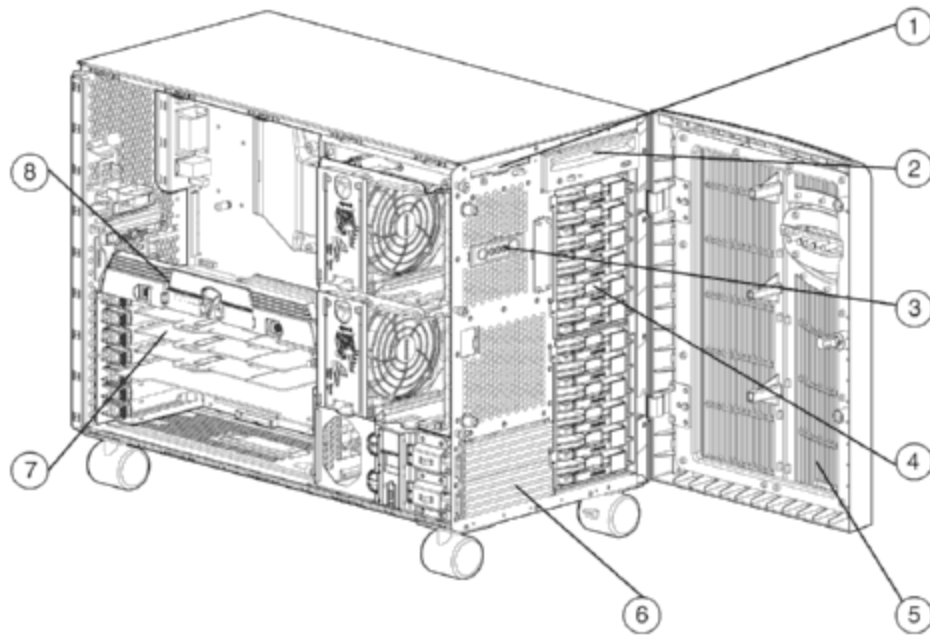
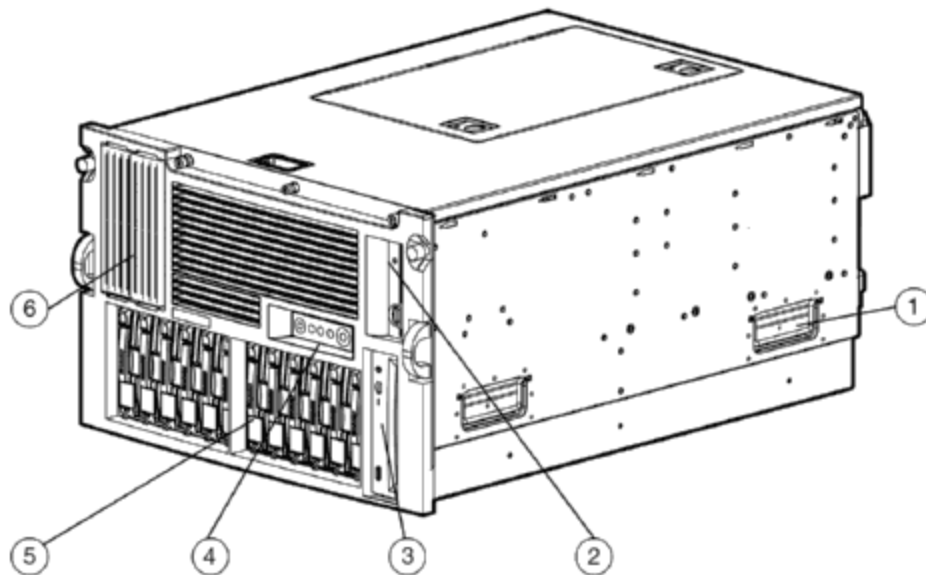


Overview



- 1. 1.44MB Floppy Drive
- 2. High Speed IDE CD-ROM
- 3. Diagnostic Lighting
- 4. Wide Ultra3/Ultra4 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. 1.44MB Floppy Drive
- 3. High Speed IDE CD-ROM

- 4. Diagnostic Lighting
- 5. Wide Ultra3/Ultra4 Hot Plug Drive Bays (12 x 1" Standard)
- 6. 5.25-inch Removable Media Bays

What's New

- Intel® Xeon 3.0GHz Processors with 400MHz system bus

Overview

At A Glance

- Designed for maximum application performance and user workload, the ML530 Generation 2 (G2) offers customers the first 2P expansion server with Mirrored Memory
- Intel Xeon 3.0 GHz, 2.80GHz or 2.40GHz Processors with 400MHz system bus
- 512-KB level 2 cache per processor
- Enterprise Class chipset: ServerWorks GC HE
- PC 1600 ECC SDRAM memory expandable to 16 GB (Advanced ECC memory standard)
- 2:1 interleaved memory
- Seven 64-Bit/100 MHz PCI-X slots; 4 Hot Plug Slots
- Two Ultra3 SCSI Drive Cages standard support up to 12 1" hot plug hard drives
- Internal mass storage capacity up to 2.055 TB (12 x 145.8 GB + 2 x 145.8 GB 1" hot plug drives) with optional ML5xx Internal Two Bay Hot Plug SCSI Drive Cage (with fan)
- Compaq Advanced Memory Protection including Mirrored Memory and Online Spare Memory
- 600-Watt Hot Plug Power Supply with optional 1+ 1 redundancy
- Hot Plug System Fans with optional redundancy
- Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 WOL (Wake On LAN) and PXE support
- Integrated Dual Channel Wide Ultra3 SCSI Adapter
- Protected by Compaq 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. Consult the Compaq Customer Support Center at 1-800-345-1518 for details.

Standard Features

Processor	Intel Xeon 3.0 GHz/512 KB Processor (with 400 MHz system bus)
	NOTE: 1P Models ship with one processor standard. 2P Models ship with two processors standard.
	Intel Xeon 2.80 GHz/512 KB Processor (with 400 MHz system bus)
	NOTE: 1P Models ship with one processor standard. 2P Models ship with two processors standard.
	Intel Xeon 2.40 GHz/512 KB Processor (with 400 MHz system bus)
	NOTE: 1P Models ship with one processor standard. 2P Models ship with two processors standard.

Cache Memory	512-KB level 2 cache per processor
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Upgradability	Upgradable to dual processing
	NOTE: 1P Models only.

Chipset	Enterprise Class chipset: ServerWorks GC HE
	NOTE: For more information regarding ServerWorks, please see the following URL: http://www.serverworks.com/products/overview.html .

Memory	Standard	1024 MB (2 x 512 MB) PC1600-MHz Registered ECC SDRAM
	Maximum	16,384 MB

Network Controller	Embedded NC3163 Fast Ethernet NIC PCI 10/100 with full WOL (Wake On LAN) and PXE support
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Expansion Slots	Bus Speed	Bus Number	Hot Plug	PCI Voltage	Notes
1	64-bit/100MHz PCI-X	1	Yes	3.3V	-
2	64-bit/100MHz PCI-X	1	Yes	3.3V	SA6402/6404 not recommended
3	64-bit/100MHz PCI-X	5	Yes	3.3V	-
4	64-bit/100MHz PCI-X	5	Yes	3.3V	-
5	64-bit/100MHz PCI-X	9	No	3.3V	-
6	64-bit/100MHz PCI-X	9	No	3.3V	-
7	64-bit/100MHz PCI-X	13	No	3.3V	Preferred RILOE slot

NOTE: For more information regarding PCI-X, please see the following URL: <http://www.HP.com/pci-x>.

