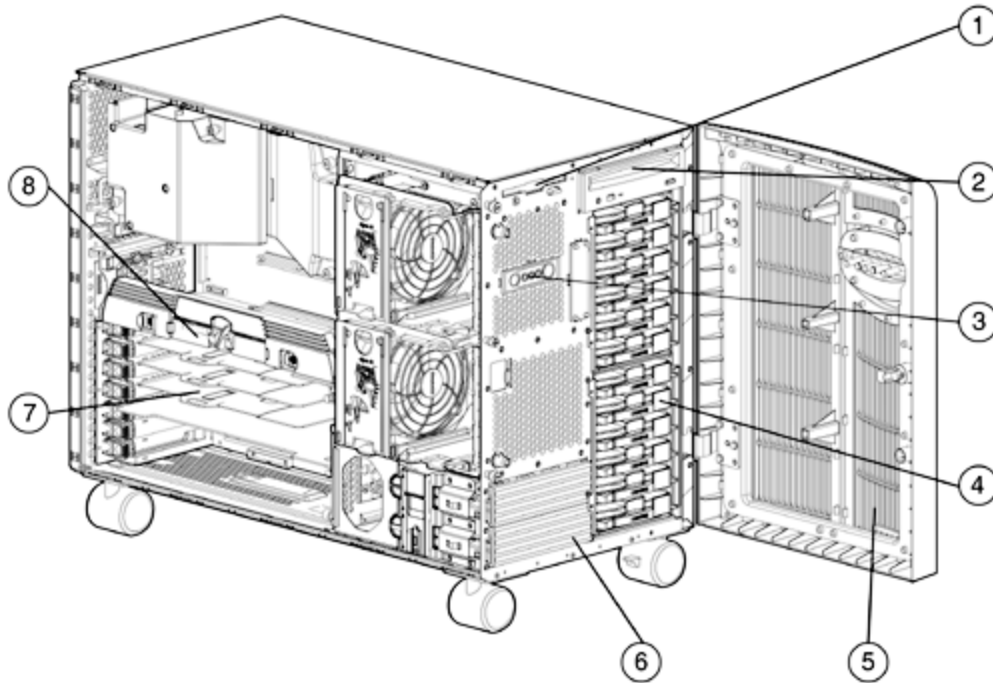
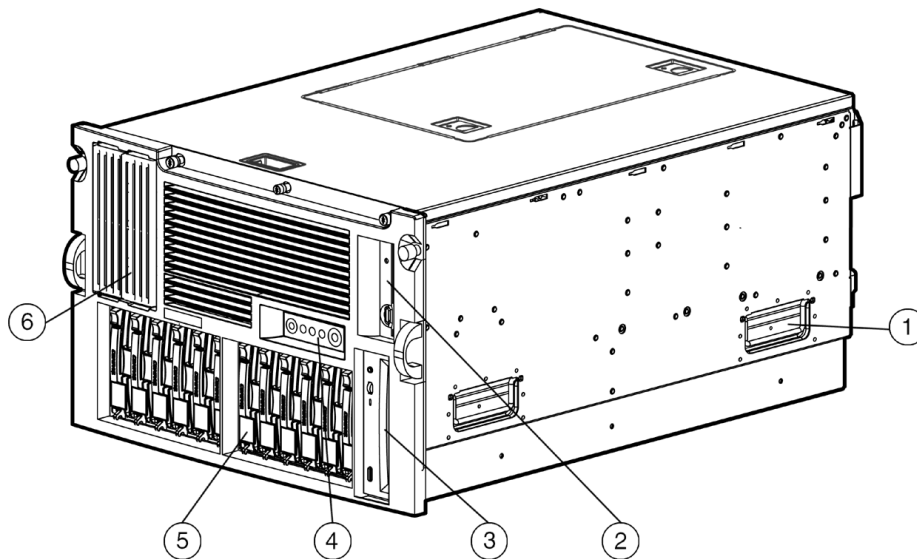


Overview



- 1. 1.44-MB Diskette Drive
- 2. High Speed IDE CD-ROM
- 3. Diagnostic Lighting
- 4. Wide Ultra3/Ultra320 Hot Plug Drive Bays (12 x 1" Standard)

- 5. Front Bezel
- 6. 5.25-inch Removable Media Bays
- 7. Seven PCI-X slots
- 8. Memory Board



- 1. Rack handles
- 2. 1.44-MB Diskette Drive
- 3. High Speed IDE CD-ROM

- 4. Diagnostic Lighting
- 5. Wide Ultra3/Ultra320 Hot Plug Drive Bays (12 x 1" Standard)
- 6. 5.25-inch Removable Media Bays

Overview

What's New

- Intel® Xeon Processors MP 3.0 GHz/4MB, 2.7 GHz/2MB or 2.2 GHz/2MB
- 1GB memory standard on all new models

At A Glance

- Best-in-class 4-way server with exceptional performance, maximum reliability and unmatched expansion/flexibility
- Intel Xeon Processor
- ServerWorks Grand Champion-HE chipset
- 2x1 interleaved memory, 200MHz DDR SDRAM Memory
- 1024-MB PC1600 Advanced ECC SDRAM Memory standard, expandable to 32 GB
- Seven, full length 64-bit/100 MHz PCI-X slots, 4 Hot Pluggable
- Integrated NC3163 Fast Ethernet NIC PCI 10/100 WOL (Wake On LAN) and PXE support
- Integrated Dual Channel Wide Ultra3 compatible SCSI Adapter
- Wide Ultra3 compatible SCSI Drive Cage standard (two 6 x 1" cages)
- Internal mass storage capacity up to 4.20 TB (12 x 300 GB + 2 x 300 GB 1" hot plug drives) with optional ML5xx Internal Two Bay Hot Plug SCSI Drive Cage (with Fan)
- Integrated Remote Console and Automatic Server Recovery-2 (ASR-2)
- Two 600-Watt Hot Pluggable Power Supplies (additional third for redundancy)
- Optional Redundant Hot Plug Fans
- Industry-standard PCI Hot Plug with Push Button Functionality
- Advanced Memory Protection including Online Spare Memory, Hot-plug Mirrored memory and hot-add capability
- Protected by a global, three-year, on-site limited warranty with next business day response, and extended Pre-Failure Warranty, which covers processors, memory and disk drives, as well as a wide range of HP Services - Certain restrictions and exclusions apply.

Standard Features

Processor

One of the following depending on Model:

Intel Xeon Processor MP at 3.0 GHz\4MB

Intel Xeon Processor MP at 2.7 GHz\2MB

Intel Xeon Processor MP at 2.2 GHz\2MB

Intel Xeon Processor MP at 2.8 GHz\2MB

Intel Xeon Processor MP at 2.5 GHz\1MB

Intel Xeon Processor MP at 2.0 GHz\1MB

NOTE: Rack-optimized models ship standard with two processors while tower models ship with one processor as standard.

