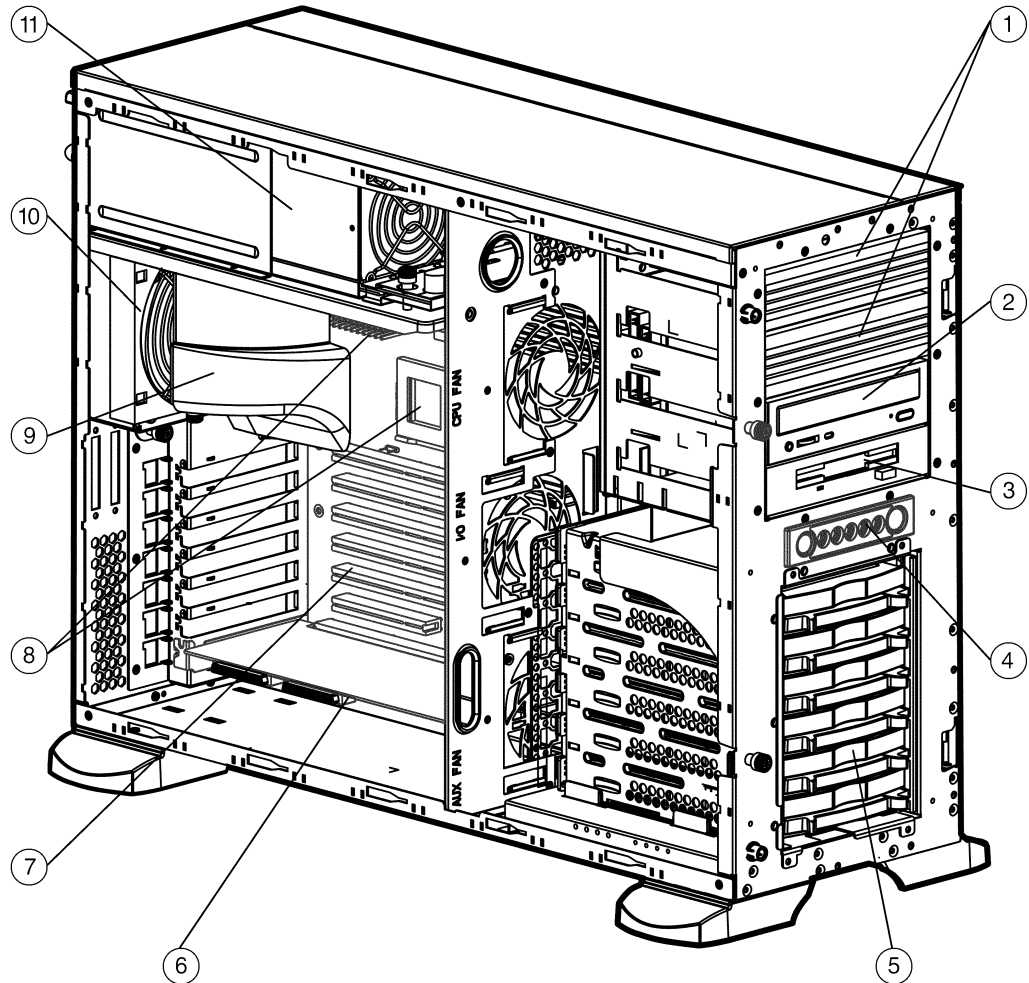


## Overview

### At A Glance

- The Compaq ProLiant™ ML350 Generation 2 (G2) 2-way rack or tower server delivers affordable performance and essential availability to corporate workgroups and growing businesses
- Intel® Pentium® III 1.40 GHz, or 1.26 GHz FC-PGA2 (Flip Chip-Pin Grid Array) processor (dual processor capability) with 512-KB second level ECC cache standard (full speed)
- Array Models ship with the Smart Array 532 Controller and 256-MB SDRAM Memory standard
- ServerWorks LE 3.0 Chipset with 133-MHz Front Side Bus
- 128-MB or 256-MB (Array Models) PC133-MHz Registered ECC SDRAM DIMM memory standard, expandable to 4-GB
- 133-MHz GTL Bus Design
- Six available PCI slots: five 64-bit/33-MHz PCI, one 32-bit/33-MHz PCI, two USB ports
- Integrated Dual Channel Wide Ultra3 SCSI Adapter
- Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)
- Support for up to six 1" Wide Ultra3 SCSI hot plug hard drives
- Internal storage capacity of up to 1.174 TB (6 x 146.8 GB 1" + 2 x 146.8 GB 1")
- 350W Hot-Pluggable Power Supply (standard) and an optional 350W Hot-Pluggable Redundant Power Supply available
- Standard 6 x 1" Wide Ultra2/Ultra3 Hot Plug Drive Cage
- Tool-free entry to chassis and access to components
- RBSU (ROM based setup utility) support, redundant ROM
- Compaq Insight Manager™, Compaq SmartStart™, ROM-based BIOS Setup Utility, and Automatic Server Recovery (ASR-2)
- 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.



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|--|---|
| 1. Two available removable media bays  | 7. Six PCI Slots (five 64-bit/33MHz PCI slots, one 32-bit/33 MHz PCI slot)              |
| 2. 40x Max IDE CD-ROM Drive  | 8. Pentium III Processor Sockets (one processor ships standard, dual processor capable) |
| 3. 1.44MB Floppy Drive   | 9. Baffle   |
| 4. LED/Button assembly (left to right: Unit ID, Internal System Health, External System Health, NIC Activity, Power) | 10. System Fan  |
| 5. Six 1" Hot Plug Drive Bays  | 11. Optional Hot-Plug Redundant 350W Power Supply (1+1)                                 |
| 6. Server Feature Board (with embedded video, SCSI, NIC and ASM (Advanced Server Management))                        |   |

**COMPAQ**

## Standard Features

<b>Processor</b> <i>(One of the following depending on model)</i>	Intel Pentium III 1.40 GHz FC-PGA2 Processor		
	Intel Pentium III 1.26 GHz FC-PGA2 Processor		
<b>Cache Memory</b>	Integrated 512-KB Level 2 ECC cache (full speed)		
<b>Upgradability</b>	Upgradable to dual processing		
<b>Chipset</b>	ServerWorks LE 3.0 Chipset with 133-MHz Front Side Bus		
	Note: For more information regarding ServerWorks, please see the following URL: <a href="http://www.serverworks.com/products/overview.html">http://www.serverworks.com/products/overview.html</a> .		
<b>Memory</b> <i>(One of the following depending on model)</i>	Standard	256 MB (PC133-MHz ECC Registered SDRAM DIMM memory) (Array Models only)	
	Maximum	4 GB	
	Standard	128 MB (PC133-MHz ECC Registered SDRAM DIMM memory)	
	Maximum	4 GB	
<b>Network Controller</b>	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)		
<b>Expansion Slots</b>	I/O (6 Total, 6 Available)		PCI Voltage:
	64-bit/33MHz, PCI	5 (5 available) (Array model has 4 available)	3.3 Volt
	32-bit/33MHz, PCI	1 (1 available)	5 Volt
<b>Storage Controller</b>	Integrated Dual Channel Wide Ultra3 SCSI Adapter Smart Array 532 Controller (Array Models Only)		
<b>Storage</b>	Diskette Drives	1.44 MB	
	CD-ROM	40x IDE (ATAPI) CD-ROM Drive	
	Hard Drives	None	
	Maximum Internal Storage	1.174 TB (6 x 146.8 GB 1" with standard internal hot plug drive cage + (2 x 146.8 GB 1") with optional ML3xx Internal Two Bay Hot Plug SCSI Drive Cage)	
	External Storage	Two external SCSI knockouts available, but requires optional ProLiant ML350 Internal to External SCSI Cable Option Kit (PN 159547-B22)	
<b>Interfaces</b>	Parallel	1	
	Serial	2	
	Pointing Device (Mouse)	1	
	Graphics	1	
	Keyboard	1	
	Network RJ-45	1	
	USB	2	
			Note: Please see the following URL for additional information regarding USB support: <a href="http://www.compaq.com/products/servers/platforms/usb-support.html">http://www.compaq.com/products/servers/platforms/usb-support.html</a> .
	External SCSI knockouts	2	
<b>Graphics</b>	Integrated ATI RAGE XL Video Controller with 8-MB SDRAM Video Memory		
<b>Form Factor</b>	Tower or rack (5U)		
<b>Product Demo</b>	To view the Product Demo, please see the following URL, then click on "PRODUCT DEMO": <a href="http://www5.compaq.com/products/servers/proliantml350/index-q2.html">http://www5.compaq.com/products/servers/proliantml350/index-q2.html</a>		

## Standard Features

### ProLiant Essentials Foundation Insight Manager 7 Pack Software

<p>Insight Manager 7</p>	<p>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 ProLiant servers.</p>
<p>Management Agents</p>	<p>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 website at <a href="http://www.hp.com/servers/manage">http://www.hp.com/servers/manage</a>.</p>
<p>SmartStart</p>	<p>SmartStart is a tool that simplifies server setup, providing a rapid way to deploy reliable and consistent server configurations. For more information, please visit the SmartStart website at <a href="http://www.hp.com/servers/smartstart">http://www.hp.com/servers/smartstart</a>.</p> <p>SmartStart version supported (minimum): SmartStart 5.20</p>
<p>ActiveUpdate™</p>	<p>ActiveUpdate is a web-based application that keeps IT managers directly connected to HP for proactive notification and delivery of the latest software updates.</p>
<p>Compaq ROMPaq™, support software, and configuration utilities</p>	<p>The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options.</p>
<p>Survey Utility and diagnostics utilities</p>	<p>The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips.</p>
<p>Optional ProLiant Essentials Value Packs</p>	<p>Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems and needs:</p> <ul style="list-style-type: none"> <li>• Rapid Deployment Pack – an automated solution for multi-server deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands.</li> <li>• 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.</li> <li>• Recovery Server Option Pack – entry-level high availability software that will provide reliable protection and increased uptime against server hardware and operating system failures.</li> <li>• 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.</li> </ul> <p>Note: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <a href="http://www.hp.com/servers/ProLiantessentials">http://www.hp.com/servers/ProLiantessentials</a> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.</p> <p>Note: For more information regarding ProLiant Essentials Software, please see the following URL: <a href="http://www.hp.com/servers/proliantessentials">http://www.hp.com/servers/proliantessentials</a>.</p> <p>Note: These Web sites are available in English only.</p>