NOTE: All slots can accept universal keyed PCI cards.

Storage Controllers	Integrated Dual Channel Wide Ultra3 SCSI Adapter
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Storage	Diskette Drives	1.44 MB
	CD-ROM	40x IDE CD-ROM Drive
	Hard Drives	None
	Internal Storage	2.055 TB (with optional ML5xx Internal Two Bay Hot Plug Wide SCSI Drive Cage (with fan) (12 x 146.8-GB 1" + 2 x 146.8-GB 1")
	Half Height Bays	2 bays for optional tape backup, DVD, or SCSI devices

Standard Features

Interfaces	Parallel	1
	Serial	2
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	Network RJ-45	1
	USB	2
	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 Rage XL Video Controller with 8 MB SDRAM Video Memory
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Form Factor	Tower or Rack (7U)
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Standard Features

ProLiant Essentials Foundation Pack Software

Insight Manager 7 and HP Systems Insight Manager

Insight Manager 7 and HP's new HP Systems Insight Manager help 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. Insight Manager 7 and HP Systems Insight Manager are both easy to set up work with the Insight Management Agents, integrated Light-Out and Remote Insight Light-Out Edition, and Version Control Agents to deliver robust fault, configuration, and asset management as well as remote administration. With HP Systems Insight Manager 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 Systems Insight Manager visit <http://www.hp.com/go/hpsim>.

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 Insight Manager 7 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>.

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.

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:

- 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..

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
PCI-X 1.0 Compliant
WOL Support
Microsoft® Logo certifications
Novell certified

Availability

Compaq 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.

NOTE: All Compaq Advanced Memory Protection modes are configured in the ROM-Based Setup Utility (RBSU) and viewable through Insight Manager 7 (CIM 7) and the Integrated Management Log (IML).

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

Intelligent Manageability

Insight Manager 7
HP Systems Insight Manager
Redundant ROM
Remote Flash ROM Utility
Remote Lights-Out Edition (optional)
Automatic Server Recovery-2 (ASR-2)
Integrated Management Log
Server Health Logging
Drive Parameter Tracking (with Smart Array Controller)
Dynamic Sector Repairing (with Smart Array Controller)
Pre-Failure Warranty (covers processors, hard drives and memory)

Standard Features

Security

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

Server Power Cords

One Lowline power cord ships standard

Power Supply

One 600W Hot Plug Power Supply standard

- Optional 2nd Power Supply for 1+ 1 redundancy

NOTE: Redundant Hot Plug Power Supplies standard on 2P servers.

NOTE: North American variants ship with IEC320-C13 to Nema 5-15P detachable power cord. (Rack models only).

System Fans

Two Hot Plug System Fans standard

- Optional Hot Plug Redundant Fan kit includes two more

NOTE: Hot Plug Redundant Fans standard on 2P servers.

Required Cabling

For required cabling information, refer to the HP Web site at
<http://h18000.www1.hp.com/products/servers/proliantML530/>.

OS Support

Microsoft Windows NT® Server
Microsoft Windows NT Enterprise Edition
Microsoft Windows 2000
Windows Server 2003
Novell NetWare
SCO UnixWare
LINUX (Red Hat, SuSE)
Sun Solaris Intel Platform Edition
Caldera OpenUnix
OS/2 e-Business

NOTE: For a more complete and up-to-date listing of supported OS's 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 ML530 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 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/ProLiantML530/index.html>.

Installation of HP servers into Third Party Round Hole Racks

If a Third Party rack is used, an additional rack kit will need to be used with the rack kit that comes with the server. The additional rack kit part number is Compaq part number 274739-B21. The rack kit comes with all necessary brackets, hardware and installation instructions.

NOTE: Third party square-holed racks are supported using the standard rack rail kit that ships with the rack server models.

Installation of HP servers into Telco Racks

If a Telco is used, an additional rack kit and brackets will need to be used with the rack kit that comes with the server (optional Third Party Rack Kit (PN: 274739-B21)). Please see the following URL to purchase the brackets (rack kit and brackets come with all necessary brackets, hardware, and installation instructions:

<http://www.racksolutions.com/compaq/products.htm>.

HP Factory Express Capabilities

HP Factory Express gives you the flexibility to choose from a full menu of factory capabilities all in one manufacturing facility, in one process, with one touch giving you full control and access to HP's World class manufacturing facility anytime. This approach provides you the speed to deploy your IT needs, with total quality assurance, reliability, and predictability to lower your total cost of ownership by letting HP install, rack, and customize your software and hardware options for you.

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

Service includes HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the enclosure, and 22" and smaller external monitors will be covered at the same service level and coverage period as the server. 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

ML530T02 X3000-512KB, 1024MB, 1P 271243-xx1	Processor	One Intel Xeon 3.0 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

ML530T02 X3000-512KB, 1024MB, 2P 271245-xx1	Processor	Two Intel Xeon 3.0 GHz Processor standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

ML530T02 X2800-512KB, 1024MB, 1P 306487-xx1	Processor	One Intel Xeon 2.80 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

Models

ML530T02 X2800-512KB, 1024MB, 2P <small>306489-xx1</small>	Processor	Two Intel Xeon 2.80 GHz Processor standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

ML530T02 X2400-512KB, 1024MB, 1P <small>180285-xx1</small>	Processor	One Intel Xeon 2.40 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

ML530T02 X2400-512KB, 1024MB, 2P <small>226608-xx1</small>	Processor	Two Intel Xeon 2.40 GHz Processors standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Tower

Models

ML530R02 X3000-512KB, 1024MB, 1P 271244-xx1	Processor	One Intel Xeon 3.0 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

ML530R02 X3000-512KB, 1024MB, 2P 271246-xx1	Processor	Two Intel Xeon 3.0 GHz Processor standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

ML530R02 X2800-512KB, 1024MB, 1P 306488-xx1	Processor	One Intel Xeon 2.80 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

Models

ML530R02 X2800-512KB, 1024MB, 2P <small>306490-xx1</small>	Processor	Two Intel Xeon 2.80 GHz Processor standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

ML530R02 X2400-512KB, 1024MB, 1P <small>180286-xx1</small>	Processor	One Intel Xeon 2.40 GHz Processor standard (up to 2 supported)
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	One 600W Hot Plug Power Supply
	System Fan	Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

ML530R02 X2400-512KB, 1024MB 2P <small>226609-xx1</small>	Processor	Two Intel Xeon 2.40 GHz Processors standard
	Processor System Bus	400 MHz system bus
	Processor Memory	512-KB level 2 cache per processor
	Memory	1024 MB (Standard) 16,384 MB (Maximum) PC1600 Advanced ECC SDRAM; 2:1 interleaved memory NOTE: Maximum memory achieved using 2048 MB DIMMs.
	Network Controller	Embedded Compaq NC3163 Fast Ethernet NIC PCI 10/100 with WOL (Wake On LAN)
	Storage Controller	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Hard Drive	None ship standard
	Internal Storage	12 1" hot plug hard drive bays standard
	Power Supplies	Redundant 600W Hot Plug Power Supplies (1 + 1 redundancy)
	System Fan	Redundant Hot Plug System Fans
	Drive Cages	Two 6 x 1" Drive Cages standard
	Optical Drive	40x or higher IDE CD-ROM Drive
	Form Factor	Rack (7U)