Cache Memory

One of the following depending on Model:

4-MB Integrated Level 3 cache (per processor)

NOTE: Available with 3.0 GHz models.

2-MB Integrated Level 3 cache (per processor)

NOTE: 2.7GHz, 2.2 GHz, 2.8 GHz Models only.

1-MB Integrated Level 3 cache (per processor)

NOTE: 2.5 GHz, 2.0 GHz Models only.

Upgradability

Upgradable to quad processing

Chipset

ServerWorks Grand Champion-HE chipset

NOTE: For more information regarding ServerWorks, please see the following URL:

<http://www.serverworks.com/products/overview.html>.

Memory Protection

Advanced Memory Protection

NOTE: For more information regarding Advanced Memory Protection, please see the following URL:

<http://h18000.www1.hp.com/products/servers/technology/memoryprotection.html>.

Memory

Type	PC1600-MHz Registered ECC SDRAM DIMM
Standard	512 MB (2 x 256 MB)
Standard (Standard on 3.0GHz/2.7GHz/2.2GHz models and 2P Models only)	1 GB (1 x 512 MB)
Maximum	32 GB

Network Controller

Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support

Standard Features

Expansion Slot	I/O (7 Total)	Bus Number	PCI Voltage
1,2	64-bit, 100-MHz PCI Hot Plug NOTE: The Smart Array 6402/6404 should not be used in slot 2	1	3.3V
3,4	64-bit, 100-MHz PCI Hot Plug	5	3.3V
5,6	64-bit, 100-MHz PCI Non-Hot Plug	9	3.3V
7	64-bit, 100-MHz PCI Non-Hot Plug NOTE: Preferred RILOE slot	13	3.3V

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

Storage Controllers Integrated Dual Channel Wide Ultra3 SCSI Adapter

Storage	Diskette Drives	1.44 MB Diskette Drive
	Optical Drive	48x IDE (ATAPI) CD-ROM Drive
	Hard Drives	None

Maximum Internal Storage Type Hot Plug SCSI 4.20 TB 12 x 300 GB + 2 x 300 GB 1" Ultra320 with optional ML5xx Two Bay Hot Plug SCSI Drive Cage

Interfaces	Parallel	1
	Serial	2
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	Rear USB Ports	2
	Network RJ-45	1
	External SCSI	1

NOTE: Please see the following URL for additional information regarding USB support: <http://h18004.www1.hp.com/products/servers/platforms/usb-support.html>

Graphics Integrated ATI RAGE IIC Video Controller with 8MB Video Memory

Form Factor Tower or Rack (7U)

Product Demo To view the Product Demo, please see the following URL, then click on "PRODUCT TOUR":
<http://h18004.www1.hp.com/products/servers/proliantml570/index.html>.

Standard Features

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 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 .
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 6.40.
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 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, linked from the SmartStart website at http://www.hp.com/servers/smartstart .
Survey Utility and diagnostics utilities	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.● 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● 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

Standard Features

information.

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

Industry Standard Compliance

ACPI 2.0 Compliant
PCI 2.2 Compliant
PXE Support
WOL Support
Physical Address Extension (PAE) Support
Microsoft® Logo certifications

Availability

Advanced Memory Protection Technology – delivers unsurpassed memory protection and server availability:

- **Advanced ECC Memory**

ECC protection provides the ability to detect and correct single bit memory errors while Advanced ECC extends this coverage to include protection against multiple simultaneous errors on a DIMM. Advanced ECC detects and corrects 4bit memory errors that occur within a single DRAM chip on a DIMM. Advanced ECC algorithms work in combination with industry standard ECC DIMMS.

Advanced Memory Protection Configurations

- **Online Spare Memory**

Offers a higher level of memory protection than Advanced ECC alone. The system is configured with a spare bank of memory. If the number of single-bit correctable errors on a bank exceeds the pre-defined error threshold, the failing bank will fail over to the Online Spare bank without intervention or server interruption. The failed memory can then be replaced at the user's convenience during a scheduled maintenance window.

- **Single-Board Mirrored Memory**

Single-board mirrored memory provides a higher level of availability than Advanced ECC and Online Spare Memory because it protects against multi-bit errors. Single-board Mirrored Memory uses a single memory board that is configured with a mirrored/redundant set of memory. The system writes to both sets of memory, but reads from one. If a memory bank has a multi-bit error or full DIMM failure, the system simply reads from the mirrored bank instead. This process occurs without intervention or server interruption, and the failed DIMM can be replaced during a regularly scheduled shutdown.

- **Hot Plug Mirrored Memory**

Hot Plug Mirrored Memory is a fault-tolerant memory feature that provides a higher level of availability than Advanced ECC, Online Spare Memory, or Single-Board Mirrored Memory because it protects against multi-bit errors and does not require any server downtime to replace failed DIMMs. Hot Plug Mirrored Memory requires that two memory boards be installed, one an exact mirror of the other, which run in parallel and provide protection against multi-bit memory errors. When configured for Hot Plug Mirrored Memory, the system writes to both memory boards, but reads from one. If a read error occurs, the system fails over to the redundant memory board. At that point the memory board containing the failed DIMMs can be hot replaced. Once the failed DIMMs are replaced and the memory board re-installed into the server, the system goes back to full mirrored status. All this occurs without bringing the server down.

NOTE: Hot Plug Mirrored Memory and Dual-Board Online Spare Memory require the use of two memory cards. All HP ProLiant ML570 G2 servers ship standard with a single memory board. The second memory board is optional (P/N 236844-B21).

NOTE: All Advanced Memory Protection modes are user configurable through the ROM-Based Setup Utility (RBSU) and viewable through Systems Insight Manager and the Integrated Management Log (IML).

