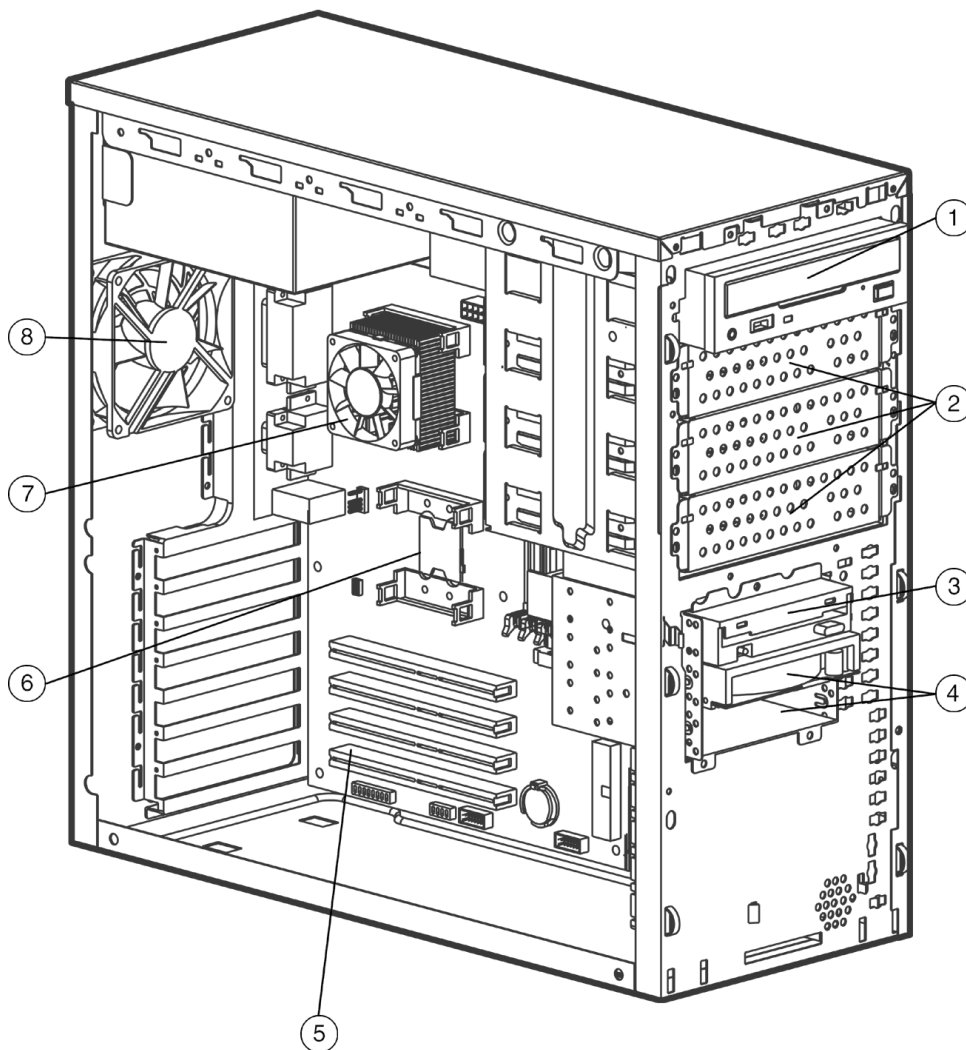# QuickSpecs

Overview

1. 48x IDE (ATAPI) CD-ROM
2. Removable Media Bays (1.6" each)
3. 1.44 MB Floppy Drive
4. Two 1" Non-plug Hard Drive Bays

5. Four 64-bit/33MHz PCI
6. Processor socket 2 (unpopulated)
7. Processor 1 (populated)
8. System Fan

What's New

- Supports up to 2 Intel® Xeon 2.8 GHz or 2.4 GHz PGA (Pin Grid Array) processors

Overview

At A Glance

- Two USB ports
- ROM Based Setup Utility (RBSU) and PXE support
- ServerWorks GC-SL Chipset with 533-MHz Front Side Bus
- 512-KB second level ECC cache standard (full speed)
- 256-MB PC2100 ECC DDR SDRAM Memory, expandable to 4 GB
- Four total slots: (three available) in SCSI models)
- 64-bit/33MHz, 3.3v PCI
- NC7760 PCI Gigabit Server Adapter (embedded)
- Integrated Dual Channel Ultra ATA/100 Adapter with Integrated ATA RAID 0, 1, & 1+0 (ATA Models) or Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot (SCSI Models)
- Support for up to five 1" Wide Ultra3 NHP SCSI hard drives or four 1" ATA NHP Drives (depending on Model)
- Internal storage capacity of up to 402.8 GB (3 x 36.4-GB non-hot-plug + 2 x 146.8-GB hot plug 1" HD (SCSI Models) with optional Drive Cage
- Internal storage capacity of up to 640 GB (4 x 160-GB 1² ATA/100 drives) (ATA Models)
  NOTE: 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.
- Integrated ATI Rage XL with 8MB SDRAM video
- 300W Power Supply
- Insight Manager, SmartStart and Automatic Server Recovery-2 (ASR-2)
- Protected by HP Services, including a one-year, limited warranty, Next Business Day 1 year on-site limited Global warranty and Pre-Failure Warranty, which covers processors, memory, and hard drives - Certain restrictions and exclusions apply. Consult the HP Customer Support Center at 1-800-345-1518 for details.

QuickSpecs

Standard Features

Processor One of the following depending on Model	Intel Xeon Processor 2.8 GHz/533-512KB (Supports up to 2 processors) Intel Xeon Processor 2.4 GHz/533-512KB (Supports up to 2 processors)

Cache Memory	Integrated 512-KB Level 2 ECC cache (full speed)

Chipset	ServerWorks Grand Champion SL Chipset with 533-MHz Front Side Bus **NOTE:** For more information regarding ServerWorks, please see the following URL: http://www.serverworks.com/products/overview.html.

Memory

Standard	256MB of non-interleaved PC2100 DDR SDRAM running at 266MHz, with Advanced ECC capabilities
Maximum	4 GB

Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)

Expansion Slots

I/O (4 Total, 3 Available)		PCI Voltage:
64-bit/33MHz PCI	4	3.3 volts

Storage Controller	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot (SCSI Models only) Integrated Dual Channel Ultra ATA 100 IDE Adapter with Integrated ATA RAID 0, 1, & 1+0 (ATA Models)

Storage

Diskette Drives	1.44 MB
CD-ROM	48x IDE CD-ROM Drive
Hard Drives	One of the following: (1) 36.4-GB Wide Ultra320 SCSI 10,000 rpm 1" Drive (SCSI Models only) (1) 40-GB ATA/100 7200 rpm 1" Drive (ATA Models only)
Maximum Internal Storage with Optional Hot Plug Drive Cage (SCSI Models)	402.8 GB (3 x 36.4 GB non-hot-plug + 2 x 146.8 GB hot plug) (internal drive bays, and optional hot plug drive cage)
Maximum Internal Storage (ATA Models)	640 GB (4 x 160.0 GB) (internal drive bays and removable media bays) NOTE: 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.

Interfaces

Parallel	1
Serial	1
Pointing Device (Mouse)	1
Graphics	1
Keyboard	1
USB	2
	NOTE: Please see the following URL for additional information regarding USB support: http://h18004.www1.hp.com/products/servers/platforms/usb-support.html.
Network RJ-45 (Ethernet)	1

Standard Features

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

Form Factor	Tower (5U) (Tower to Rack Enabling Option Kit (PN 238547-B22) available)

ProLiant Essentials Foundation Pack Software	Insight Manager 7	Insight Manager 7 helps maximize system uptime and performance and reduces the cost of maintaining the IT infrastructure by providing proactive notification of problems before those problems result in costly downtime and reduced productivity. Insight Manager 7 is easy to set up and provides rapid access to detailed fault and performance information gathered by the Management Agents. One-click-access to the Remote Insight Lights Out Edition board allows systems administrators to take full graphical control of ProLiant servers in remote locations or lights-out data centers. Finally, Insight Manager 7 in concert with the Version Control Agents and Version Control Repository Manager enables systems administrators to version manage and update system software across groups of Compaq ProLiant servers.
	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 6.30
	ActiveUpdate	ActiveUpdate is a web-based application that keeps IT managers directly connected to HP for proactive notification and delivery of the latest software updates.
	ROMPaq, support software, and configuration utilities	The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options.
	Survey Utility and diagnostics utilities	The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips.
	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.
- Recovery Server Option Pack – entry-level high availability software that will provide reliable protection and increased uptime against server hardware and operating system failures.
- 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 V1.0b Compliant PCI 2.2 Compliant PXE Support WOL Support Microsoft® Logo certifications
Manageability	Insight Manager 7 Redundant ROM Remote Flash ROM Automatic Server Recovery-2 (ASR-2) Remote Insight Lights-Out Edition II (optional) Drive Parameter Tracking (with Smart Array Controller) Dynamic Sector Repairing (with Smart Array Controller) Pre-Failure Warranty (covers processors, memory and hard drives)
Security	Power-on password Setup password Diskette boot control Power switch security
Server Power Cords	One Lowline power cord ships standard
Power Supply	300 Watts, PFC (Power Factor Correcting)
System Fans	1 non-hot plug; non-redundant system fan shipped standard. 1 non-hot-plug CPU fan/heatsink assembly shipped standard. 2 fan supported standard. 3 fans supported with CPU option kit.
Required Cabling	For required cabling information, refer to the HP Web site at http://h18000.www1.hp.com/products/servers/ProLiantML330/.
OS Support	Microsoft Windows 2000 Microsoft BackOffice Small Business Server 2000 Windows Server 2003 Novell NetWare Novell NetWare Small Business Suite 6.0 LINUX (Red Hat, United Linux) **NOTE:** For a more complete and up-to-date listing of supported OS's and versions, please visit our OS Support Matrix at: ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf **NOTE:** For an up-to-date listing of the latest drivers available for the HP ProLiant ML330, please see: http://h18023.www1.hp.com/support/files/server/us/index.html.