Models

Country Code Key		Tower Code Key		Rack Code Key
	XX=00		U.S. English	U.S. English
	XX=01		Australia	N/A
	XX=03		UK	N/A
	XX=04		Germany	N/A
	XX=05		France	N/A
	XX=37		APD	APD
	XX=29		Japan	Japan
	XX=42		Europe	Europe
	XX=AA		PRC	PRC

Options

ProLiant ML530 G2 Unique Options	Intel Xeon 3.0 GHz/512 KB Processor Option Kit	316898-B21
	Intel Xeon 2.80 GHz/512 KB Processor Option Kit	306504-B21
	Intel Xeon 2.40 GHz/512 KB Processor Option Kit	191224-B21
	512 MB (2 x 256 MB) PC1600 ECC SDRAM Memory Kit	187418-B21
	1024 MB (2 x 512 MB) PC1600 ECC SDRAM Memory Kit	187419-B21
	2048 MB (2 x 1024 MB) PC1600 ECC SDRAM Memory Kit	187420-B21
	4096 MB (2 x 2048 MB) PC1600 ECC SDRAM Memory Kit	187421-B21
	ProLiant ML5xx G2 Tower to Rack Conversion Kit	253699-B21
	ProLiant ML5xx G2 Rack to Tower Conversion Kit	271258-B21

ProLiant Essentials Value Pack Software	Rapid Deployment Pack, 1 User, V1.x	267196-B21
	NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 1 User, V1.x (Japan)	267196-291
	NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 10 Users, V1.x	269817-B21
	NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 10 Users, V1.x (Japan)	269817-291
	NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	
	ProLiant Essentials Workload Management Pack 2.0 (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	Performance Management Pack, single server	306696-B21
	NOTE: This license allows 1 server to be managed by Performance Management Pack.	
	Performance Management Pack, flexible license kit	306697-B21
	NOTE: A single pack is shipped with a single license key for the total number of licenses ordered	
	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 .	

Software	HP digital asset protection	302316-001
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Processor	Intel Xeon 3.0 GHz/512 KB Processor Option Kit	316898-B21
	Intel Xeon 2.80 GHz/512 KB Processor Option Kit	306504-B21
	Intel Xeon 2.40 GHz/512 KB Processor Option Kit	191224-B21

Memory (DIMMs; 2:1 interleaved)	512MB PC1600 Registered ECC SDRAM Memory Kit (2 x 256 MB)	187418-B21
	1024MB PC1600 Registered ECC SDRAM Memory Kit (2 x 512 MB)	187419-B21
	2048MB PC1600 Registered ECC SDRAM Memory Kit (2 x 1024 MB)	187420-B21
	4096MB PC1600 Registered ECC SDRAM Memory Kit (2 x 2048 MB)	187421-B21

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 CDROM bay and in the removable media bay.	

Options

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	
	36.4-GB 10,000 rpm U320 Universal Hard Drive (1")	286713-B22
	72.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286714-B22
	146.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286716-B22
	18.2-GB 15,000 rpm U320 Universal Hard Drive (1")	286775-B22
	36.4-GB 15,000 rpm U320 Universal Hard Drive (1")	286776-B22
	72.8-GB 15,000 rpm U320 Universal Hard Drive (1")	286778-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 532 Controller	225338-B21
	Smart Array 532 Controller (Japan)	225338-291
	Smart Array 6402/128 Controller	273915-B21
	256MB DDR, Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB Battery-Backed Cache upgrade kit supports the Smart Array 6400 series controller only.	
	Smart Array 5304/256 Controller	283551-B21
	Smart Array 5304/256 Controller (Japan)	283551-291
	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.	
	64 MB Battery Backed Write Cache Enabler	291969-B21
	NOTE: This 64 MB BBWC supports the Smart Array 641 Controller and Smart Array 642 Controller.	
	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter	268351-B21
	Ultra320 Expansion Module for SA-6402	273911-B21
	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-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/10851_div/10851_div.HTML (Smart Array 532) http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML (Smart Array 6400 Series) http://h18000.www1.hp.com/products/quickspecs/11563_div/11563_div.HTML (Smart Array 641) http://h18000.www1.hp.com/products/quickspecs/11563_div/11563_div.HTML (Smart Array 642) http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML (SCSI Adapter) http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML (U320 Adapter)	
Communications	NC6170 Dual Port PCI-X 1000SX Gigabit Server Adapter	313879-B21
	HP NC6770 PCI-X Gigabit Server Adapter, 1000-SX	244949-B21
	NC7170 Dual Port PCI-X 1000T Gigabit Server Adapter	313881-B21
	NC7771 PCI-X Gigabit Server Adapter	290563-B21
	NOTE: Any NC61XX, NC71XX or NC77XX NIC can be used for redundancy with the embedded NC7781 Network Controller.	

Options

Redundant Options	Hot-plug Redundant Fan Kit	128284-B21
	NOTE: Included in 2P models.	
	Hot Plug Redundant Power Supply	236845-001
	NOTE: Included in 2P models.	
	Hot Plug Redundant Power Supply (Australia)	236845-011
	NOTE: Included in 2P models.	
	Hot Plug Redundant Power Supply (Int'l)	236845-021
Management Options	NOTE: Included in 2P models.	
	Hot Plug Redundant Power Supply (UK)	236845-031
	NOTE: Included in 2P models.	
	Hot Plug Redundant Power Supply (Japan)	236845-291
	NOTE: Included in 2P models.	
	Remote Insight Lights-Out Edition II (NA, LA)	227251-001
	Remote Insight Lights-Out Edition II (EMEA)	227251-021
Security	Remote Insight Lights-Out Edition II (ROW)	227251-371
	HP/Atalla AXL600L SSL Accelerator Card for ProLiant Servers	524545-B21
	Compaq AXL300 Accelerator PCI Card for ProLiant Servers	227933-B21
Monitors	Rackmount Flat Panel Monitors	
	TFT5110R Flat Panel Monitor (Carbon)	281683-B21
	TFT7210R Rack Mounted 17" Monitor	348373-B21
	NOTE: Monitors larger than 17" may be too heavy for use in rack systems.	
	NOTE: For a complete list of Monitors please view the following URL: http://h18004.www1.hp.com/products/monitors/	
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.	
	Internal, External, and Rack-Mount Ultrium Tape Drives	
	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 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
	NOTE: Needs to be ordered when purchasing an internal Ultrium 230 drive that will be installed	

Options

inside of an ML 530 G1/G2 or ML 570 G1/G2. Kit includes fan and instructions to install fan inside of server in drive bay.

NOTE: Please see the HP StorageWorks Ultrium 215, 230, and 460 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)

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>

Internal, External, Hot-Plug, and Rack-Mount DAT Drives

HP StorageWorks DAT 72 Tape Drive, External (Carbon)	Q1523A
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 24 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 for controllers, media, and other options:

http://h18000.www1.hp.com/products/quickspecs/11883_div/11883_div.HTML (Worldwide)

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

NOTE: Please see the DLT VS80 Tape Drive QuickSpecs 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, External and Rack-mount 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
Fan Option - Internal Cooling Fan Kit	344257-B21

NOTE: Needs to be ordered when purchasing an internal SDLT 320 drive that will be installed inside of an ML530 G1/G2 or ML570 G1/G2. Kit includes fan and instructions to install fan inside of server in drive bay.

