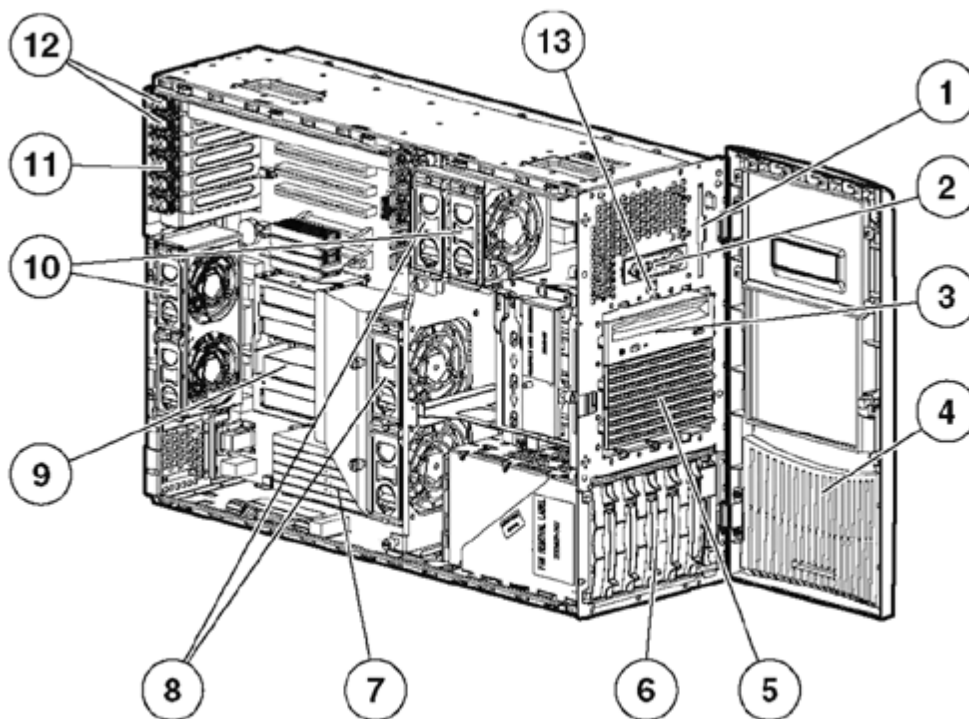


Overview

HP ProLiant ML370 Generation 4 (G4)



- | | |
|--|---|
| 1. 1.44 MB Diskette Drive | 8. Hot Plug Fans (standard) |
| 2. Front Panel LEDs (show server status) | 9. Intel Xeon Processors |
| 3. 48X MAX CD-ROM | 10. Hot Plug Redundant Fans (Optional) |
| 4. Front Bezel | 11. 4 PCI-X 64-Bit/100-MHz Non Hot Plug slots |
| 5. Removable Media Bays | 12. 2 PCI-Express Non Hot Plug slots |
| 6. Six 1" Hot Plug Drives Bays | 13. USB 2.0 (on the front) |
| 7. 8 PC2-3200 Memory Slots | |

What's New

- New Intel Xeon Processors with 2MB Level 2 cache offer blazing performance increases - 3.6 GHz, 3.4 GHz, 3.2 GHz and 3.0 GHz models available
- Systems support up to two Intel Xeon Processors with Hyperthreading Technology (2 processors standard on High Performance models)
- Integrated Dual Channel Ultra320 SCSI Adapter (Smart Array 6402 controller is standard on High Performance models)
- Maximum 16GB of 2-way interleaved PC2-3200 400MHz DDR2 memory with Advanced ECC capabilities; 1GB (2x512MB) standard, 2GB (2x1024MB) standard on High Performance models
- 6 expansion slots - 2 PCI-Express x4 and 4 PCI-X 64-Bit/100-MHz (3 PCI-X slots and 2 PCI-Express slots available on High Performance models)
- Support for new iLO Shared Network Port enables access to the iLO management processor through one of the embedded system NICs
- New optional duplex drive backplane splits the standard drive cage (2+4)

Overview

At A Glance

- Preconfigured High Performance models save valuable deployment time at a discounted bundle price
- Powerful Integrated Lights-Out remote management technology embedded
- NC7781 PCI-X Gigabit NIC (embedded)
- 5U Tower and Rack Models
- Optional Hot plug redundant power supplies and cooling fans (On High Performance models, hot plug redundant fans and power supplies standard)
- Up to 8 Hot Plug hard drive bays (An additional two-bay drive cage standard on High Performance Models)
- New 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
- Tool-free serviceability
- Tool-free, spring loaded snap-on slide rails
- Diagnostic and Unit ID LEDs
- HP Systems Insight Manager
- SmartStart 7.1 +
- Protected by HP Services, including a three-year, Next Business Day on-site, limited, Global warranty and extended Pre-Failure Warranty that covers processors, memory and disk drives - Certain restrictions and exclusions apply.

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 -2MB L2 cache (up to 2 supported)
One of the following depending on Model	Intel Xeon Processor 3.2 GHz/800MHz -2MB L2 cache (up to 2 supported)
	Intel Xeon Processor 3.4 GHz/800MHz -2MB L2 cache (up to 2 supported)
	Intel Xeon Processor 3.6 GHz/800MHz -2MB L2 cache (up to 2 supported)
	Intel Xeon Processor 3.2 GHz/800MHz -1MB L2 cache (up to 2 supported)
	Intel Xeon Processor 3.4 GHz/800MHz -1MB L2 cache (up to 2 supported)
	Intel Xeon Processor 3.6 GHz/800MHz -1MB L2 cache (up to 2 supported)

NOTE: High Performance configurations include two 3.4GHz processors. Models available with either 2MB or 1MB of Level 2 cache.

Cache Memory	2MB and 1MB Level 2 cache available
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Chipset	Intel E7520 Chipset
	NOTE: For more information regarding Intel chipsets, please see the following URL: http://www.intel.com/products/server/chipsets/ .

Memory	Type	Single-ranked 2-way interleaved PC2-3200 running at 400MHz
	Standard	NOTE: HP ProLiant ML370 G4 does not support dual ranked DIMMs. 1 GB (2x512MB), 2GB (2x1024MB) standard on High Performance models
	Maximum	16 GB

Memory Protection	Advanced ECC and Online Spare capabilities
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Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
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Standard Features

Expansion Slots	Slot Number	Bus Speed	Bus Number*	Device Number**	Hot Plug	PCI Voltage	Notes
	1	64-bit/100MHz PCI-X	3	1	no	3.3 Volt	Supported RILOE slot
	2	64-bit/100MHz PCI-X	3	2	no	3.3 Volt	
	3	64-bit/100MHz PCI-X	7	1	no	3.3 Volt	
	4	64-bit/100MHz PCI-X	7	2	no	3.3 Volt	
	5	PCI Express x4	11	0	no	N/A	
	6	PCI Express x4	14	0	no	N/A	

NOTES:

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

**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: All PCI-X slots can only accept universal keyed PCI cards running at 3.3 volts. For more information regarding PCI-X, please see the following URL: <http://www.hp.com/servers/pci-x>.

Remote Management

Integrated Lights-Out (iLO) Standard Management

- Virtual Text Remote Console
- Virtual Power Button Control
- Virtual Unit Identification Light Control
- Virtual Serial Port Redirection
- Dedicated LAN Connectivity
- Automatic IP Configuration via DHCP/DNS/WINS
- Industry Standard 128-bit Secure Sockets Layer (SSL) Security
- IML and iLO Event Logging
- Support for 12 user accounts with customizable access privilege

Intelligent Manageability

HP Systems Insight Manager
 SmartStart
 Management Agent
 Redundant ROM
 Remote Flash ROM
 Remote Lights-Out Edition II (Optional)
 ROM-Based Setup Utility (RBSU)
 Integrated Management Log
 Automatic Server Recovery (ASR)
 Dynamic Sector Repairing (with Smart Array controller)
 Drive Parameter Tracking (with Smart Array controller)
 Hot Spare Boot

NOTE: Upon the event of a failed processor in a multi-processing environment, the system will automatically reboot and attempt to use the remaining good processor.

