.
System Fans	7 fans ship standard; Fan redundancy standard
Required Cabling	For required cabling information, refer to the Web site at http://h18000.www1.hp.com/products/servers/proliantdl360/ .
OS Support	Microsoft Windows 2000 Windows Server 2003 Novell NetWare Linux (Red Hat, SuSE, UnitedLinux) Solaris VMware Virtualization Software NOTE: SCSI and SATA models have different OS support. Please see OS Support Matrix. NOTE: For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix page at: http://www.hp.com/go/supportos . NOTE: For more complete and up-to-date information on how to buy server operating systems from HP please visit the OS product site at: http://h18004.www1.hp.com/products/servers/software/OEM.html NOTE: For a listing of the latest drivers available for the HP ProLiant DL360, please see: http://h18023.www1.hp.com/support/files/server/us/index.html . NOTE: For a more complete and up-to-date information on Linux support, please visit HP Linux Web site at http://h18000.www1.hp.com/products/servers/linux/hpLinuxcert.html . NOTE: For more information on HP's Certified and Supported ProLiant Servers, please visit the VMware Server Support Matrix at: http://h18004.www1.hp.com/products/servers/software/vmware/hpvmwarecert.html .

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>.

Custom 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

DL360R04 X3.4-1MB/800, 2GB SCSI, RPS 354572-xx1	Processor	(1) Intel Xeon Processor 3.4 GHz/800MHz standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	2 x 1 GB (Standard) to 8 GB (Maximum) of PC2700 DDR 333 SDRAM
	Network Controller	Embedded NC7782 Dual Port NIC
	Storage Controller	U320 Smart Array 6i Controller (embedded on system board) NOTE: The HP ProLiant DL360 Generation 4 (G4) does not offer an external SCSI port.
	Hard Drives	None ship standard; system supports up to two hot plug U320 drives NOTE: 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	Two 460W power supply (1 + 1 redundant)
	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)

DL360R04 X3.4-1MB/800, 1GB SCSI 354571-xx1	Processor	(1) Intel Xeon Processor 3.4 GHz/800MHz standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1 x 1 GB (Standard) to 8 GB (Maximum) of PC2700 DDR 333 SDRAM
	Network Controller	Embedded NC7782 Dual Port NIC
	Storage Controller	U320 Smart Array 6i Controller (embedded on system board) NOTE: The HP ProLiant DL360 Generation 4 (G4) does not offer an external SCSI port.
	Hard Drives	None ship standard; system supports up to two hot plug U320 drives NOTE: 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)

Models

DL360R04 X3.4- 1MB/800, 1GB 2P SATA 354570-xx1	Processor	(2) Intel Xeon Processor 3.4 GHz/800MHz standard
	Cache Memory	1MB level 2 cache
	Memory	1 x 1 GB (Standard) to 8 GB (Maximum) of PC2700 333 DDR SDRAM
	Network Controller	Embedded NC7782 Dual Port NIC
	Storage Controller	Embedded SATA controller; Non-RAID for controller
	Hard Drives	None ship standard; system supports up to two Serial ATA drives NOTE: When SATA drives are installed, hot-plug capability and LEDs are not currently supported.
	Remote Management	Integrated Lights-Out (iLO) Standard Management (embedded)
	Power Supply	One 460W power supply (redundant power supply optional)
	Optical Drive	Optional on SATA Models
	Diskette Drive	Optional 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)

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 DL360G4 SATA Rack CTO Chassis (North America)	367006-405
	Factory Integrated Model ships with:	
	NC7782 Dual Port PCI-X Gigabit Server Adapter (embedded)	
	Non-RAID SATA (SATA RAID functionality is available via OS software RAID)	
	1 full length and 1 half length 64bit/133 MHz PCI-X slot	
	Integrated Lights-Out (iLO) embedded	
	7 fans; Fan redundancy	
	Rack (1U), (1.75 in/4.45 cm)	
	HP ProLiant DL360G4 SCSI Rack CTO Chassis (North America)	367007-405
	Factory Integrated Model ships with:	
	NC7782 Dual Port PCI-X Gigabit Server Adapter (embedded)	
	U320 Smart Array 6i Controller (embedded on system board)	
	1 full length and 1 half length 64bit/133 MHz PCI-X slot	
	Integrated Lights-Out (iLO) embedded	
	1.44MB Diskette Drive	
	7 fans; Fan redundancy	
	Rack (1U), (1.75 in/4.45 cm)	