<p><b>Industry Standard Compliance</b></p>	<p>ACPI V1.0B Compliant PCI 2.2 Compliant PXE Support WOL Support Microsoft® Logo certifications</p>
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## Standard Features

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<b>Manageability</b>	Insight Manager 7 Redundant ROM Remote Flash ROM Remote Insight Lights-Out Edition (optional) ProLiant RBSU (ROM-Based Setup Utility) Automatic Server Recovery-2 (ASR-2) Drive Parameter Tracking (with Smart Array Controller) Dynamic Sector Repairing (with Smart Array Controller) Pre-Failure Warranty (covers processors, memory and hard drives)
<b>Security</b>	Power-on password Setup password Diskette boot control Parallel and serial interface control Disk configuration lock Power switch security
<b>Server Power Cords</b>	One Lowline power cord ships standard. <b>Note:</b> Country specific power cords ship with all ProLiant ML350 G2 Models.
<b>Power Supply</b>	350 Watts, Power Factor Correction (PFC), Hot Plug 100 to 240 VAC Rated Input Voltage (Auto-sensing), CE Mark Compliant. <b>Note:</b> Power Supply and optional Hot Plug Redundant Power Supply are shipped with their own fan. <b>Note:</b> Optional Hot Plug Redundant Power Supply available (PN 237046-xx1).
<b>System Fans</b>	1 fan ships standard. 1 total supported internally.
<b>Required Cabling</b>	For required cabling information, refer to the Compaq Web site at <a href="http://www.compaq.com/products/servers/proliantML350">http://www.compaq.com/products/servers/proliantML350</a> . <b>Note:</b> This Web site is available in English only.
<b>OS Support</b>	Microsoft Windows NT <sup>®</sup> Server 4.0 Microsoft BackOffice Small Business Server 2000 Microsoft Windows 2000 Server and Advanced Server Novell <sup>®</sup> NetWare <sup>®</sup> 5.1 Novell NetWare Small Business Suite 5.1 SCO <sup>®</sup> OpenServer SCO UnixWare <sup>®</sup> IBM OS/2 Warp Family for e-business and Warp Server for e-business Convenience Pack LINUX <sup>®</sup> (RedHat <sup>®</sup> , SuSE <sup>®</sup> , Caldera <sup>®</sup> eServer, Open Linux Server) <b>Note:</b> For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix at: <a href="ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf">ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf</a> . <b>Note:</b> Optional hardware may be required to support some operating systems. <b>Note:</b> For an up-to-date listing of the latest drivers available for the Compaq ProLiant ML350, please see: <a href="http://www.compaq.com/support/files/server/us/index.html">http://www.compaq.com/support/files/server/us/index.html</a> .

## Standard Features

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### 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 Compaq 9000 Series Rack and the new 10000 Series Racks provides 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 Compaq 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 5,350 sq cm (830 square inches) 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 7 cm (2.75 inches).

**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://www5.compaq.com/products/servers/proliantml350/index.html>

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### Service and Support

Compaq Services provides a three-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. Compaq 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 3 year Parts, 3 year Labor, 3-year on-site support.

A full range of *CarePaq*™ packaged hardware and software services:

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

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

Please see the following URL regarding Warranty Information For Your Compaq Products:  
[http://www.compaq.com/support/warranty\\_upgrades/web\\_statements/176738.html](http://www.compaq.com/support/warranty_upgrades/web_statements/176738.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 Compaq Customer Support Center at 1-800-345-1518 for details.

## Models

<b>ML350T02 P1400-512KB, 256MB Array</b> <i>267124-xx1</i>	<b>Processor</b> <b>Cache Memory</b> <b>Memory</b>  <b>Network Controller</b> <b>Storage Controller</b>  <b>Hard drive</b> <b>Internal Storage</b> <b>Optical Drive</b> <b>Form Factor</b>	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported) Integrated 512-KB Level 2 ECC 256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter and Smart Array 532 Controller None ship standard 1.174 TB maximum hot plug (with optional hard drives & drive cage) 40x IDE (ATAPI) CD-ROM Drive Tower (5U)
<i>Note: Not available in EMEA.</i>		
<b>ML350T02 P1400-512KB, 128MB</b> <i>266241-xx1</i>	<b>Processor</b> <b>Cache Memory</b> <b>Memory</b>  <b>Network Controller</b> <b>Storage Controller</b> <b>Hard drive</b> <b>Internal Storage</b> <b>Optical Drive</b> <b>Form Factor</b>	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter None ship standard 1.174 TB maximum hot plug (with optional hard drives & drive cage) 40x IDE (ATAPI) CD-ROM Drive Tower (5U)
<b>ML350T02 P1266-512KB, 256MB Array</b> <i>263635-xx1</i>	<b>Processor</b> <b>Cache Memory</b> <b>Memory</b>  <b>Network Controller</b> <b>Storage Controller</b>  <b>Hard drive</b> <b>Internal Storage</b> <b>Optical Drive</b> <b>Form Factor</b>	(1) Intel Pentium III FC-PGA2 1.26-GHz Processor standard (up to 2 supported) Integrated 512-KB Level 2 ECC 256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter and Smart Array 532 Controller None ship standard 1.174 TB maximum hot plug (with optional hard drives & drive cage) 40x IDE (ATAPI) CD-ROM Drive Tower (5U)
<i>Note: Not available in EMEA.</i>		
<b>ML350T02 P1266-512KB, 128MB</b> <i>225861-xx1</i>	<b>Processor</b> <b>Cache Memory</b> <b>Memory</b>  <b>Network Controller</b> <b>Storage Controller</b> <b>Hard drive</b> <b>Internal Storage</b> <b>Optical Drive</b> <b>Form Factor</b>	(1) Intel Pentium III FC-PGA2 1.26-GHz Processor standard (up to 2 supported) Integrated 512-KB Level 2 ECC 128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL Integrated Dual Channel Wide Ultra3 SCSI Adapter None ship standard 1.174 TB maximum hot plug (with optional hard drives & drive cage) 40x IDE (ATAPI) CD-ROM Drive Tower (5U)

## Models

<b>ML350R02 P1400-512KB, 256MB Array</b> <i>267125-xx1</i>  <a href="#">Note: Not available in EMEA</a>	<b>Processor</b>	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported)
	<b>Cache Memory</b>	Integrated 512-KB Level 2 ECC
	<b>Memory</b>	256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	<b>Network Controller</b>	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	<b>Storage Controller</b>	Integrated Dual Channel Wide Ultra3 SCSI Adapter and Smart Array 532 Controller
	<b>Hard drive</b>	None ship standard
	<b>Internal Storage</b>	1.174 TB maximum hot plug (with optional hard drives & drive cage)
	<b>Optical Drive</b>	40x IDE (ATAPI) CD-ROM Drive
	<b>Form Factor</b>	Rack (5U)

<b>ML350R02 P1400-512KB, 128MB</b> <i>266242-xx1</i>	<b>Processor</b>	(1) Intel Pentium III FC-PGA2 1.40 GHz Processor standard (up to 2 supported)
	<b>Cache Memory</b>	Integrated 512-KB Level 2 ECC
	<b>Memory</b>	128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	<b>Network Controller</b>	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	<b>Storage Controller</b>	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	<b>Hard drive</b>	None ship standard
	<b>Internal Storage</b>	1.174 TB maximum hot plug (with optional hard drives & drive cage)
	<b>Optical Drive</b>	40x IDE (ATAPI) CD-ROM Drive
	<b>Form Factor</b>	Rack (5U)

<b>ML350R02 P1266-512KB, 256MB Array</b> <i>263636-xx1</i>  <a href="#">Note: Not available in EMEA.</a>	<b>Processor</b>	(1) Intel Pentium III FC-PGA2 1.26 GHz Processor standard (up to 2 supported)
	<b>Cache Memory</b>	Integrated 512-KB Level 2 ECC
	<b>Memory</b>	256-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	<b>Network Controller</b>	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	<b>Storage Controller</b>	Integrated Dual Channel Wide Ultra3 SCSI Adapter and Smart Array 532 Controller
	<b>Hard drive</b>	None ship standard
	<b>Internal Storage</b>	1.174 TB maximum hot plug (with optional hard drives & drive cage)
	<b>Optical Drive</b>	40x IDE (ATAPI) CD-ROM Drive
	<b>Form Factor</b>	Rack (5U)

<b>ML350R02 P1266-512KB, 128MB</b> <i>225862-xx1</i>	<b>Processor</b>	(1) Intel Pentium III FC-PGA2 1.26 GHz Processor standard (up to 2 supported)
	<b>Cache Memory</b>	Integrated 512-KB Level 2 ECC
	<b>Memory</b>	128-MB (Standard) to 4-GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	<b>Network Controller</b>	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	<b>Storage Controller</b>	Integrated Dual Channel Wide Ultra3 SCSI Adapter
	<b>Hard drive</b>	None ship standard
	<b>Internal Storage</b>	1.174 TB maximum hot plug (with optional hard drives & drive cage)
	<b>Optical Drive</b>	40x IDE (ATAPI) CD-ROM Drive
	<b>Form Factor</b>	Rack (5U)