Pre-Failure Warranty (covers processors, hard drives and memory)

Storage Controller

Integrated Dual Channel Ultra320 SCSI Adapter
 Smart Array 6402 standard on High Performance Models

Standard Features

Storage	Diskette Drive	1.44MB Diskette Drive	
	Optical Drive	48x IDE CD-ROM Drive	
	Hard Drives	None	
Maximum Internal Storage	Hot Plug SCSI	2.4 TB	(6 x 300 GB 1") with standard internal hot plug drive cage + (2 x 300 GB 1") with optional ML3xx Two Bay Hot Plug SCSI Drive Cage
Interfaces	Parallel	1	
	Serial	2	
	Pointing Device (Mouse)	1	
	Graphics	1	
	Keyboard	1	
	Network RJ-45	1	
	iLO remote management port	1	
	USB 2.0	3 (2 on the rear and 1 on the front)	
<p>NOTE: Please see the following URL for additional information regarding USB support: http://h18004.www1.hp.com/products/servers/platforms/usb-support.html</p>			
Graphics	Integrated ATI Rage XL Video Controller with 8MB SDRAM Video Memory		
Form Factor	Tower or Rack (5U)		
ProLiant Essentials Foundation Pack Software	HP Systems Insight Manager	<p>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 Light-Outs 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 HP SIM visit http://www.hp.com/go/hpsim.</p>	
	SmartStart	<p>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</p>	

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 Systems 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 - identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources.• 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.

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>.

Standard Features

Industry Standard Compliance	ACPI 1.0b Compliant PCI 2.2 Compliant WOL Support Microsoft® Logo certifications PXE Support
Security	Power-on password Keyboard password Diskette drive control Diskette boot control QuickLock, Network Server Mode Parallel and serial interface control Administrator's password Disk configuration lock
Server Power Cords	110V NEMA 12ft. (3.66m) cords included in the United States; localized cables included with geographic specific models in other world regions. Also included with rack models, IEC 10 ft. (3.05m) cords. IEC cable included with Worldwide version of Redundant Power Supply kit.
Power Supply	775 Watt-CE Mark Compliant Hot Plug Power Supply Optional Power Supply provides redundant capability.
System Fans	Three fans standard. Redundant fan kit includes three fans plus rear cage for CPU fans.
Required Cabling	For external storage cabling information, refer to the Web site at http://h18000.www1.hp.com/products/servers/ProLiantML370/ .
OS Support	Microsoft Windows 2000 Server Windows Server 2003 Server Novell NetWare SCO OpenServer and OpenUNIX LINUX (Red Hat, SuSE, United Linux) 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 more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix at: http://www.hp.com/go/supportos NOTE: For an up-to-date listing of the latest drivers available for the HP ProLiant ML370 G4, 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

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/ProLiantDL380/index.html>.

Installation of HP ProLiant ML370 G4 servers with Round Hole, Third Party or Telco Racks

ProLiant rack mount servers and tower-to-rack kits include snap-on quick deploy side rails designed to accommodate both round and square hole rack rails. Telco rack solutions for ProLiant servers, are available through the following URL: <http://www.racksolutions.com/hp>.

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, EVA3000 & EVA5000, XP, rackable tape libraries and configurable network switches.

For more information on how to order please contact your sales representative or go to <http://www.hp.com/go/factory-express>.

Standard Features

Service and Support

Three-year limited warranty, including hardware diagnostic support, pre-failure warranty (coverage of hard drives, memory and processors). The warranty is fully supported by HP Services and a worldwide network of resellers and service providers. In addition 90-day's getting started software telephone support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services.

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

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 (Processors with 2MB Level 2 cache)

High Performance ML370T04 X3.4- 2MB/800, 2GB 379916-xx1	Processor	Two Intel Xeon 3.4GHz Processors standard
	Cache Memory	2MB level 2 cache
	Memory	2GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Smart Array 6402/128 Ultra320 RAID controller standard (installed in a slot) and the Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	2.4 TB maximum hot plug with optional hard drives, two-bay drive cage standard (6 x 300 GB 1" with standard internal hot plug drive cage + 2 x 300 GB 1" with ML3xx Two Bay Hot Plug SCSI Drive Cage)
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

High Performance ML370R04 X3.4- 2MB/800, 2GB 379917-xx1	Processor	Two Intel Xeon 3.4GHz Processors standard
	Cache Memory	2MB level 2 cache
	Memory	2GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Smart Array 6402/128 Ultra320 RAID controller standard (installed in a slot) and the Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Availability	Hot Plug Redundant Fans and Power Supply included
	Internal Storage	2.4 TB maximum hot plug with optional hard drives, two-bay drive cage standard (6 x 300 GB 1" with standard internal hot plug drive cage + 2 x 300 GB 1" with ML3xx Two Bay Hot Plug SCSI Drive Cage)
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (5U)	

Models (Processors with 2MB Level 2 cache)

ML370T04 X3.6-2MB/800, 1GB 379912-xx1	Processor	One Intel Xeon 3.6GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

ML370R04 X3.6-2MB/800, 1GB 379913-xx1	Processor	One Intel Xeon 3.6GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

ML370T04 X3.4-2MB/800, 1GB 379910-xx1	Processor	One Intel Xeon 3.4GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

Models (Processors with 2MB Level 2 cache)

ML370R04 X3.4-2MB/800, 1GB 379911-xx1	Processor	One Intel Xeon 3.4GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

ML370T04 X3.2-2MB/800, 1GB 379908-xx1	Processor	One Intel Xeon 3.2GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

ML370R04 X3.2-2MB/800, 1GB 379909-xx1	Processor	One Intel Xeon 3.2GHz Processor standard (up to 2 supported)
	Cache Memory	2MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

Models (Processors with 2MB Level 2 cache)

ML370T04 X3.0-
2MB/800, 1GB
379906-xx1

Processor	One Intel Xeon 3.0GHz Processor standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
Hard Drive	None ship standard
Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Tower (5U)

ML370R04 X3.0-
2MB/800, 1GB
379907-xx1

Processor	One Intel Xeon 3.0GHz Processor standard (up to 2 supported)
Cache Memory	2MB level 2 cache
Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
Hard Drive	None ship standard
Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (5U)

Models (Processors with 1MB Level 2 cache)

High Performance ML370T04 X3.4- 1MB/800, 2GB 311137-xx1	Processor	Two Intel Xeon 3.4GHz Processors standard
	Cache Memory	1MB level 2 cache
	Memory	2GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Smart Array 6402/128 Ultra320 RAID controller standard (installed in a slot) and the Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Availability	Hot Plug Redundant Fans and Power Supply included
	Internal Storage	2.4 TB maximum hot plug with optional hard drives, two-bay drive cage standard (6 x 300 GB 1" with standard internal hot plug drive cage + 2 x 300 GB 1" with ML3xx Two Bay Hot Plug SCSI Drive Cage)
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

High Performance ML370R04 X3.4- 1MB/800, 2GB 311138-xx1	Processor	Two Intel Xeon 3.4GHz Processors standard
	Cache Memory	1MB level 2 cache
	Memory	2GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Smart Array 6402/128 Ultra320 RAID controller standard (installed in a slot) and the Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Availability	Hot Plug Redundant Fans and Power Supply included
	Internal Storage	2.4 TB maximum hot plug with optional hard drives, two-bay drive cage standard (6 x 300 GB 1" with standard internal hot plug drive cage + 2 x 300 GB 1" with ML3xx Two Bay Hot Plug SCSI Drive Cage)
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

Models (Processors with 1MB Level 2 cache)

ML370T04 X3.6-1MB/800, 1GB 311135-xx1	Processor(s)	One Intel Xeon 3.6GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