Standard Features

Rack Airflow Requirements

- Rack 9000 and 10000 series Cabinets
  The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The 9000 and 10000 Series Racks provide enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

- Rack 7000 series Cabinets
  When installing a server with processors running at speeds of 550 MHz or greater in Rack 7000 series racks with glass doors (165753-001 (42U), and 163747-001 (22U)), the new processor technology requires the installation of High Airflow Rack Door Inserts (327281-B21 (42U), 327281-B22 (42U 6 pack), or 157847-B21 (22U)) to promote enhanced airflow for maximum cooling.

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/ProLiantml330/index.html.

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.

Service and Support

HP Services provides a one-year, limited warranty, including Pre-Failure Warranty (coverage of hard drives, memory and processors) fully supported by a worldwide network of resellers and service providers. HP technical assistance is available 7x24, toll free in the United States and Canada. Telephone support services may be covered under warranty or available for an additional fee.

NOTE: Limited Warranty includes 1 year Parts, 1 year Labor, 1-year on-site support.

A full range of HP Care Pack packaged hardware and software services:

- Installation and start up
- Extended coverage hours and enhanced response times
- System management and performance services
- Availability and recovery service

NOTE: For more information, customer/resellers can contact http://www.hp.com/hps/.

Please see the following URL regarding Warranty Information For Your HP Products: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

For additional information regarding Worldwide Limited Warranty and Technical Support, please see the following URL: ftp://ftp.compaq.com/pub/supportinformation/ejourney/176738.pdf.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center at 1-800-345-1518 for details.

QuickSpecs

Models

ML330T03 X2.80-512KB/533 256MB, 40GB, ATA *317817-xx2*	**Processor**	(1) Intel Xeon Processor 2.80 GHz Processor standard
	Cache Memory	Integrated 512-KB Level 2 cache (full speed)
	Memory	256 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (Standard) to 4 GB (Maximum)
	Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)
	Storage Controller	Integrated Dual Channel Ultra ATA-100 IDE Adapter with Integrated ATA RAID 0,1, & 1+0
	Hard Drive	40 GB Ultra ATA/100
	Internal Storage	640 GB maximum (with optional hard drives) **NOTE:** 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.
	Optical Drive	48x IDE (ATAPI) CD-ROM Drive
	Form Factor	Tower (5U) (Tower to Rack Enabling Kit available)

ML330T03 P2.40-512KB/533 256MB, 40GB, ATA *323137-xx2*	**Processor**	(1) Intel Xeon Processor 2.40 GHz Processor standard
	Cache Memory	Integrated 512-KB Level 2 cache (full speed)
	Memory	256 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (Standard) to 4 GB (Maximum)
	Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)
	Storage Controller	Integrated Dual Channel Ultra ATA-100 IDE Adapter with Integrated ATA RAID 0,1, & 1+0
	Hard Drive	40 GB Ultra ATA/100
	Internal Storage	640 GB maximum (with optional hard drives) **NOTE:** 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.
	Optical Drive	48x IDE (ATAPI) CD-ROM Drive
	Form Factor	Tower (5U) (Tower to Rack Enabling Kit available)

ML330T03 P2.8-512KB/533 256MB, 36GB, SCSI *317821-xx2*	**Processor**	(1) Intel Xeon Processor 2.8 GHz Processor standard
	Cache Memory	Integrated 512-KB Level 2 cache (full speed)
	Memory	256 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (Standard) to 4 GB (Maximum)
	Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)
	Storage Controller	Integrated Single Channel Ultra3 SCSI Adapter in a PCI slot
	Hard Drive	(1) 36.4 GB Wide Ultra320 SCSI 10,000 rpm 1" Drive
	Internal Storage	402.8 GB maximum (with optional hot plug drive cage and optional hard drives)
	Optical Drive	48x IDE (ATAPI) CD-ROM Drive
	Form Factor	Tower (5U) (Tower to Rack Enabling Kit available)

QuickSpecs

HP ProLiant ML330 Generation 3 (G3)

Models

ML330T03 P2.4-512KB/533 256MB, 36GB, SCSI *323138-xx2*		
	Processor	(1) Intel Xeon Processor 2.4 GHz Processor standard
	Cache Memory	Integrated 512-KB Level 2 cache (full speed)
	Memory	256 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (Standard) to 4 GB (Maximum)
	Network Controller	NC7760 PCI Gigabit Server Adapter (embedded)
	Storage Controller	Integrated Single Channel Ultra3 SCSI Adapter in a PCI slot
	Hard Drive	(1) 36.4 GB Wide Ultra320 SCSI 10,000 rpm 1" Drive
	Internal Storage	402.8 GB maximum (with optional hot plug drive cage and optional hard drives)
	Optical Drive	48x IDE (ATAPI) CD-ROM Drive
	Form Factor	Tower (5U) (Tower to Rack Enabling Kit available)

Country Code Key		
	XX=00	NA
	XX=01	Australia
	XX=03	UK
	XX=04	Germany
	XX=34	Austria
	XX=05	France
	XX=29	Japan
	XX=37	AP
	XX=42	Euro
	XX=AA	PRC

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QuickSpecs

Options

ProLiant Essentials Value Pack Software	Rapid Deployment Pack, 1 User, V1.x **NOTE**: This license allows 1 server to be managed and deployed via the Deployment Server.	267196-B21
	Rapid Deployment Pack, 1 User, V1.x (Japan) **NOTE:** This license allows 1 server to be managed and deployed via the Deployment Server.	267196-291
	Rapid Deployment Pack, 10 Users, V1.x **NOTE**: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-B21
	Rapid Deployment Pack, 10 Users, V1.x (Japan) **NOTE**: This license allows 10 servers to be managed and deployed via the Deployment Server.	269817-291
	Flexible Quantity License Kit	302127-B21
	License-Only - for use with a Master License Agreement	302128-B21
	ProLiant Essentials Workload Management Pack 2.0 (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	ProLiant Essentials Recovery Server Option Pack	280189-B21
	ProLiant Essentials Performance Management Pack Flexible License	306697-B21
	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./td>	

Software	HP digital asset protection	302316-001

NetServer to ProLiant integrations services	HP NetServer to ProLiant integration and assessment service	304164-002
	NOTE: HP identifies current levels of NetServer support, services, and management. This service helps maximize customer's ability to add ProLiant platforms into their current environment.	
	HP TopTools to Insight Manager 7 installation and startup service	304163-002
	NOTE: Provides on-site review, installation and configuration services for Insight Manager 7. HP will also re-create, as closely as possible, the views and reports from the customer's current TopTools configuration. This service assures a smooth transition to the ProLiant Essentials software.	
	HP NetServer to ProLiant Essentials Rapid Deployment Pack installation and startup service	304162-002
	NOTE: Install and configure Rapid Deployment Pack in a test environment, then deploy a server image to a maximum of 250 systems in the production environment. This service helps to assure successful system deployment.	

Processors	Intel Xeon 2.80 GHz-512KB Processor Option Kit **NOTE:** The Intel Xeon 2.80 GHz-512KB Processor Option Kit is supported by the ProLiant ML330 Generation 3 (G3) servers only.	317823-B21
	Intel Xeon 2.40 GHz-512KB Processor Option Kit **NOTE:** The Intel Xeon 2.40 GHz-512KB Processor Option Kit is supported by the ProLiant ML330 Generation 3 (G3) servers only.	323139-B21

Memory (DIMMs)	128MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 128 MB)	287494-B21
	256MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 256 MB)	287495-B21
	512MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 512 MB)	287496-B21
	1024MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 1024 MB)	287497-B21

Options

Optical Drives	CD-RW/DVD-ROM Combo Drive Option Kit	331346-B21

Internal Storage	ML3xx Two Bay Hot Plug SCSI Drive Cage **NOTE:** This Drive Cage has one 1" drive bay and one 1.6"drive bay.	244059-B21

Hard Drives

Ultra320 SCSI – Universal Hot Plug

NOTE: These Hot Plug Drives are for use in conjunction with the ML3xx Two Bay Hot Plug SCSI Drive Cage (PN 244059-B21).

36.4GB 10,000 rpm, U320 Universal Hard Drive, 1"	286713-B22
72.8GB 10,000 rpm, U320 Universal Hard Drive, 1"	286714-B22
146.8GB 10,000 rpm, U320 Universal Hard Drive, 1"	286716-B22
18.2GB 15,000 rpm, U320 Universal Hard Drive, 1"	286775-B22
36.4GB 15,000 rpm, U320 Universal Hard Drive, 1"	286776-B22
72.8GB 15,000 rpm, U320 Universal Hard Drive, 1"	286778-B22

Ultra320 SCSI – Non-Hot Plug

36.4GB 10,000 rpm, U320 Non-Hot Plug Hard Drive, 1"	271832-B21

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.