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

Processors	Intel X3.0GHz/800-1MB DL360G4 FIO BASE	368152-L21
	Intel X3.4GHz/800-1MB DL360G4 FIO BASE	354582-L21
	Intel X3.6GHz/800-1MB DL360G4 FIO BASE	354583-L21
Base Memory	512 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 512 MB)	358347-B21
	1024 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 1 GB)	358348-B21
	2048 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 2 GB)	358349-B21
Optical Drive	NOTE: An Optical Drive is REQUIRED if choosing the 367007-405 SCSI Rack CTO Chassis Model in Step 1.	
	NOTE: Optical Drives are OPTIONAL if choosing the 367006-405 SATA Rack CTO Chassis Model in Step 1.	
	Slimline CD-ROM Drive 24X	356963-B21
	NOTE: This CD-ROM Drive (PN 356963-B21) is for SATA models.	
	Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit	264007-B21
	NOTE: This DVD-ROM Drive (PN 264007-B21) is for SCSI models. It is not supported in SATA models.	

Configuration Information - Factory Integrated Models (North America only)

Step 3: Choose Additional Factory Integratable Options

Diskette Drive	1.44 MB Diskette drive NOTE: This Diskette Drive is for SATA (367006-405) models	354588-B21
Optical Drive	NOTE: The Optical Drive is OPTIONAL for the SATA Rack CTO Chassis Model (367006-405) but REQUIRED if choosing the SCSI Rack CTO Chassis Model (367007-405) in Step 1.	
	Slimline CD-ROM Drive 24X NOTE: This CD-ROM Drive (PN 356963-B21) is for SATA models.	356963-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit NOTE: This DVD-ROM Drive (PN 264007-B21) is for SCSI models. It is not supported in SATA models.	264007-B21
	460W HP redundant power supply with IEC cord only	354587-B21

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.

HP ProLiant DL360 G4 Unique Options	Intel Xeon 3.0 GHz/800MHz-1MB Processor Option Kit NOTE: This processor option kit (PN 368152-B21) supports the HP ProLiant DL360 G4 only.	368152-B21
	Intel Xeon 3.4 GHz/800MHz-1MB Processor Option Kit NOTE: This processor option kit (PN 354582-B21) supports the HP ProLiant DL360 G4 only.	354582-B21
	Intel Xeon 3.6 GHz/800MHz-1MB Processor Option Kit NOTE: This processor option kit (PN 354583-B21) supports the HP ProLiant DL360 G4 only.	354583-B21
	1.44 MB Diskette Drive NOTE: This Diskette drive is for SATA models only.	354588-B21
	PCI-e Riser option (to convert one or both PCI-X to PCI-e slots)	354589-B21
	Ambidextrous cable management arm NOTE: Package contains two cable management arms	365403-B21
	Fixed Cord Extension Bars for 1U servers (2 PDU sticks per kit)	351655-B21
	460W HP redundant power supply with IEC cord only	354587-B21
	460W HP redundant power supply with US or Japanese NEMA cord only NOTE: The HP ProLiant DL360 G4 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 country-specific NEMA cords.	354587-001

ProLiant Essentials Value Pack Software	ProLiant Essentials Integrated Lights-Out Advanced Pack ProLiant Essentials Integrated Lights-Out Advanced Pack, 1 server Featuring: sophisticated virtual administration features for ultimate control of servers in the data centers and remote sites. 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	263825-B21
	ProLiant Essentials Intelligent Networking Pack ProLiant Essentials Intelligent Networking Pack - Windows Edition, Single Server License 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 - Windows License Kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/12062_div/12062_div.HTML	372906-B21
	ProLiant Essentials Intelligent Networking Pack - Linux Edition, Single Server License 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	397004-B21
	ProLiant Essentials Performance Management Pack	