- PCI-X Hot Plug Technology (Four 64bit/100MHz PCI-X hot plug slots available)
 - Two 600W Hot Plug Power Supply standard
 - Six Hot Plug System Fans standard
-

Standard Features

Intelligent Manageability	<p>HP Systems Insight Manager Remote Lights-Out Edition II (optional) Automatic Server Recovery-2 (ASR-2) Hardware Remote Console Full Remote Server Reboot Capability Reset and Failure Sequence Replay Host Hardware Independent Operating System Independent Server Health Logging Revision History Table Automatic Revision Tracking Drive Parameter Tracking (with Smart Array Controller) Dynamic Sector Repairing (with Smart Array Controller) Hot Spare Boot</p> <p>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).</p> <p>Pre-Failure Warranty (covers processors, hard drives and memory)</p>
Security	<p>Power-on password Hot plug keyboard password Diskette drive control Diskette boot control QuickLock, Network Server Mode Parallel and serial interface control Administrator's password Disk configuration lock Locking access door on hood Locking tower bezel door Tool required for removing shipping screw from hood</p>
Server Power Cords	<p>Two Lowline power cords ship standard (Rack models ship with IEC cords)</p>
Power Supply	<p>Two 600W Hot Pluggable Power Supplies (three supported on rack models) third power supply is needed for redundancy.</p> <p>NOTE: Two 600-Watt Hot Plug Power Supply ships standard with 1P tower Models (optional Redundant Hot Plug Power Supply Option Kit).</p> <p>Three 600-Watt Hot Plug Power Supplies ship standard with 2P Rack Models.</p> <p>NOTE: Under certain configurations, server can operate in 1+ 1 redundancy model using two power supplies. Configurations include servers with two processors and up to 12 drives or up to four processors and 6 drives installed. This assumes all PCI-X slots are fully populated. This mode will need to be set-up through RBSU.</p>
System Fans	<p>Six fans ship standard with two additional option fans for redundancy</p> <p>NOTE: Rack Models ship standard with redundant fans.</p>
Required Cabling	<p>For required cabling information, refer to the Web site at http://h18000.www1.hp.com/products/servers/ProLiantml570/.</p>

Standard Features

OS Support

Microsoft Windows Server 2003 (Standard and Enterprise Edition)
Microsoft Windows NT® Enterprise Edition
Microsoft Windows 2000 Servers
Microsoft Windows 2000 Advanced Servers
Microsoft Windows NT
Novell NetWare
SCO OpenServer, UnixWare
Caldera OpenUnix®
IBM OS/2 Warp Server for e-business
Red Hat Linux
Red Hat Enterprise Linux
SuSE Linux Enterprise Server
UnitedLinux
Sun Solaris Intel Platform Edition

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 a listing of the latest drivers available for the HP ProLiant ML570 G2, 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 website at <http://h18000.www1.hp.com/products/servers/linux/hpLinuxcert.html>.

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>

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/ProLiantml570/index.html>.

Rack Kit

HP ProLiant ML570 G2 rack models provide tool-free support for square hole racks (including Compaq/HP 7000, 9000, 10000 and H9 series) with an adjustment range from 28" – 29" depth.

Standard Features

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 www.hp.com/go/factory-express.

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

**ML570R02 X3.0-4MB,
1024MB (2P)**
345320-xx1

Processor	(2) Intel Xeon Processors MP 3.0 GHz standard (up to four supported)
Cache Memory	4-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Three 600W Power Supplies (third power supply for redundancy)
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (7U)

**ML570R02 X2.7-2MB,
1024MB (2P)**
345316-xx1

Processor	(2) Intel Xeon Processors MP 2.7 GHz standard (up to four supported)
Cache Memory	2-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Three 600W Power Supplies (third power supply for redundancy)
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (7U)

**ML570R02 X2.2-2MB,
1024MB (2P)**
345318-xx1

Processor	(2) Intel Xeon Processors MP 2.2 GHz standard (up to four supported)
Cache Memory	2-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Three 600W Power Supplies (third power supply for redundancy)
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (7U)

Models

**ML570R02 X2.0-1MB,
1024MB (2P)**
325247-xx1

Processor	(2) Intel Xeon Processors MP 2.0 GHz standard (up to four supported)
Cache Memory	1-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Three 600W Power Supplies (third power supply for redundancy)
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Rack (7U)

**ML570T02 X3.0-4MB,
1024MB (1P)**
345319-xx1

Processor	(1) Intel Xeon Processors MP 3.0 GHz standard (up to four supported)
Cache Memory	4-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Two standard with optional third power supply for redundancy
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Tower

**ML570T02 X2.7-2MB,
1024MB (1P)**
345315-xx1

Processor	(1) Intel Xeon Processors MP 2.7 GHz standard (up to four supported)
Cache Memory	2-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Two standard with optional third power supply for redundancy
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Tower

Models

**ML570T02 X2.2-2MB,
1024MB (1P)**
345317-xx1

Processor	(1) Intel Xeon Processors MP 2.2 GHz standard (up to four supported)
Cache Memory	2-MB Integrated Level 3 Cache
Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Two standard with optional third power supply for redundancy
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Tower

**ML570T02 X2.0-1MB,
512MB (1P)**
325246-xx1

Processor	(1) Intel Xeon Processors MP 2.0 GHz standard (up to four supported)
Cache Memory	1-MB Integrated Level 3 Cache
Memory	512 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (2x1 interleaved memory and Advanced Memory Protection Technology) NOTE: Second memory board would be required to configure up to 32 GB or maximum memory using 2 GB DIMMs.
Network Controller	Integrated NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter (Ultra320 compatible)
Hard Drive	None ship standard
Internal Storage	4.20 TB maximum (with optional hard drives and drive cage)
Power Supplies	Two standard with optional third Power supplies for redundancy
Optical Drive	48x IDE CD-ROM Drive
Diskette Drive	1.44 MB Diskette Drive
Form Factor	Tower

Country Code Key	XX=00	U.S. English
	XX=02	Int'l
	XX=03	UK
	XX=20	Brazil (Tower Models only)
	XX=37	APD
	XX=29	Japan
	XX=42	Europe
	XX=AA	PRC

Options

Processor		
	Intel Xeon MP X3.0 GHz-4MB Processor Option Kit	345323-B21
	NOTE: This processor option kit (PN 345323-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.70 GHz-2MB Processor Option Kit	345322-B21
	NOTE: This processor option kit (PN 345322-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.20 GHz-2MB Processor Option Kit	345321-B21
	NOTE: This processor option kit (PN 345321-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.80 GHz-2MB Processor Option Kit	325254-B21
	NOTE: This processor option kit (PN 325254-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.50 GHz-1MB Processor Option Kit	325253-B21
	NOTE: This processor option kit (PN 325253-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.0 GHz-1MB Processor Option Kit	325252-B21
	NOTE: This processor option kit (PN 325252-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.0 GHz-2MB Processor Option Kit	307276-B21
	NOTE: This processor option kit (PN 307276-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X1.90 GHz-1MB Processor Option Kit	311228-B21
	NOTE: This processor option kit (PN 311228-B21) supports the HP ProLiant ML570 G2 only.	
	Intel Xeon MP X1.50 GHz-1MB Processor Option Kit	191220-B21
	NOTE: This processor option kit (PN 191220-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	NOTE: Processor mixing of different frequencies and cache sizes is not supported.	