ATA 100 - Non-Hot Plug

80-GB ATA/100 7,200 rpm Drive (1")	278424-B21
40-GB ATA/100 7,200 rpm Drive (1")	230534-B21

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)
SCSI Hard Drive QS:
http://h18000.www1.hp.com/products/quickspecs/10260_div/10260_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10260_na/10260_na.HTML (North America)
ATA100 Hard Drive QS:
http://h18000.www1.hp.com/products/quickspecs/11361_div/11361_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11361_na/11361_na.HTML (North America)

Options

Storage Controllers – SCSI Drives	**NOTE:** The following Storage Controllers are qualified for SCSI drives only.	
	HP RAID LC2 Controller	188044-B21
	HP RAID LC2 Controller (Japan)	188044-291
	Smart Array 532 Controller	225338-B21
	Smart Array 532 Controller (Japan)	225338-291
	Smart Array 5302/128 Controller	283552-B21
	Smart Array 5302/128 Controller (Japan)	283552-291
	Smart Array 6402/128 Controller	273915-B21
	Smart Array 641 Controller	291966-B21
	Smart Array 642 Controller	291967-B21
	Smart Array 5312 Controller	238633-B21
	Smart Array 5312 Controller (Japan)	238633-291
	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.	
	128-MB Cache Module for Smart Array 5302 Controller	153506-B21
	RAID ADG Upgrade for Smart Array 5302	288601-B21
	256-MB Battery-Back Cache Module	254786-B21
	NOTE: This 256-MB Battery-Backed Cache Module supports the Smart Array 5300 series controllers, MSA 1000 and the Smart Array Cluster Storage.	
	256MB DDR, Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB Battery-Backed Cache Module upgrade kit supports the Smart Array 6400 series controller only .	
	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B22
	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/10652_div/10652_div.HTML (RAID LC2)
http://h18000.www1.hp.com/products/quickspecs/10851_div/10851_div.HTML (Smart Array 532)
http://h18000.www1.hp.com/products/quickspecs/10640_div/10640_div.HTML (Smart Array 5300 Series)
http://h18000.www1.hp.com/products/quickspecs/11328_div/11328_div.HTML (Smart Array 5312)
http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML (Smart Array 6402)
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)

QuickSpecs

HP ProLiant ML330 Generation 3 (G3)

Options

Wireless HAP Solution		
	WL410 Wireless SMB Access Point (US)	191811-001
	WL410 Wireless SMB Access Point (Australia)	191811-011
	WL410 Wireless SMB Access Point (Europe)	191811-021
	WL410 Wireless SMB Access Point (UK)	191811-031
	WL410 Wireless SMB Access Point (Japan)	191811-291
	WL410 Wireless SMB Access Point (China)	191811-AA1
	WL410 Wireless SMB Access Point (Korea)	191811-AD1
	WL410 Wireless SMB Access Point (S. Africa)	191811-AR1
	HP ProCurve WL520 Wireless Access Point	J8133A

Communications		
	NC3123 Fast Ethernet NIC PCI 10/100 WOL	174830-B21
	NC3134 Fast Ethernet NIC 64 PCI Dual Port 10/100	138603-B21
	NC3135 Fast Ethernet Module Dual 10/100 Upgrade Module for NC3134 and NC3131	138604-B21
	NC6132 1000 SX Upgrade Module	338456-B23
	NC6170 Dual Port PCI-X 1000SX Gigabit Server Adapter	313879-B21
	NC6770 PCI-X Gigabit Server Adapter, 1000-SX	244949-B21
	NC7132 Gigabit Upgrade Module 10/100/1000-T	153543-B21
	NC7170 Dual Port PCI-X 1000T Gigabit Server Adapter	313881-B21
	NC7770 PCI-X Gigabit Server Adapter	244948-B21

NOTE: Any NC31XX, NC61XX, or NC71XX NIC can be used for redundancy with the embedded NC3163 Network Controller.

56K v.90 PCI Modem		239137-xx1

Country Key Code

XX = 00	US	XX = 15	Greece
XX = 01	Austria	XX = 16	S. America
XX = 03	UK	XX = 17	ARAB
XX = 04	Germany	XX = 18	Belgium
XX = 05	France	XX = 24	Poland
XX = 06	Italy	XX = 28	Thailand
XX = 07	Spain	XX = 29	Japan
XX = 08	Denmark	XX = 33	Netherlands
XX = 09	Norway	XX = 35	Finland
XX = 10	Sweden/Finland	XX = 37	APD
XX = 11	Switzerland	XX = AB	Taiwan
XX = 12	French Canadian	XX = AD	Korea
XX = 13	Portugal	XX = BB	HE
XX = 14	Turkey	XX = C9	LA MERCO

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

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Options

Monitors

Essential Series

Compaq S9500 CRT Monitor (19-inch, Carbon/Silver)	261615-XXX
Compaq S7500 CRT Monitor (17-inch, Carbon/Silver)	261606-XXX
Compaq S5500 CRT Monitor (15-inch Carbon/Silver)	261602-XXX
Compaq TFT1501 Flat Panel Monitor (15-inch, Carbon/Silver, North America)	301042-003
Compaq TFT1501 Flat Panel Monitor (15-inch, Carbon/Silver, Outside North America)	P4825D-XXX
Compaq TFT1701 Flat Panel Monitor (17-inch, Carbon/Silver, North America)	292847-003
Compaq TFT1701 Flat Panel Monitor (17-inch, Carbon/Silver, Outside North America)	P9019A-XXX

Advantage Series

Compaq V7550 CRT Color Monitor (17-inch, Carbon/Silver)	261611-XXX
Compaq TFT1720 Flat Panel Monitor (17-inch, Carbon/Silver, North America)	295926-003
Compaq TFT1720 Flat Panel Monitor (17-inch, Carbon/Silver, outside North America)	D5064D-XXX
Compaq FT1720M Flat Panel Monitor (17-inch, Carbon/Silver, includes speaker, USB port, headphone, North America)	301958-003
Compaq TFT1720M Flat Panel Monitor (17-inch, Carbon/Silver, includes speaker, USB port, headphone, outside North America)	D5064P-XXX
Compaq TFT1520 Flat Panel Monitor (15-inch, Carbon/Silver, North America)	295925-003
Compaq TFT1520 Flat Panel Monitor (15-inch, Carbon/Silver, outside North America)	D5063D-XXX
Compaq TFT1520M Flat Panel Monitor (15-inch, Carbon/Silver includes speaker, USB port, headphone, North America)	301957-003
Compaq TFT1520M Flat Panel Monitor (15-inch, Carbon/Silver includes speaker, USB port, headphone, outside North America)	D5063P-XXX

Performance Series

HP P930 CRT Monitor (19-inch, Flat-screen, Carbon/Silver, North America)	302268-003
HP P930 CRT Monitor (19-inch, Flat-screen, Carbon/Silver, Outside North America)	P909W-XXX
HP P1130 CRT Monitor (21-inch, Flat-screen, Carbon/Silver, North America)	302270-003
HP P1130 CRT Monitor (21-inch, Flat-screen, Carbon/Silver, Outside North America)	P4819-XXX
HP L1825 Flat Panel Monitor (18-inch, Carbon/Silver, North America)	303486-003
HP L1825 Flat Panel Monitor (18-inch, Carbon/Silver, Outside North America)	P9021W-XXX
HP L2025 Flat Panel Monitor (20-inch, Carbon/Silver, North America)	303102-003
HP L2025 Flat Panel Monitor (20-inch, Carbon/Silver, Outside North America)	P4831W-XXX
Compaq TFT1825 Flat Panel Monitor (18-inch, Carbon/Silver, North America)	296751-003
Compaq TFT1825 Flat Panel Monitor (18-inch, Carbon/Silver, Outside North America)	P9021A-XXX
Compaq TFT2025 Flat Panel Monitor (20-inch, Carbon/Silver, North America)	285550-003
Compaq TFT2025 Flat Panel Monitor (20-inch, Carbon/Silver, Outside North America)	P4831D-XXX
TFT5110R Flat Panel Monitor (Carbon)	281683-B21

Options

Tape Drives

NOTE: To run any external SCSI-based devices, the customer needs to purchase an Internal to External Cable Option kit for SCSI models or a SCSI controller for ATA Models. IDE Tape Drives should be connected to the IDE ports on the Mother Board not the Server Feature Board.
NOTE: The SCSI Cable Kit (PN 273463-B21) is required when installing an internal tape drive and a SCSI Controller.

Internal AIT IDE Tape Drives

AIT 35 GB, IDE Tape Drive, Internal	246627-B22

NOTE: The AIT 35 GB, IDE Tape Drive (246627-B22) ships bundled with the following software "AIT 35 GB, IDE Tape Drive with Retrospect Backup Software Bundle".
NOTE: Please see the AIT 35-GB IDE Tape Drive QuickSpecs for additional options such as cassettes and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11013_div/11013_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11013_na/11013_na.HTML (North America)

Internal and External DAT 72 Tape Backup Drive

HP StorageWorks DAT 72i Internal 5th generation DDS Tape Drive (Carbon)	Q1525A
HP StorageWorks DAT 72e External 5th generation DDS Tape Drive, External (US) (Carbon)	Q1527A
HP StorageWorks DAT 72e External 5th generation DDS Tape Drive, External (International) (Carbon)	Q1528A

NOTE: Please see the DAT 72 Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11597_div/11597_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11597_na/11597_na.HTML (North America)

Internal and External DAT Tape Drives

HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, Internal (Carbon) (WW)	157769-B22
HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, External (Carbon) (NA)	157770-002
HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, External (Int'l) (Carbon)	157770-B32
HP StorageWorks 20/40-GB DAT DDS-4 Tape Drive, External (Japan) (Carbon)	157770-292

NOTE: Please see the 20/40-GB DAT Tape Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10426_div/10426_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10426_na/10426_na.HTML (North America)

External LTO Ultrium Tape Drives

HP StorageWorks Ultrium 215 Tape Drive for ProLiant, External (Carbon) NA	Q1544A
HP StorageWorks Ultrium 215 Tape Drive for ProLiant, External (Carbon) Int'l	Q1545A

NOTE: Please see the HP StorageWorks Ultrium 215 Tape Drive QuickSpecs for additional options such as controllers, and other related items, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18006.www1.hp.com/products/quickspecs/11678_div/11678_div.html (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/11678_na/11678_na.html (North America)
For an up-to-date listing of the latest O/S and backup software support, please visit our compatibility Web site at: http://www.hp.com/go/connect.