Options

ProLiant Essentials Performance Management Pack, Single-Server License 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	306696-B21
ProLiant Essentials Rapid Deployment Pack Windows Edition and Linux Edition Release	
Rapid Deployment Pack, Single-Server License NOTE: This license allows 1 server to be deployed and managed via RDP.	267196-B21
Rapid Deployment Pack, Single-Server License (Japan) 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/11713_div/11713_div.HTML	267196-291
ProLiant Essentials Workload Management Pack	
ProLiant Essentials Workload Management Pack, Single Server License 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	303284-B21
ProLiant Essentials Virtualization Management Software	
ProLiant Essentials Virtual Machine Management Pack, Single-Server License NOTE: For use with a single server. Contains one license with a unique license activation key and documentation.	372214-B21
ProLiant Essentials Server Migration Pack, Single-Migration License NOTE: Contains one license, enabling 1 server migration, with a unique license activation key and documentation. 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	375345-B21
ProLiant Essentials Vulnerability and Patch Management Pack	
ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License 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 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 .	371645-B21

Options

ProLiant Software Maintenance Subscription	ProLiant Software Maintenance Subscription	355060-B21
	ProLiant Software Maintenance Single Release	356573-B21
	ProLiant Foundation Pack Single Release	356604-B21
<p>NOTE: Please see the SmartStart QuickSpecs for additional information regarding the subscription purchase: http://h18000.www1.hp.com/products/quickspecs/Division/11073.html (Worldwide) http://h18000.www1.hp.com/products/quickspecs/North_America/11073.html (North America)</p>		
Processor	Intel Xeon 3.0 GHz/800MHz-1MB Processor Option Kit	368152-B21
	<p>NOTE: This processor option kit (PN 368152-B21) supports the HP ProLiant DL360 G4 only.</p> Intel Xeon 3.4 GHz/800MHz-1MB Processor Option Kit	354582-B21
	<p>NOTE: This processor option kit (PN 354582-B21) supports the HP ProLiant DL360 G4 only.</p> Intel Xeon 3.6 GHz/800MHz-1MB Processor Option Kit	354583-B21
Memory (DIMMs)	512 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 512 MB)	358347-B21
	1024 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 1 GB)	358348-B21
	2048 MB of Advanced ECC PC2700 DDR SDRAM DIMM Memory Kit (1 x 2 GB)	358349-B21
Optical Drives	Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit (Servers)	264007-B21
	<p>NOTE: This DVD-ROM Drive (PN 264007-B21) is for SCSI models. It is not supported in SATA models.</p> Slimline CD-ROM Drive 24X	356963-B21
	<p>NOTE: This CD-ROM Drive (PN 356963-B21) is for SATA models.</p> HP DVD+R/RW 8X Slim	383975-B21
Diskette Drive	1.44 MB Diskette Drive	354588-B21
<p>NOTE: This 1.44MB Diskette Drive (PN 354588-B21) is for SATA models.</p>		

Options

Hard Drives

Ultra320 – Universal Hot Plug

NOTE: The HP ProLiant DL360 G4 only supports 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:

U320 Hard Drive QS:

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
(North America)

Serial-ATA (SATA) Hard Drive (SATA Models only)

NOTE: When SATA drives are installed, hot-plug capability and LEDs are currently not supported.

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

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:

Serial ATA Hard Drive QS:

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
(North America)

Options

Storage Controllers

SCSI Controllers

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

NOTE: Upgrade for Smart Array 6i Controller.

Smart Array 6402/128 Controller 273915-B21

NOTE: For support of external drives only.

Smart Array 6404/256 Controller 273914-B21

NOTE: For support of external drives only.