Options

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 Users, V1.x NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-B21
	Rapid Deployment Pack, 10 Users, V1.x (Japan) NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-291
	Flexible Quantity License Kit	302127-B21
	License-Only - for use with a Master License Agreement	302128-B21
	ProLiant Essentials Workload Management Pack (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	Performance Management Pack, single server NOTE: This license allows 1 server to be managed by Performance Management Pack.	306696-B21
	ProLiant Essentials Performance Management Pack, 10 Pack Server License	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
	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 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	
Software	HP digital asset protection	302316-001
Memory (DIMMs)	4096MB PC1600 Registered ECC SDRAM Memory Kit (2 x 2048 MB)	187421-B21
	2048MB PC1600 Registered ECC SDRAM Memory Kit (2 x 1024 MB)	187420-B21
	1024MB PC1600 Registered ECC SDRAM Memory Kit (2 x 512 MB)	187419-B21
	512MB PC1600 Registered ECC SDRAM Memory Kit (2 x 256 MB)	187418-B21
	Hot-plug Memory Expansion Board	236844-B21
	NOTE: Second memory board would be required to configure 16GB of memory using 2GB DIMMs.	

Options

Optical Drives	16X DVD-ROM Drive Option Kit (Carbon)	217053-B21
	NOTE: This drive is supported in the CD-ROM bay and in the removable media bay.	
	CD-RW/DVD ROM Combo Drive Option Kit	331346-B21
	NOTE: This drive is supported in the CD-ROM bay and in the removable media bay.	
	HP DVD+R/RW 16X Half Height	383974-B21

Internal Storage	ML5xx Two Bay Hot Plug SCSI Drive Cage	244058-B21
	NOTE: The drive cage option kit (PN 244058-B21) has one 1" drive bay and one 1.6" drive bay.	

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 Ultra320 SCSI 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. U320 drives require an optional U320 Smart Array Controller or U320 SCSI HBA to support U320 transfer rates.

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
	128-MB Cache Module for Smart Array 5302 Controller	153506-B21
	256-MB Battery-Back Cache Module	254786-B21
	NOTE: This 256-MB Battery-Backed Cache Module supports the Smart Array 5300 series controllers, HP StorageWorks Modular Smart Array 1000 and the HP StorageWorks Modular Smart Array 500.	
	256MB DDR Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB DDR, Battery-Backed Cache 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/133Mhz Dual Channel Ultra320 SCSI Adapter	268351-B21
	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21
	Ultra320 Expansion Module for SA-6402	273911-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/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) http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML (U320 Adapter)	
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Communications	HP NC310F PCI-X 1000SX Gigabit Server Adapter	368169-B21
	HP NC320T PCI Express 1000T Gigabit Server Adapter	367047-B21
	HP NC1020 PCI 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 1000T Gigabit Server Adapter	290563-B21
	NOTE: Any network adapter (NIC), except the NC1020, on the option list can be used for redundancy with the embedded NC7782 NIC. 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).	
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Redundant Options	Hot-plug Redundant Fan Kit	128284-B21
	NOTE: Included in Rack Optimized models.	
	Hot Plug Redundant Power Supply	236845-001
	NOTE: Included in Rack Optimized models.	
	Hot Plug Redundant Power Supply (Australia)	236845-011
	NOTE: Included in Rack Optimized models	
	Hot Plug Redundant Power Supply (Int'l)	236845-021
	NOTE: Included in Rack Optimized models	
Hot Plug Redundant Power Supply (UK)	236845-031	
NOTE: Included in Rack Optimized models		
Hot Plug Redundant Power Supply (Japan)	236845-291	
NOTE: Included in Rack Optimized models		
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Options

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 (APD, Japan)	227251-371

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

Tape Drives

NOTE: In order to install certain tape drives internally, you may need to remove the rails that come standard on the drives and then re-insert the screws in the mounting holes. Mounting screws are shipped standard with server.

NOTE: External tape devices, including both tape drives and tape arrays/enclosures, can be directly connected to the VHDCI SCSI port located on the back of the server. Use of a SCSI adapter to connect these devices is optional, not required.

Ultrium Tape Drives - External, Rack-Mount and Array

HP StorageWorks Ultrium 215 Tape Drive, External (Carbon)	Q1545A
HP StorageWorks Ultrium 215 rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350544-B21
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
NOTE: When purchasing this internal drive a cooling fan also needs to be ordered. The fan kit part number is 344257-B21 and comes with installation instructions to install inside the server.	
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
Fan Option - Internal Cooling Fan Kit	344257-B21
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: Needs to be ordered when purchasing an internal Ultrium 230 drive that will be installed inside of an HP ProLiant ML530, HP ProLiant ML530 G2, HP ProLiant ML570, or HP ProLiant ML570 G2. Kit includes fan and instructions to install fan inside of server in drive bay.

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 Tape Drive, External (Carbon)	Q1523A
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Options

HP StorageWorks DAT 72 Tape Drive, Internal (Carbon)	Q1522A
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, External (Carbon)	C5687C
HP StorageWorks DAT 40 Tape Drive, Internal (Carbon)	C5686B
HP StorageWorks DAT 40 Tape Drive, Internal Hot-Plug (Carbon)	Q1546A
HP StorageWorks DAT 40 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7497B
HP StorageWorks DAT 24e Tape Drive, External (Flint)	C1556D
HP StorageWorks DAT 24 Tape Drive, Internal (Flint)	C1555D
HP StorageWorks DAT 24 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7498A

NOTE: Please see the [DAT Tape Drive QuickSpecs](http://h18000.www1.hp.com/products/quickspecs/11883_div/11883_div.HTML) 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>

Internal and External DLT VS Tape Drives

HP StorageWorks DLT VS80 Tape Drive, Internal (Carbon) WW	337699-B21
HP StorageWorks DLT VS80 Tape Drive, External (Carbon) NA	337699-B22
HP StorageWorks DLT VS80 Tape Drive, External (Carbon) Int'l	337699-B31
HP StorageWorks DLT VS80 Tape Drive, External (Carbon) Japan	337699-291
DLT VS160, Internal, Worldwide (Carbon)	A7569A
DLT VS160, External, North America (Carbon)	A7570A
DLT VS160, External, International (Carbon)	A7571A

NOTE: Please see the [DLT VS Tape Drive QuickSpecs](http://h18006.www1.hp.com/products/quickspecs/11403_div/11403_div.HTML) for additional options such as host bus adapters, controllers, media, and other options:
http://h18006.www1.hp.com/products/quickspecs/11403_div/11403_div.HTML (Worldwide)
http://h18006.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 the DLT VS80, please visit: <http://www.hp.com/go/connect>

Internal and External SDLT Tape Drives

HP StorageWorks SDLT 320 Tape Drive, Internal (Carbon) WW	257319-B21
NOTE: When purchasing this internal drive a cooling fan also needs to be ordered. The fan kit part number is 344257-B21 and comes with installation instructions to install inside the server.	
HP StorageWorks SDLT 320 Tape Drive, External (Carbon) NA	257319-001
HP StorageWorks SDLT 320 Tape Drive, External (Carbon) Int'l	257319-B31
HP StorageWorks SDLT 320 Tape Drive, External (Carbon) Japan	257319-291
HP StorageWorks SDLT 600 Internal Tape Drive	A7518A
HP StorageWorks SDLT 600 in 3U Rack (1) Drive	A7965A
Fan Option - Internal Cooling Fan Kit	344257-B21

NOTE: Needs to be ordered when purchasing an internal SDLT drive that will be installed inside of an HP ProLiant ML530, HP ProLiant ML530 G2 or HP ProLiant ML570, HP ProLiant ML570 G2. Kit includes fan and instructions to install fan inside of server in drive bay.