HP StorageWorks Ultrium 230 Tape Drive, external (Carbon) NA	Q1516A
HP StorageWorks Ultrium 230 Tape Drive, external (Carbon) Int'l	Q1517A

NOTE: Please see the HP StorageWorks Ultrium 230 QuickSpecs for additional options such as host bus adapters, controllers, and data cartridges, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18006.www1.hp.com/products/quickspecs/11415_div/11415_div.html (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/11415_na/11415_na.html (North America)
For an up-to-date listing of the latest O/S and backup software support, please visit our compatibility Web site at: http://www.hp.com/go/connect.

HP StorageWorks Ultrium 460 Tape Drive, external (Carbon) NA	Q1519A
HP StorageWorks Ultrium 460 Tape Drive, external (Carbon) Int'l	Q1520A

Options

NOTE: Please see the HP StorageWorks Ultrium 460 QuickSpecs for ProLiant QuickSpecs for additional options such as host bus adapters, controllers, and data cartridges, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18006.www1.hp.com/products/quickspecs/11530_div/11530_div.html (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/11530_na/11530_na.html (North America)
For an up-to-date listing of the latest O/S and backup software support, please visit our compatibility Web site at: http://www.hp.com/go/connect.

Internal and External AIT Tape Drives

HP StorageWorks Internal AIT 35-GB, LVD Tape Drive (Carbon)	216884-B21
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (NA)	216885-001
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (Int'l)	216885-B31
HP StorageWorks External AIT 35-GB, LVD Tape Drive (Carbon) (Japan)	216885-291

NOTE: Please see the AIT 35-GB, LVD Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10712_div/10712_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10712_na/10712_na.HTML (North America)

HP StorageWorks AIT 50-GB Tape Drive, Internal (Carbon) (WW)	157766-B22
HP StorageWorks AIT 50-GB Tape Drive, External (Carbon) (NA)	157767-002
HP StorageWorks AIT 50-GB Tape Drive, External (Int'l) (Carbon)	157767-B32
HP StorageWorks AIT 50-GB Tape Drive, External (Japan) (Carbon)	157767-292
HP StorageWorks Rackmount AIT 50-GB, 3U (Single Drive)	274333-B21

NOTE: Please see the AIT 50-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10425_div/10425_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10425_na/10425_na.HTML (North America)

HP StorageWorks Internal AIT 100-GB Tape Drive (Carbon)	249189-B21
HP StorageWorks External AIT 100-GB Tape Drive (Carbon)	249160-001
HP StorageWorks External AIT 100-GB Tape Drive (Carbon) (Int'l)	249160-B31

NOTE: Please see the AIT 100-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11062_div/11062_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11062_na/11062_na.HTML (North America)

External DLT/SDLT Tape Drives

HP StorageWorks 40/80-GB DLT Tape Drive, External (Carbon) (NA)	146197-B22
HP StorageWorks 40/80-GB DLT Tape Drive, External (Carbon) (Japan)	146197-293
HP StorageWorks Rackmount DLT 40/80, 3U (Single Drive)	274332-B21
HP StorageWorks Rackmount DLT 40/80, Dual-Drive, 3U (Two Drives)	274335-B21
HP StorageWorks Rackmount DLT 40/80, Tape Array III, 5U (Four Drives)	274337-B21

NOTE: Please see the 40/80-GB DLT Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10658_div/10658_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10658_na/10658_na.HTML (North America)

Options

Internal and External DLT VS Tape Drives

HP StorageWorks DLT VS 40/80 Tape Drive, Internal (carbon) WW	280129-B21
HP StorageWorks DLT VS 40/80 Tape Drive, External (carbon) NA	280129-B22
HP StorageWorks DLT VS 40/80 Tape Drive, External (carbon) INTL	280129-B31
HP StorageWorks DLT VS 40/80 Tape Drive, External (carbon) Japan	280129-291

NOTE: Please see the 40/80-GB DLT VS Drive QuickSpecs for additional options such as host bus adapters, controllers, cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11403_div/11403_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11403_na/11403_na.HTML (North America)

External DLT/SDLT Tape Drives

HP StorageWorks Rackmount SDLT 110/220, 3U (Single Drive)	274331-B21
HP StorageWorks Rackmount SDLT 110/220, Dual-Drive, 3U (Two Drives)	274334-B21
HP StorageWorks Rackmount SDLT 110/220, Tape Array III, 5U (Four Drives)	274336-B21

NOTE: Please see the SDLT 110/220-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and media, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10772_div/10772_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10772_na/10772_na.HTML (North America)

HP StorageWorks SDLT 160/320, External NA (carbon)	257319-001
HP StorageWorks SDLT 160/320, External WW (carbon)	257319-B31
HP StorageWorks SDLT 160/320, External Japan (carbon)	257319-291

NOTE: Please see the SDLT 160/320-GB Tape Drive QuickSpecs for additional options such as adapters, controllers, and media, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11406_div/11406_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11406_na/11406_na.HTML (North America)

External DAT Autoloader

20/40-GB DAT 8 Cassette Autoloader External (Opal)	166505-001
20/40-GB DAT 8 Cassette Autoloader External (Opal) (Int'l)	166505-B31
20/40-GB DAT 8 Cassette Autoloader External (Opal) (Japan)	166505-291

NOTE: Please see the 20/40-GB DAT DDS-4 8 Cassette Autoloader QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/10518_div/10518_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10518_na/10518_na.HTML (North America)

AIT Autoloader

HP StorageWorks AIT 35 GB Autoloader, Rackmount (Carbon) (NA)	280349-001
HP StorageWorks AIT 35 GB Autoloader, Rackmount (Carbon) (Int'l)	280349-B31
HP StorageWorks AIT 35 GB Autoloader Tabletop (Carbon) (NA)	292355-001
HP StorageWorks AIT 35 GB Autoloader, Tabletop (Carbon) (Int'l)	292355-B31

NOTE: Please see the AIT 35-GB Autoloader QuickSpecs for additional options such as adapters, controllers, and cassettes, and for an up-to-date listing of the latest O/S Support details, please see the following:
http://h18000.www1.hp.com/products/quickspecs/11404_div/11404_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11404_na/11404_na.HTML (North America)

Options

HP StorageWorks 1/8 Autoloader

HP StorageWorks 1/8 Autoloader, Tabletop, Ultrium 230	C9572CB
HP StorageWorks 1/8 Autoloader, Tabletop, DLT VS80	C9264CB
HP StorageWorks 1/8 Autoloader, Rackmount kit	C9268R

SSL1016 tape autoloader

SSL1016 DLT1 tape autoloader (includes two 8-cartridge magazines and a barcode reader)	330815-B21

NOTE: Please see the SSL1016 DLT1 tape autoloader Quick Specs for additional information:
http://h18000.www1.hp.com/products/quickspecs/11626_div/11626_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11626_na/11626_na.HTML (North America)

SSL1016 SDLT160/320 tape autoloader (includes 2 8-cartridge magazines and a barcode reader)	330816-B21

NOTE: Please see the SSL1016 SDLT160/320 tape autoloader Quick Specs for additional information:
http://h18000.www1.hp.com/products/quickspecs/11609_div/11609_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11609_na/11609_na.HTML (North America)

Add-on drives and accessories

SSL1016 DLT/SDLT 8-cartridge magazine	268664-B22
HP Super DLT tape Data Cartridge	C7980A
HP SDLT Cleaning Cartridge	C7982A

NOTE: Please see the SSL1016 tape autoloader Quick Specs for additional information:
http://h18000.www1.hp.com/products/quickspecs/11626_div/11626_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/11626_na/11626_na.HTML (North America)

Rackmount Tape Drive Kits

3U Rackmount Kit	274338-B21

NOTE: The 3U Rackmount Kit (PN 274338-B21) 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 the 12/24-GB DAT, 20/40-GB DAT, 20/40-GB DAT DDS-4 8 Cassette Autoloader, AIT 35-GB LVD, AIT 50 GB, 20/40-GB DLT, 40/80-GB DLT, and the SDLT 110/220-GB Tape Drives.

5U Rackmount Kit	274339-B21

NOTE: The 5U Rackmount Kit (PN 274339-B21) can support up to (4) full-height tape drives and is compatible with all Compaq DLT/SDLT tape drives including the 20/40-GB DLT, 35/70-GB DLT, 40/80-GB DLT, and the SDLT 110/220-GB tape drives.

NOTE: Please see the Rackmount Tape Drive Kits QuickSpecs for additional information regarding these kits, please see the following:
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)

Rackmount Tape Drive Cable Kits

LVD Cable Kit, VHDCI/HD68	168048-B21

NOTE: For use with the 3U RM Storage Enclosure and DLT Tape Array III only.

LVD Cable Kit, HD68/HD68	242381-B21

NOTE: For use with the 3U RM Storage Enclosure and DLT Tape Array III only.