Smart Array 642 Controller 291967-B21

NOTE: For support of external drives only.

128MB Battery-Backed Cache Enabler 351580-B21

NOTE: 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

NOTE: For support of external drives only.

Ultra320 Expansion Module for SA-6402 273911-B21

NOTE: For support of external drives only.

64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2 374654-B21

NOTE: 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:

http://h18000.www1.hp.com/products/quickspecs/12030_div/12030_div.HTML
(Smart Array 6i)

http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML
(Smart Array 6400 Series)

http://h18000.www1.hp.com/products/quickspecs/11563_div/11563_div.HTML
(Smart Array 642)

http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML
(SCSI Adapter)

http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML
(U320 Adapter)

http://h18000.www1.hp.com/products/quickspecs/11943_div/11943_div.HTML
(U320 SCSI HBA)

SAS Controller

HP Smart Array P600 Controller 337972-B21

512MB DDR BBWC Upgrade 372538-B21

NOTE: 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:

http://h18000.www1.hp.com/products/quickspecs/12247_div/12247_div.HTML
(Smart P600 Controller)

SAS HBA

HP 8 Internal Port SAS HBA with RAID 347786-B21

NOTE: Please see the following QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/12332_div/12332_div.HTML
(SAS HBA)

Options

Communications	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
	NOTE: A minimum of 1 GB of memory is required for NC370x adapters, with a maximum of two NC370x adapters permitted in a server.	
	NOTE: 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	

Management Options	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

High Performance Solutions	HPCC Myrinet Fiber NIC	257894-006
	Myrinet 2XP PCI-X, Fiber, F-series, 2MB	390456-B21

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
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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
(Worldwide)

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
(Worldwide)

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
(Worldwide)

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 compatible with multiple Single-Ended and LVD SCSI tape drives including the 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
(Worldwide)

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
(Worldwide)

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>NOTE: Please see the HP StorageWorks Magneto-Optical Products data sheet for a complete listing of available jukeboxes at: http://www.hp.com/products1/storage/products/archivalprod/brochures/MO_family_pb.pdf</p> <p>NOTE: Please reference the Magneto-Optical Jukebox data sheets at http://www.hp.com/go/optical 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>NOTE: Please see the HP StorageWorks Ultra Density Optical Jukeboxes QuickSpecs for a complete listing of available jukeboxes at: http://h18006.www1.hp.com/products/quickspecs/11944_div/11944_div.html</p> <p>NOTE: Please reference the Ultra Density Optical Jukebox QuickSpecs at http://www.hp.com/go/optical for additional information needed to create a complete solution</p>	
Power Cords	<p>NOTE: The HP ProLiant DL360 G4 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 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>NOTE: 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>NOTE: Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies. Includes Smart Array 6402/128 Controller.</p> <p>NOTE: 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 NOTE: Rack-mountable 14 drive enclosure with single bus, redundant power supplies HP StorageWorks Modular Smart Array 30 DB NOTE: Rack-mountable 14 drive enclosure with dual bus, redundant power supplies NOTE: 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 NOTE: Please see the Modular Smart Array 50 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: http://h18000.www1.hp.com/products/quickspecs/12245_na/12245_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/12245_div/12245_div.HTML (Worldwide)	364430-B21
HP StorageWorks Modular Smart Array 500	HP StorageWorks Modular Smart Array 500 Generation 2 NOTE: 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: http://h18000.www1.hp.com/products/quickspecs/11956_na/11956_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11956_div/11956_div.HTML (Worldwide)	335880-B21
HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000 NOTE: Please see the Modular Smart Array 1000 QuickSpecs for additional options and configuration information at http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML (Worldwide)	201723-B22
HP StorageWorks Modular Smart Array 1500 cs	Modular Smart Array 1500 Controller Shelf NOTE: Please see the StorageWorks Modular SAN Array 1500 cs QuickSpecs for additional options and configuration information at: http://www.hp.com/go/MSA1500cs	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 NOTE: 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 NOTE: 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 NOTE: 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 NOTE: 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 NOTE: For additional information regarding the ProLiant Cluster Starter Kit please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11935_na/11935_na.html (North America) http://h18000.www1.hp.com/products/quickspecs/11935_div/11935_div.html (Worldwide)	364023-B21
	HP HA/F200 for Entry SAN Cluster	364026-B22
	HP HA/F200 for Entry SAN Cluster (Japan) NOTE: For additional information regarding the ProLiant Cluster for Entry Level SAN please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11932_na/11932_na.html (North America) http://h18000.www1.hp.com/products/quickspecs/11932_div/11932_div.html (Worldwide)	364026-292
	ProLiant Cluster HA/F500 for the Enterprise SAN NOTE: For additional information regarding the ProLiant Cluster HA/F500 for Enterprise SAN please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11933_na/11933_na.html (North America) http://h18000.www1.hp.com/products/quickspecs/11933_div/11933_div.html (Worldwide)	364024-B21
	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
(North America)