ML370R04 X3.6-1MB/800, 1GB 311136-xx1	Processor(s)	One Intel Xeon 3.6GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

ML370T04 X3.4-1MB/800, 1GB 311133-xx1	Processor(s)	One Intel Xeon 3.4GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

Models (Processors with 1MB Level 2 cache)

ML370R04 X3.4-1MB/800, 1GB 311134-xx1	Processor(s)	One Intel Xeon 3.4GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

ML370T04 X3.2-1MB/800, 1GB 374489-xx1	Processor(s)	One Intel Xeon 3.2GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Tower (5U)

ML370R04 X3.2-1MB/800, 1GB 374490-xx1	Processor(s)	One Intel Xeon 3.2GHz Processor standard (up to 2 supported)
	Cache Memory	1MB level 2 cache
	Memory	1GB (Standard) of 2-way interleaved capable PC2-3200 DDR2 running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated NC7781 PCI-X Gigabit NIC (single port)
	Storage Controller	Integrated Dual Channel Ultra320 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	1.8 TB maximum hot plug - 6 x 300 GB 1" with standard internal hot plug drive cage
	Optical Drive	48x IDE CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (5U)

Models (Processors with 1MB Level 2 cache)

Country Code Key

XX=00
XX=01
XX=03
XX=04
XX=05
XX=20
XX=29
XX=37
XX=42
XX=AA

Tower Code Key

U.S. English
Australia
UK
Germany
France
Brazil
Japan
APD
Europe
PRC

Rack Code Key

U.S. English
N/A
N/A
N/A
N/A
N/A
Japan
APD
Europe
PRC

Configuration Information - Factory Integrated Models

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

Configure-to-order (CTO) 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	<p>HP ProLiant ML370G4 Rack CTO Chassis (North America) 360729-405</p> <p>Factory Integrated Model ships with:</p> <ul style="list-style-type: none"> Integrated NC7781 PCI-X Gigabit NIC (single port) Integrated dual channel Ultra320 SCSI adapter Six Hot Plug Drive Bays 6 expansion slots - 2 PCI-Express x4 and 4 PCI-X 64-bit 100 MHz Integrated Lights-Out (iLO) 775 Watt-CE Mark Compliant Hot Plug Power Supply with 110V NEMA 12ft. (3.66m) cord Three fans Rack (5U) <p>HP ProLiant ML370G4 Tower CTO Chassis (North America) 360730-405</p> <p>Factory Integrated Model ships with:</p> <ul style="list-style-type: none"> Integrated NC7781 PCI-X Gigabit NIC (single port) Integrated dual channel Ultra320 SCSI adapter Six Hot Plug Drive Bays 6 expansion slots - 2 PCI-Express x4 and 4 PCI-X 64-bit 100 MHz Integrated Lights-Out (iLO) 775 Watt-CE Mark Compliant Hot Plug Power Supply with 110V NEMA 12ft. (3.66m) cord Three fans Keyboard 2-button Mouse Tower form factor (5U)
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Step 2: Choose Required Options (only one of the following from each list)

Processors	<ul style="list-style-type: none"> Intel X3.6GHz/800-2MB 370G4 FIO BASE 378751-L21 Intel X3.4GHz/800-2MB 370G4 FIO BASE 378750-L21 Intel X3.2GHz/800-2MB 370G4 FIO BASE 378749-L21 Intel X3.0GHz/800-2MB 370G4 FIO BASE 378748-L21 Intel X3.6GHz/800-1MB 370G4 FIO BASE 311584-L21 Intel X3.4GHz/800-1MB 370G4 FIO BASE 311583-L21 Intel X3.2GHz/800-1MB 370G4 FIO BASE 374492-L22 <p>NOTE: One additional xxxxx-B21 processors for each HP ProLiant ML370 server may be ordered. If selecting the Performance Pack option (380099-001), a second processor is included and should not be ordered.</p>
Base Memory	<ul style="list-style-type: none"> 1GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB) 343055-B21 2GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2 x 1024 MB) 343056-B21 4GB of Single-Ranked PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2 x 2048 MB) 343057-B21
Optical Drives	<ul style="list-style-type: none"> HP ProLiant 48X CD w/o SCREWS 367920-B21 HP ProLiant 16X DVD-ROM Drive 217053-B21 CD-RW/DVD-ROM Combo Drive Option Kit 331346-B21

Step 3: Choose Additional Factory Integratable Options

Performance Packs

The HP ProLiant ML370 G4 performance packs are necessary to configure a HP ProLiant ML370 G4 High Performance Model which includes the latest performance technologies and enterprise class availability features pre-installed for convenience and value. The performance pack includes a 2nd processor, redundant fans and power supplies, extra 2-bay HDD drive cage and Smart Array 6402 controller with 128 battery-backed write cache (installed in PCI-X slot).

HP ML370G4 3.4 2M HPM PERF PACK FIO NA	383195-001
HP ML370G4 3.4 2M HPM PERF PACK FIO ALL	383195-B21
ML370G4 HPM Performance Pack, US	380099-001
ML370G4 HPM Performance Pack, WW	380099-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 configurable. Please contact your local sales representative for additional information.

HP ProLiant ML370	G4 Hot Plug Redundant Power Supply Option Kit (U.S.)	356544-001
Unique Options	G4 Hot Plug Redundant Power Supply Option Kit (Australia)	356544-011
	G4 Hot Plug Redundant Power Supply Option Kit (EURO)	356544-021
	G4 Hot Plug Redundant Power Supply Option Kit (UK)	356544-031
	G4 Hot Plug Redundant Power Supply Option Kit (Japan)	356544-291
	G4 Hot Plug Redundant Power Supply Option Kit (Worldwide)	356544-B21
	Redundant Hot Plug Fan Option Kit	225073-B21
	ML350/ML370 Duplex SCSI Backplane Kit	339323-B21
	ML3xx Two Bay Hot Plug SCSI Drive Cage	244059-B21
	SCSI VHDCI Cable Kit ML310/330/350/370	333370-B21
	SCSI Cable Kit HD68 ML330/350/370	159547-B22

Software	HP digital asset protection	302316-001
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ProLiant Essentials Value Pack Software	Rapid Deployment Pack, 1 User, V1.x NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	267196-B21
	Rapid Deployment Pack, 1 User, V1.x (Japan) NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	267196-291
	Rapid Deployment Pack, 10-server License Kit NOTE: This license allows 10 servers to be deployed via the Deployment Server.	269817-B21
	Rapid Deployment Pack, 10-server License Kit (Japan) NOTE: This license allows 10 servers to be deployed via the Deployment Server.	269817-291
	Rapid Deployment Pack, Flexible-Quantity License Kit NOTE: A single pack is shipped with a single license key for the total number of licenses ordered.	302127-B21
	Rapid Deployment Pack, Tracking License Kit NOTE: For use with a Master License Agreement.	302128-B21
	ProLiant Essentials Workload Management Pack (Featuring Resource Partitioning Manager version 2.0)	303284-B21
	ProLiant Essentials Integrated Lights-Out Advanced Pack Featuring: sophisticated virtual administration features for ultimate control of servers in the data centers and remote sites	263825-B21
	ProLiant Essentials Intelligent Networking Pack (1 License)	372906-B21
	ProLiant Essentials Intelligent Networking Pack Flex License	372950-B21
	ProLiant Essentials Intelligent Networking Pack Track License	372951-B21
	ProLiant Essentials Resource Management, Single kit	371645-B21
	ProLiant Essentials Resource Management, 10-license kit	372029-B21
	ProLiant Essentials Resource Management, Flex kit	371646-B21
	ProLiant Essentials Resource Management, AKA kit	371647-B21