<b>Country Code Key</b>	XX=00	U.S. English	XX=05	France
	XX=01	Australia	XX=37	APD
	XX=02	Int'l	XX=42	EURO
	XX=03	UK	XX=29	Japan
	XX=04	Germany	XX=AA	PRC

## Options

<b>Compaq ProLiant ML350 Generation 2 (G2) Unique Options</b>	Hot Plug Redundant Power Supply Option Kit (NA, LA)	237046-001
	Hot Plug Redundant Power Supply Option Kit (AUST)	237046-011
	Hot Plug Redundant Power Supply Option Kit (EURO)	237046-021
	Hot Plug Redundant Power Supply Option Kit (UK)	237046-031
	Hot Plug Redundant Power Supply Option Kit (Japan)	237046-291
	ProLiant ML350 Generation 2 (G2) Tower to Rack Conversion Kit	237045-B21
<b>ProLiant Essentials Value Pack Software</b>	Rapid Deployment Pack, 1 User, V1.x <i>Note: This license allows 1 server to be managed and deployed via the Deployment Server.</i>	267196-B21
	Rapid Deployment Pack, 1 User, V1.x (Japan) <i>Note: This license allows 1 server to be managed and deployed via the Deployment Server.</i>	267196-291
	Rapid Deployment Pack, 10 Users, V1.x <i>Note: This license allows 10 servers to be managed and deployed via the Deployment Server.</i>	269817-B21
	Rapid Deployment Pack, 10 Users, V1.x (Japan) <i>Note: This license allows 10 servers to be managed and deployed via the Deployment Server.</i>	269817-291
	ProLiant Essentials Workload Management Pack (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	ProLiant Essentials Recovery Server Option Pack	280189-B21
	ProLiant Essentials Performance Management Pack v2.0, Single License	306696-B21
	<i>Note: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <a href="http://www.hp.com/servers/proliantessentials">http://www.hp.com/servers/proliantessentials</a> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.</i>	
	<i>Note: For more information regarding ProLiant Essentials Software, please see the following URL: <a href="http://www.hp.com/servers/proliantessentials">http://www.hp.com/servers/proliantessentials</a>.</i>	
	<i>Note: These Web sites are available in English only.</i>	
<b>Software</b>	HP digital asset protection	302316-001
<b>NetServer to ProLiant integrations services</b>	HP NetServer to ProLiant integration and assessment service <i>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.</i>	304164-002
	HP TopTools to Insight Manager 7 installation and startup service <i>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.</i>	304163-002
	HP NetServer to ProLiant Essentials Rapid Deployment Pack installation and startup service <i>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.</i>	304162-002

## Options

Processor	Pentium III P1400-512KB Processor Option Kit	231118-B21
	Note: This processor option kit (PN 231118-B21) supports the ProLiant ML350 Generation 2 (G2), and ProLiant ML370 Generation 2 (G2) servers.	
	Pentium III P1266-512KB (FC-PGA2) Processor Option Kit	231117-B21
Memory (DIMMs)	1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128280-B21
	512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128279-B21
	256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128278-B21
Internal Storage	128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit	128277-B21
	ML3xx Two Bay Hot Plug SCSI Drive Cage	244059-B21
	Note: The drive cage option kit (PN 244059-B21) has one 1" drive bay and one 1.6" drive bay, installed in two available removable media bays.	
Optical Drives	Note: The Drive Cage must be shipped separately from your ML350 G2 server. Failure to do so can cause damage to the ML350 G2 removable media drive bays.	
	16X DVD-ROM Drive Option Kit (Carbon)	217053-B21
	Hard Drives	<b>Ultra320 SCSI – Universal Hot Plug</b>
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
Note: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds and will run at U3 within the ML350 G2.		
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: <a href="http://www5.compaq.com/products/quickspecs/11531_div/11531_div.HTML">http://www5.compaq.com/products/quickspecs/11531_div/11531_div.HTML</a> (Division/World Wide) <a href="http://www5.compaq.com/products/quickspecs/11531_na/11531_na.HTML">http://www5.compaq.com/products/quickspecs/11531_na/11531_na.HTML</a> (North America)		
Storage Controllers	RAID LC2 Controller	188044-B21
	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 5304/256 Controller	283551-B21
	Smart Array 5304/256 Controller (Japan)	283551-291
	Ultra3 Channel Expansion Module for Smart Array 5300 Controller	153507-B21
	128-MB Cache Module for Smart Array 5302 Controller	153506-B21

## Options

<b>Storage Controllers</b> <i>(continued)</i>	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.	
	Advanced Data Guarding Module for Smart Array 5302 Controller	199371-B21
	RAID ADG Upgrade for Smart Array 5302	288601-B21
	64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter	154457-B21
	64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-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: <a href="http://www5.compaq.com/products/quickspecs/10652_div/10652_div.HTML">http://www5.compaq.com/products/quickspecs/10652_div/10652_div.HTML</a> (RAID LC2) <a href="http://www5.compaq.com/products/quickspecs/10851_div/10851_div.HTML">http://www5.compaq.com/products/quickspecs/10851_div/10851_div.HTML</a> (Smart Array 532) <a href="http://www5.compaq.com/products/quickspecs/10640_div/10640_div.HTML">http://www5.compaq.com/products/quickspecs/10640_div/10640_div.HTML</a> (Smart Array 5300 Series) <a href="http://www5.compaq.com/products/quickspecs/10429_div/10429_div.HTML">http://www5.compaq.com/products/quickspecs/10429_div/10429_div.HTML</a> (SCSI Adapter)	
<b>Wireless HAP Solution</b>	Compaq WL410 Wireless SMB Access Point (US)	191811-001
	Compaq WL410 Wireless SMB Access Point (Australia)	191811-011
	Compaq WL410 Wireless SMB Access Point (Europe)	191811-021
	Compaq WL410 Wireless SMB Access Point (UK)	191811-031
	Compaq WL410 Wireless SMB Access Point (Japan)	191811-291
	Compaq WL410 Wireless SMB Access Point (China)	191811-AA1
	Compaq WL410 Wireless SMB Access Point (Korea)	191811-AD1
	Compaq WL410 Wireless SMB Access Point (S. Africa)	191811-AR1
<b>Communications</b>	Compaq NC3123 Fast Ethernet NIC PCI 10/100 WOL	174830-B21
	Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Port 10/100	138603-B21
	Compaq NC3135 Fast Ethernet Module Dual 10/100 Upgrade Module for NC3134 and NC3131	138604-B21
	Compaq NC6132 Gigabit Module 1000 SX Upgrade Module for NC3134 and NC3131	338456-B23
	Compaq NC3133 Fast Ethernet Module 100FX Upgrade Module for NC3134 and NC3131	338456-B25
	Compaq NC7132 10/100/1000-T Upgrade Module for NC3134 and NC3131	153543-B21
	Compaq NC6136 Gigabit Server Adapter, 64-bit/66MHz, PCI, 1000 SX	203539-B21
	Compaq NC7131 Gigabit Server Adapter, 64-bit/66MHz, PCI, 10/100/1000-T	158575-B21
	Compaq NC7132 10/100/1000-T Upgrade Module for NC3134 and NC3131	153543-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	

## Options

<b>Country Code Key</b>	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 MERC0
<b>Redundant Options</b>	Hot Plug Redundant Power Supply Option Kit (NA, LA)			237046-001
	Hot Plug Redundant Power Supply Option Kit (AUST)			237046-011
	Hot Plug Redundant Power Supply Option Kit (EURO)			237046-021
	Hot Plug Redundant Power Supply Option Kit (UK)			237046-031
	Hot Plug Redundant Power Supply Option Kit (Japan)			237046-291
<b>Management Options</b>	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
	Compaq Remote Insight Lights-Out Edition (NA, LA)			157866-001
	Compaq Remote Insight Lights-Out Edition (EURO)			157866-021
	Compaq Remote Insight Lights-Out Edition (APD, Japan)			157866-371
<b>Security</b>	HP/Atalla AXL600L SSL Accelerator Card for ProLiant Servers			524545-B21
	Compaq AXL300 Accelerator PCI Card for ProLiant Servers			227933-B21
<b>Monitors</b>	Flat Panel TFT1825 18" Color Monitor Two-Tone (Carbon/Silver)			296751-xxx
	Flat Panel TFT1720 17" Color Monitor Two-Tone (Carbon/Silver)			295926-xxx
	Flat Panel TFT1520 15" Color Monitor Two-Tone (Carbon/Silver)			295925-xxx
	Flat Panel TFT2025 20" Color Monitor Two-Tone (Carbon/Silver)			285550-xxx
	TFT5110R Flat Panel Monitor (Carbon)			281683-B21
	TFT5010R Flat Panel Monitor (NA)			217248-001
	TFT5010R Flat Panel Monitor (Int'l)			217248-B31
	TFT5010R Flat Panel Monitor (Japan)			217248-291