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

Uninterruptible Power Systems – Rack Mountable	HP UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)	204404-001
	HP UPS R1500 XR (1500VA, 1340 Watt), High Voltage (INTL)	204404-B31
	HP UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (JPN)	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 (JPN)	192186-291
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (JPN)	192186-292
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (INTL - 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 (INTL)	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.

HP Monitored Power Distribution Unit (PDU)	HP Monitored Power Distribution Unit: Full Rack Version	
	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

Modular PDUs 1U/0U (Up to 32 outlets) NOTE: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	Fixed Cord Extension Bars	351655-B21
	NOTE: Two extension bar sticks; each with (7) C13 plugs.	
	Fixed Cord PDU (NA/JPN)	351655-D72
	NOTE: Four Fixed Cord Extension Bars, and one 24A, HV mPDU L6-30P core.	
	Fixed Cord PDU (INTL)	351655-B31
	NOTE: Four Fixed Cord Extension Bars, and one 32A, HV mPDU IEC-309 core.	
	HP Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan)	252663-D71
	NOTE: This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.	
	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)	252663-B21	
NOTE: This mPDU (252663-B21), 40A model has a hardwired input.		
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)	252663-B32	
NOTE: 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.		
NOTE: 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: http://h18000.www1.hp.com/products/quickspecs/11041_na/11041_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11041_div/11041_div.HTML (Worldwide)		

USB Options	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

HP ProLiant DL360 G4 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 NOTE: The HP ProLiant DL360 G4 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 country-specific NEMA cords.	354587-001

Options

Third Party Rack Kit	Rack Adapter Kit NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.	332815-B21
Telco Rack Kit	Telco Rack Kit, ProLiant DL360 G4, Japan	385938-291
HP Rack 5000 Series (Graphite Metallic)	HP 5642 Rack Unassembled	358254-B21
Rack Options for Rack 5000 Series	Stabilizer Kit for 5642 rack (Graphite Carbon) NOTE: The stabilizing kit is used to prevent rack from tipping over.	374493-B21
	Baying Kit for 5642 rack (Graphite Carbon) NOTE: The baying kit is used to join two or more HP 5642 racks.	374499-B21
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	
	NOTE: It is mandatory to use a shock pallet when shipping racks with equipment installed.	
	NOTE: Please see the Rack 10000 G2 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color: http://h18000.www1.hp.com/products/quickspecs/12402_div/12402_div.HTML (Worldwide)	
	NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://www.hp.com/go/rackandpower .	

Options

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
	NOTE: Supports 10000 G2 Series only.	
	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

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
 (Worldwide)

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>.

Options

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	
	NOTE: For a complete list of Monitors please view the following URL: http://www.hp.com/go/kvm .		
	TFT5600 Rack Keyboard Monitor	221546-xx1	
	NOTE: For a complete list of Monitors please view the following URL: http://h18004.www1.hp.com/products/monitors/ .		
	1U Rack Keyboard & Drawer (Carbon)	257054-xx1	
Country Code Key (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 .			