Options

ProLiant Essentials Performance Management Pack v2.0, Single Server License Kit NOTE: This license allows 1 server to be managed by Performance Management Pack.	306696-B21
ProLiant Essentials Performance Management Pack v2.0, 10-server License Kit NOTE: This license allows 10 servers to be managed by Performance Management Pack.	374055-B21
Performance Management Pack, Flexible License Kit NOTE: A single pack is shipped with a single license key for the total number of licenses ordered.	306697-B21
Performance Management Pack, Tracking License Kit	306698-B21
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 Virtual Machine Management Pack, Flexible-Quantity License NOTE: For use with multiple servers. This part number can be used to purchase multiple licenses with a single activation key.	372215-B21
ProLiant Essentials Virtual Machine Management Pack, Tracking License NOTE: For use with signed and implemented Activation Key Agreements only. Purchase of this part number entitles the customer to deploy additional licenses of the product under the terms of the existing Activation Key Agreement.	372216-B21
ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License	371645-B21
ProLiant Essentials Vulnerability and Patch Management Pack, 10-Server License	372029-B21
ProLiant Essentials Vulnerability and Patch Management Pack, Flexible-Quantity License	371646-B21
ProLiant Essentials Vulnerability and Patch Management Pack, Tracking license for new servers	371647-B21
ProLiant Essentials Vulnerability and Patch Management Pack, Tracking license for installed servers	378372-B21
ProLiant Essentials Vulnerability and Patch Management Pack, 1-Server 10-Desktop Bundle License 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 .	389941-B21

ProLiant Software Maintenance Subscription	ProLiant Software Maintenance Subscription	355060-B21
	ProLiant Software Maintenance Single Release	356573-B21
	ProLiant Foundation Pack Single Release	356604-B21
NOTE: Please see the SmartStart QuickSpecs for additional information regarding the subscription purchase: http://h18000.www1.hp.com/products/quickspecs/12007_div/12007_div.HTML (Worldwide) http://h18000.www1.hp.com/products/quickspecs/12007_na/12007_na.HTML (North America)		

Options

Processor	Intel Xeon X3.6-2MB/800MHz Processor Option Kit	378751-B21
	Intel Xeon X3.4-2MB/800MHz Processor Option Kit	378750-B21
	Intel Xeon X3.2-2MB/800MHz Processor Option Kit	378749-B21
	Intel Xeon X3.0-2MB/800MHz Processor Option Kit	378748-B21
	Intel Xeon X3.6-1MB/800MHz Processor Option Kit	311584-B21
	Intel Xeon X3.4-1MB/800MHz Processor Option Kit	311583-B21
	Intel Xeon X3.2-1MB/800MHz Processor Option Kit	374492-B21

Memory	1GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x512 MB)	343055-B21
	2GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x1024 MB)	343056-B21
	4GB of Single-Ranked PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x2048 MB)	343057-B21

NOTE: HP ML370 G4 does not support dual ranked memory.

Internal Storage	ML3xx Two Bay Hot Plug SCSI Drive Cage	244059-B21
	NOTE: The drive cage option kit (PN 244059-B21) has one 1" drive bay and one 1.6" drive bay, installed in two available removable media bays.	
	Duplex SCSI Backplane Option Kit	339323-B21

Optical Drives	16X DVD-ROM Drive Option Kit (Carbon)	217053-B21
	CD-RW/DVD ROM combo Drive Option Kit	331346-B21
	NOTE: The DVD-ROM drive is supported in the CD-ROM bay and in the removable media bay. If placed in the removable media bay, it requires the 2-Device IDE cable (PN 305381-B21).	
	HP DVD+R/RW 16X Half Height	383974-B21

Hard Drives	Ultra320 SCSI - Universal Hot Plug	
	300-GB 10,000 rpm U320 Universal Hard Drive (1")	350964-B22
	146.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286716-B22
	72.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286714-B22
	146.8-GB 15,000 rpm U320 Universal Hard Drive (1")	347708-B22
	72.8-GB 15,000 rpm U320 Universal Hard Drive (1")	286778-B22
	36.4-GB 15,000 rpm U320 Universal Hard Drive (1")	286776-B22

NOTE: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds.

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)

Options

Storage Controllers	Smart Array 6402/128 Controller	273915-B21
	Smart Array 6404/256 Controller	273914-B21
	Smart Array 641 Controller	291966-B21
	Smart Array 642 Controller	291967-B21
	256MB Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB Battery-Backed Cache Module upgrade kit supports the Smart Array 6400 series controller 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/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B21
	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21
	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/11943_div/11943_div.HTML (Single Channel U320 SCSI HBA)	
	http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML (Smart Array 6400 Series)	
http://h18000.www1.hp.com/products/quickspecs/12067_div/12067_div.HTML (Smart Array 641)		
http://h18000.www1.hp.com/products/quickspecs/12069_div/12069_div.HTML (Smart Array 642)		
http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML (SCSI Adapter)		

Communications	HP NC150T PCI 4-port Gigabit 1000T Combo Switch Adapter	368169-B21
	HP NC310F PCI-X 1000SX Gigabit Server Adapter	367132-B21
	HP NC320T PCI Express Single Port 1000T Gigabit Server Adapter	367047-B21
	HP NC1020 PCI Single Port 1000T Gigabit Server Adapter	353377-B21
	HP NC6170 PCI-X Dual Port 1000SX Gigabit Server Adapter	313879-B21
	HP NC7170 PCI-X Dual Port 1000T Gigabit Server Adapter	313881-B21
	HP NC7771 PCI-X Single Port 1000T Gigabit Server Adapter	290563-B21
	NOTE: Any NIC (except the NC1020 and the NC150T) on the option list can be used for redundancy with the embedded NC7781 Network Controller. When teaming with other NICs or with the embedded NIC, the lack of Jumbo Frames and LSO features on the NC1020 and NC150T will cause high end NICs to have those features disabled. (e.g. incompatibility issues with the other option NICs for that platform).	

Options

Redundant Options	Hot Plug Redundant Power Supply Option Kit (NEMA) (U.S.)	356544-001
	Hot Plug Redundant Power Supply Option Kit (Australia)	356544-011
	Hot Plug Redundant Power Supply Option Kit (EURO)	356544-021
	Hot Plug Redundant Power Supply Option Kit (UK)	356544-031
	Hot Plug Redundant Power Supply Option Kit (Japan)	356544-291
	Hot Plug Redundant Power Supply Option Kit (IEC) (Worldwide)	356544-B21
	Redundant Hot Plug Fan Option Kit	225073-B21

Management Options	ProLiant Essentials Integrated Lights-Out Advanced Pack	263825-B21
	Featuring: sophisticated virtual administration features for ultimate control of servers in the data centers and remote sites	
	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 (APD, Japan)	227251-371

Security	HP/Atalla AXL600L SSL Accelerator Card for ProLiant Servers	524545-B21
	AXL300 Accelerator PCI for ProLiant Servers	227933-B21

Tape Drives

NOTE: For complete listing of tape drive offerings see

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

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

Ultrium Tape Drives - External, Rack-Mount and Array

HP StorageWorks Ultrium 215 Tape Drive, Internal (Carbon)	Q1543A
HP StorageWorks Ultrium 215 Tape Drive, External (Carbon)	Q1545A
HP StorageWorks Ultrium 215 rack-mount (Carbon) - Single drive installed in a 1U rack-mount kit	A7444A
HP StorageWorks Ultrium 215 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7492B
HP StorageWorks Ultrium 230 Tape Drive, Internal (Carbon)	Q1515A
HP StorageWorks Ultrium 230 Tape Drive, External (Carbon)	Q1517A
HP StorageWorks Ultrium 230, Rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350545-B21
HP StorageWorks Ultrium 230 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7470B
HP StorageWorks Ultrium 448 Tape Drive, External (Carbonite)	DW017A
HP StorageWorks Ultrium 448, Rack-mount (Carbonite) - Single drive installed in a 1U rack-mount kit	DW028A
HP StorageWorks Ultrium 448 Tape Drive, Internal (Carbonite)	DW016A
HP StorageWorks Ultrium 460 Tape Drive, Internal (Carbon)	Q1518A
HP StorageWorks Ultrium 460 Tape Drive, External (Carbon)	Q1520A
HP StorageWorks Ultrium 460, Rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350546-B21
HP StorageWorks Ultrium 460 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	Q1512B