NOTE: Please see the SDLT 320 Tape Drive QuickSpecs for additional options such as adapters, controllers, and media.

http://h18006.www1.hp.com/products/quickspecs/11406_div/11406_div.HTML (Worldwide)

http://h18006.www1.hp.com/products/quickspecs/11406_na/11406_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

Options

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)	
Accessories for 3U & 5U Rack-mount Tape Drive Kits	
LVD Cable Kit, VHDCI/HD68	168048-B21
NOTE: For use with the 3U Rackmount Kit and 5U Rackmount Kit only.	
LVD Cable Kit, HD68/HD68	242381-B21
NOTE: For use with the 3U Rackmount Kit and 5U Rackmount Kit only.	
Accessories for 3U & 5U Rack-mount Tape Drive Kits	
<i>PSU/Fan Upgrade Kit - Redundant hot-swap power supply unit and fan for Tape Array 5300.</i>	
68-pin HD multi-mode terminator	C2364A
1.0m 68-pin VHDCI to 68-pin HD cable	C2361B
2.5m 68-pin VHDCI to 68-pin HD cable	C2362B
5.0m 68-pin VHDCI to 68-pin HD cable	C2365A
10.0m 68-pin VHDCI to 68-pin HD cable	C2363B
0.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2978B
1.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2979B
0.9m 68-pin HDI to 68-pin HD cable LVD/SE	C2911C
2.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2924C
NOTE: For use with Tape Array 5300 only	

Options

Tape Autoloaders

DAT Autoloader

HP StorageWorks DAT 40x6 Tape Autoloader, Internal (Flint)	C5716A
HP StorageWorks DAT 40x6 Tape Autoloader, External (Flint)	C5717C

NOTE: Please see the DAT 40x6 Tape Autoloader QuickSpecs for additional options such as host bus adapters, controllers and media:

http://h18000.www1.hp.com/products/quickspecs/11882_div/11882_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11882_na/11882_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 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
SSL1016 DLT1 Tape Autoloader	330815-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, rackmount	330731-B22
MSL6030, 2 drive, 30 slots, Ultrium 460, rackmount	330731-B23
MSL6030, 1 drive, 30 slots, Ultrium 460, rackmount with embedded FC router	330731-B24
MSL6030, 2 drive, 30 slots, Ultrium 460, rackmount with embedded FC router	330731-B25
MSL6030, 1 drive, 30 slots, Ultrium 460, tabletop	330788-B21
MSL6030, 2 drive, 30 slots, Ultrium 460, tabletop	330788-B22
MSL6060, 2 drive, 60 slot, Ultrium 460, rackmount	331196-B21
MSL6060, 2 drive, 60 slot, Ultrium 460, rackmount with embedded FC router	331196-B22
MSL6060, 2 drive, 60 slot, Ultrium 460, tabletop	331195-B21

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, rackmount	293472-B22
MSL5026S2, 2 drive, 26 slots, SDLT 320, rackmount	293472-B23
MSL5026S2, 1 drive, 26 slots, SDLT 320, rackmount with embedded FC router	293472-B24
MSL5026S2, 2 drive, 26 slots, SDLT 320, rackmount with embedded FC router	293472-B25
MSL5026S2, 1 drive, 26 slots, SDLT 320, tabletop	293473-B21

Options

MSL5026S2, 2 drive, 26 slots, SDLT 320, tabletop 293473-B22

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, rackmount 293474-B21

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

MSL5052S2, 2 drive, 52 slots, SDLT 320, tabletop 293476-B21

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, rackmount 301897-B22

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

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

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

MSL5030, 1 drive, 30 slots, Ultrium 230, tabletop 301898-B21

MSL5030, 2 drive, 30 slots, Ultrium 230, tabletop 301898-B22

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, rackmount 301899-B22

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

MSL5060, 2 drive, 60 slots, Ultrium 230, tabletop 301900-B21

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 AA934A

ESL Extended 712e Tape Library, 0 drive, 712 LTO slots AA935A

ESL Extended 630e Tape Library, 0 drive, 630 SDLT slots AA937A

ESL E Ultrium 460 drive kit AA936A

ESL E SDLT 320 drive kit

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>

HP StorageWorks ESL9000 Series Tape Libraries

ESL9595 Extended Tape Library, 0 drive, 400 slots (card cage, Interface Mgr card, Command View license) 343378-B21

ESL9322 Extended Tape Library, 0 drive, 222 slots (card cage, Interface Mgr card, Command View license) 343377-B21

ESL9000 Ultrium 460 drive kit 330834-B21

ESL9000 Ultrium 230 drive kit 301930-B21

Options

ESL9000 SDLT 320 drive kit

293414-B21

NOTE: Please reference the ESL9000 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 9.1 GB High-end Optical Jukeboxes

1200mx, 4 drive, up to 128 slots

C1104M

1200mx, 6 drive, up to 128 slots

C1105M

2200mx, 4 drive, up to 238 slots

C1111M

2200mx, 6 drive, up to 238 slots

C1107M

2200mx, 10 drive, up to 238 slots

C1110M

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

External Storage – Tower & Rack

HP StorageWorks Modular Smart Array 30 SB

302969-B21

NOTE: Rack-mountable 14 drive enclosure with single bus , redundant power supplies

HP StorageWorks Modular Smart Array 30 DB

302970-B21

NOTE: Rack-mountable 14 drive enclosure with single bus , redundant power supplies

NOTE: The Modular Smart Array Enclosure 30 Family supports the Wide Ultra3, Ultra320 1" Hot Plug Hard Drives.

Redundant Power Supply 499W

338296-B21

StorageWorks Single Bus U320 I/O Module

287484-B21

StorageWorks Dual Bus Ultra320 I/O Module

287483-B21

Options

HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000	201723-B22
	Modular Smart Array 1000 Controller	218231-B22
	Modular Smart Array Fibre Channel I/O Module	218960-B21
	Modular Smart Array 1000 Fibre Channel Adapter (FCA) 2101	245299-B21
	Modular Smart Array hub 2/3	286763-B21
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)		

StorageWorks Options	StorageWorks SAN Switch 2/8-EL	322120-B21
	StorageWorks SAN Switch 2/16	322118-B21

UPS Power Cord Matrix	Please see the UPS Power Cord Matrix for cable descriptions, requirements, and specifications for UPS units: ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf .	
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Uninterruptible Power Systems – Tower Supply	Compaq UPS T1000 XR (1000 VA, 700 Watts), Low Voltage (NA)	204155-001
	Compaq UPS T1000 XR (1000 VA, 700 Watts), High Voltage (Int'l)	204155-B31
	UPS T1000 XR (1000VA, 700Watts) 100 VAC (JPN)	312803-291
	Compaq UPS T1500 XR (1440 VA, 1050 Watts) (NA)	204155-002
	Compaq UPS T1500 XR (1500 VA, 1050 Watts) (Int'l)	204155-B32
	Compaq UPS T1500 XR (1500 VA, 1050 Watts) (Japan)	204155-292
	Compaq UPS T2200 XR (1920 VA, 1600 Watts) Low Voltage (NA)	204451-001
	Compaq UPS T2200 XR (2200 VA, 1600 Watts) High Voltage (NA)	204451-002
	Compaq UPS T2200 XR (2200 VA, 1600 Watts) (Int'l)	204451-B31
	Compaq UPS T2200 XR (2200 VA, 1600 Watts) (Japan)	204451-291