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
	NOTE: Cat5e cables are required to connect Interface Adapters to Console Switches. Cat5e cables can be found at the following URL: http://www.hp.com/go/kvm .	
	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	

Options

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>.

Service and Support Offerings (HP Care Pack Services)	Hardware Services 4-Hour On-site Service	
	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
	Hardware Services 6-Hour Call to Repair On-site Service	
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4498E
	Hardware Services Next Business Day On-Site Service	
	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
	Support Plus	
	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
	Support Plus 24	
	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 ES2.1 Linux SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic	U8332E	
NOTE: For more information, customer/resellers can contact http://www.hp.com/services/carepack .		

Memory

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

HP ProLiant DL360 G4 3.06 GHz and 3.4 GHz-1MB Models

Standard Memory

1 GB PC2700 DDR 333 Registered SDRAM DIMM installed (1 x 1 GB SDRAM DIMM)

Upgrading Memory and Memory Interleaving

When upgrading memory, DIMMs 1A and 2A must match. DIMMs 3B and 4B 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 all four DIMMs are populated with identical DIMMs the system is automatically configured for bank interleaving. Bank B can be configured for Online Spare Memory.

Standard Memory Plus Optional Memory

Up to 6 GB memory is available with the standard memory of 1 GB and the optional installation of PC2700 DDR 333 Registered SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 8 GB of memory is available with the removal of the standard 1 GB of memory and the optional installation of PC2700 DDR 333 Registered SDRAM DIMM memory kits.

NOTE: Chart does not represent all possible configurations.

Memory		Slot			
		1	2	3	4
Standard	1 GB	1 GB	Empty	Empty	Empty
Optional	6 GB	1 GB	1 GB	2 GB	2 GB
Maximum	8 GB	2 GB	2 GB	2 GB	2 GB

Following are memory options available from HP:

- 512 MB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 512 MB) 358347-B21
- 1 GB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 1 GB) 358348-B21
- 2 GB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 2 GB) 358349-B21

HP ProLiant DL360 G4 3.4 GHz-1MB RPS Models

Standard Memory

2 GB PC2700 DDR 333 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 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 all four DIMMs are populated with identical DIMMs the system is automatically configured for bank interleaving. Bank B can be configured for Online Spare Memory.

Standard Memory Plus Optional Memory

Up to 6 GB memory is available with the standard memory of 1 GB and the optional installation of PC2700 DDR 333 Registered SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 8 GB of memory is available with the removal of the standard 1 GB of memory and the optional installation of PC2700 DDR 333 Registered SDRAM DIMM memory kits.

NOTE: Chart does not represent all possible configurations.

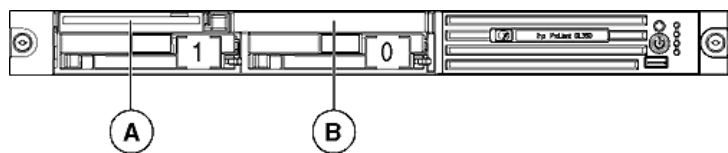
Memory

Memory		Slot			
		1	2	3	4
Standard	2 GB	1 GB	1 GB	Empty	Empty
Optional	6 GB	1 GB	1 GB	2 GB	2 GB
Maximum	8 GB	2 GB	2 GB	2 GB	2 GB

Following are memory options available from HP:

- 512 MB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 512 MB) 358347-B21
- 1 GB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 1 GB) 358348-B21
- 2 GB of Advanced ECC PC2700 DDR 333 SDRAM DIMM Memory Kit (1 x 2 GB) 358349-B21

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)

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	A	Integrated
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

Hard Drives

Ultra320 Hot Pluggable Drives

NOTE: The HP ProLiant DL360 G4 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			NOTE: The HP ProLiant DL360 Generation 4 (G4) 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

Serial-ATA (SATA) Hard Drive

NOTE: When SATA drives are installed, Hot-plug capability and LEDs are only supported when a Serial ATA Smart Array option card has been installed.