Options

Tape Automation	**Entry Level Tape Libraries**	
	SSL2020 Automated AIT Library	
	SSL2020 AIT Mini-Library 1 drive, 20 slot Rackmount	175196-B21
	SSL2020 AIT Mini-Library 2 drive, 20 slot Rackmount	175196-B22
	SSL2020 AIT Library Pass Thru with Transport	175312-B21
	SSL2020 AIT Library Pass Thru Extender	175312-B22
	AIT 50-GB Drive Add-On LVD Drive for SSL2020 AIT Library	175197-B21
	Add-on drives and accessories	
	SSL2020 AIT Library Pass Thru Extender	175312-B22
	AIT 50GB Drive Add-On LVD Drive for SSL2020 AIT Library	175197-B21
	19 Slot Magazine for SSL2020 AIT Library	175198-B21
	AIT 50-GB Data Cassette (5 pack)	152841-001
	AIT Cleaning Cassette	402374-B21

NOTE: Please see the SSL2020 Automated AIT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/10580_na/10580_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/10580_div/10580_div.HTML (Worldwide)

StorageWorks MSL6000 and MSL5000 Departmental tape libraries

MSL6060L1 - Ultrium 460 1 based departmental library up to 4 drives and 60 slots

	MSL6060L1, 0 DRV Ultrium 460 RM Library	331196-B23
	MSL6060L1, 2 DRV Ultrium 460 RM Library	331195-B21
	MSL6060L1, 2 DRV Ultrium 460 TT Library	331196-B21
	MSL6060L1FC, 2 DRV Ultrium 460 embedded Fibre RM Library	331196-B22

NOTE: Please see the StorageWorks MSL6060 LTO Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11608_na/11608_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11608_div/11608_div.HTML (Worldwide)

MSL5060 LTO Library

	MSL5060L1, Rackmount, 0 Drive Library	301899-B21
	MSL5060L1, Rackmount, 2 Drives, LTO1 Library	301899-B22
	MSL5060L1FC, Rackmount, 2 Drives, LTO1 Library	301899-B23
	MSL5060L1, Tabletop, 2 Drives, LTO1 Library	301900-B21

NOTE: Please see the StorageWorks MSL5060 LTO Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11438_na/11438_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11438_div/11438_div.HTML (Worldwide)

MSL5052S2 - SDLT160 based departmental library up to 4 drives and 52 slots

	MSL5052S2, RM 0 DRV SDLT ALL	255102-B21
	MSL5052S2, 2 DRV SDLT2 TT LIB	293476-B21
	MSL5052S2, 2 DRV SDLT2 RM LIB	293474-B21
	MSL5052S2FC 2 DRV SDLT2 RM- with integrated FC router	293474-B24

NOTE: Please see the StorageWorks MSL5052S2 Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11442_na/11442_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11442_div/11442_div.HTML (Worldwide)

Options

MSL6030 - LTO Ultrium 460 mid-range library up to 2 drives and 30 slots

MSL6030 0-drive, LTO, LVDS, RM	330731-B21
MSL6030 1-drive, LTO Gen2, LVDS, RM	330731-B22
MSL6030 2-drive, LTO Gen2, LVDS, RM	330731-B23
MSL6030 1-drive, LTO Gen2, Fibre, RM	330731-B24
MSL6030 2-drive, LTO Gen2, Fibre, RM	330731-B25
MSL6030 1-drive, LTO Gen2, LVDS, TT	330788-B21
MSL6030 2-drive, LTO Gen2, LVDS, TT	330788-B22

MSL5030 LTO Library

MSL5030L1, 0 DRV LTO1 RM Library	301897-B21
MSL5030L1, 1 DRV LTO1 RM Library	301897-B22
MSL5030L1, 2 DRV LTO1 RM Library	301897-B23
MSL5030L1FC, 1 DRV LTO1 RM- with integrated FC router	301897-B24
MSL5030L1FC, 2 DRV LTO1 RM- with integrated FC router	293472-B25
MSL5030L1, 1 DRV LTO1 TT Library	301898-B21
MSL5030L1, 2 DRV LTO1 TT Library	301898-B22

NOTE: Please see the StorageWorks MSL5030 LTO Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11439_na/11439_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11439_div/11439_div.HTML (Worldwide)

MSL5026SL Graphite - SDLT110 based mid-range library up to 2 drives and 26 slots

MSL5026SL, 1 DRV SDLT TT, graphite

MSL5026SL, 2 DRV SDLT TT, graphite

MSL5026SL, 1 DRV SDLT RM, graphite

MSL5026SL, 2 DRV SDLT RM, graphite

NOTE: Please see the StorageWorks MSL5026SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11440_na/11440_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11440_div/11440_div.HTML (Worldwide)

MSL5026S2 - SDLT160 based mid-range library up to 2 drives and 26 slots

MSL5026S2, 0 DRV SDLT2 RM Library	293472-B21
MSL5026S2, 1 DRV SDLT2 RM Library	293472-B22
MSL5026S2, 2 DRV SDLT2 RM Library	293472-B23
MSL5026S2FC, 1 DRV SDLT2 RM- with integrated FC router	293472-B24
MSL5026S2FC, 2 DRV SDLT2 RM- with integrated FC router	293472-B25
MSL5026S2, 1 DRV SDLT2 TT Library	293473-B21
MSL5026S2, 2 DRV SDLT2 TT Library	293473-B22

NOTE: Please see the StorageWorks MSL5026S2 Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11453_na/11453_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11453_div/11453_div.HTML (Worldwide)

Options

MSL5026SL Opal - SDLT110 based mid-range library up to 2 drives and 26 slots	
MSL5026, 0 DR, LVD, RM	231979-B21
MSL5026DLX DLT Library	
MSL5026DLX, 1 40/80GB DLT, LVD, TT	231821-B21
MSL5026DLX, 2 40/80GB DLT, LVD, TT	231821-B22
MSL5026DLX, 1 40/80GB DLT, LVD, RM	231891-B21
MSL5026DLX, 2 40/80GB DLT, LVD, RM	231891-B22

NOTE: Please see the StorageWorks MSL5026DLX Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/10860_na/10860_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/10860_div/10860_div.HTML (Worldwide)

MSL6000 and MSL5000 Add-on drives & accessories	
MSL SDLT 160/320 Upgrade DRV	293475-B21
MSL Ultrium 460 upgrade drive in hot plug canister	330729-B21
MSL5000 SDLT 110/220 Upgrade DRV	231823-B22
MSL5000 40/80GB DLT Upgrade DRV	231823-B21
MSL Dual Magazine DLT (2 X 13 slot magazines)	232136-B21
MSL Universal passthrough mechanism	304825-B21
MSL 5U passthrough extender	231824-B22
MSL 10U passthrough extender	231824-B23
MSL Dual Magazine - Ultrium	301902-B21

Smart Array Cluster Storage	Smart Array Cluster Storage	201724-B21
	Smart Array Cluster Storage Redundant Controller Option Kit	218252-B21
	4-Port Shared Storage Module with Smart Array Multipath Software for Smart Array Cluster Storage	292944-B21
	128-MB Cache Module for Smart Array 5302 Controller	153506-B21
	256-MB Battery-Backed Cache Module	254786-B21

NOTE: 128-MB Cache Module for Smart Array 5302 Controller (PN 153506-B21) is an upgrade cache module (128 MB Standard) for Smart Array Cluster Storage Controller.
NOTE: Please see the Compaq Smart Array Cluster Storage QuickSpecs for additional information including OS support for the ML330 G2, configuration steps and additional options needed for a complete solution at:
http://h18000.www1.hp.com/products/quickspecs/11050_na/11050_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11050_div/11050_div.HTML (Worldwide)

Cluster Options	ProLiant Cluster HA/L100 LifeKeeper for Linux	303523-B22

NOTE: For additional information regarding the ProLiant Cluster HA/L100 LifeKeeper for Linux, please see the following QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/11533_na/11533_na.html (North America)
http://h18000.www1.hp.com/products/quickspecs/11533_div/11533_div.html (Worldwide)

QuickSpecs

Options

External Storage – Tower & Rack	**NOTE:** To run any external SCSI-based devices, the customer needs to purchase an Internal to External Cable Option kit for SCSI models or a SCSI controller for ATA Models.	
	StorageWorks Enclosure Model 4314T (tower)	190210-001
	StorageWorks Enclosure Model 4314T (tower) (Int'l)	190210-B31
	StorageWorks Enclosure Model 4314T (tower) (Japan)	190210-291
	StorageWorks Enclosure Model 4314R (rack-mountable)	190209-001
	StorageWorks Enclosure Model 4314R (rack-mountable) (Int'l)	190209-B31
	StorageWorks Enclosure Model 4314R (rack-mountable) (Japan)	190209-291
	StorageWorks Enclosure Model 4354R (rack-mountable)	190211-001
	StorageWorks Enclosure Model 4354R (rack-mountable) (Int'l)	190211-B31
	StorageWorks Enclosure Model 4354R (rack-mountable) (Japan)	190211-291
	NOTE: The StorageWorks Enclosure 4300 Family support the Wide Ultra2/Ultra3 1"Hot Plug Hard Drives.	
	StorageWorks Enclosure 4200 Redundant Power Supply Option	119826-B21
	StorageWorks Enclosure 4200 Ultra3 Single Bus I/O Module Option	190212-B21
	StorageWorks Enclosure 4200 Ultra3 Dual Bus I/O Module Option	190213-B21

UPS Power Cord Matrix	**Please see the UPS and PDU cable matrix that lists cable descriptions, requirements, and specifications for UPS and PDU units**. ftp://ftp.compaq.com/pub/products/servers/ProLiantstorage/power-protection/powercordmatrix.pdf.