Options

HP StorageWorks Ultrium 960 Tape Drive, Internal (Carbonite)	Q1538A
HP StorageWorks Ultrium 960 Tape Drive, External (Carbonite)	Q1539A
HP StorageWorks Ultrium 960 Rack-mount (Carbonite) - Single drive installed in a 3U rack-mount kit	Q1595A

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 - Hot Plug, External, Rack-Mount and Array Module

HP StorageWorks DAT 72 Tape Drive, Internal (Carbon)	Q1522A
HP StorageWorks DAT 72 Tape Drive, External (Carbon)	Q1523A
HP StorageWorks 1U Rack-Mount Kit with one DAT 72 drive (Carbon)	A7443A
HP StorageWorks DAT 72 Tape Drive, Internal Hot-Plug (Carbon)	Q1529A
HP StorageWorks DAT 72 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	Q1524B
HP StorageWorks DAT 40 Tape Drive, Internal Hot-Plug (Carbon)	Q1546A

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>

DLT VS Tape Drives

HP StorageWorks DLT VS160, Internal, Worldwide (Carbon)	A7569A
HP StorageWorks DLT VS160, External, North America (Carbon)	A7570A
HP StorageWorks DLT VS160, External, International (Carbon)	A7571A

NOTE: Please see the [DLT VS Tape Drive QuickSpecs](#) for controllers, media, and other options:

http://h18000.www1.hp.com/products/quickspecs/11403_div/11403_div.HTML
(Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11403_na/11403_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>

SDLT Tape Drives

HP StorageWorks SDLT 600 Internal Tape Drive	A7518A
HP StorageWorks SDLT 600 in 3U Rack (1) Drive	A7965A

Options

NOTE: Please see the SDLT Tape Drive QuickSpecs for controllers, media, and other options:

http://h18000.www1.hp.com/products/quickspecs/11840_div/11840_div.HTML
(Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11840_na/11840_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

A7445A

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 DAT 24, DAT40, DAT72, DLT VS 80, and Ultrium 215 tape drives.

HP StorageWorks 3U Rack-Mount Kit

274338-B21

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, DLT VS80, SDLT 320, Ultrium 215, Ultrium 230, and Ultrium 460 Tape Drives.

HP StorageWorks 5U Rack-Mount Kit

274339-B21

NOTE: The 5U Rack-Mount Kit can support up to 4 full-height tape drives and is compatible with SDLT 320, Ultrium 230, and Ultrium 460 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)

HP StorageWorks Tape Array 5300

C7508A

NOTE: The Tape Array 5300 is a 3U enclosure that supports up to 2 full-height or 4 half-height hot-swap array modules, including DAT and Ultrium tape drives. Cables and terminators are not included and must be ordered separately.

NOTE: Please see the Tape Array 5300 QuickSpecs for additional information regarding this product.

http://h18000.www1.hp.com/products/quickspecs/11878_div/11878_div.HTML
(Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11878_na/11878_na.HTML
(North America)

Options

Tape Autoloaders

DAT Autoloader

HP StorageWorks DAT 72x6 Tape Autoloader, Internal (Carbon) Q1566A

HP StorageWorks DAT 72x6 Tape Autoloader, External (Carbon) 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

1/8 Ultrium 460 Tape Autoloader, Tabletop AA927A

1/8 SDLT 320 Tape Autoloader, Tabletop AA926A

1/8 Ultrium 230 Tape Autoloader, Tabletop C9572CB

1/8 DLT VS80 Tape Autoloader, Tabletop C9264CB

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>

HP StorageWorks SSL1016 Tape Autoloader

SSL1016 Ultrium 460 Tape Autoloader 330821-B21

SSL1016 SDLT 320 Tape Autoloader 330816-B21

NOTE: Please reference the SSL1016 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 MSL6000 Tape Library

MSL6030, 1 drive, 30 slots, Ultrium 460, RM 330731-B22

MSL6030, 2 drive, 30 slots, Ultrium 460, RM 330731-B23

MSL6030, 1 drive, 30 slots, Ultrium 460, RM with embedded FC router 330731-B24

MSL6030, 2 drive, 30 slots, Ultrium 460, RM with embedded FC router 330731-B25

MSL6060, 2 drive, 60 slot, Ultrium 460, RM 331196-B21

MSL6060, 2 drive, 60 slot, Ultrium 460, RM with embedded FC router 331196-B22

NOTE: Please reference the 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>

HP StorageWorks MSL5026S2 Tape Library

MSL5026S2, 1 drive, 26 slots, SDLT 320, RM 293472-B22

MSL5026S2, 2 drive, 26 slots, SDLT 320, RM 293472-B23

MSL5026S2, 1 drive, 26 slots, SDLT 320, RM with embedded FC router 293472-B24

MSL5026S2, 2 drive, 26 slots, SDLT 320, RM with embedded FC router 293472-B25

Options

NOTE: Please reference the MSL5026S2 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>

HP StorageWorks MSL5052S2 Tape Library

MSL5052S2, 2 drive, 52 slots, SDLT 320, RM 293474-B21

MSL5052S2, 2 drive, 52 slots, SDLT 320, RM with embedded FC router 293474-B24

NOTE: Please reference the MSL5052S2 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>

HP StorageWorks MSL5030 Tape Library

MSL5030, 1 drive, 30 slots, Ultrium 230, RM 301897-B22

MSL5030, 2 drive, 30 slots, Ultrium 230, RM 301897-B23

MSL5030, 1 drive, 30 slots, Ultrium 230, RM with embedded FC router 301897-B24

MSL5030, 2 drive, 30 slots, Ultrium 230, RM with embedded FC router 301897-B25

NOTE: Please reference the MSL5030 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>

HP StorageWorks MSL5060 Tape Library

MSL5060, 2 drive, 60 slots, Ultrium 230, RM 301899-B22

MSL5060, 2 drive, 60 slots, Ultrium 230, RM with embedded FC router 301899-B23

NOTE: Please reference the MSL5060 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>

HP StorageWorks ESL E-Series Tape Libraries

ESL Extended 712e Tape Library, 0 drive, 712 LTO slots AA934B

ESL Extended 630e Tape Library, 0 drive, 630 SDLT slots AA935B

ESL Extended 322e Tape Library, 0 drive, 322 LTO slots AA939B

ESL Extended 286e Tape Library, 0 drive, 286 SDLT slots AA940B

ESL E-Series Ultrium 460 drive kit AA937A

ESL E-Series Ultrium 460-FC drive kit AA941A

ESL E-Series SDLT 320 drive kit AA936A

ESL E-Series e2400-FC 2G Interface Controller AA928A

NOTE: Please reference the ESL E-Series Tape Libraries 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	<i>HP StorageWorks 9.1 GB Entry-level Optical Storage</i>	
	220mx, 1 drive, 24 slot jukebox	C1118M
	220mx, 2 drive, 24 slot jukebox	C1119M
	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.	
	<i>HP StorageWorks 9.1 GB Mid-range Optical Jukeboxes</i>	
	300mx, 2 drive, 32 slot jukebox	C1150M
	600mx, 4 drive, 64 slot jukebox	C1160M
	700mx, 2 drive, 76 slot jukebox	C1170M
	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.	
<hr/>		
Ultra Density Optical Jukeboxes	700ux, 1 drive, 24 slot jukebox	AA962A
	700ux, 2 drive, 24 slot jukebox	AA963A
	1100ux, 2 drive, 38 slot jukebox	AA964A
	1000ux, 2 drive, 32 slot jukebox	AA965A
	1900ux, 4 drive, 64 slot jukebox	AA966A
	1900ux, 4 mixed drive, 64 slot jukebox	AA968A
	2300ux, 2 drive, 76 slot jukebox	AA967A
	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	
<hr/>		
HP StorageWorks Modular Smart Array 500	HP StorageWorks Modular Smart Array 500 Generation 2	335880-B21
	NOTE: Please see the Modular Smart Array 500 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: http://h18000.www1.hp.com/products/quickspecs/11050_na/11050_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11050_div/11050_div.HTML (Worldwide)	
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Options