## Options

CRT Country Code Key	NORTH AMERICA (NA)/LATIN AMERICA (LA)	
	Dash #	Description
	-001	NA Kit with US Power Cord
	-002	Carbon model with US Power Cord
	-003	Touch Screen model with US Power Cord
	-004	NAFTA model with US Power Cord (Made in Mexico)
	-005	NA Kit with Powered Speakers
	-006	GSA model with US Power Cord
	-007	NH MPR model with US power cord (Made in Mexico)
	-B24	TCO model without power cord (Digital Classic)
	-201	EH model for Brazil (older Brazil models used -B29)
	-202	EH model for Brazil Carbon (older Brazil models used -B29)
	-C91	EH model for Mercosur countries
	-C92	EH model for Mercosur countries Carbon
	-B29	EH/ALADI model for Latin America
	<i>Note: All NA/LA models above are NH.</i>	
	EUROPE, MIDDLE EAST AND AFRICA (EMEA)	
	Dash #	Description
	-021	NH/TCO with Eurocord (DCE Hub)
	-022	NH/MPR with Eurocord (DCE Hub) (India)
	-023	NH Carbon model with Eurocord (DCE Hub)
	-024	NH Touch Screen model with Eurocord (DCE Hub)
	-025	NH Kit with Speakers and Eurocord
	-A91	NH/TCO without power cord (Dubai hub)
	-A92	NH/MPR without power cord (Dubai hub)
	-031	NH/TCO with UK Cord (UK Hub)
	-032	NH/MPR with UK Cord (UK Hub)
	-033	NH/TCO carbon with UK Cord
	-035	NH Kit with Speakers and UK Cord
	-B21	SH/MPR without power cord (S. Africa Hub)
	-B23	SH/TCO without power cord (S. Africa Hub)
	-B27	SH/TCO Carbon without power cord (S. Africa Hub)
	PACIFIC/AUSTRALIA (APD)	
	Dash #	Description
	-B22	NH/MPR without power cord
	-B24	NH/TCO without power cord
	-B25	EH Carbon model without power cord
	-B26	NH Touch Screen model without power cord
	-011	SH model with AUZ/NZ power cord
	-015	SH model with speakers AUZ/NZ power cord
	-012	SH Carbon model with AUZ/NZ power cord
	-AD1	NH model for Korea
	-AD2	NH Carbon model for Korea
	-B28	EH model without power cord
	-B35	EH model with speakers no power cord (Singapore)

## Options

CRT Country Code Key (continued)	GREATER CHINA (GCD)	
	Dash #	Description
	-AA1	NH/China Kit with CCIB label (Local Sales)
	-AA2	NH/ Carbon China Kit with CCIB label (Local Sales)
	-KA1	NH/China Kit with CCIB label (External Sales/Bundles in HK)
	-AB1	NH/Taiwan kit, made in Taiwan
	JAPAN (CKK)	
	Dash #	Description
	-291	NH/Japan Kit with 3-2 pin adapter
	-292	NH Carbon Japan Kit with 3-2 pin adapter

TFT Country Code Key	EUROPE, MIDDLE EAST & AFRICA (EMEA)	
	Dash #	Description
	-021	Europe
	-031	UK
	NORTH AMERICA	
	Dash #	Description
	-001	NA
	-B24	All NA/LA models
	APD	
	Dash #	Description
	-011	Australia/NZ
	JAPAN (CKK)	
	Dash #	Description
	-291	Japan

## 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.

### Internal and External DAT Tape Drives

Internal 12/24-GB DAT Drive (Opal)	295513-B22
Internal 12/24-GB DAT Drive (Opal) (Japan)	295513-292

Note: Please see the 12/24-GB DAT 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://www5.compaq.com/products/quickspecs/10239\\_div/10239\\_div.HTML](http://www5.compaq.com/products/quickspecs/10239_div/10239_div.HTML) (Division/World Wide)  
[http://www5.compaq.com/products/quickspecs/10239\\_na/10239\\_na.HTML](http://www5.compaq.com/products/quickspecs/10239_na/10239_na.HTML) (North America)

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
HP StorageWorks Internal 20/40-GB DAT, Hot Plug (Carbon)	215488-B21

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://www5.compaq.com/products/quickspecs/10426\\_div/10426\\_div.HTML](http://www5.compaq.com/products/quickspecs/10426_div/10426_div.HTML) (Division/World Wide)  
[http://www5.compaq.com/products/quickspecs/10426\\_na/10426\\_na.HTML](http://www5.compaq.com/products/quickspecs/10426_na/10426_na.HTML) (North America)

## Options

### Tape Drives (continued)

#### Internal and External AIT Tape Drives

Note: The Internal AIT Hot Plug Drives are supported in the drive bay only. When installing an AIT tape drive into an ML350 ProLiant server you must use the special screw included with the drive kit in order for the drive to seat properly in the ML350 drive bay.

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
HP StorageWorks Internal AIT 35-GB, LVD, Hot Plug (Carbon)	216886-B21

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://www5.compaq.com/products/quickspecs/10712\\_div/10712\\_div.HTML](http://www5.compaq.com/products/quickspecs/10712_div/10712_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/10712\\_na/10712\\_na.HTML](http://www5.compaq.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 Internal AIT 50-GB, Hot Plug (Carbon)	215487-B21
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://www5.compaq.com/products/quickspecs/10425\\_div/10425\\_div.HTML](http://www5.compaq.com/products/quickspecs/10425_div/10425_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/10425\\_na/10425\\_na.HTML](http://www5.compaq.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
HP StorageWorks Internal AIT 100-GB, Hot-Plug (carbon)	249161-B21

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://www5.compaq.com/products/quickspecs/11062\\_div/11062\\_div.HTML](http://www5.compaq.com/products/quickspecs/11062_div/11062_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11062\\_na/11062\\_na.HTML](http://www5.compaq.com/products/quickspecs/11062_na/11062_na.HTML) (North America)

#### Internal and External DLT/SDLT Tape Drives

HP StorageWorks 40/80-GB DLT Tape Drive, Internal (Carbon)	146196-B22
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://www5.compaq.com/products/quickspecs/10658\\_div/10658\\_div.HTML](http://www5.compaq.com/products/quickspecs/10658_div/10658_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/10658\\_na/10658\\_na.HTML](http://www5.compaq.com/products/quickspecs/10658_na/10658_na.HTML) (North America)

## Options

### Tape Drives (continued)

#### 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) (Int'l)	280129-B31
HP StorageWorks DLT VS 40/80 Tape Drive, External (Carbon) (Japan)	280129-291

Note: Please see the DLT VS 40/80 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://www5.compaq.com/products/quickspecs/11403\\_div/11403\\_div.HTML](http://www5.compaq.com/products/quickspecs/11403_div/11403_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11403\\_na/11403\\_na.HTML](http://www5.compaq.com/products/quickspecs/11403_na/11403_na.HTML) (North America)

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://www5.compaq.com/products/quickspecs/10772\\_div/10772\\_div.HTML](http://www5.compaq.com/products/quickspecs/10772_div/10772_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/10772\\_na/10772\\_na.HTML](http://www5.compaq.com/products/quickspecs/10772_na/10772_na.HTML) (North America)

HP StorageWorks SDLT 160/320, Internal (carbon) (WW)	257319-B21
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://www5.compaq.com/products/quickspecs/11406\\_div/11406\\_div.HTML](http://www5.compaq.com/products/quickspecs/11406_div/11406_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11406\\_na/11406\\_na.HTML](http://www5.compaq.com/products/quickspecs/11406_na/11406_na.HTML) (North America)

#### External SuperLoader

DLT1 1280 SuperLoader	268664-B21
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Note: Please see the StorageWorks™ DLT1 1280 SuperLoader by Compaq QuickSpecs for additional options and for an up-to-date listing of the latest O/S Support details, please see the following:

[http://www5.compaq.com/products/quickspecs/11330\\_div/11330\\_div.HTML](http://www5.compaq.com/products/quickspecs/11330_div/11330_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11330\\_na/11330\\_na.HTML](http://www5.compaq.com/products/quickspecs/11330_na/11330_na.HTML) (North America)

#### Internal and External LTO Ultrium Tape Drives

HP StorageWorks LTO Ultrium 230 Tape Drive, Internal (Carbon) WW	Q1515A
HP StorageWorks LTO Ultrium 230 Tape Drive, External (Carbon) NA	Q1516A
HP StorageWorks LTO Ultrium 230 Tape Drive, External (Carbon) Int'l	Q1517A

Note: Please see the HP StorageWorks LTO Ultrium 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://www5.compaq.com/products/quickspecs/11415\\_div/11415\\_div.HTML](http://www5.compaq.com/products/quickspecs/11415_div/11415_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11415\\_na/11415\\_na.HTML](http://www5.compaq.com/products/quickspecs/11415_na/11415_na.HTML) (North America)

HP StorageWorks Ultrium 460 Tape Drive for ProLiant, Internal (Carbon) WW	Q1518A
HP StorageWorks Ultrium 460 Tape Drive for ProLiant, External (Carbon) NA	Q1519A
HP StorageWorks Ultrium 460 Tape Drive for ProLiant, External (Carbon) Int'l	Q1520A

Note: Please see the HP StorageWorks Ultrium 460 Tape Drives for ProLiant QuickSpecs for additional options such as data and cleaning cartridges, and for an up-to-date listing of the latest O/S Support details, please see the following:

[http://www5.compaq.com/products/quickspecs/11530\\_div/11530\\_div.HTML](http://www5.compaq.com/products/quickspecs/11530_div/11530_div.HTML) (Division/World Wide)

[http://www5.compaq.com/products/quickspecs/11530\\_na/11530\\_na.HTML](http://www5.compaq.com/products/quickspecs/11530_na/11530_na.HTML) (North America)

## Options

### Tape Drives (continued)

#### Internal and External DAT Autoloader

20/40-GB DAT 8 Cassette Autoloader Internal (Opal)	166504-B21
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://www5.compaq.com/products/quickspecs/10518\\_div/10518\\_div.HTML](http://www5.compaq.com/products/quickspecs/10518_div/10518_div.HTML) (Division/World Wide)  
[http://www5.compaq.com/products/quickspecs/10518\\_na/10518\\_na.HTML](http://www5.compaq.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)	280349-001
HP StorageWorks AIT 35 GB Autoloader, Tabletop (Carbon) (Int'l)	280349-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://www5.compaq.com/products/quickspecs/11404\\_div/11404\\_div.HTML](http://www5.compaq.com/products/quickspecs/11404_div/11404_div.HTML) (Division/World Wide)  
[http://www5.compaq.com/products/quickspecs/11404\\_na/11404\\_na.HTML](http://www5.compaq.com/products/quickspecs/11404_na/11404_na.HTML) (North America)