Uninterruptible Power Supply	Compaq Pro UPS 500 (300 Watt) 120V (NA)	136386-001
	Compaq Pro UPS 500 (300 Watt) 120V (Int'l)	136386-B31
	HP UPS Model T700 (700VA, 500 Watt), Low Voltage (NA)	204015-001
	HP UPS Model T700 (700VA, 500 Watt), High Voltage (Int'l)	204015-B31
	HP UPS Model T700 (700VA, 500 Watt), Low Voltage (Japan)	204015-291
	HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (NA)	204155-001
	HP UPS Model T1000 XR (1000VA, 700 Watt), High Voltage (Int'l)	204155-B31
	HP UPS Model T1000 XR (1000VA, 700 Watt), Low Voltage (Japan)	312803-291
	HP UPS Model T1500 XR (1440VA, 1050 Watt), Low Voltage (NA)	204155-002
	HP UPS Model T1500 XR (1440VA, 1050 Watt), Low Voltage (Int'l)	204155-B32
	HP UPS Model T1500 XR (1500VA, 1050 Watt), Low Voltage (JPN)	204155-291

QuickSpecs

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
	Rack-Mountable UPS R6000 (208V) (NA) **NOTE:** UPS R6000 has a hardwired input	347207-001
	Rack-Mountable UPS R6000 (230V) (Int'l) **NOTE:** UPS R6000 has a hardwired input	347207-B31
	Rack-Mountable UPS R6000 (200V) (Japan) **NOTE:** UPS R6000 has a hardwired input	347207-291
	UPS R12000 XR N+ x (200-240V) (WW-hardwired) **NOTE:** UPS R12000 XR has a hardwired input and output connection.	207552-B22

UPS Options	SNMP Serial Port Card **NOTE**: Supports tower and rack UPS XR models ranging from 1000 – 3000VA	192189-B21
	Six Port Card **NOTE**: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	192185-B21
	High to Low Voltage Transformer (250VA) **NOTE**: Supports R6000 UPS series only. 2.5A @ 125 Volts max output across two NEMA 5-15.	388643-B21
	Extended Runtime Module, T1000 XR	218967-B21
	Extended Runtime Module, T1500 XR/T2200 XR	218969-B21
	Extended Runtime Module, R1500 XR **NOTE**: 2U each, two ERM maximum.	218971-B21
	Extended Runtime Module, R3000 XR **NOTE**: 2U each, one ERM maximum.	192188-B21
	Extended Runtime Module, R6000 **NOTE**: 3U each, two ERM maximum.	347224-B21
	Extended Runtime Module, R12000 XR, 4U **NOTE:** 4U each, two ERM maximum.	217800-B21
	R12000 XR BackPlate Receptacle Kit, (2) L6-30R (NA) **NOTE:** The R12000 XR BackPlate Kit has a hardwired input.	325361-001
	R12000 XR BackPlate Receptacle Kit, (2) IEC-309R (WW) **NOTE:** The R12000 XR BackPlate Kit has a hardwired input.	325361-B21
	SNMP-EN Adapter **NOTE**: Supports R6000 UPS series only.	347225-B21
	Multi-Server UPS Card **NOTE**: Supports R6000 UPS series only.	123508-B21
	Scalable UPS Card **NOTE**: Supports R6000 UPS series only.	123509-B21

QuickSpecs

Options

Modular PDUs – 1U/0U (up to 32 outlets) **NOTE:** 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	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.	
	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)	

Modular PDU Options	Third Party Modular PDU Mounting Kit **NOTE:** This kit allows you to mount the Modular PDUs in (1U configuration only) in racks other than the 9000/10000 Series racks (any racks using the standard 19" rail, including the 7000 Series racks). For more details please refer the Modular PDU QuickSpecs.	310777-B21
	4.5' IEC C 13 to IEC C14 PDU Jumper Cable (1 per pack)	142257-006
	4.5' IEC C 13 to IEC C14 PDU Jumper Cable (15 per pack)	142257-007

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) 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		

Rack Enabling Kit	ProLiant ML310/ML330 Rack Enabling Kit	238547-B22
	DL360 Telco Rack Option Kit	251243-B21

Other

Enhanced Keyboard (Carbon)	296435-xx5
ProLiant ML310/ML330 G2 SCSI Cable Kit	273463-B21

NOTE: This SCSI Cable Kit (PN 273463-B21) is required when installing an internal tape drive and a SCSI Controller.

ProLiant ML330/ML350/ML310 Internal to External HD68 SCSI Cable Option Kit	159547-B22
ProLaint ML330/ML350/ML310 Internal to External VHDCI SCSI Cable Option Kit	333370-B21

Enhanced Keyboard (Carbon) Country Key Code

Dash #	Description	Dash #	Description
-005	US	-175	Arabic
-035	UK	-185	Belgium
-045	Germany	-215	Hungary
-055	France	-225	Czech
-065	Italy	-235	Slovac
-075	Spain	-245	Polish
-085	Denmark	-255	Russian
-085	Norway	-295	Japan
-105	Sweden/Finland	-335	Dutch
-125	French Canadian	-355	Finish
-135	Portugal	-B35	Int'l
-145	Turkey	-B45	BHCSY
-155	Greece		

QuickSpecs

Options

Rack Builder	Please see the Rack Builder for configuration assistance at http://www.compaq.com/rackbuilder/.	

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
	HP Rack 10614 (14U) – Shock Pallet	292303-B22

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

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

NOTE: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:
http://h18000.www1.hp.com/products/quickspecs/10995_div/10995_div.HTML (Worldwide)
http://h18000.www1.hp.com/products/quickspecs/10995_na/10995_na.HTML (North America)

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

QuickSpecs

Options

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-B21) contains 10 each of (2U).	
	Rack Blanking Panels – Graphite (3U)	253214-B23
	NOTE: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (3U).	
	Rack Blanking Panels – Graphite (4U)	253214-B24
	NOTE: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (4U).	
	Rack Blanking Panels – Graphite (5U)	253214-B25
	NOTE: The Rack Blanking Panels (PN 253214-B21) 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
	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.

Options

Rack Options for Rack 9000 Series	Baying/Coupling Kit	120669-B21
	42U Side Panel	120670-B21
	NOTE: The 42U Side Panel (PN 120670-B21) supports the Compaq Rack 9142 and Compaq Rack 9842.	
	36U Side Panel	120671-B21
	NOTE: The 36U Side Panel (PN 120671-B21) supports the Compaq Rack 9136.	
	800mm Stabilizer Option Kit (Opal)	234493-B21
	NOTE: The 800mm Stabilizer Kit (PN 234493-B21) supports the Rack 9842 only.	
	600mm Stabilizer Option Kit	120673-B21
	9142 Extension Kit	120679-B21
	NOTE: The 9142 Extension Kit (PN 120679-B21) supports the Compaq Rack 9142 only.	
	9142 Split Rear Door (Opal)	254045-B21
	NOTE: The 9142 Split Rear Door (PN 254045-B21) supports the 600 mm wide, 42U 9000 series rack.	
	9136 Extension Kit	218216-B21
	9142 Short Rear Door	218217-B21
	NOTE: The 9142 Short Rear Door (PN 218217-B21) supports the Compaq Rack 9142 only.	
	9136 Short Rear Door	218218-B21
	Rack Blanking Panel (Multi)	169940-B21
	NOTE: Kit includes four panels in 1U, 2U, 4U, and 8U.	
	Rack Blanking Panels (1U)	189453-B21
	NOTE: The Rack Blanking Panels (PN 189453-B21) contains 10 each of (1U).	
	Rack Blanking Panels (2U)	189453-B22
	NOTE: The Rack Blanking Panels (PN 189453-B22) contains 10 each of (2U).	
	Rack Blanking Panels (3U)	189453-B23
	NOTE: The Rack Blanking Panels (PN 189453-B23) contains 10 each of (3U).	
	Rack Blanking Panels (4U)	189453-B24
	NOTE: The Rack Blanking Panels (PN 189453-B24) contains 10 each of (4U).	
	Rack Blanking Panels (5U)	189453-B25
	NOTE: The Rack Blanking Panels (PN 189453-B25) contains 10 each of (5U).	
	9000/10000 Series Offset Baying Kit	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 100 mm 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 Options for Rack 7000 Series	High Air Flow Rack Door Insert for the 7122 Rack	157847-B21
	High Air Flow Rack Door Insert for the 7142 Rack (single)	327281-B21
	High Air Flow Rack Door Insert for the 7142 Rack (6-pack)	327281-B22
	Compaq Networking Cable Management Kit	292407-B21
	Compaq Rack Extension Kit for 7142	154392-B21
	NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html.	

Rack Options for Rack 7000, 9000 and 10000 Series	Monitor Utility Shelf	303606-B21
	Ballast Option Kit	120672-B21
	100kg Sliding Shelf	234672-B21
	Rack Rail Adapter Kit (25-inch depth)	120675-B21
	Cable Management D-Rings Kit	168233-B21
	Monitor/Utility Shelf - Graphite	253449-B21

Options

Depth Adjustable Fixed Rail	332558-B21
Console Management Controller (CMC) Option Kit	203039-B21
Console Management Controller (CMC) Sensors Option Kit	203039-B22
Console Management Controller (CMC) Locking Option Kit	203039-B23
Console Management Controller (CMC) Smoke Sensors Option Kit	203039-B24
Server Console Switch 1 x 2 port (100 to 230 VAC)	120206-001
Server Console Switch 1 x 2 port (100 to 230 VAC) (Int'l)	120206-B31
Server Console Switch 1 x 2 port (100 to 230 VAC) (Japan)	120206-291
Server Console Switch 1 x 4 port (100 to 230 VAC)	400336-001
Server Console Switch 1 x 4 port (100 to 230 VAC) (Int'l)	400336-B31
Server Console Switch 1 x 4 port (100 to 230 VAC) (Japan)	400336-291
Server Console Switch 1 x 8 port (100 to 230 VAC)	400337-001
Server Console Switch 1 x 8 port (100 to 230 VAC) (Int'l)	400337-B31
Server Console Switch 1 x 8 port (100 to 230 VAC) (Japan)	400337-291
Server Console Switch 2 x 8 port (100 to 230 VAC)	400338-001
Server Console Switch 2 x 8 port (100 to 230 VAC) (Int'l)	400338-B31
Server Console Switch 2 x 8 port (100 to 230 VAC) (Japan)	400338-291
Server Console Switch 2 x 8 port (48 VDC)	400542-B21
IP Console Switch Box, 1x1x16	262585-B21
IP Console Switch Box, 3x1x16	262586-B21
IP Console Interface Adapter, 8 pack	262587-B21
IP Console Interface Adapter, 1 pack	262588-B21
IP Console Expansion Module	262589-B21
KVM 9 PIN Adapter (4 Pack)	149361-B21
CPU to Server Console Cable, 12'	110936-B21
CPU to Server Console Cable, 20'	110936-B22
CPU to Server Console Cable, 40'	110936-B23
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 (115 V)	144007-001
Switch Box Connector Kit (230 V)	144007-002
Switch Box Connector Kit (High Voltage) (Int'l)	144007-B33
Keyboard/Monitor/Mouse extension cables	169989-001
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 with Trackball (PN 158649-xxx).