Cluster Options	ProLiant Cluster Starter Kit	364023-B21
	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)	
	ProLiant Cluster Kit with OpenView Storage Mirroring	364025-B21
	NOTE: For additional information regarding the ProLiant Cluster Kit with OpenView Storage Mirroring please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11934_na/11934_na.html (North America) http://h18000.www1.hp.com/products/quickspecs/11934_div/11934_div.html (Worldwide)	
	ProLiant Cluster HA/F200 for the Entry Level SAN	364026-B21
	ProLiant Cluster HA/F200 for the Entry Level SAN (Japan)	364026-291
	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)	
	ProLiant Cluster HA/F500 for the Enterprise SAN	364024-B21
	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)	
	HP Serviceguard for Linux ProLiant Cluster A.11.15 for SUSE SLES 8 / UnitedLinux 1.0 and Red Hat EL 3 (2 node license cluster kit).	305199-B24
	HP Serviceguard for Linux ProLiant Cluster A.11.16 for SUSE SLES 9 and Red Hat EL 3 (2 node license cluster kit)	305199-B25
	HP Serviceguard for Linux License A.11.15 for SUSE SLES 8 / UnitedLinux 1.0 and Red Hat EL 3 (single license version)	307754-B24
	HP Serviceguard for Linux A.11.16 for SUSE SLES9 and Red Hat EL 3 (single license version)	307754-B25
	NOTE: For additional information regarding the HP Serviceguard for Linux License, 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)	

Options

External Storage - Rack	HP StorageWorks Modular Smart Array 20 NOTE: Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies.	335921-B21
	HP StorageWorks Modular Smart Array 20 Starter Kit NOTE: Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies. Includes Smart Array 6402/128 Controller. NOTE: The Modular Smart Array Enclosure 20 Family supports the SATA 1.5Gb/s 1" Hot Plug Hard Drives.	366172-B21
	HP StorageWorks Modular Smart Array 30 SB NOTE: Rack-mountable 14 drive enclosure with single bus, redundant power supplies	302969-B21
	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 1" Hot Plug Hard Drives.	302970-B21
	StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - WW StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - Japan	359079-B21 359079-291
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
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
UPS 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 .	
Uninterruptible Power Supply - Tower	HP UPS Model T1500 XR (1440VA, 1050 Watt), Low Voltage (NA)	204155-002
	HP UPS Model T1500 XR (1500VA, 1050 Watt), High Voltage (Int'l)	204155-B32
	HP UPS Model T1500 XR (1500VA, 1050 Watt), Low Voltage (Japan)	204155-292
	HP UPS Model T2200 XR (1920VA, 1600 Watt), Low Voltage (NA)	204451-001
	HP UPS Model T2200 XR (2080VA, 1600 Watt), High Voltage (NA)	204451-002
	HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (NA)	204451-B31
	HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (Japan)	204451-291

Options

Uninterruptible Power Systems - Rack UPS	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: The UPS R12000 XR has a hardwired input and output connection.

HP Power Distribution Unit with Power Monitoring	HP Power Distribution Unit with Power Monitoring Model S2324 - dual input, 3 phase, 24A (NA/JPN)	370959-D71
	HP Power Distribution Unit with Power Monitoring Model S1324 - single input, 3 phase, 24A (NA/JPN)	370960-D71
	HP Power Distribution Unit with Power Monitoring Model S2140 - dual input, 1 phase, 40A (NA/JPN)	370961-D71
	HP Power Distribution Unit with Power Monitoring Model S1140 - single input, 1 phase, 40A (NA/JPN)	370962-D71
	HP Power Distribution Unit with Power Monitoring Model S2316 - dual input, 3 phase, 16A (INTL)	370963-B31
	HP Power Distribution Unit with Power Monitoring Model S1316 - single input, 3 phase, 16A (INTL)	370964-B31
	HP Power Distribution Unit with Power Monitoring Model S2132 - dual input, 1 phase, 32A (INTL)	370965-B31
	HP Power Distribution Unit with Power Monitoring Model S1132 - single input, 1 phase, 32A (INTL)	370966-B31

Options

Modular Power Distribution Units 1U/0U (up to 32 outlets) NOTE: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	<p>HP Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan) NOTE: The above mPDU may also be used to connect to the low volt model of the UPS R3000 XR.</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan) NOTE: L6-30 input.</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW) NOTE: The 40A model has a hardwired input.</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 16A (200-240 VAC) (WW)</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 40A, Attached Cord, (NA/JPN)</p> <p>HP Modular Power Distribution Units (mPDU), High Volt Model, 40A, Attached Cord, (Int'l) 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. 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)</p>	<p>252663-D71</p> <p>252663-D72</p> <p>252663-B31</p> <p>252663-B21</p> <p>252663-B24</p> <p>252663-D73</p> <p>252663-B32</p>
USB Options	<p>USB 1.44-MB External Diskette Drive (Carbonite)</p> <p>HP USB 2-Button Optical Scroll Mouse (Carbonite/Silver)</p> <p>256MB HP Drive Key II (USB 2.0)</p> <p>Multibay USB cradle</p> <p>Multibay USB cradle</p>	<p>DC141B</p> <p>DC172B</p> <p>PH657A</p> <p>DC373A#ABA</p> <p>DC373A#B13</p>
Custom Builder	<p>Please see the Enterprise Configurator for configuration assistance at: http://www.hp.com/products/configurator.</p>	
Rack Conversion Kit	<p>ML370 G3/G4 Tower to Rack Conversion Kit</p> <p>ProLiant DL380 G4, ML370 G4, ML350 G4 Shipping Bracket for Round Hole Racks NOTE: Required when shipping HP ProLiant DL380 G4, HP ProLiant ML370 G4, or HP ProLiant ML350 G4 pre-installed in round hole rack. Square hole pre-configured rack shipping hardware included with server mounting rails.</p> <p>Rack Adapter Kit NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.</p>	<p>356545-B21</p> <p>371482-B21</p> <p>332815-B21</p>

Options

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 Series (Graphite Metallic)	10642 (42U) Infrastructure Rack (Low Voltage)	379006-001
	10642 (42U) Infrastructure Rack (High Voltage)	379005-001
	HP 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
<p>NOTE: -B21 (pallet) used to ship empty racks -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</p> <p>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.</p> <p>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)</p>		

Options

Rack Options for HP Rack 10000 Series

NOTE: For additional information regarding Rack Options, please see the following URL: <http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html>.

HP Rack Light Kit (Neon)	361589-B21
HP Rack Plinth Kit (Carbon)	251960-B21
TFT5600 Rack Keyboard Monitor	221546-xx1
TFT7210R Rack Mounted 17" Monitor	348373-B21

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
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Country Code Key for Keyboards (for 1U Rack Keyboard & Drawer (PN 257054-xx1))

XX = 001	US	XX = 091	Norway
XX = 031	UK	XX = 101	Sweden/Finland
XX = 041	Germany	XX = 111	Switzerland
XX = 051	France	XX = 131	Portugal
XX = 061	Italy	XX = 181	Belgium
XX = 071	Spain	XX = 291	Japan
XX = 081	Denmark	XX = B31	International