NOTE: Please see the [SDLT Tape Drive QuickSpecs](http://h18006.www1.hp.com/products/quickspecs/11840_div/11840_div.HTML) for additional options such as adapters, controllers, and media.
http://h18006.www1.hp.com/products/quickspecs/11840_div/11840_div.HTML (Worldwide)
http://h18006.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 SDLT tape drives, please visit: <http://www.hp.com/go/connect>

Rack-Mount Tape Drive Enclosures

HP StorageWorks 1U Rack-Mount Kit	A7445A
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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

Options

<p>Ultrium 215 tape drives.</p> <p>HP StorageWorks 3U Rack-Mount Kit 274338-B21</p> <p>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.</p>
<p>HP StorageWorks 5U Rack-Mount Kit 274339-B21</p> <p>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.</p> <p>NOTE: Please see the Rack-Mount Tape Drive Kits QuickSpecs for additional information regarding these kits:</p> <p>http://h18000.www1.hp.com/products/quickspecs/10854_div/10854_div.HTML (Worldwide)</p> <p>http://h18000.www1.hp.com/products/quickspecs/10854_na/10854_na.HTML (North America)</p>
<p>HP StorageWorks Tape Array 5300 C7508A</p> <p>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.</p> <p>NOTE: Please see the Tape Array 5300 QuickSpecs for additional information regarding this product.</p> <p>http://h18000.www1.hp.com/products/quickspecs/11878_div/11878_div.HTML (Worldwide)</p> <p>http://h18000.www1.hp.com/products/quickspecs/11878_na/11878_na.HTML (North America)</p> <p>Accessories for 3U & 5U Rack-mount Tape Drive Kits</p>
<p>LVD Cable Kit, VHDCI/HD68 168048-B21</p> <p>NOTE: For use with the 3U Rack-mount Kit and 5U Rack-mount Kit only.</p>
<p>LVD Cable Kit, HD68/HD68 242381-B21</p> <p>NOTE: For use with the 3U Rack-mount Kit and 5U Rack-mount Kit only.</p> <p>Accessories for 3U & 5U Rack-mount Tape Drive Kits</p>
<p><i>PSU/Fan Upgrade Kit - Redundant hot-swap power supply unit and fan for Tape Array 5300.</i></p>
<p>68-pin HD multi-mode terminator C2364A</p>
<p>1.0m 68-pin VHDCI to 68-pin HD cable C2361B</p>
<p>2.5m 68-pin VHDCI to 68-pin HD cable C2362B</p>
<p>5.0m 68-pin VHDCI to 68-pin HD cable C2365A</p>
<p>10.0m 68-pin VHDCI to 68-pin HD cable C2363B</p>
<p>0.5m 68-pin HDI to 68-pin HD cable LVD/SE C2978B</p>
<p>1.5m 68-pin HDI to 68-pin HD cable LVD/SE C2979B</p>
<p>0.9m 68-pin HDI to 68-pin HD cable LVD/SE C2911C</p>
<p>2.5m 68-pin HDI to 68-pin HD cable LVD/SE C2924C</p> <p>NOTE: For use with Tape Array 5300 only</p>

Options

Tape Autoloaders

DAT Autoloader

HP StorageWorks DAT 72x6 Internal Autoloader Q1566A

HP StorageWorks DAT 72x6 External Autoloader Q1567A

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

http://h18000.www1.hp.com/products/quickspecs/11985_div/11985_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11985_na/11985_na.HTML (North America)

HP StorageWorks Tape 1/8 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

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

Options

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>

Magneto-Optical Jukeboxes

HP StorageWorks 9.1 GB Entry-level Optical Storage

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

HP StorageWorks 9.1 GB Mid-range Optical Jukeboxes

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

HP StorageWorks Ultra Density Optical Storage

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
700ux, 1 drive, 24 slot jukebox	AA962A

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

Options

Cluster Options	ProLiant Cluster Starter Kit	364023-B21
	<p>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)</p>	
	ProLiant Cluster Kit with OpenView Storage Mirroring	364025-B21
	<p>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)</p>	
	ProLiant Cluster HA/F200 for the Entry Level SAN	364026-B21
External Storage – Tower & Rack	ProLiant Cluster HA/F200 for the Entry Level SAN (Japan)	364026-291
	<p>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)</p>	
	ProLiant Cluster HA/F500 for the Enterprise SAN	364024-B21
	<p>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)</p>	
	HP StorageWorks Modular Smart Array 20	335921-B21
HP StorageWorks Modular Smart Array 1500 cs	<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 1" Hot Plug Hard Drives.</p>	
	HP StorageWorks Modular Smart Array 30 SB	302969-B21
	<p>NOTE: Rack-mountable 14 drive enclosure with single bus, redundant power supplies</p>	
	HP StorageWorks Modular Smart Array 30 DB	302970-B21
<p>NOTE: Rack-mountable 14 drive enclosure with dual bus, redundant power supplies</p>		
<p>NOTE: The Modular Smart Array Enclosure 30 Family supports the Wide Ultra3, Ultra320 1" Hot Plug Hard Drives.</p>		
Redundant Power Supply 499W	338296-B21	
Ultra320 Dual Bus I/O Module for MSA30	287483-B21	
Ultra320 Single Bus I/O Module for MSA30	287484-B21	
HP StorageWorks Modular Smart Array 1500 cs	Modular Smart Array 1500 Controller Shelf	AA986A
<p>NOTE: Please see the StorageWorks Modular SAN Array 1500 cs QuickSpecs for additional options and configuration information at: http://www.hp.com/go/MSA1500cs</p>		