Options

Uninterruptible Power Systems – Rack	HP UPS R1500 XR (100 to 127) (NA)	204404-001
	HP UPS R1500 XR (208 to 480) (Int'l)	204404-B31
	HP UPS R1500 XR (100 to 127) (Japan)	204404-291
	HP UPS R3000 XR (120V) (NA)	192186-001
	HP UPS R3000 XR (208V) (NA)	192186-002
	HP UPS R3000 XR (100V) (Japan)	192186-291
	HP UPS R3000 XR (208V) (Japan) Compaq UPS R3000 XR (200V) (Japan)	192186-292
	HP UPS R3000 XR (230V) (Int'l - detachable cord)	192186-B31
	HP UPS R3000 XR (230V) (16A IEC309 Plug)	192186-B32
	HP UPS R3000 XR (230V) (16A CEE 7/7 SCHUKO Plug)	192186-B33
	HP UPS R3000 XR (230V) (16A BS-546 Plug)	192186-AR1
	HP UPS R5500 XR, (5000VA, 4500 Watt), High Voltage (NA/Japan)	326529-D71
	HP UPS R5500 XR, (6000VA, 5400 Watt), High Voltage (Int'l)	326529-B31
	Extended Runtime Module R5500XR,WW	326564-B21
	NOTE: 3U each, two ERM maximum.	
	Rack-Mountable UPS R6000 (208V) (NA)	347207-001
	Rack-Mountable UPS R6000 (230V) (Int'l)	347207-B31
	Rack-Mountable UPS R6000 (200V) (Japan)	347207-291
	UPS R12000 XR N+ x (200-240V) (WW-hardwired)	207552-B22
	NOTE: UPS R6000 has a hardwired input; and the UPS R12000 XR has a hardwired input and output connection.	

UPS Options	SNMP Serial Port Card	192189-B21
	NOTE: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	
	Six Port Card	192185-B21
	NOTE: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	
	Extended Runtime Module, T1000 XR	218967-B21
	Extended Runtime Module, T1500 XR/T2200 XR	218969-B21
	Extended Runtime Module, R1500 XR	218971-B21
	NOTE: 2U each, two ERM maximum.	
	Extended Runtime Module, R3000 XR	192188-B21
	NOTE: 2U each, one ERM maximum.	
	Extended Runtime Module, R6000	347224-B21
	NOTE: 3U each, two ERM maximum.	
	Extended Runtime Module, R12000 XR, 4U each, two ERMs maximum	217800-B21
	R12000 XR BackPlate Receptacle Kit, (2) L6-30R (NA)	325361-001
	NOTE: The R12000 XR BackPlate Kit has a hardwired input.	
	R12000 XR BackPlate Receptacle Kit, (2) IEC-309R (WW)	325361-B21
	NOTE: The R12000 XR BackPlate Kit has a hardwired input.	
	SNMP-EN Adapter	347225-B21
	NOTE: Supports R6000 UPS series only.	
	Cable, 1xC13-C14, Y-Cable (WW)	310782-B21
	Cable, 1xECC19-C20, 16A, 2.5m (WW)	295633-B22

Options

Modular PDUs 1U/0U (Up to 32 outlets)	HP Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan)	252663-D71
	NOTE: The above mPDU may also be used to connect to the low volt model of the UPS R3000 XR.	
	HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan)	252663-D72
	NOTE: L6-30 input.	
	HP Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)	252663-B31
	HP Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW)	252663-B21
	NOTE: The 40A model has a hardwired input.	
	HP Modular Power Distribution Units (mPDU), High Volt Model, 16A (200-240 VAC) (WW)	252663-B24
	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. Cable P/N 340653-001 required if connecting to UPS R3000 XR (192186-002 NA -High Volt model only).	
	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)	
PDU Options	1U PDU Mounting Brackets Kit	215852-B21
	NOTE: The 1U PDU Mounting Brackets are required when mounting PDUs PN 207590-xxx series in 1U configurations.	
	Third Party Modular PDU Mounting Kit	310777-B21
	NOTE: This kit allows you to mount the Modular PDUs in racks other than the 9000/10000 Series racks (any racks using the standard 19" rail). For more details please refer the Modular PDU QuickSpecs.	
USB Options	USB Optical Scroll Mouse (Carbonite)	DD441B
	USB 1.44-MB External Diskette Drive (Carbonite)	DC141B
	USB Easy Access Keyboard (Carbonite/Silver)	DC168B#

Options

USB Easy Access Keyboard (Carbonite/Silver) Country Key Code

Dash #	Description	Dash #	Description
A2M	ICELAND	ABT	HE
AB0	TAWA	ABU	UK
AB1	KOR	ABV	ARA
AB2	PRC	ABX	FIN
AB6	FRA	ABY	DEN
AB7	GRK	ABZ	ITL
AB8	TURK	AC0	BEL
AB9	PORT	AC4	BRZ
ABA	US	ACB	RUSS
ABB	EURO	AKB	CZE
ABC	FCAN	AKC	HUNG
ABD	GR	AKD	POL
ABE	SP	AKL	THAI
ABF	FR	AKN	BHCSY
ABH	NL	AKR	SLOV
ABJ	Japan	ARK	ICELAND
ABM	LA	B15	KAZ
ABN	NOR	UUZ	SWISS
ABS	SW		

Custom Builder

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

Rack Conversion Kit

ProLiant ML5xx G2 Tower to Rack Conversion Kit	253699-B21
ProLiant ML5xx G2 Rack to Tower Conversion Kit	271258-B21

Options

HP Rack 10000 Series (Graphite Metallic)

HP Rack S10614 (14U) Rack Cabinet - Shock Pallet	292302-B22
HP Rack 10842 (42U, 800mm wide) – Pallet	257415-B21
HP Rack 10842 (42U, 800mm wide) – Shock Pallet	257415-B22
HP Rack 10647 (47U) – Pallet	245160-B21
HP Rack 10647 (47U) – Crated	245160-B23
HP Rack 10642 (42U) – Pallet	245161-B21
HP Rack 10642 (42U) – Shock Pallet	245161-B22
HP Rack 10642 (42U) – Crated	245161-B23
HP Rack 10636 (36U) – Pallet	245162-B21
HP Rack 10636 (36U) – Shock Pallet	245162-B22
HP Rack 10636 (36U) – Crated	245162-B23
HP Rack 10622 (22U) – Pallet	245163-B21
HP Rack 10622 (22U) – Shock Pallet	245163-B22
HP Rack 10622 (22U) – Crated	245163-B23

NOTE: -B21 (pallet) used to ship empty racks shipped on a truck

-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)

-B23 (crated) used for air shipments of empty racks

NOTE: 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/racks/index.html>.