#### 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	C9266R

#### Rackmount Tape Drive Kits

3U Rackmount Kit	274338-B21
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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
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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://www5.compaq.com/products/quickspecs/10854\\_div/10854\\_div.HTML](http://www5.compaq.com/products/quickspecs/10854_div/10854_div.HTML) (Division/World Wide)  
[http://www5.compaq.com/products/quickspecs/10854\\_na/10854\\_na.HTML](http://www5.compaq.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 Table Top	175195-B21
SSL2020 AIT Mini-Library 2 drive, 20 slot Table Top	175195-B22
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

##### Required Adapters/Controllers for SSL2020 AIT Library

64-Bit/66-Mhz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
SAN Access Module for Smart Array 5302 Controller	216687-B21
SAN Access Module for Smart Array 5302 Controller (Japan)	216687-291

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://www5.compaq.com/products/quickspecs/10580\\_na/10580\\_na.HTML](http://www5.compaq.com/products/quickspecs/10580_na/10580_na.HTML) (North America)

[http://www5.compaq.com/products/quickspecs/10580\\_div/10580\\_div.HTML](http://www5.compaq.com/products/quickspecs/10580_div/10580_div.HTML) (Division/World Wide)

#### MSL5000 Libraries

##### Mainstream Tape Library

##### MSL5026DLX DLT Library

MSL5026DLX, 1 40/80-GB DLT, LVD Table Top	231821-B21
MSL5026DLX, 2 40/80-GB DLT, LVD Table Top	231821-B22
MSL5026DLX, 1 40/80-GB DLT, LVD Rackmount	231891-B21
MSL5026DLX, 2 40/80-GB DLT, LVD Rackmount	231891-B22

##### MSL5026SL SDLT Library

Note: Please see the StorageWorks MSL5026DLX or MSL5026SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at:

[http://www5.compaq.com/products/quickspecs/10860\\_na/10860\\_na.HTML](http://www5.compaq.com/products/quickspecs/10860_na/10860_na.HTML) (North America)

[http://www5.compaq.com/products/quickspecs/10860\\_div/10860\\_div.HTML](http://www5.compaq.com/products/quickspecs/10860_div/10860_div.HTML) (Division/World Wide)

MSL5026SL, Tabletop, 1 SDLT Drive (Graphite)	302511-B21
MSL5026SL, Tabletop, 2 SDLT Drives (Graphite)	302511-B22
MSL5026SL, Rackmount, 1 SDLT Drive (Graphite)	302512-B21
MSL5026SL, Rackmount, 2 SDLT Drive (Graphite)	302512-B22

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://www5.compaq.com/products/quickspecs/11440\\_na/11440\\_na.HTML](http://www5.compaq.com/products/quickspecs/11440_na/11440_na.HTML) (North America)

[http://www5.compaq.com/products/quickspecs/11440\\_div/11440\\_div.HTML](http://www5.compaq.com/products/quickspecs/11440_div/11440_div.HTML) (Division/World Wide)

MSL5026S2, Rackmount, 0 Drive Library	293472-B21
MSL5026S2, Rackmount, 1 Drive, SDLT2 Library	293472-B22
MSL5026S2, Rackmount, 2 Drives, SDLT2 Library	293472-B23
MSL5026S2FC, Rackmount, 1 Drive, SDLT2 Library	293472-B24
MSL5026S2FC, Rackmount, 2 Drives, SDLT2 Library	293472-B25
MSL5026S2, Tabletop, 1 Drive, SDLT2 Library	293473-B21
MSL5026S2, Tabletop, 2 Drives, SDLT2 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://www5.compaq.com/products/quickspecs/11453\\_na/11453\\_na.HTML](http://www5.compaq.com/products/quickspecs/11453_na/11453_na.HTML) (North America)

[http://www5.compaq.com/products/quickspecs/11453\\_div/11453\\_div.HTML](http://www5.compaq.com/products/quickspecs/11453_div/11453_div.HTML) (Division/World Wide)

## Options

<b>Tape Automation (continued)</b>	<b>MSL5000 Libraries (continued)</b>	
	<b>Departmental Tape Library</b>	
	<b>MSL5052SL SDLT Library</b>	
	MSL5052, Rackmount, 0 Drive, SDLT ALL	255102-B21
	MSL5052SL, SDLT, 110/220, 2 Drives, LVD, Table Top	249490-B21
	MSL5052SL, SDLT, 110/220, 2 Drives, LVD, Rackmount	249491-B21
	Note: Please see the StorageWorks MSL5052SL Library QuickSpecs for additional information including Upgrade Kits, Accessories, and SCSI Cable Kits and additional options needed for a complete solution at: <a href="http://www5.compaq.com/products/quickspecs/11061_na/11061_na.HTML">http://www5.compaq.com/products/quickspecs/11061_na/11061_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/11061_div/11061_div.HTML">http://www5.compaq.com/products/quickspecs/11061_div/11061_div.HTML</a> (Division/World Wide)	
	<b>MSL5052S2 SDLT Library</b>	
	MSL5052S2, Tabletop, 2 Drives, SDLT2 Library	293476-B21
	MSL5052S2, Rackmount, 2 Drives, SDLT2 Library	293474-B21
	MSL5052S2FC, Rackmount, 2 Drives, SDLT2 Library	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: <a href="http://www5.compaq.com/products/quickspecs/11442_na/11442_na.HTML">http://www5.compaq.com/products/quickspecs/11442_na/11442_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/11442_div/11442_div.HTML">http://www5.compaq.com/products/quickspecs/11442_div/11442_div.HTML</a> (Division/World Wide)	
	<b>MSL5030 LTO Library</b>	
	MSL5030L1, Rackmount, 0 Drive Library	301897-B21
	MSL5030L1, Rackmount, 1 Drive, LTO1 Library	301897-B22
	MSL5030L1, Rackmount, 2 Drives, LTO1 Library	301897-B23
	MSL5030L1FC, Rackmount, 1 Drive, LTO1 Library	301897-B24
	MSL5030L1FC, Rackmount, 2 Drives, LTO1 Library	301897-B25
	MSL5030L1, Tabletop, 1 Drive, LTO1 Library	301898-B21
	MSL5030L1, Tabletop, 2 Drives, LTO1 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: <a href="http://www5.compaq.com/products/quickspecs/11439_na/11439_na.HTML">http://www5.compaq.com/products/quickspecs/11439_na/11439_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/11439_div/11439_div.HTML">http://www5.compaq.com/products/quickspecs/11439_div/11439_div.HTML</a> (Division/World Wide)	
	<b>MSL5060 LTO Library</b>	
	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: <a href="http://www5.compaq.com/products/quickspecs/11438_na/11438_na.HTML">http://www5.compaq.com/products/quickspecs/11438_na/11438_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/11438_div/11438_div.HTML">http://www5.compaq.com/products/quickspecs/11438_div/11438_div.HTML</a> (Division/World Wide)	
	<b>MSL5000 series Libraries Options</b>	
	MSL5K Field Upgrade SDLT 110/220 Drive, LVD	231823-B22
	MSL5000 SDLT2 Upgrade Drive	293475-B21
	MSL5000 LTO1 Upgrade Drive	301901-B21
	MSL5000 Dual Magazine LTO	301902-B21
	MSL5000 Dual Magazine DLT	232136-B21
	<b>Required Adapters for MSL5000 series Libraries</b>	
	64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21

## Options

<b>Smart Array Cluster Storage</b>	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	
	<p>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.</p> <p>Note: Please see the Compaq Smart Array Cluster Storage QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at:  <a href="http://www5.compaq.com/products/quickspecs/11050_na/11050_na.HTML">http://www5.compaq.com/products/quickspecs/11050_na/11050_na.HTML</a> (North America)  <a href="http://www5.compaq.com/products/quickspecs/11050_div/11050_div.HTML">http://www5.compaq.com/products/quickspecs/11050_div/11050_div.HTML</a> (Division/World Wide)</p>		
<b>Cluster Options</b>	ProLiant Cluster HA/L100 LifeKeeper for Linux	303523-B21	
	<p>Note: For additional information regarding the ProLiant Cluster HA/L100 LifeKeeper for Linux, please see the following QuickSpecs at:  <a href="http://www5.compaq.com/products/quickspecs/11533_na/11533_na.html">http://www5.compaq.com/products/quickspecs/11533_na/11533_na.html</a> (North America)  <a href="http://www5.compaq.com/products/quickspecs/11533_div/11533_div.html">http://www5.compaq.com/products/quickspecs/11533_div/11533_div.html</a> (Division/World Wide)</p>		
<b>External Storage – Tower and Rack</b>	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	
	<p>Note: The StorageWorks Enclosure 4300 Family supports the Wide Ultra3, Ultra320 1" Hot Plug Hard Drives.</p>		
	Redundant Power Supply Option	119826-B21	
	Ultra3 Single Bus I/O Module Option	190212-B21	
	Ultra3 Dual Bus I/O Module Option	190213-B21	
	StorageWorks Enclosure Tower to Rack Conversion Kit	150213-B21	
<b>MSA1000</b>	MSA 1000	201723-B22	
	MSA 1000 Controller	218231-B22	
	MSA Fibre Channel I/O Module	218960-B21	
	MSA1000 Fabric Switch	218232-B21	
	MSA 1000 Fibre Channel Adapter (FCA) 2101	245299-B21	
	HP StorageWorks msa hub 2/3	286763-B21	
	<p>Note: Please see the HP StorageWorks modular SAN array 1000 QuickSpecs for additional options and configuration information at:  <a href="http://www5.compaq.com/products/quickspecs/11033_na/11033_na.HTML">http://www5.compaq.com/products/quickspecs/11033_na/11033_na.HTML</a> (North America)  <a href="http://www5.compaq.com/products/quickspecs/11033_div/11033_div.HTML">http://www5.compaq.com/products/quickspecs/11033_div/11033_div.HTML</a> (Division/World Wide)</p>		
<b>Compaq UPS Power Cord Reference Guide</b>	<p><i>Please see the Compaq UPS Power Cord Reference Guide that lists cable descriptions, requirements, and specifications for Compaq UPS units.</i>  <a href="ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf">ftp://ftp.compaq.com/pub/products/servers/proliantstorage/power-protection/powercordmatrix.pdf</a></p>		