Options

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
StorageWorks Options	StorageWorks SAN Switch 2/16 StorageWorks SAN Switch 2/8-EL Upgrade Kit	322118-B21 325888-B21
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 .	
HP Uninterruptible Power Systems - Tower	HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (NA) HP UPS Model T1000 XR (1000VA, 700 Watt), High Voltage (Int'l) HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (Japan) HP UPS Model T1500 XR (1440VA, 1050 Watt), Low Voltage (NA) HP UPS Model T1500 XR (1500VA, 1050 Watt), High Voltage (Int'l) HP UPS Model T1500 XR (1500VA, 1050 Watt), Low Voltage (Japan) HP UPS Model T2200 XR (1920VA, 1600 Watt), Low Voltage (NA) HP UPS Model T2200 XR (2080VA, 1600 Watt), High Voltage (NA) HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (WW) HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (Japan)	204155-001 204155-B31 312803-291 204155-002 204155-B32 204155-292 204451-001 204451-002 204451-B31 204451-291
Uninterruptible Power Systems – Rack	HP UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA) HP UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'l) HP UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (Japan) HP UPS R3000 XR (2880VA, 2700 Watt), Low Voltage (NA) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (NA) HP UPS R3000 XR (2400VA, 2250 Watt), Low Voltage (Japan) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Japan) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Int'l - detachable cord) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A IEC309 Plug) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A CEE 7/7 SCHUKO Plug) HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A BS-546 Plug) HP UPS R5500 XR, (5000VA, 4500 Watt), High Voltage (NA/Jpn) HP UPS R5500 XR, (6000VA, 5400 Watt), High Voltage (Int'l) HP UPS R12000 XR, N+x (12KVA, 12KW) High Voltage (WW)	204404-001 204404-B31 204404-291 192186-001 192186-002 192186-291 192186-292 192186-B31 192186-B32 192186-B33 192186-AR1 326529-D71 326529-B31 207552-B22
	NOTE: UPS R6000 has a hardwired input; and the UPS R12000 XR has a hardwired input and output connection.	

Options

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	
Modular PDUs 1U/0U (Up to 32 outlets) NOTE: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	HP Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan) NOTE: This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.	252663-D71
	HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan)	252663-D72
	HP Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)	252663-B31
	HP Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW) NOTE: This mPDU (252663-B21), 40A model has a hardwired input.	252663-B21
	HP Modular Power Distribution Units (mPDU), High Volt Model, 16A (200-240 VAC) (WW) 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.	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) 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)	252663-B32
USB Options	USB 2-Button Optical Scroll Mouse (Carbonite/Silver)	DC172B
	USB 1.44-MB External Diskette Drive (Carbonite)	DC141B
	256 MB HP Drive Key II (USB 2.0)	PH657A
Custom Builder	Please see the Enterprise Configurator for configuration assistance at: http://www.hp.com/products/configurator .	
Rack Conversion Kit	ProLiant Tower to Rack Conversion Kit NOTE: This Tower to Rack Conversion Kit (PN 253699-B21) supports the HP ProLiant ML570 G2 and HP ProLiant ML530 G2 servers.	253699-B21
	ProLiant Rack to Tower Conversion Kit NOTE: This Rack to Tower Conversion Kit (PN 271258-B21) supports the HP ProLiant ML570 G2 and HP ProLiant ML530 G2 servers.	271258-B21

Options

Rack Options for Third Party Rack	ML570 G2 rack model support: The ML570 G2 Third Party rack kit provides support for any rack, 274739-B21 square hole or round hole, (including HP Rack System /E and HP Systems), with an adjustment range from 23 1/2"- 34" deep. NOTE: The Third party rack kit is required for round hole racks or for square hole racks that do not conform to the adjustment range of the standard rail that ships with the server.	274739-B21
	Rack Adapter Kit NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.	332815-B21

Telco Rack Support	ML570 G2 rack model support: Support for all 2-post Telco racks requires the Third Party Rack 274739-B21 option kit plus an additional option kit from Rack Solutions. The Rack Solutions brackets can be purchased at: http://www.racksolutions.com/compaq .	274739-B21
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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. Baying Kit for 5642 rack (Graphite Carbon) NOTE: The baying kit is used to join two or more HP 5642 racks.	374493-B21 374499-B21
HP Rack 10000 Series (Graphite Metallic)	10642 (42U) Infrastructure Rack (Low Voltage) 10642 (42U) Infrastructure Rack (High Voltage) HP Rack S10614 (14U) Rack Cabinet – Shock Pallet HP Rack 10842 (42U, 800mm wide) – Pallet HP Rack 10842 (42U, 800mm wide) – Shock Pallet HP Rack 10647 (47U) – Pallet HP Rack 10647 (47U) – Crated HP Rack 10642 (42U) – Pallet HP Rack 10642 (42U) – Shock Pallet HP Rack 10642 (42U) – Crated HP Rack 10636 (36U) – Pallet HP Rack 10636 (36U) – Shock Pallet HP Rack 10636 (36U) – Crated HP Rack 10622 (22U) – Pallet HP Rack 10622 (22U) – Shock Pallet HP Rack 10622 (22U) – Crated HP Rack 10614 (14U) – Shock Pallet	379006-001 379005-001 292302-B22 257415-B21 257415-B22 245160-B21 245160-B23 245161-B21 245161-B22 245161-B23 245162-B21 245162-B22 245162-B23 245163-B21 245163-B22 245163-B23 292303-B22
	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://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html .	
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) HP Rack Plinth Kit (Carbon) 42U Side Panel – Graphite Metallic 36U Side Panel – Graphite Metallic 47U Side Panel – Graphite Metallic TFT5600 Rack Keyboard Monitor	361589-B21 251960-B21 246099-B21 246102-B21 255486-B21 221546-xx1
	Country Code Key (for TFT5600 Rack Keyboard Monitor (PN 221546-xx1))	

Options

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

1U Rack Keyboard & Drawer (Carbon)

257054-xx1

Country Code Key (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

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 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	U4591A
4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	U4591E
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years	U4592A
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4592E
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years	U4593A
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4593E

Installation & Start-up Services

Hardware Installation	U4601A
Hardware Installation, Electronic	U4601E
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.	U4602A
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.	U4602E

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.	U4603A
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.	U4603E
Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays	U4605A
Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays, Electronic	U4605E

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	U4604A
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	U4604E
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays.	U4606A
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic	U4606E

NOTE: For more information, customer/resellers can contact <http://www.hp.com/services/carepack>

Memory

HP ProLiant ML570 G2 - 3.0 GHz, 2.7 GHz, 2.2 GHz and 2P Models

Standard Memory

1024-MB PC1600-MHz Registered ECC SDRAM DIMM installed (2 x 512-MB SDRAM DIMM)

Standard Memory Plus Optional Memory

Up to 29,696-MB of memory is available with the optional installation of PC1600-MHz Registered ECC SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 32,768 MB of memory is available with the removal of the standard 1024 MB of memory and the optional installation of PC1600-MHz Registered ECC SDRAM DIMM memory kits

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

NOTE: Second memory board would be required to configure up to 32GB or maximum memory using 2GB DIMMs.