Rack Options for HP Rack 10000 Series

Rack Blanking Panels – Graphite (Multi)	253214-B26
NOTE: Contains one each of 1U, 2U, 4U and 8U.	
Rack Blanking Panels – Graphite (1U)	253214-B21
NOTE: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (1U).	
Rack Blanking Panels – Graphite (2U)	253214-B22
NOTE: The Rack Blanking Panels (PN 253214-B22) contains 10 each of (2U).	
Rack Blanking Panels – Graphite (3U)	253214-B23
NOTE: The Rack Blanking Panels (PN 253214-B23) contains 10 each of (3U).	
Rack Blanking Panels – Graphite (4U)	253214-B24
NOTE: The Rack Blanking Panels (PN 253214-B24) contains 10 each of (4U).	
Rack Blanking Panels – Graphite (5U)	253214-B25
NOTE: The Rack Blanking Panels (PN 253214-B25) contains 10 each of (5U).	
800mm Wide Stabilizer Kit (Graphite)	255488-B21
NOTE: Supported by the Rack 10842 cabinet only.	
600mm Stabilizer Kit – Graphite	246107-B21
Baying Kit for Rack 10000 series (Carbon)	248929-B21
42U Side Panel – Graphite Metallic	246099-B21
110V Fan Kit (Graphite)	257413-B21
NOTE: Roof Mount Includes power cord with IEC320-C13 to Nema 5-15P.	
220V Fan Kit (Graphite)	257414-B21
NOTE: Roof Mount Includes power cord with IEC320-C13 to Nema 6-15P.	
36U Side Panel – Graphite Metallic	246102-B21
47U Side Panel – Graphite Metallic	255486-B21

Options

9000/10000 Series Offset Baying Kit (42U)	248931-B21
NOTE: This kit can be used to connect 9000 and 10000 series racks of the same U height together. Kit contents include hardware for connecting racks and a panel to cover the 100mm gap at the rear of the two racks.	
NOTE: For additional information regarding Rack Options, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html .	
Ballast Option Kit	120672-B21
9000/10000 Series Offset Baying Kit (42U)	248931-B21
NOTE: This kit can be used to connect 9000 and 10000 series racks of the same U height together. Kit contents include hardware for connecting racks and a panel to cover the 100mm gap at the rear of the two racks.	
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 Rail Adapter Kit (25" depth)	120675-B21
100 kg Sliding Shelf	234672-B21
Monitor/Utility Shelf - Graphite	253449-B21
Depth Adjustable Fixed Rail	332558-B21
Cable Management D-Rings Kit	168233-B21
KVM USB Interface Adapter	336047-B21
Server Console Switch 1 x 4 port (100-230 VAC)	400336-001
Server Console Switch, 0 x 1 x 8 port	336044-B21
Server Console Switch, 0 x 2 x 16 port	336045-B21
Server Console Switch 1 x 4 port (100-230 VAC) (Int'l)	400336-B31
Server Console Switch 1 x 4 port (100-230 VAC) (Japan)	400336-291
IP Console Switch Box, 1 x 1 x 16	262585-B21
IP Console Switch Box, 3 x 1 x 16	262586-B21
IP Console Interface Adapter, 8 pack	262587-B21
IP Console Interface Adapter, 1 pack	262588-B21
IP Console Expansion Module	262589-B21
CPU to Server Console Cable, 12'	110936-B21
CPU to Server Console Cable, 3'	110936-B24
CPU to Server Console Cable, 7'	110936-B25
IP CAT5 Cable 3', 4 pack	263474-B21
IP CAT5 Cable 6', 8 pack	263474-B22
IP CAT5 Cable 12', 8 pack	263474-B23
IP CAT5 Cable 20', 4 pack	263474-B24
IP CAT5 Cable 40', 1 pack	263474-B25
Switch Box Connector Kit (high voltage) (Int'l)	144007-B33
TFT5600 Rack Keyboard Monitor	221546-xx1
Country Code Key (for TFT5600 RKM Rack Keyboard Monitor (PN 221546-xx1))	
XX = 001	US
XX = 031	UK
XX = 041	Germany
XX = 051	France
XX = 061	Italy
XX = 071	Spain
XX = 081	Denmark
XX = 091	Norway
XX = 101	Sweden/Finland
XX = 111	Switzerland
XX = 131	Portugal
XX = 181	Belgium
XX = 291	Japan
XX = B31	International
Local Access Cable Kit	232985-B21
1U Rack Keyboard & Drawer (Carbon)	257054-xx1
NOTE: The 1U Rack Keyboard & Drawer (PN 257054-xx1) is to be used with the Keyboards for Racks	

Options

with Trackball (PN 158649-xxx).			
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
Input Device Adjustable Rails			287139-B21
NOTE: Input Device Adjustable Rails (287139-B21) are for use with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.			
Input Device Telco Rail			287138-B21
NOTE: Input Device Adjustable Rails (287138-B21) are for use ONLY with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.			
Keyboard/Monitor/Mouse extension cables			169989-001
NOTE: For additional information regarding Rack Options, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html .			
Rack Options for Third Party Cabinet Racks	Rack Adapter Kit		332815-B21
	NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.		
	Third Party Rack Kit		274739-B21
	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.		

Options

HP Factory Express

Factory Installation, Racking, and Customization Services

Factory Express Server Configuration Level 1 293355-888

NOTE: Free Installation of HP Options - Installation of HP Options memory, NICs, hard drives, controllers, processors, I/O cards, pre-install standard OEM OS image, and tape drives. Installation fees will apply to all non-HP certified hardware and asset tags.

Factory Express Server Configuration Level 2 266326-888

NOTE: Includes Level 1 Customer Intent of a ProLiant server and options configuration, OS installation, custom image download, IP addressing, network setting, and custom packaging. Customer unique requirements (quick restore creation, cd duplication, test reports, real-time reporting of server MAC address, password, and RILOE). Customer access, validation and control through VPN (price/server).

Factory Express Rack Integration Level 3 with 1 – 3 servers or storage enclosures 325736-888

Factory Express Rack Integration Level 3 with 4 – 9 servers or storage enclosures 232539-888

Factory Express Rack Integration Level 3 with 10 or more servers or storage enclosures 325735-888

NOTE: Includes Level 1 Customer Intent for standard mounted servers and storage units plus standard cable mgmt, RAID configuration, servers & storage, power distribution, networking gear and accessories (price/rack).

NOTE: Available on ProLiant rack models only.

Factory Express Rack Integration Level 4 with 1 – 3 servers or storage enclosures 325734-888

Factory Express Rack Integration Level 4 with 4 – 9 servers or storage enclosures 232540-888

Factory Express Rack Integration Level 4 with 10 or more servers or storage enclosures 325733-888

NOTE: Includes Level 2 Customer Intent plus customer defined cable management and naming convention, customer furnished image download, IP addressing, cluster configurations (SQL, External storage RAID). Quick restore creation, cd duplication, test reports, real-time reporting of server MAC address, password, RILOE). Customer access and validation through VPN (price/rack).

NOTE: Available on ProLiant rack models only.

Factory Express Rack Integration Level 5 with 1 – 3 servers or storage enclosures 325732-888

Factory Express Rack Integration Level 5 with 4 – 9 servers or storage enclosures 232541-888

Factory Express Rack Integration Level 5 with 10 or more servers or storage enclosures 325731-888

NOTE: Includes Level 4 Customer Intent plus Custom SW layering and extended test, Customer access, validation and control through VPN, Clustered racks with networking gear and / or external storage array, Start-up installation services custom quote. (price/rack).

NOTE: Available on ProLiant rack models only.