HP KVM Switch Options

Server Console Switch (KVM), 0 x 1 x 8 port	336044-B21
Server Console Switch (KVM), 0 x 2 x 16 port	336045-B21
IP Console Switch Box (KVM/IP), 1 x 1 x 16	262585-B21
IP Console Switch Box (KVM/IP), 3 x 1 x 16	262586-B21
HP 1x4 USB/PS2 KVM Switch, RM (ALL)	371302-B21
HP 1x4 USB/PS2 KVM Switch, TT, (EURO)	371301-A21
HP 1x4 USB/PS2 KVM Switch, TT (UK)	371301-031
HP 1x4 USB/PS2 KVM Switch, TT, (AUST/NZ)	371301-011
HP 1x4 USB/PS2 KVM Switch, TT, (NA/JPN)	371301-D71
PS/2 Interface Adapter, 8 pack	262587-B21
PS/2 Interface Adapter, 1 pack	262588-B21
CAT5 KVM Expansion Module	262589-B21
Serial Interface adapter - 1 Pack with power supply	373035-B21
CAT5e Cable 3', 4 pack	263474-B21
CAT5e Cable 6', 8 pack	263474-B22
CAT5e Cable 12', 8 pack	263474-B23
CAT5e Cable 20', 4 pack	263474-B24
CAT5e Cable 40', 1 pack	263474-B25

NOTE: For additional information regarding HP KVM Switches and options, please see the following URL: <http://h18004.www1.hp.com/products/servers/proliantstorage/rack-options/list.html#console>

Options

Service and Support Offerings (HP Care Pack Services)	Hardware Services On-site Service	
	4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years	U4528A
	4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	U4528E
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years	U4529A
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4529E
	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	U4530A
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4530E
	Installation & Start-up Services	
	Hardware Installation	U4538A
	Hardware Installation, Electronic	U4538E
	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.	U4539A
	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	U4539E
	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.	U4540A
	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	U4540E
	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.	U4541A
	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	U4541E
	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.	U6311A
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	U6311E	
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.	U8333A	
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	U8333E	

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 ML370 G4 Models

Standard Memory

1GB PC2-3200 Single-ranked Memory comes installed (2 x 512-MB SDRAM)

NOTE: HP ProLiant ML370 G4 does not support dual-ranked memory.

Standard Memory Replaced with Optional Memory

Up to 16GB of memory is available with the removal of the standard 1GB of memory and the optional installation of 16GB PC2-3200 Memory Option Kit (8 x 2GB)

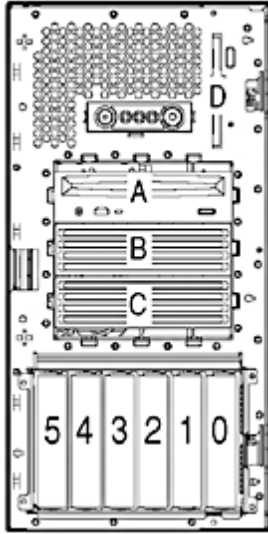
NOTE: This chart does not represent all possible memory configurations.

Memory		Slot							
		1	2	3	4	5	6	7	8
Standard	1 GB	512 MB	512 MB	Empty	Empty	Empty	Empty	Empty	Empty
Optional	7 GB	512 MB	512 MB	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB
Maximum	16 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB

Following are memory options available from HP:

- 1GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2 x 512 MB) 343055-B21
- 2GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2 x 1024 MB) 343056-B21
- 4GB of Single-Ranked PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x2048 MB) 343057-B21

Storage

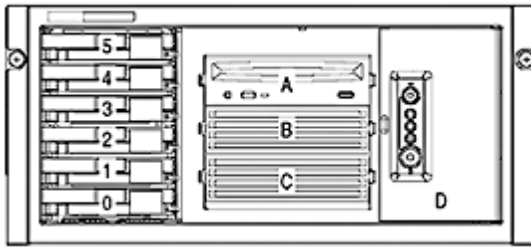


0 - 5 6 x 1" Hot Pluggable Hard Drive Bays

A 48x IDE CD-ROM Drive

B, C Two available half height bays

D 1.44 MB Diskette Drive



0 - 5 6 x 1" Hot Pluggable Hard Drive Bays

A 48x IDE CD-ROM Drive

B, C Two available half height bays

D 1.44 Diskette Drive

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	D	Integrated
IDE CD-ROM Drive	Up to 2	A, B	Integrated IDE
DVD-ROM Drive Option Kit (optional)	Up to 2	A, B	Integrated IDE
ML3xx Two Bay Hot Plug Wide SCSI Drive Cage(optional)	Up to 1	B, C	Integrated SCSI or optional array controller

Storage

Hard Drives

Ultra320 Hot Pluggable Drives

	Quantity Supported	Position Supported	Controller
1-inch	Up to 8 (With optional ML3xx Two Bay Hot Plug SCSI Drive Cage)	0-7	Integrated Dual Channel Ultra320 SCSI Adapter Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 641 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
300-GB 10,000 rpm			
146.8-GB 10,000 rpm			
72.8-GB 10,000 rpm			
146.8-GB 15,000 rpm			
72.8-GB 15,000 rpm			
36.4-GB 15,000 rpm			

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 20 Family	1 per external VHDCI SCSI connector	External	Smart Array 6402/128 Controller Smart Array 6404/256 Controller
Modular Smart Array 30 Family	1 per external VHDCI SCSI connector	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 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 1500 cs	Please see the Modular Smart Array 1500 cs QuickSpecs link 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 link 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 (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>

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

	Quantity Supported	Position Supported	Controller
HP StorageWorks Tape Drives, Internal	Up to 2 NOTE: drives are 1.5 height devices	0+1, 2+3, 4+5	Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller Smart Array 641 Controller
Ultrium 215			Smart Array 642 Controller
Ultrium 230			Smart Array 641 Controller
Ultrium 448			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
Ultrium 460			64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 960			OS
DAT 72 Tape Drive			
DAT 40 Tape Drive			
HP StorageWorks Tape Drives, Internal	2 (Ultrium 215, DAT 72)	B + C	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 215	1 (Ultrium 230)		OS
Ultrium 230			
HP StorageWorks Tape Drives, Internal	2	B,C	Integrated Dual Channel Ultra320 SCSI Adapter 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
DAT 72 Tape Drive, Internal			OS
HP StorageWorks Tape Drives, External	Up to 2	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 215			OS
Ultrium 230			
Ultrium 448			
Ultrium 460			
Ultrium 960			
DAT 72 Tape Drive			
DAT 40 Tape Drive			
HP StorageWorks Tape Drives, External	1	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 960			OS

Storage

HP StorageWorks Rack-mount Tape Drive Enclosures 1U Rack-Mount Kit 3U Rack-Mount Kit 5U Rack-Mount Kit Tape Array 5300	1 per SCSI channel	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Autoloaders, Internal DAT 72x6 Tape Autoloader	1	B+C	64-Bit/133-MHz 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 SSL1016 Tape Autoloader	1 autoloader per SCSI channel	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Tape Libraries, External MSL6060 (Ultrium 460 - based) MSL6030 (Ultrium 460 - based) MSL5026S2 (SDLT 320-based) MSL5052S2 (SDLT 320-based) MSL5030 (Ultrium 230 - based) MSL5060 (Ultrium 230 - based)	Please reference the relevant MSL or ESL Tape Library QuickSpecs to determine configuration requirements	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks ESL E-Series Tape Libraries ESL 712e ESL 630e ESL 322e ESL 286e	Please reference the ESL E-series Tape Libraries QuickSpecs to determine configuration requirements	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Power Specifications

Part Number	367242-001
Spare Kit	360623-B21
Operational Input Voltage Range (V rms)	90 to 264
Frequency Range (Nominal) (Hz)	47 to 63 (50/60)

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Max Rated Output Wattage Rating	775	775	775	775	775	775
Nominal Input Current (A rms)	10.0	8.6	4.7	4.4	4.1	4.0
Max Rated Input Wattage Rating (Watts)	981	969	957	945	934	934
Max. Rated VA (Volt-Amp)	1001	989	976	964	963	953
Efficiency (%)	79	80	81	82	83	83
Power Factor	0.98	0.98	0.98	0.98	0.98	0.98
Leakage Current (mA)	0.43	0.50	0.65	0.96	1.00	1.04
Maximum Inrush Current (A peak)	30	30	30	30	30	30
Maximum Inrush Current duration (mS)	3	3	3	3	3	3

NOTES:

* - 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/powercalcs.asp>.