Memory		Slot							
		1	2	3	4	5	6	7	8
Standard	1024 MB	512 MB	512 MB	Empty	Empty	Empty	Empty	Empty	Empty
Optional	29,696 MB	512 MB	512 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Maximum	32,768 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Memory		Slot							
		9	10	11	12	13	14	15	16
Standard	1024 MB	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty
Optional	29,696 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Maximum	32,768 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB

Following are memory options available from HP:

- 4096-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 2048 MB) 187421-B21
- 2048-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 1024 MB) 187420-B21
- 1024-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 512 MB) 187419-B21
- 512-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 256 MB) 187418-B21

Memory

HP ProLiant ML570 G2 1P all other Models

Standard Memory

512-MB PC1600-MHz Registered ECC SDRAM DIMM installed (2 x 256-MB SDRAM DIMM)

Standard Memory Plus Optional Memory

Up to 29,184-MB of memory is available with the optional installation of PC1600-MHz Registered ECC SDRAM DIMM memory kits.

Standard Memory Replaced with Optional Memory

Up to 32,768 MB of memory is available with the removal of the standard 512 MB of memory and the optional installation of PC1600-MHz Registered ECC SDRAM DIMM memory kits

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

NOTE: Second memory board would be required to configure up to 32GB or maximum memory using 2GB DIMMs.

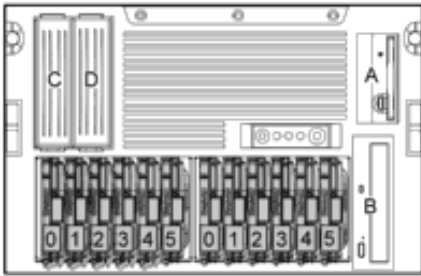
Memory		Slot							
		1	2	3	4	5	6	7	8
Standard	512 MB	256 MB	256 MB	Empty	Empty	Empty	Empty	Empty	Empty
Optional	29,184MB	256 MB	256 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Maximum	32,768 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Memory		Slot							
		9	10	11	12	13	14	15	16
Standard	512 MB	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty
Optional	29,184MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Maximum	32,768 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB

Following are memory options available from HP:

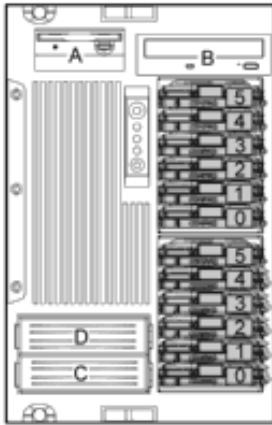
- 4096-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 2048 MB) 187421-B21
- 2048-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 1024 MB) 187420-B21
- 1024-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 512 MB) 187419-B21
- 512-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 256 MB) 187418-B21

Storage

1-inch Drive Locations



- 2X 0 - 5 Two 6 x1 inch Wide Ultra3 SCSI Hard Drive Cages
- A 1.44-MB Diskette Drive
- B 48x IDE CD-ROM
- C, D Two available half height bays for tape backup storage



1-inch Drive Locations

- 2X 0 - 5 Two 6 x1 inch Wide Ultra3 SCSI Hard Drive Cages
- A 1.44-MB Diskette Drive
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- C, D Two available half height bays for tape backup storage

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	A	Integrated
IDE CD-ROM Drive	Up to 1	B	Integrated IDE
DVD-ROM Drive	Up to 1	B, C, D	Integrated IDE
ML5xx Two Bay Hot Plug SCSI Drive Cage	Up to 1	C, D	Integrated SCSI

Storage

Hard Drives

Ultra320 Hot Pluggable Drives

	Quantity Supported	Position Supported	Controller
1-inch	Up to 12	2X 0-5 for each drive cage	Integrated Dual Channel Wide Ultra3 SCSI Adapter
300-GB 10,000 rpm	Up to 14 (With		Smart Array 6402/128 Controller
146.8-GB 10,000 rpm	Optional ML5xx		Smart Array 6404/256 Controller
72.8-GB 10,000 rpm	Two Bay Hot Plug		Smart Array 641 Controller
146.8-GB 15,000 rpm	SCSI Drive Cage)		Smart Array 642 Controller
72.8-GB 15,000 rpm			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
36.4-GB 15,000 rpm			

NOTE: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds. U320 drives require an optional U320 Smart Array Controller or U320 SCSI HBA to support U320 transfer rates.

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 30 Family	Up to 28	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 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>

Maximum Storage Capacity – (Ultra3 Drive Cage, ML5xx Two Bay Hot Plug SCSI Drive Cage, 4 channel controller in all 7 slots & MSA30 enclosures)

Internal	4.20 TB ((12 x 300 GB) + (2 x 300 GB) Ultra320 SCSI 1" Drives)
External	117.60 TB hot plug SCSI storage (28 x (14 x 300 GB 1" Ultra320 SCSI Drives))
Total	121.80 TB

Tape Drives, Tape Autoloaders, & Tape Libraries

NOTE: For an up-to-date listing of the latest O/S Support details for each of the Tape Drives listed below, please see the following:
http://h18000.www1.hp.com/products/quickspecs/North_America/10233.html (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)

Storage

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, Internal Hot Plug DAT 40 Tape Drive DAT 72 Tape Drive	Up to 3 per drive cage. NOTE: drives are 1.5 height devices	0-4 per drive cage	Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller Smart Array 641 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Tape Drives, Internal Ultrium 215 Ultrium 230 Ultrium 448 Ultrium 460 Ultrium 960 SDLT 320 Tape Drive SDLT 600 Tape Drive	1	C + D	Integrated Dual Channel Wide Ultra3 Adapter 64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks Tape Drives, Internal DAT 72 Tape Drive DAT 40 Tape Drive DAT 24 Tape Drive DLT VS80 Tape Drive DLT VS160 Tape Drive	2	C, D	Integrated Dual Channel Wide Ultra3 Adapter 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 Ultrium 215 Ultrium 230 Ultrium 448 Ultrium 460 DAT 72 Tape Drive DAT 40 Tape Drive DAT 24 Tape Drive DLT VS80 Tape Drive DLT VS160 Tape Drive SDLT 320 Tape Drive SDLT 600 Tape Drive	Up to 2	External	Integrated Dual Channel Wide Ultra3 Adapter 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 Ultrium 960	1	External	Integrated Dual Channel Wide Ultra3 Adapter 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 SSL1016 Tape Autoloader	1 autoloader 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	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

5U Rack-Mount Kit

HP StorageWorks Tape Libraries, External Please reference the External
MSL6060 (Ultrium 460 -based) MSL Tape Library
MSL6030 (Ultrium 460 -based) QuickSpecs to
MSL5026S2 (SDLT 320-based) determine
MSL5052S2 (SDLT 320-based) configuration
MSL5030 (Ultrium 230 -based) requirements
MSL5060 (Ultrium 230 -based)