	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			

Storage

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array20 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
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: http://www.hp.com/go/msa500
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 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: 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 (North America)			
Modular Smart Array 1500 cs: http://www.hp.com/go/MSA1500cs			

Tape Drives, Tape Autoloaders, & Tape Libraries

Storage

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 (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 (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
HP StorageWorks Tape Drives, External Ultrium 232 Ultrium 448 Ultrium 460 DAT 40 DAT 72 DLT VS80 DLT VS160 SDLT 320	Up to 2	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Tape Drives, External DAT 72 USB DAT 40 USB	Up to 2	External	USB Port
HP StorageWorks Tape Drives, External Ultrium 960 SDLT 600	1	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Autoloaders, External DAT 72x6 Tape Autoloader 1/8 Tape Autoloader	1 per SCSI channel	External	64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Rack-mount Tape Drive Enclosures 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/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Storage

HP StorageWorks Tape Libraries, External
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 <http://www.hp.com/go/ebs> 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 G4
- Click on: "Power Calculator" link. (You may need to scroll down to see it)

Technical Specifications

System Unit	Dimensions (H x W x D)	1.70 x 16.78 x 27.75 in (4.32 x 42.62 x 70.49 cm)
	Weight	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)
	Input Requirements	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) NOTE: 585 W of Rated Input Power is for the Maximum Peak Output Power of 460 W.
	BTU Rating	2000 BTU/HR NOTE: The BTU rating listed is for the Rated Input Power of 585 W.
	Power Specifications	To review typical system power ratings use the 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 G4 - Click on: "Power Calculator" link. (You may need to scroll down to see it)
	Power Supply Output Power (per power supply)	Rated Steady-State Power 460 W
	Temperature Range	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.
	Relative Humidity (non-condensing)	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
	Maximum Wet Bulb Temperature	38.7° C
	SCSI Connectors	No external VHDCI connector
	Acoustic Noise	Idle (Fixed Disk Drives Spinning)

Technical Specifications

L _{wAd} (BELS)	6.6
L _{pAm} (dBA)	50
Operating (Random Seeks to Fixed Disks)	
L _{wAd} (BELS)	6.9 BELS
L _{pAm} (dBA)	53 dBA

Smart Array 6i Controller (integrated on system board)	Data Compatible with all Smart Array Controllers	Yes
	Instant Upgrades to other Smart Array Controllers	Yes
	Consistent Software Manageability Tools	Yes
	PCI-X Bus	64-bit/133-MHz
	PCI-X Peak Data Transfer Rate	1066 MB/s
	SCSI Protocols Supported	Ultra320, Ultra3, Ultra2
	SCSI Peak Data Transfer Rate	320 MB/s per channel NOTE: For ProLiant servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 320 MB/s; 160 MB/s per channel and Channels is 2
	Channels	1
	SCSI Ports (external/internal)	0/1
	Drives Supported (maximum)	2 drives
	Cache	64 MB Read Cache
	Battery-Backed Write Cache	Yes, with installation of Battery-Backed Write Cache Enabler, up to 128MB
	RAID Support	0, 1, 1+0, 5
	Logical Drives (maximum)	32 Logical Drives
	Online Configuration	Yes
	Online Capacity Expansion	Yes
	Logical Drive Capacity Extension	Yes
	Online Stripe Size Migration	Yes
	Online RAID Level Migration	Yes
	Online Spare Support	Yes

Technical Specifications

Automatic Data Recovery	Yes
Drive Roaming	Yes

Embedded NC7782 Dual Port NIC	Network Interface	10/100/1000-T	
	Compatibility	EEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX	
	Data Transfer Method	64-bit/66MHz PCI-X	
	Network Transfer Rate	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 (Full and Half-Duplex)	2000 Mb/s
	Connector	RJ-45	
	Cable Support	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)	

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