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

Options

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

TFT5600 Rack Keyboard Monitor	221546-xx1

Country Code Key (for TFT5600 RKM Rack Keyboard Monitor (PN 221546-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

PCI KVM Management Card Kit	232983-B21
PCI KVM Remote Card Kit	232984-B21
Local Access Cable Kit	232985-B21
Input Device Adjustable Rails	287139-B21

NOTE: Input Device Adjustable Rails (287139-B21) are for use ONLY 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 Telco 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 Cabinets, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html.

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).

Options

Service and Support Offerings (HP Care Pack Services)	**Hardware Services On-site Service**	
	Next Business Day On-site Service, 5-Day x 9-Hour Coverage, 3 Years (Canadian Part Number)	FP-ELXEC-36
	Next Business Day On-site Service, 5-Day x 9-Hour Coverage, 3 Years (U.S. Part Number)	102407-002
	Next Business Day On-site Service, 5-Day x 9-Hour Coverage, 3 Years (AP/EMEA Part Numbers)	U4462A U4462E
	4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years (Canadian Part Number)	FP-EL3EC-36
	4-Hour On-site Service, 5-Day x 13-Hour, 3 Years (U.S. Part Number)	331045-002
	4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years (AP/EMEA Part Numbers)	U4463A U4463E
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (Canadian Part Number)	FP-EL7EC-36
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (U.S. Part Number)	162675-002
	4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (AP/EMEA Part Numbers)	U4464A U4464E
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years (Canadian Part Number)	FP-ELCEC-36
	6-Hour Call to Repair, On-site Service 7-Day x 24-Hour Coverage, 3 Years (U.S. Part Number)	331046-002
	6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years (AP/EMEA Part Numbers)	U4465A U4465E
	Installation & Start-up Services	
	Hardware Installation (Canadian Part Number)	FP-ELINS-EC
	Hardware Installation (U.S. Part Number)	401791-002
	Hardware Installation (AP/EMEA Part Numbers)	U4473A U4473E
	Installation & Start-Up of a ProLiant server and Microsoft O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (U.S. Part Number)	240013-002
	Installation & Start-Up of a ProLiant server and Microsoft O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (Canadian Part Number)	FM-MSTEC-01
	Installation & Start-Up of a ProLiant server and Microsoft or Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (AP/EMEA Part Numbers)	U4474A U4474E
	Installation & Start-Up of a ProLiant server and Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (U.S. Part Number)	331051-002
	Installation & Start-Up of a ProLiant server and Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (Canadian Part Number)	FM-LSTEC-01
	Support Plus	
	Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (U.S. Part Number)	239928-002
	Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (Canadian Part Number)	FM-M01E1-36
	Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (AP/EMEA Part Numbers)	U4475A U4475E
	Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (U.S. Part Number)	331049-002
	Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (Canadian Part Number)	FM-L01E1-36
	Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (AP/EMEA Part Numbers)	U4477A U4477E

Options

Support Plus 24

Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (U.S. Part Number)	239930-002
Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (Canadian Part Number)	FM-M02E1-36
Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (AP/EMEA Part Numbers)	U4476A U4476E
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (U.S. Part Number)	331050-002
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (Canadian Part Number)	FM-L02E1-36
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (AP/EMEA Part Numbers)	U4478A U4478E

CarePaq 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, proactive patch notification, 1 System Healthcheck per year (2-5-2 Part Number for Canada)	FM-M04E1-36
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-M24E1-36
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-N04E1-36
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-N24E1-36
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, Technical Account Manager, Technical Newsletter, SW activity review, proactive patch notification, 1 System Healthcheck per year (6-3 Part Number for U.S.)	239932-002
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.)	239934-002
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.)	239972-002
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.)	239974-002

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

Memory

HP ProLiant ML330 G3 Models

Standard Memory

256-MB (expandable to 4GB) of non interleaved PC2100 DDR SDRAM running at 266MHz, with Advanced ECC capabilities (1x 256MB)

Standard Memory Plus Optional Memory

Up to 3328-MB memory is available with the optional installation of PC2100 DDR SDRAM memory kits.

Standard Memory Replaced with Optional Memory

Up to 4096-MB memory is available with the removal of the standard 256-MB of memory and the optional installation of PC2100 DDR SDRAM DIMM memory kits.
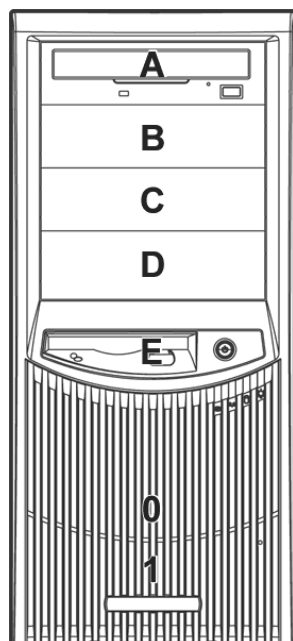
NOTE: Charts do not represent all possible memory configurations.

Memory		Slot			
		1	**2**	**3**	**4**
Standard	**256 MB**	**256 MB**	**Empty**	**Empty**	**Empty**
Optional	**3,328 MB**	**256 MB**	**1024 MB**	**1024 MB**	**1024 MB**
Maximum	**4,096 MB**	**1024 MB**	**1024 MB**	**1024 MB**	**1024 MB**

Following are memory options available from HP:

- 128MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 128 MB)   287494-B21
- 256MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 256 MB)   287495-B21
- 512MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 512 MB)   287496-B21
- 1024MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 1024 MB)   287497-B21

Storage

A		48x IDE (ATAPI) CD-ROM
E		3.5 in. Diskette Drive
B, C, D		Removable Media Bays (1.6" each)
0,1		Two 1" Non-Hot Plug Drive Bays

Drive Support

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	E	Integrated
IDE (ATAPI) CD-ROM Drive	Up to 2	A, B, C, or D	Integrated IDE (ATAPI)
DVD-ROM Drive Option Kit	Up to 2	A, B, C, or D	Integrated IDE (ATAPI)

Storage

Hard Drives

Hard Drives (SCSI Models only)

Ultra320 Hot Pluggable Drives (**NOTE:** For use with the ML3xx Two Bay Hot Plug SCSI Drive Cage (PN 244059-B21) ONLY.)

	Quantity Supported	Position Supported	Controller
1-inch 146.8-GB 10,000 rpm 72.8-GB 10,000 rpm 36.4-GB 10,000 rpm 72.8-GB 15,000 rpm 36.4-GB 15,000 rpm 18.2-GB 15,000 rpm	Up to 2 (With optional ML3xx Two Bay Hot Plug SCSI Drive Cage)	A & B	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot Compaq RAID LC2 Controller Smart Array 532 ControllerSmart Array 5302/128 Controller Smart Array 641 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

Ultra320 – Non-Hot Plug

	Quantity Supported	Position Supported	Controller
1-inch 36.4-GB 10,000 rpm	Up to 5	0, 1, A, B, C, D (Using the A position requires the removal or re-positioning of CD-ROM)	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot Compaq RAID LC2 Controller Smart Array 532 Controller Smart Array 5302/128 Controller Smart Array 5312 Controller Smart Array 641 Controller Smart Array 642 Controller 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.

Hard Drives (ATA Models only)

ATA/100 IDE - Non-Hot Plug

	Quantity Supported	Position Supported	Controller
1-inch 160.0-GB (**NOTE:** 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.) 80.0-GB 40.0-GB	Up to 4	0, 1, A, B, C, D (Using the A position requires the removal or re-positioning of CD-ROM)	Integrated Dual Channel Ultra ATA-100 Adapter with support for Integrated ATA RAID 0, 1, & 1+0 (ATA Models)

External Storage

	Quantity Supported	Position Supported	Controller
StorageWorks Enclosure 4300 Family (supports Ultra2/Ultra3 1"drives only)	Up to 7 (6 with RAID protection, 1 without)	External	Smart Array 532 Controller Smart Array 5312 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
3U Rackmount Kit 5U Rackmount Kit	Up to 2	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

Storage

Maximum Storage Capacity - ATA Models (SCSI Attached (StorageWorks Enclosure))

Internal	640.0 GB (4 x 160.0 GB) (ATA only)
External	14.386 TB (14 x 146.8 GB) x 7 (Requires additional SCSI controllers in slots)
Total	15.026 TB

NOTE: 160GB ATA HDDs only available for large volume orders through the Specials process. Please contact your local product manager for more information.