64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter
64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks ESL E-Series Tape Libraries Please reference the External
ESL 712e ESL E-series Tape
ESL 630e Libraries
ESL 322e QuickSpecs to
ESL 286e determine
configuration
requirements

64-Bit/133MHz Dual Channel Ultra320 SCSI Adapter
64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Power Specifications

Part Number	144579-001
Spare Kit	157793-001
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	450	450	450	450	450	450
Nominal Input Current (A rms)	7.1	6.0	3.3	3.1	2.9	2.7
Max Rated Input Wattage Rating (Watts)	692	682	672	662	652	656
Max. Rated VA (Volt-Amp)	706	696	686	675	665	656
Efficiency (%)	65	66	67	68	68	70
Power Factor	0.98	0.98	0.98	0.98	0.98	0.98
Leakage Current (mA)	0.31	0.36	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	42	48	87	92	96	100
Maximum Inrush Current duration (mS)	20	20	20	20	20	20

System Specifications

HP ProLiant ML570 Fully Configured

Up to 4 Processors, 16 Memory Slots, 12 Hard Drives, 6 PCI Slots, and 3 Hot Plug Power Supplies

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Fully Loaded System Input Wattage (W)	1073	1056	1041	1025	1011	996
Fully Loaded System Input Current (A rms)	11.3	9.7	5.1	4.8	4.5	4.2
Fully Loaded System Thermal (BTU-Hr)	3658	3602	3549	3497	3446	3397
Fully Loaded System VA (Volt-Amp)	1129	1112	1062	1046	1031	1016
System Leakage with all power supplies loaded (mA)	.94	1.08	1.95	2.06	2.16	2.25
System Inrush Current with all power supplies loaded (A)	44	50	91	96	101	105
Power cord requirements	Nema 5-15P to IEC320-C13			Option no. See chart below Spare no. See chart below		
	IEC320-C13 to IEC320-C14 NOTE: For interconnect to high Voltage PDU or UPS.			Option no. See chart below Spare no. See chart below		

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: ML570 G2
- Click on: "Power Calculator" link. (You may need to scroll down to see it)

Power Specifications

Country Power Cords (Nema 5-15P to IEC320-C13)	Option Power Cord Part Number/Spare Power Cord Part Number
Euro	157215-021/285810-001
UK	157216-031/121259-001
Danish	157218-081/292657-081
Swiss	157219-111/292657-111
Italian	157217-061/292657-061
South Africa	157220-AR1/N/A
Australia/NZ	227098-011/285811-001
US	227099-002/188493-001 or 188493-002
Argentina	227102-D01/N/A
Country Power Cords (IEC320-C13 to IEC320-C14)	Option Power Cord Part Number/Spare Power Cord Part Number
WW	142257-003/142258-003
Country Power Cords (13A 125V Straight (3.6m or 12ft))	Option Power Cord Part Number/Spare Power Cord Part Number
US	227099-001/187335-001
Country Power Cords (12A 125V Straight (3.6m or 12ft))	Option Power Cord Part Number/Spare Power Cord Part Number
JPN	227100-291/NA
UK	100613-003
US	227099-001

Technical Specifications

System Unit	Dimensions (HxWxD) (with feet/bezel)	20 x 12.8 x 27.8 in (50.8 x 32.5 x 70.6 cm)	
	Rack Dimensions (HxWxD)	12.8 x 17.5 x 25.6 in (32.5 x 44.4 x 65.0 cm)	
	Weight (approximate)	100 lb (45.36 kg)	
	No hard drives installed, one power supply		
	Input Requirements (per power supply)	Range Input Voltage	100 to 127 VAC/200 to 240 VAC
		Rated Input Frequency	47 to 63 Hz
		Input Power	690W @ 110 VAC
		Rated Input Current	7.6A
	BTU Rating	2,400 BTU/hr	
	SCSI Connectors	Two internal HD68 connectors (supporting Wide Ultra3)	
		One external VHDCI connector (supporting Wide Ultra3)	
		One SCSI knockout	
Power Supply Output Power (per power supply)	Rated Steady-State Power	600W	
	Maximum Peak Power		
Acoustic Noise	Listed are the declared A-WEIGHTED SOUND POWER (L_{WAd}) and average bystander position A-WEIGHTED SOUND PRESSURE LEVEL (L_{pAm}) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74, 7th edition) and declared in accordance with ISO 9296 (ECMA 109).		
	Steady-State (Maximum configuration): $L_{WAd} = 7.2$ Bels, Average Bystander $L_{pAm} = 54$ dBA (Note 1)		
	NOTE 1: The values listed apply to both the tower and 7U rack configurations. Maximum configuration tested included four Xeon MP processors, twelve 15K rpm hard drives, three power supplies, and four inlet fans.		

Technical Specifications

48X Max IDE (ATAPI) CD-ROM Drive	Disk	Applicable Disk	CD-ROM, CD-XA, CD-DA (Mode 1, Mode 2, Form 1 and 2) Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined) CD-R
		Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)
	Block Size	Mode 1	2,048 bytes
		Mode 2	2,340 bytes, 2,336 bytes
		CD-DA	2,352 bytes
		CD-XA	2,328 bytes
	Interface	IDE (ATAPI)	
	Access Times (typical)	Random	<100 ms
		Full-Stroke	<150 ms
	Data Transfer Rate	Sustained	3000 to 7200 KB/s (20X to 48X)
		Burst	150 KBps to 7,200 KBps
	Cache Buffer	128 KB	
	Start-up Time (typical)	< 7seconds	
	Stop Time	< 4seconds	
	Laser Parameters	Type	Semiconductor Laser GaAlAs
	Wave Length	780 ± 25 nm	
Operating Conditions	Temperature	41° to 113° F (5° to 45° C)	
	Humidity	10% to 80%	
Dimensions	(HxWxD, maximum)	1.7 x 5.85 x 8.11 in (4.29 x 14.86 x 20.60 cm)	
	Weight	2.09 lb (0.95 kg)	

NC3163 Fast Ethernet NIC Embedded 10/100 WOL (Wake On LAN)	Network Interface	10Base-T/100Base-TX	
	Compatibility	PCI, v2.1, IEEE 802.3/802.3u compliant	
	Data Transfer Method	32-bit bus-master PCI	
	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
Connector	10Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)	
Cable Support	100Base-TX	Category 5 UTP; up to 328 ft (100 m)	

Integrated Dual Channel Wide Ultra3 SCSI Adapter	Drives Supported	Up to 15 SCSI devices per channel
	Data Transfer Method	64-bit PCI bus-master
	SCSI Channel Transfer Rate	160 MB/s per channel
	Maximum Transfer Rate per PCI Bus (peak)	267 MB/s
	SCSI Termination	Active Termination
	SCSI Connectors	1 external, 2 internal (68-pin)

Technical Specifications

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