## Options

<b>Uninterruptible Power Systems – Tower</b>	Compaq Pro UPS 500 (300 Watt) 120V (NA)	136386-001
	Compaq Pro UPS 500 (300 Watt) 120V (Int'l)	136386-B31
	UPS Model T700 (700VA, 500 Watt), Low Voltage (NA)	204015-001
	UPS Model T700 (700VA, 500 Watt), High Voltage (Int'l)	204015-B31
	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 (1500VA, 1050 Watt), High Voltage (Int'l)	204155-B32
	HP UPS Model T1500 XR (1500VA, 1050 Watt), Low Voltage (Japan)	204155-291
	HP UPS Model T2200 XR (1920VA, 1600 Watt), Low Voltage (NA)	204451-001
	HP UPS Model T2200 XR (2080VA, 1600 Watt), High Voltage (NA)	204451-002
	HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (NA)	204451-B31
	HP UPS Model T2200 XR (2200VA, 1600 Watt), Low Voltage (Japan)	204451-291
	<b>Uninterruptible Power Systems – Rack</b>	Compaq UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)
Compaq UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'l)		204404-B31
Compaq UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (Japan)		204404-291
Compaq UPS R3000 XR (2880VA, 2700 Watt), Low Voltage (NA)		192186-001
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (NA)		192186-002
Compaq UPS R3000 XR (2400VA, 2250 Watt), Low Voltage (Japan)		192186-291
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Japan)		192186-292
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Int'l - detachable cord)		192186-B31
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A IEC309 Plug)		192186-B32
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A CEE 7/7 SCHUKO Plug)		192186-B33
Compaq UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A BS-546 Plug)		192186-AR1
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (NA)		347207-001
<i>Note: The UPS R6000 has a hardwired input.</i>		
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (Int'l)		347207-B31
<i>Note: The UPS R6000 has a hardwired input.</i>		
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage (Japan)		347207-291
<i>Note: The UPS R6000 has a hardwired input.</i>		
UPS R12000 XR N+x (200-240V) (WW-hardwired)		207552-B22
<i>Note: The UPS R12000 XR has a hardwired input and output.</i>		

## Options

<b>UPS Options</b>	SNMP Serial Port Card <i>Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.</i>	192189-B21	
	Six Port Card <i>Note: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.</i>	192185-B21	
	High to Low Voltage Transformer (250VA) <i>Note: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15.</i>	388643-B21	
	Extended Runtime Module, T1000 XR	218967-B21	
	Extended Runtime Module, T1500 XR/T2200 XR	218969-B21	
	Extended Runtime Module, R1500 XR <i>Note: 2U each, two ERM maximum.</i>	218971-B21	
	Extended Runtime Module, R3000 XR <i>Note: 2U each, one ERM maximum.</i>	192188-B21	
	Extended Runtime Module, R6000 <i>Note: 3U each, two ERM maximum.</i>	347224-B21	
	Extended Runtime Module, R12000 XR, 4U <i>Note: 4U each, two ERM maximum.</i>	217800-B21	
	SNMP-EN Adapter <i>Note: Supports R6000 UPS series only.</i>	347225-B21	
	Multi-Server UPS Card <i>Note: Supports R6000 UPS series only.</i>	123508-B21	
	Scalable UPS Card <i>Note: Supports R6000 UPS series only.</i>	123509-B21	
	<b>Rack-Mountable PDUs – 1U/0U</b> (up to 12 outlets) <i>Note: 0U mounting brackets shipped with the unit (separate option kit for 1U mounting).</i>	Compaq Power Distribution Unit-16A (200 to 240V) (WW) <i>Note: The 16A PDU also connects to the high volt models of the UPS R3000 XR (need cable PN 340653-001 (NA)) and the UPS R6000 models. Cable PN 340653-001 required if connecting to UPS R3000 XR (192186-002 NA-High Volt model only).</i>	207590-B21
		Compaq Power Distribution Unit-32A (200 to 240V) (Int'l)	207590-B31
Compaq Power Distribution Unit-40A (200 to 240V) (WW)		207590-B23	
<i>Note: Please see the following Power Distribution Unit (Zero-U/1U PDU) QuickSpecs for additional options including cables:</i> <a href="http://www5.compaq.com/products/quickspecs/10838_na/10838_na.HTML">http://www5.compaq.com/products/quickspecs/10838_na/10838_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/10838_div/10838_div.HTML">http://www5.compaq.com/products/quickspecs/10838_div/10838_div.HTML</a> (Division/World Wide)			
<b>Dual Input PDUs – 1U/0U</b> (up to 12 outlets) <i>Note: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).</i>	Compaq Dual Input Power Distribution Unit-24A High Voltage (NA only)	191186-001	
	Compaq Dual Input Power Distribution Unit-24A High Voltage (Int'l)	191186-B31	
	<i>Note: Please see the following Power Distribution Unit (Zero-U/1U PDU) QuickSpecs for additional options including cables:</i> <a href="http://www5.compaq.com/products/quickspecs/10838_na/10838_na.HTML">http://www5.compaq.com/products/quickspecs/10838_na/10838_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/10838_div/10838_div.HTML">http://www5.compaq.com/products/quickspecs/10838_div/10838_div.HTML</a> (Division/World Wide)		

## Options

<b>Modular PDUs – 1U/0U</b> (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: This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.	
	HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan)	252663-D72
	HP Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)	252663-B31
	HP Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW)	252663-B21
	Note: This mPDU (252663-B21), 40A model has a hardwired input.	
HP Modular Power Distribution 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: <a href="http://www5.compaq.com/products/quickspecs/11041_na/11041_na.HTML">http://www5.compaq.com/products/quickspecs/11041_na/11041_na.HTML</a> (North America) <a href="http://www5.compaq.com/products/quickspecs/11041_div/11041_div.HTML">http://www5.compaq.com/products/quickspecs/11041_div/11041_div.HTML</a> (Division/World Wide)		

<b>PDU Options</b>	1U PDU Mounting Brackets Kit	215852-B21
	Note: The 1U PDU Mounting Brackets are required when mounting PDU's PN 207590-xxx series in 1U configurations.	
	Third Party 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.		

<b>Other</b>	Enhanced Keyboard (Carbon)	296435-xx8
	Mouse (Carbon)	103180-B21
	Mouse (Carbon) (Japan)	103180-291
	ProLiant ML330/ML350 Internal to External SCSI Cable Option Kit	159547-B22
Note: The ProLiant ML330/ML350 Internal to External SCSI Cable Option Kit (PN 159547-B22) is supported by the ML330 G2/ML350 Family.		

Enhanced Keyboard (Carbon) Country Key Code	Dash #	Description	Dash #	Description
	-008	US	-178	Arabic
	-038	UK	-188	Belgium
	-048	Germany	-218	Hungary
	-058	France	-228	Czech
	-068	Italy	-238	Solvac
	-078	Spain	-248	Polish
	-088	Denmark	-258	Russian
	-089	Norway	-298	Japan
	-108	Sweden/Finland	-338	Dutch
	-128	French Canadian	-358	Finish
	-138	Portugal	-B38	Int'l
	-148	Turkey	-B48	BHCSY
	-158	Greek		