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: ML370 G4
- Click on: "Power Calculator" link. (You may need to scroll down to see it)

Power Cords (13 Cord Sets)	Power Cord Part Number
Country	
APD	139867-006
APD	100613-003
APD	100614-003
Australia	100611-007
Europe	100614-003
France	100614-003
Germany	100614-003
Japan	139867-006
PRC	139867-006
PRC	100613-003
PRC	100661-007
UK	100613-003
US	163719-002

Technical Specifications

System Unit - Tower	Dimensions	18.46 x 8.69 x 28 in (46.88 x 22.07 x 71.12 cm)	
	Weight	70 lb (31.75 kg) (without hard drives, no RPS)	
	Input Requirements	Range Line Voltage	100-132 VAC, 200-240 VAC
		Rated Input Voltage	7.5A (100VAC), 3.8A (200VAC)
		Rated Input Frequency	50 to 60 Hz
		Rated Input Current	735W
		Rated Input Power	1001W (100VAC)
	BTU Rating	3,420 BTU/HR	
	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/powercalcs.asp .	
		To drill down to calculators: - Click on: "ProLiant Servers" - Click on the Server of interest. Example: ML370 G4 - Click on: "Power Calculator" link. (You may need to scroll down to see it)	
	SCSI Connectors	Two Internal HD68 connectors (Option kits available for HD68 or VHDCI external connectors)	
	Power Supply Output Power	Steady State Power	775W
Maximum Peak Power		775W	
Temperature Range	Operating	41° to 95° F (5° to 35° C)	
	Shipping	-40° to 185° F (-40° to 85° C)	
Relative Humidity (non-condensing)	Operating	5% to 95%	
	Shipping	5% to 95%	
Acoustic Noise	Idle		
	(Fixed Disk Drives Spinning)		
	L WAd (BELS)	5.9	
	L pAm (dBA)	41	
	Operating		
	(Random Seeks to Fixed Disks)		
L WAd (BELS)	6.0		
L pAm (dBA)	42		

Technical Specifications

System Unit - Rack	Dimensions	8.69 x 19.0 x 25.75 in (22.07 x 48.26 x 65.43 cm)		
	Weight	65 lb (29.48) (without hard drives, no RPS)		
	Input Requirements	Range Line Voltage	90 to 264 VAC	
		Rated Input Voltage	100 to 240 VAC	
		Rated Input Frequency	47 to 63 Hz	
		Rated Input Current	10A (110 V) to 4.8A (220 V)	
		Rated Input Power	1001W (100VAC)	
	BTU Rating	3,420 BTU/HR		
	SCSI Connectors	Two Internal HD68 connectors (Option kits available for HD68 or VHDCI external connectors)		
	Power Supply Output Power	Steady State Power	775W	
		Maximum Peak Power	775W	
	Temperature Range	Operating	41° to 95° F (5° to 35° C)	
		Shipping	-40° to 185° F (-40° to 85° C)	
	Relative Humidity (non-condensing)	Operating	5% to 95%	
		Shipping	5% to 95%	
Maximum Wet Bulb Temperature	101.7° F (38.7° C)			
Acoustic Noise	Idle (Fixed Disk Drives Spinning)	L WAd (BELS)	5.9	
		L pAm (dBA)	41	
	Operating (Random Seeks to Fixed Disks)	L WAd (BELS)	6.0	
		L pAm (dBA)	42	

Optional Redundant Power Supply	Input Requirements	Rated Input Voltage	100 to 240 VAC	
		Rated Input Frequency	47 to 63 Hz	
		Rated Input Current	10A (110 V) to 4.8A (220 V)	
		Rated Input Power	1001W (100VAC)	
	BTU Rating	3,420 BTU/HR		
	Power Supply Output Power	Steady State Power	775W	
		Maximum Peak Power	775W	
	Temperature Range	Operating	41° to 95° F (5° to 35° C)	
		Shipping	-40° to 185° F (-40° to 85° C)	
	Relative Humidity (non-condensing)	Operating	5% to 95%	
		Shipping	5% to 95%	
	Maximum Wet Bulb Temperature	101.7° F (38.7° C)		

Technical Specifications

Integrated Dual Channel Ultra320 SCSI Adapter	Drives Supported	Up to 28 SCSI devices (14 per channel)
	Data Transfer Method	64-bit PCI bus-master
	SCSI Channel Transfer Rate	320 MB/s per channel
	Maximum Transfer Rate per PCI Bus (peak)	400 MB/s per channel
	SCSI Protocols	Wide Ultra2 SCSI Wide-Ultra SCSI-3 Ultra320 SCSI
	Electrical Protocol	Low Voltage Differential (LVD)
	SCSI Termination	Active Termination
	External SCSI Connectors	Optional VHDCI and HD68 internal-to-external connectors
	Internal SCSI Connectors	Two 68-Pin Wide-Ultra SCSI-3 connectors

NC7781 PCI-X Gigabit NIC (embedded) Server Adapter	Network Interface	10/100/1000-T		
	Compatibility	IEEE 802.3 10Base-T		
		IEEE 802.3ab 1000Base-T		
		IEEE 802.3u 100Base-TX		
	Data Transfer Method	64-bit/133MHz 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	
		1000BaseTX (Half-Duplex)	1000 Mb/s	
1000BaseTX (Full-Duplex)		2000 Mb/s		
Connector	RJ-45			
Cable Support	10Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)		
	10/100/1000Base-TX	Category 5 UTP; up to 328 ft (100 m)		

Integrated Lights-Out (integrated on system board)	Architecture	32-bit PCI-based health and remote management ASIC (Application Specific Integrated Circuit)	
	Processor	32-bit RISC processor core running at 66MHz	
	Upgradeability	Option firmware upgradeable via flash ROM.	
	Video Support	Utilizes the host server's embedded video chip. Supports VGA/SVGA, 640 x 480 (256 to 16.7M colors), 800 x 600 (256 to 16.7M colors), 1024 x 768 (256 to 65K colors), 1280 x 1024 (256 colors)	
	Interfaces	One dedicated Ethernet network connection (10/100 Mb/s) One shared Ethernet network connection via one of the embedded 1Gb/s system network interfaces	
	Memory	2-MB Flash ROM 8-MB SDRAM	

Technical Specifications

Operating System Support	Microsoft Windows 2000 Server and Advanced Server, Microsoft Windows Server 2003, Standard Edition, Web Edition, Enterprise Edition, SBS Edition Red Hat AS 2.1 Red Hat Enterprise Linux L 3.0 (10/03) - WS, ES, AS SuSE Linux Enterprise Server 7, United Linux 1.0 SP2 & SP3 (11/03) Novell NetWare 6.0, 6.5
Client System Support	Windows 2000 and 2000 Professional Windows 2003 Windows 2000 XP Professional Edition Red Hat Advanced Server 2.1, Red Hat Linux V7.2, V7.3, V8.0 SuSE Linux Enterprise Server V7, V8 United Linux 1.0
Client Browser Support	Microsoft Internet Explorer 6.0 or later. Netscape Navigator 7.1 (on supported Linux client systems) Mozilla 1.5 (for supported Linux client systems)
Command Line support	Telnet, Secure Shell and serial port access
Security	Secure Socket Layer Secure Shell version 2
Directory Support Services	Active Directory V1.0 (Windows 2000, 2003)
Directory Support Services Driver Support	Novell eDirectory V8.6.2, V8.7 (Novell NetWare 5.X, 6.X, Red Hat 7.1, Windows 2000, Windows Server 2003) Health Driver (iLO Advanced Server Management Controller Driver) iLO Management Interface Driver
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) Secure Shell Security IML and iLO Event Logging Support for up to 12 user accounts with customizable access privileges
iLO Advanced Features	Virtual Graphical Remote Console Virtual Floppy Drive

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