Maximum Storage Capacity SCSI Models (SCSI Attached (StorageWorks Enclosure) + Optional Hot Plug Drive Cage)

Internal	402.8 GB ((3 x 36.4 GB non-hot-plug hard drives) + (2 x 146.8 GB hot plug hard drives))
External	14.386 TB (14 x 146.8 GB) x 7 (Requires additional SCSI controller in slots)
Total	14.789 TB

Tape Drives

NOTE: A SCSI controller and a SCSI cable needs to be purchased to operate internal or external SCSI devices in the ATA Models. Please see the ML330 G3 cabling matrix for more information:
ftp://ftp.compaq.com/pub/products/servers/proliantml330/ML330%20G3%20SCSI%20Cabling%20Matrix.pdf.
NOTE: The DLT vs 40/80 tape drive may only be installed in bay A or B and can not be installed together with the ML3xx two-bay hot plug drive cage.
NOTE: For an up-to-date listing of the latest O/S Support details for each of the Tape Drives listed below, please see the following:
http://h18000.www1.hp.com/products/quickspecs/North_America/10233.html (North America)
http://h18000.www1.hp.com/products/quickspecs/Division/10233.html (Worldwide)

	Quantity Supported	Position Supported	Controller
Internal AIT 35-GB IDE Tape Drive	Up to 2	B, C, D (if installed in system with CD-ROM, should be installed in media bay below CD-ROM)	Integrated IDE (ATAPI)
HP DLT vs 40/80 Tape Drive	Up to 2	A, B (Using the A position requires the removal or re-positioning of CD-ROM; may not be installed together with the ML3xx two-bay hot plug hard drive cage).	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
HP StorageWorks DAT 72 Tape Drive Internal 20/40-GB DAT DDS-4 Tape Drive	Up to 2	B, C, D	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
AIT 100-GB, Internal AIT 50-GB Internal AIT 35-GB, LVD Internal	Up to 2	C, D	Integrated Single Channel Wide Ultra3 SCSI Adapter in a PCI slot 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
HP StorageWorks AIT 35 GB Autoloader	Up to 1 (for a single HBA) Up to 2 (for a dual HBA)	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
Ultrium 215, External Ultrium 230, External Ultrium 460, External	Up to 2	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
SDLT 110/220-GB, External SDLT 160/320-GB, External	Up to 2	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
AIT 100-GB, External AIT 50-GB External	Up to 2	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

Storage

AIT 35-GB, LVD External			
SSL2020 AIT Mini-Library	Up to 5	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
MSL5026DLX (40/80GB DLT-based)	2 drives per SCSI channel	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
MSL5026SL (SDLT-based) Library			
MSL5052SL (SDLT-based) Library			
MSL5052S2 (SDLT-based) Library			
MSL5030L1 (LTO-based) Library			
MSL5060L1 (LTO-based) Library			
MSL6060L1 (Ultrium 460 - based) Library			
MSL6030 (LTO Ultrium - based) Library			
20/40-GB DAT 8 Cassette Autoloader External	Up to 1	External	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter

QuickSpecs

HP ProLiant ML330 Generation 3 (G3)

Power Specifications

Part Number	319640-001
Spare Kit	324714-001
Operational Input Voltage Range (V rms)	90-264
Frequency Range (Nominal) (Hz)	47 - 63 (50 / 60)

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Max Rated Output Wattage Rating	300	300	300	300	300	300
Nominal Input Current (A rms)	4.6	3.9	2.1	2.0	1.9	1.8
Max Rated Input Wattage Rating (Watts)	435	429	423	423	417	411
Max. Rated VA (Volt-Amp)	458	451	445	445	439	433
Efficiency (%)	69	70	71	71	72	73
Power Factor	0.95					
Leakage Current (mA)	0.70	0.81	1.47	1.55	1.62	1.69
Maximum Inrush Current (A peak)	42	48	81	92	96	100
Maximum Inrush Current duration (mS)	2					

System Specifications

	Processor	Memory	HDD	PCI	PS	
ML330 G3 Fully Configured	**2**	**4**	**5**	**4**	**1**	
Fully Loaded System Input Wattage (W)	425	419	413	413	408	402
Fully Loaded System Input Current (A rms)	4.5	3.8	2.1	2.0	1.9	1.8
Fully Loaded System Thermal (BTU-Hr)	1450	1429	1409	1409	1390	1371
Fully Loaded System VA (Volt-Amp)	448	441	435	435	429	423
System Leakage with all power supplies loaded (mA)	0.70	0.81	1.47	1.55	1.62	1.69
System Inrush Current with all power supplies loaded (A)	42	48	87	92	96	100
Power cord requirements	Nema 5-15P to IEC320-C13			Option no./Spare no: 227099-001/187335-001		
	IEC320-C13 to IEC320-C14			Option no./Spare no: 142257-001/142258-B21		

Example of real input watts consumed versus rated watts consumed is available via the online tool located at url:
http://inline.compaq.com/pg/ecg/issd/power/psupply.asp
select system calculator for one of the systems and reference the green fields at the bottom of the calculator.

NOTES:
* To review typical system power ratings use the Active Answers Power Calculator which is available via the online tool located at URL:
http://h30099.www3.hp.com/configurator/powercalcs.asp.

To drill down to calculators:
- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: ML330 G3
- Click on: "Power Calculator" link (You may need to scroll down to see it.)

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QuickSpecs

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

QuickSpecs

TechSpecs

System Unit	**Dimensions** (HxWxD) (with feet)	16.8 x 7.5 x 20.25 in (41.91 x 19.05 x 51.44 cm)	
	Weight	40 lb (18.18 kg)	
	Input Requirements (per power supply)	Range Input Voltage	100 to 199 VAC/200 to 240 VAC
		Normal Line Voltage	115 to 230 VAC
	Line Frequency	50 to 60 Hz	
	Rated Input Current	<6A 100VAC to 199VAC	
		<3A 200VAC to 240VAC	
	BTU Rating	1,560 BTU	
	SCSI Connectors	One internal HD68 connectors	
		NOTE: Support for either one internal, or one external is available. Internal cabling is included with the server. External SCSI cabling from the integrated SCSI controller is achieved using an internal to external SCSI cable option kit (PN 159547-B22 or 333370-B21).	
	Power Supply Output Power (per power supply)	Rated Steady-State Power	300W
		Maximum Peak Power	400W
	Temperature Range	Operating	50° to 93° F (10° to 35° C)
		Shipping	-40° to 150° F (-40° to 66° C)
	Relative Humidity (non-condensing)	Operating	20% to 80%
		Non-operating	5% to 90%
	Acoustic Noise	Idle (Fixed Disk Drives Spinning)	
		L WAd (BELS)	5.1
		L pAm (dBA)	34
		Operating (Random Seeks to Fixed Disks)	
		L WAd (BELS)	5.5
		L pAm (dBA)	38

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	

Non-Hot Plug Wide Ultra320 SCSI Hard Drives	**36.4 GB 10K** 271832-B21	**Capacity**	36,419.2 MB	
		Height	1 in (2.54 cm)	
		Width	4 in (10.16 cm)	
		Interface	Wide Ultra320 SCSI	
		Transfer Rate Synchronous (Maximum)	320 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.7 ms
			Average	5.4 ms
			Full-Stroke	11 ms
			Rotational Speed	10,000 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	71,132,000
		Operating Temperature	50° to 95° F (10° to 35° C)	

TechSpecs

48X Max IDE CD-ROM Drive	**Disk**	Applicable Disk	CD-ROM (modes 1 and 2); mixed mode (audio and data combined)
			CD-DA
			Photo CD (Single- and Multi-session)
			CD-XA (mode 2, forms 1 and 2)
			CDI ready ; CD-WO
		Capacity	650 MB
	Block Size	Mode 1	2,048 bytes, 1024 bytes
		Mode 2	2,340 bytes, 2,336 bytes, 1024 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 (single), 1,500 to 7,200 KBps (10x to 48x)
		Burst	150 KB/s to 7,200 KB/s
	Cache Buffer	128 KB	
	Start-up Time (typical)	<7seconds	
	Stop Time	<4seconds	
	Laser Parameters	Type	Semiconductor Laser GaA1As
		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 (42.9 x 150 x 208 cm)
		Weight	2.09 lb (0.95 kg)

NC7760 PCI Gigabit Server Adapter (embedded)	**Network Interface**	10Base-T/100Base-TX/1000Base-TX	
	Compatibility	IEEE 802.3 10Base-T	
		IEEE 802.3ab 1000Base-T	
		IEEE 80.3u 100Base-TX	
	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
		1000Base-TX	1000Mb/s
	Connector	RJ-45	
	Cable Support	10Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)
		10/100/1000Base-TX	Category 5 UTP; up to 328 ft (100 m)

TechSpecs

Integrated Single Channel Wide Ultra3 SCSI Adapter in PCI Slot 1	Drives Supported	Up to 14 SCSI devices Wide Ultra320, Wide Ultra3 and Wide Ultra2 SCSI hard drives
	Data Transfer Method	64-bit/33-MHz PCI bus-master
	SCSI Channel Transfer Rate	160 MB/s per channel
	Maximum Transfer Rate per PCI Bus (peak)	267 MB/s per channel
	SCSI Protocols	Wide Ultra 3 SCSI and Wide Ultra2 SCSI
	Electrical Protocol	Low Voltage Differential (LVD)
	SCSI Termination	Active Termination
	External SCSI Connectors	External SCSI cabling from the integrated SCSI controller is achieved using an internal to external SCSI cable option kit (PN 159547-B22 or 333370-B21).
	Internal SCSI Connectors	One 68-Pin Wide Ultra SCSI-3 connectors

Video Controlle	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