## Options

Rack Builder	<i>Please see the Compaq Rack Builder for configuration assistance at <a href="http://www.compaq.com/rackbuilder/">http://www.compaq.com/rackbuilder/</a>.</i>		
Rack Conversion Kit	ProLiant ML350 Generation 2 Tower to Rack Conversion Kit	237045-B21	
HP Rack 10000 Series (Graphite Metallic)	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) – Shock Pallet	245160-B23	
	HP Rack 10642 (42U) – Pallet	245161-B21	
	HP Rack 10642 (42U) – Shock Pallet	245161-B22	
	HP Rack 10642 (42U) – Crated	245161-B23	
	HP Rack 10636 (36U) - Pallet	245162-B21	
	HP Rack 10636 (36U) – Shock Pallet	245162-B22	
	HP Rack 10636 (36U) - Crated	245162-B23	
	HP Rack 10622 (22U) – Pallet	245163-B21	
	HP Rack 10622 (22U) – Shock Pallet	245163-B22	
	HP Rack 10622 (22U) – Crated	245163-B23	
	<p>Note: -B21 (pallet) used to ship empty racks 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</p> <p>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.</p> <p>Note: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:  <a href="http://www5.compaq.com/products/quickspecs/10995_div/10995_div.HTML">http://www5.compaq.com/products/quickspecs/10995_div/10995_div.HTML</a> (Division/World Wide)  <a href="http://www5.compaq.com/products/quickspecs/10995_na/10995_na.HTML">http://www5.compaq.com/products/quickspecs/10995_na/10995_na.HTML</a> (North America)</p> <p>Note: For additional information regarding Rack Cabinets, please see the following URL:  <a href="http://www.compaq.com/racks">http://www.compaq.com/racks</a></p>		
	Compaq Rack 9000 Series (Opal)	Compaq Rack 9142 (42U) – Pallet	120663-B21
Compaq Rack 9142 (42U) – Shock Pallet		120663-B22	
Compaq Rack 9142 (42U) – Crated		120663-B23	
Compaq Rack 9136 (36U) – Pallet		120664-B21	
Compaq Rack 9136 (36U) – Shock Pallet		120664-B22	
Compaq Rack 9136 (36U) – Crated		120664-B23	
Compaq Rack 9122 (22U) – Pallet		120665-B21	
Compaq Rack 9122 (22U) – Shock Pallet		120665-B22	
Compaq Rack 9122 (22U) – Crated		120665-B23	
Compaq Rack 9842 (800mm wide, 42U) - Pallet		222192-B21	
<p>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</p> <p>Note: Please see the Rack 9000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:  <a href="http://www5.compaq.com/products/quickspecs/10366_div/10366_div.HTML">http://www5.compaq.com/products/quickspecs/10366_div/10366_div.HTML</a> (Division/World Wide)  <a href="http://www5.compaq.com/products/quickspecs/10366_na/10366_na.HTML">http://www5.compaq.com/products/quickspecs/10366_na/10366_na.HTML</a> (North America)</p> <p>Note: For additional information regarding Rack Cabinets, please see the following URL:  <a href="http://www.compaq.com/racks">http://www.compaq.com/racks</a></p>			

## Options

<b>Rack Options for HP Rack 10000 Series</b>	Rack Blanking Panels – Graphite (Multi) Note: Contains one each of 1U, 2U, 3U, and 4U panel.	253214-B26	
	Rack Blanking Panels – Graphite (1U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (1U).	253214-B21	
	Rack Blanking Panels – Graphite (2U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (2U).	253214-B22	
	Rack Blanking Panels – Graphite (3U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (3U).	253214-B23	
	Rack Blanking Panels – Graphite (4U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (4U).	253214-B24	
	Rack Blanking Panels – Graphite (5U) Note: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (5U).	253214-B25	
	800mm Wide Stabilizer Kit (Graphite) Note: Supported by the Rack 10842 cabinet only.	255488-B21	
	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) Note: Roof Mount Includes power cord with IEC320-C13 to Nema 5-15P	257413-B21	
	220V Fan Kit (Graphite) Note: Roof Mount Includes power cord with IEC320-C13 to Nema 6-15P.	257414-B21	
	36U Side Panel – Graphite Metallic (for 10636 Rack only)	246102-B21	
	47U Side Panel – Graphite Metallic (for 10647 Rack only)	255486-B21	
	9000/10000 Series Offset Baying Kit (42U) 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.	248931-B21	
	Note: For additional information regarding Rack Options, please see the following URL: <a href="http://www.compaq.com/rackoptions">http://www.compaq.com/rackoptions</a>		
	<b>Rack Options for Compaq Rack 9000 Series</b>	Baying/Coupling Kit	120669-B21
		42U Side Panel Note: The 42U Side Panel (PN 120670-B21) supports the Compaq Rack 9142 and Compaq Rack 9842.	120670-B21
		36U Side Panel Note: The 36U Side Panel (PN 120671-B21) supports the Compaq Rack 9136.	120671-B21
		800mm Stabilizer Option Kit (Opal) Note: The 800mm Stabilizer Kit (PN 234493-B21) supports the Rack 9842 only.	234493-B21
600mm Stabilizer Option Kit		120673-B21	
9142 Extension Kit Note: The 9142 Extension Kit (PN 120679-B21) supports the Compaq Rack 9142 only.		120679-B21	
9142 Split Rear Door (Opal) Note: The 9142 Split Rear Door (PN 254045-B21) supports the 600 mm wide, 42U 9000 series rack.		254045-B21	
9136 Extension Kit		218216-B21	
9142 Short Rear Door Note: The 9142 Short Rear Door (PN 218217-B21) supports the Compaq Rack 9142 only.		218217-B21	

## Options

<b>Rack Options for Compaq Rack 9000 Series</b> <i>(continued)</i>	9136 Short Rear Door	218218-B21	
	Rack Blanking Panel (Multi) Note: Kit includes four panels in 1U, 2U, 4U, and 8U.	169940-B21	
	Rack Blanking Panels (1U) Note: The Rack Blanking Panels (PN 189453-B21) contains 10 each of (1U)	189453-B21	
	Rack Blanking Panels (2U) Note: The Rack Blanking Panels (PN 189453-B22) contains 10 each of (2U)	189453-B22	
	Rack Blanking Panels (3U) Note: The Rack Blanking Panels (PN 189453-B23) contains 10 each of (3U)	189453-B23	
	Rack Blanking Panels (4U) Note: The Rack Blanking Panels (PN 189453-B24) contains 10 each of (4U)	189453-B24	
	Rack Blanking Panels (5U) Note: The Rack Blanking Panels (PN 189453-B25) contains 10 each of (5U)	189453-B25	
	9000/10000 Series Offset Baying Kit (42U) 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: <a href="http://www.compaq.com/rackoptions">http://www.compaq.com/rackoptions</a>	248931-B21	
	<b>Rack Options for Compaq Rack 7000 Series</b>	High Air Flow Rack Door Insert for 7122	157847-B21
	High Air Flow Rack Door Insert for 7142	327281-B21	
	High Air Flow Rack Door Insert for 7142 (6 pack)	327281-B22	
	Compaq Networking Cable Management Kit	292407-B21	
	Compaq Networking Recessed Rail Management Kit	292406-B21	
Compaq Rack Extension Kit for 7142	154392-B21		
Note: For additional information regarding Rack Options, please see the following URL: <a href="http://www.compaq.com/rackoptions">http://www.compaq.com/rackoptions</a>			
<b>Rack Options for Rack 7000, 9000 and 10000 Series</b>	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	
	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	

## Options

Rack Options for Rack 7000, 9000 and 10000 Series (continued)		
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
CPU to Server Console Cable (Plenum Rated) 20'		149363-B21
CPU to Server Console Cable (Plenum Rated) 40'		149364-B21
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
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))

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
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### 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

## Options

Rack Options for Rack 7000, 9000 and 10000 Series (continued)	
PCI KVM Management Card Kit	232983-B21
PCI KVM Remote Card Kit	232984-B21
Local Access Cable Kit	232985-B21
1U Rack Keyboard Drawer	338056-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 Options, please see the following URL: <a href="http://www.compaq.com/rackoptions">http://www.compaq.com/rackoptions</a>	

## Service and Support Offerings (CarePak Services)

### Hardware Services 4-Hour On-site Service

9 x 5 Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL4HR-36
9 x 5 Coverage, 3 Years (6-3 Part Number for U.S.)	162676-002
9 x 5 Coverage, 3 Years (6-3 Part Number for EMEA)	324416-022
24 x 7 Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL724-36
24 x 7 Coverage, 3 Years (6-3 Part Number for U.S.)	162675-002
24 x 7 Coverage, 3 Years (6-3 Part Number for EMEA)	376910-022

### Installation & Start-up Services

Hardware Installation (2-5-2 Part Number for Canada)	FP-ELINS-IN
Hardware Installation (6-3 Part Number for US)	401791-002
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)	204563-022
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.)	240013-002
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 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-01
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.)	240008-002
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-01

## Options

Service and Support Offerings (CarePaq Services) <i>(continued)</i>	<b>CarePaq Priority Services for ProLiant Servers – Priority Level</b>	
	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.)	239928-002
	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 (6-3 Part Number for U.S.)	239968-002
	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-M01E1-36
	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 (2-5-2 Part Number for Canada)	FM-N01E1-36
	9 x 5 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for EMEA)	179834-022
	<b>CarePaq Priority Services for ProLiant Servers – Priority 24 Level</b>	
	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.)	239930-002
	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.)	239970-002
	7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (6-3 Part Number for EMEA)	179839-022
	<b>CarePaq Priority Services for ProLiant Servers – Priority Silver</b>	
	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
	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
	<b>Note:</b> For more information, customer/resellers can contact <a href="http://www.compaq.com/services">http://www.compaq.com/services</a> .	

## Memory

### Compaq ProLiant ML350 G2 Array Models

#### STANDARD MEMORY

256-MB PC133-MHz Registered ECC SDRAM DIMM installed (1 x 256-MB SDRAM DIMM)

#### STANDARD MEMORY PLUS OPTIONAL MEMORY

Up to 3328-MB memory is available with the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

#### STANDARD MEMORY REPLACED WITH OPTIONAL MEMORY

Up to 4096-MB of memory is available with the removal of the standard 256-MB of memory and the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

Note: Charts do not represent all possible memory configurations.

Memory		Slot			
		1	2	3	4
Standar	256 MB	256 MB	Empty	Empty	Empty
Optiona	3328 MB	256 MB	1024 MB	1024 MB	1024 MB
Maximu	4096 MB	1024 MB	1024 MB	1024 MB	1024 MB

Following are memory options available from Compaq:

- 1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128280-B21
- 512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128279-B21
- 256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128278-B21
- 128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128277-B21

## Memory

### Compaq ProLiant ML350 G2 Models

#### STANDARD MEMORY

128-MB PC133-MHz Registered ECC SDRAM DIMM installed (1 x 128-MB SDRAM DIMM)

#### STANDARD MEMORY PLUS OPTIONAL MEMORY

Up to 3200-MB memory is available with the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

#### STANDARD MEMORY REPLACED WITH OPTIONAL MEMORY

Up to 4096-MB of memory is available with the removal of the standard 128-MB of memory and the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

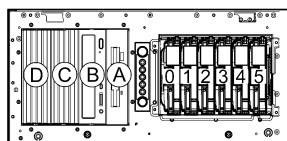
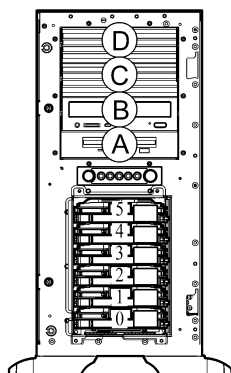
Note: Charts do not represent all possible memory configurations.