NOTE: Factory Express Engineered Solution Level 6 is a custom solutions available through Factory Express. Please contact your local reseller or Account Manager.

Service and Support Offerings (HP Care Pack Services)

Hardware Services 4-Hour On-site Service

4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (2-5-2 Part Number for Canada) FP-MI4HR-36

4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (6-3 Part Number for US) 401783-002

4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (6-3 Part Number for EMEA) 324418-002

4-Hour On-site Service, 24 Hour x 7 Day Coverage, 3 Years (6-3 Part Number for US) 401782-002

4-Hour On-site Service, 24 Hour x 7 Day Coverage, 3 Years (2-5-2 for Canada) FP-MI724-36

4-Hour On-site Service, 24-Hour x 7-Day Coverage, 3 Years (2-5-2 Part Number for EMEA) 376911-022

Options

Installation & Start-up Services

Hardware Installation (2-5-2 Part Number for Canada)	FP-MIINS-IN
Hardware Installation (6-3 Part Number for US)	401793-002
Hardware Installation (6-3 Part Number for EMEA)	Quote
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Win NT Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (2-5-2 Part Number for Canada.)	FM-MSTEC-03
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Win NT Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (6-3 Part Number for U.S.)	240015-002
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Novell NetWare Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (2-5-2 Part Number for Canada)	FM-NSTEC-03
Pre-installation planning; unpack equipment, install most current Compaq HW options internal to server at same time of server installation; assemble & test; basic user information provided; Install & configure basic functionality of Novell NetWare Operating System plus up to 1 day start-up activity, configure print & network access services, and orientation (6-3 Part Number for U.S.)	240010-002
Server Installation and Set-Up (Installation of the server, installation of the appropriate service tools, check to ensure device SW and firmware is loaded and installation of the operating system software (6-3 Part Number for EMEA.)	204564-022

HP Care Pack Priority Services for ProLiant Servers – Priority Level

9x5 4-hour H/W, 9x5 2-hour O/S (NT & NetWare), 3 Years (6-3 Part Number for EMEA)	179836-022
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (2-5-2 Part Number for Canada)	FM-M01E3-36
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239936-002
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Novell NetWare Operating System, Next Available Specialist (2-5-2 Part Number for Canada)	FM-N01E3-36
9 x 5 HW, 4-hr response, Next Available HW engineer; 9 x 5 Bronze Software Support 2-hr response for Novell NetWare Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239976-002

HP Care Pack Priority Services for ProLiant Servers – Priority 24 Level

24x7 4-hour H/W, 24x7 2-hour O/S (NT & NetWare), 3 years (6-3 Part Number for EMEA)	179841-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Bronze Software Support, 2-hr response for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239938-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Bronze Software Support, 2-hr response for Novell NetWare Operating System, Next Available Specialist (6-3 Part Number for U.S.)	239978-002

HP Care Pack Priority Services for ProLiant Servers - Priority Silver

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review (2-5-2 Part Number for Canada)	FM-M04E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System Operating System, Technical Account Manager, Technical Newsletter, SW activity review (6-3 Part Number for U.S.)	239940-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239942-002

Options

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M24E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (2-5-2 Part Number for Canada)	FM-N04E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday – Friday, 8AM – 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (6-3 Part Number for U.S.)	239980-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada.)	FM-N24E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239982-002
HP Care Pack Priority Services for ProLiant Servers – Priority Gold	
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (2-5-2 Part Number for Canada)	FM-M08E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (6-3 Part Number for U.S.)	239944-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M28E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239946-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (2-5-2 Part Number for Canada)	FM-N08E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (6-3 Part Number for U.S.)	239984-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada)	FM-N28E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239986-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (2-5-2 Part Number for Canada)	FM-M09E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (6-3 Part Number for U.S.)	239948-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M29E3-36

Options

24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239950-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (2-5-2 Part Number for Canada.)	FM-N09E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (6-3 Part Number for U.S.)	239988-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada)	FM-N29E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239990-002

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

Memory

HP ProLiant ML530 Generation 2 (G2)
Advanced ECC Memory Standard
1024 MB (2 x 512-MB) PC1600- ECC SDRAM installed

Advanced ECC Memory Standard Plus Optional Memory
Up to 13,312-MB memory is available with the optional installation of PC1600- ECC SDRAM memory kits

Advanced ECC Memory Standard Replaced with Optional Memory
Up to 16,384-MB of memory is available with the removal of the standard 1024-MB of memory and the optional installation of PC1600-MHz ECC SDRAM memory kits.

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

		Bank A		Bank B		Bank C		Bank D	
		Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	Slot 7	Slot 8
Standard	1024MB	512 MB	512 MB	Empty	Empty	Empty	Empty	Empty	Empty
Optional	13,312MB	512 MB	512 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
Maximum	16,384MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB

Optional Compaq Advanced Memory Protection Configurations

NOTE:
-Online Spare Memory: Bank D is the Online Spare Bank.
-Mirrored Memory: Bank C mirrors Bank A, Bank D mirrors Bank B.

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

		Bank A		Bank B		Bank C		Bank D	
		Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6	Slot 7	Slot 8
Online	2560MB	512 MB	512 MB	256 MB	256 MB	Empty	Empty	512 MB	512 MB
Mirrored	3072MB	512 MB	512 MB	256 MB	256 MB	512 MB	512 MB	256 MB	256 MB

Following are memory options available from HP:

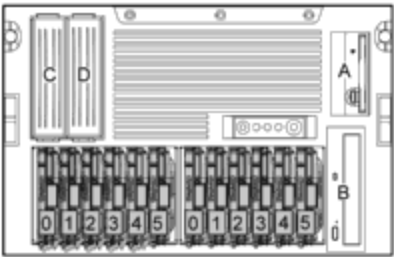
- 512-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 256 MB)
 - 1024-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 512 MB)
 - 2048-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 1024 MB)
 - 4096-MB PC1600-MHz Registered ECC SDRAM Memory Option Kit (2 x 2048 MB)
- 187418-B21

187419-B21

187420-B21

187421-B21

Storage



- 2X 0 - 5

Two 6 x1 inch Wide Ultra3 SCSI Hard Drive Cages
- A

1.44-MB Diskette Drive
- B

40x IDE CD-ROM
- C, D

Two available half height bays for tape backup, DVD, SCSI storage, or optional ML5xx Internal Two Bay Hot Plug Wide SCSI Drive Cage (with fan)



- 2X 0 - 5

Two 6 x1 inch Wide Ultra3 SCSI Hard Drive Cages
- A

1.44-MB Diskette Drive
- B

40x IDE CD-ROM
- C, D

Two available half height bays for tape backup, DVD, SCSI storage, or optional ML5xx Internal Two Bay Hot Plug Wide SCSI Drive Cage (with fan)

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 Option Kit	Up to 1	B, C, D	Integrated IDE
ML5xx Internal Two Bay Hot Plug Wide SCSI Drive Cage (with fan)	Up to 1	C, D	Integrated SCSI

Storage

Hard Drives

Ultra320 Hot Pluggable Drives

	Quantity Supported	Position Supported	Controller
1-inch Drives	Up to 12	2X 0-5	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	Up to 14 (With optional Drive Cage and ML5xx Internal Two Bay Hot Plug Wide SCSI Drive Cage)	2X 0-5, C, D	Smart Array 532 Controller
146.8-GB 10,000 rpm			Smart Array 5304/256 Controller
72.8-GB 10,000 rpm			Smart Array 6402/128 Controller
36.4-GB 10,000 rpm			Smart Array 6404/256 Controller
72.8-GB 15,000 rpm			Smart Array 641 Controller
36.4-GB 15,000 rpm			Smart Array 642 Controller
18.2-GB 15,000 rpm			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

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 5304/256 Controller
			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 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)

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

Internal	2.055 TB (14 x 146.8-GB Ultra320 1" Drives)
External	57.456 TB (28 StorageWorks Enclosures each with 14 x 146.8-GB Ultra320 1" Drives)
Total	59.6 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://www5.compaq.com/products/quickspecs/North_America/10233.html (North America)

<http://www5.compaq.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 & Tape Libraries listed below, please see the following:

http://www5.compaq.com/products/quickspecs/North_America/10809.html (North America)

<http://www5.compaq.com/products/quickspecs/Division/10809.html> (Worldwide)

	Quantity Supported	Position Supported	Controller
HP StorageWorks DAT 40 Tape Drive, Internal Hot-Plug	Up to 3 per drive cage.	0-4 per drive cage	Smart Array 532
HP StorageWorks DAT 72 Tape Drive, Internal Hot-Plug	NOTE: drives are 1.5 height devices		Smart Array 5304/256 Controller
			Smart Array 6402/128 Controller
			Smart Array 6404/256 Controller
			Smart Array 642 Controller

Storage

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

Ultrium 230, Internal Ultrium 460, Internal	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 DAT 72 Tape Drive, Internal HP StorageWorks DAT 40 Tape Drive, Internal HP StorageWorks DAT 24 Tape Drive, Internal	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 DLT VS80 Tape Drive, Internal HP StorageWorks SDLT 320 Tape Drive, Internal	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
Ultrium 215, External Ultrium 230, External Ultrium 460, External	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 DAT 72 Tape Drive, External HP StorageWorks DAT 40 Tape Drive, External HP StorageWorks DAT 24 Tape Drive, External	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 DLT VS80 Tape Drive, External	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 SDLT 320 Tape Drive, External	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 DAT 40x6 Tape Autoloader, Internal	1	C+D	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DAT 40x6 Tape Autoloader, External 1/8 Ultrium 460 Tape Autoloader 1/8 SDLT 320 Tape Autoloader 1/8 Ultrium 230 Tape Autoloader 1/8 DLT VS80 Tape Autoloader SSL1016 Ultrium 460 Tape Autoloader SSL1016 SDLT320 Tape Autoloader SSL1016 DLT1 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

Storage

MSL6060 (Ultrium 460 -based) Library	Please reference the MSL Tape Library QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter
MSL6030 (Ultrium 460 -based) Library			64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
MSL5052S (320 SDLT-based) Library			
MSL5030 (Ultrium 230 -based) Library			
MSL5060 (Ultrium 230 -based) Library			
ESL Extended 712e	Please reference the ESL E-Series and ESL9000 Series Tape Libraries QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter
ESL Extended 630e			64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
ESL9322 ETLA			
ESL9595 ETLA			
ESL9000 Serries: http://h18000.www1.hp.com/products/quickspecs/11875_div/11875_div.html			

Power Specifications

Part Number	230822-001
Spare Kit	231782-001
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	600	600	600	600	600	600
Nominal Input Current (A rms)	9.4	8.1	4.4	4.1	3.9	3.6
Max Rated Input Wattage Rating (Watts)	923	909	914	882	870	857
Max. Rated VA (Volt-Amp)	942	928	914	900	887	875
Efficiency (%)	65	66	67	68	69	70
Power Factor	0.98					
Leakage Current (mA)	0.31	0.36	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	15	17	30	32	34	35
Maximum Inrush Current duration (mS)	20					

System Specifications

	Processor	Memory	HDD	PCI	PS	
ML530 G2 Fully Configured	2	16	12	7	2	
Fully Loaded System Input Wattage (W)	902	888	875	862	850	838
Fully Loaded System Input Current (A rms)	9.2	7.9	4.3	4.0	3.8	3.6
Fully Loaded System Thermal (BTU-Hr)	3076	3029	2984	2940	2898	2856
Fully Loaded System VA (Volt-Amp)	920	906	893	880	867	855
Power cord requirements	Nema 5-15P to IEC320-C13			Option no./Spare no.: See Power Cord chart		
	IEC320-C13 to IEC320-C14			Option no. /Spare no.: 142259-001/142258-B21		

NOTES:

ActiveAnswers Power Calculation

Power calculator is LIVE on ActiveAnswers website. This is an external link.

Follow this link: <http://h30099.www3.hp.com/configurator/powercalcs.asp>.

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: ML530 G2
- Click on: "Power Calculator" link (You may need to scroll down to see it.)

Power Specifications

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

TechSpecs

System Unit – Tower	Dimensions (HxWxD) (with feet/bezel)	20.0 x 12.8 x 27.8 in (50.8 x 32.5 x 70.6 cm)	
	Weight	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	2400 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	Idle (Fixed Disk Drives Spinning)	
		L WAd (BELS)	7.0
		Operating (Random Seeks to Fixed Disks)	
		L WAd (BELS)	7.1

System Unit 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	2400 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	Idle (Fixed Disk Drives Spinning)	
		L WAd (BELS)	6.7
		Operating (Random Seeks to Fixed Disks)	
		L WAd (BELS)	6.8

TechSpecs

1.44-MB Diskette Drive	Diskette Size	3.5 in (8.89 cm)	
	LED Indicators (front panel)	Green	
	Read/Write Capacity per Diskette (high/low density)	1.44 MB/720 KB	
	Drive Supported	One	
	Drive Height	One-third	
	Drive Rotation	300 rpm	
	Transfer Rate (high/low)	500 K/250 K bits/s	
	Bytes/Sector	512	
	Sectors/Track (high/low)	18/9	
	Tracks/Side (high/low)	80/80	
	Access Times	Track-to-Track (high/low)	3/6 ms
		Average (high/low)	169/94 ms
		Settling Time	15 ms
		Latency Average	100 ms
	Cylinders (high/low)	80/80	
	Read/Write Heads	Two	
40X Max IDE 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
	Audio Output Level	Line-Out 0.7 VRMS at 47 kOhms	
	Data Transfer Rate	Sustained	150 KB/s (1X audio)
		Burst	16.67 Mbytes/sec
	Cache Buffer	128 KB	
	Start-up Time (typical)	< 7 seconds	
	Stop Time	< 4 seconds	
	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)

TechSpecs

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)		
Compaq NC3163 Fast Ethernet NIC Embedded 10/100 WOL (Wake On LAN)	Network Interface	10Base-T/100Base-TX		
	Compatibility	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)	
Video Controller	Controller Chip	ATI RAGE XL		
	Video DRAM	8 MB Video SDRAM		
	Data Transfer Method	32-bit PCI		
	Support Resolution	Supported Color Depths:		
	640 x 480	16.7M, 64K, 256, 16		
	800 x 600	16.7M, 64K, 256, 16		
	1024 x 768	16.7M, 64K, 256, 16		
	1152 x 864	16.7M, 64K, 256, 16		
	1280 x 1024	16.7M, 64K, 256, 16		
	1600 x 1200	64K, 256, 16		
	Connector	VGA		

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