Memory		Slot			
		1	2	3	4
Standar	128 MB	128 MB	Empty	Empty	Empty
Optiona	3200 MB	128 MB	1024 MB	1024 MB	1024 MB
Maximu	4096 MB	1024 MB	1024 MB	1024 MB	1024 MB

Following are memory options available from Compaq:

- 1024-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128280-B21
- 512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128279-B21
- 256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128278-B21
- 128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128277-B21

## Storage



- 0 - 5      6 x 1 in SCSI Hard Drive Bays
- A        3.5 in Diskette Drive
- B        40x CD-ROM
- C, D     Available half height bay

### DRIVE SUPPORT

	Quantity Supported	Position Supported	Controller
<b>Removable Media</b>			
1.44-MB Diskette Drive	Up to 1	A	Integrated
IDE (ATAPI) CD-ROM Drive	Up to 2	B, C, D	Integrated IDE (ATAPI)
DVD-ROM Drive Option Kit	Up to 2	B, C, D	Integrated IDE
ML3xx Internal Two Bay Hot Plug SCSI Drive Cage	Up to 1	C, D	Integrated SCSI

#### Hard Drives

##### Ultra320 Hot Pluggable Drives

1-inch	Quantity Supported	Position Supported	Controller
146.8-GB 10,000 rpm	Up to 8 (With optional ML3xx Internal Two Bay Hot Plug SCSI Drive Cage)	0-7	Integrated Dual Channel Wide Ultra3 SCSI Adapter Smart Array 532 Controller (Note: The Smart Array 532 Controller ships standard with the Array models.) Compaq RAID LC2 Controller Smart Array 5302/128 Controller Smart Array 5304/256 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
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			

\*Note: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds and will run at U3 within the ML350 G2.

#### External Storage

StorageWorks Enclosure 4300 Family (supports Wide Ultra2/Ultra3 1" drives)	Up to 24	External	Integrated Dual Channel Wide Ultra3 SCSI Adapter Smart Array 532 Controller (Note: The Smart Array 532 Controller ships standard with the Array models.) Smart Array 5302/128 Controller Smart Array 5304/256 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
MSA 1000	Please see the MSA 1000 QuickSpecs below to determine configuration requirements	External	Please see the MSA 1000 QuickSpecs (URL below) for the latest list of supported HBA's

MSA 1000: [http://www5.compaq.com/products/quickspecs/11033\\_div/11033\\_div.HTML](http://www5.compaq.com/products/quickspecs/11033_div/11033_div.HTML)

## Storage

### DRIVE SUPPORT *(continued)*

	Quantity Supported	Position Supported	Controller
<b>Maximum Storage Capacity</b> – (StorageWorks Enclosure)			
Internal	1.174 TB (6 x 146.8-GB 1” Ultra 320 hot plug hard drives with standard internal drive cage + 2 x 146.8-GB 1” Ultra 320 Hot plug hard drive using the optional ML3xx Internal Two Bay Hot Plug SCSI Drive Cage)		
External	49.324 TB (14 x 146.8 GB) x 24		
Total	50.499 TB		

### Tape Drives

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](http://www5.compaq.com/products/quickspecs/North_America/10233.html) (North America)

<http://www5.compaq.com/products/quickspecs/Division/10233.html> (Division/World Wide)

Note: For an up-to-date listing of the latest O/S Support details for each of the Tape Storage Systems listed below, please see the following:

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

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

Internal AIT 100-GB, Hot Plug	Up to 2	0+1, 2+3	Integrated Dual Channel Wide Ultra3 SCSI Adapter
Internal AIT 50-GB, Hot Plug	Up to 3		Smart Array 532 Controller
Internal AIT 35-GB, LVD Hot Plug	(With optional ML3xx	0+1, 2+3, D+C	Smart Array 5302/128 Controller
Internal 20/40-GB DAT Drive, Hot Plug	Internal Two Bay Hot Plug SCSI Drive Cage)		Smart Array 5304/256 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter *Note: The Smart Array 532 Controller does not support the AIT 100-GB Hot Plug Tape Drive.
Internal 12/24-GB DAT Drive	Up to 2	C	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
Internal 40/80-GB DLT Enhanced	Up to 1	C + D	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 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/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 100-GB Internal	Up to 2	C, D	Integrated Dual Channel Wide Ultra3 SCSI Adapter
AIT 50-GB Internal			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
AIT 35-GB, LVD Internal			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
20/40-GB DAT 8 Cassette Autoloader Internal	Up to 1	C, D	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 100-GB External	2	External	Integrated Dual Channel Wide Ultra3 SCSI Adapter
AIT 50-GB External			64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
AIT 35-GB, LVD External			64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
External 40/80-GB DLT Enhanced	Up to 3	External	Integrated Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
SSL2020 AIT Mini-Library	Up to 5	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
MSL5026DLX (40/80GB DLT-based)	2 drives per SCSI channel	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
MSL5026SL (SDLT-based) Library			
MSL5052SL (SDLT-based) Library			
MSL5052S2 (SDLT-based) Library			
MSL5030L1 (LTO-based) Library			
MSL5060L1 (LTO-based) Library			
20/40-GB DAT 8 Cassette Autoloader External	Up to 1	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
DLT1 1280 SuperLoader	Up to 2 drives	External	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-Bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter

## Power Specifications

### POWER SPECIFICATIONS

Part Number	243406-001
Spare Kit	249687-001
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	350	350	350	350	350	350
Nominal Input Current (A rms)	5.5	4.8	2.6	2.5	2.4	2.3
Max Rated Input Wattage Rating (Watts)	538	538	538	538	538	538
Max. Rated VA (Volt-Amp)	549	549	549	549	549	549
Efficiency (%)	65	65	65	65	65	65
Power Factor	0.98	0.98	0.98	0.98	0.98	0.98
Leakage Current (mA)	0.31	0.36	0.65	0.69	0.72	0.75
Maximum Inrush Current (A peak)	25	25	25	25	25	25
Maximum Inrush Current duration (mS)	20	20	20	20	20	20

### SYSTEM SPECIFICATIONS

#### ML350 G2 Fully Configured

Up to 2 Processors, 4 Memory Slots, 8 Hard Drives, 6 PCI Slots, and 2 Hot Plug Power Supplies

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Fully Loaded System Input Wattage (W)	441	434	428	421	415	409
Fully Loaded System Input Current (A rms)	4.5	3.9	2.1	2.0	1.8	1.7
Fully Loaded System Thermal (BTU-Hr)	1503	1480	1458	1436	1416	1395
Fully Loaded System VA (Volt-Amp)	450	443	436	430	424	418
System Leakage with all power supplies loaded (mA)	0.63	0.72	1.30	1.38	1.44	1.50
System Inrush Current with all power supplies loaded (A)	50	50	50	50	50	50
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://activeanswers.compaq.com/aaconfiguratorcode/configurationUi.asp?HTMLFilename=Mainselections&UiLocalization=UnitedStates&DisplayCountry=United%20States>

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: ML350 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
<b>Country</b>	
APD	139867-006
APD	100613-003
APD	100614-003
Australia	100611-007
Europe	100614-003
France	100614-003
Germany	100614-003
Japan	139867-006
PRC	139867-006
PRC	100613-003
PRC	100661-007
UK	100613-003
US	163719-002

## Technical Specifications

<b>System Unit – Tower</b>	<b>Dimensions (HxWxD)</b> (with feet/bezel)	18.5 x 8.5 x 26 in/46.99 x 21.59 x 66.04 cm
	<b>Dimensions (HxWxD)</b> (without feet/bezel)	17.5 x 8.5 x 24 in/44.50 x 21.59 x 60.96 cm
	<b>Weight (approximate)</b>	60 lb/27.24 kg (without hard drives)
<b>Input Requirements</b> (per power supply)	Rated Input Voltage	100 to 120 VAC/200 to 240 VAC
	Rated Input Frequency	50 Hz to 60 Hz
	Input Power	538W @ 110 VAC
	Rated Input Current	6A/3A
	<b>Line Frequency</b>	50 to 60 Hz
	<b>BTU Rating</b>	1, 839 BTU/hr
	<b>SCSI Connectors</b>	Two internal HD68 connectors (Support for either two internal, two external, or a mix of internal/external is available. This is achieved using an internal to external SCSI cable option kit (PN 159547-B21 or PN 159547-B22) and either of the two SCSI knockouts.)
<b>Power Supply Output Power</b> (per power supply)	Rated Steady-State Power	350W
	Maximum Peak Power	400W
<b>Temperature Range</b>	Operating	50° to 93°F/10° to 35°C (No direct sustaining sunlight)  Altitude range derating: 33.8°F/1°C per 984.25 ft/300 m up to 9,842.5 ft/3,000 m
	Storage (up to one year) Altitudes up to 9,842.5 ft/ 3,000m	-4° to 140°F/-20° to 60°C
	Shipping (up to 72 hours) Altitudes up to 29,855.5 ft/ 9100m	-20° to 140°F/-29° to 60°C
<b>Relative Humidity</b> (non-condensing)	Operating	5% to 80%
	Non-operating	5% to 90%
<b>Acoustic Noise</b>	Idle	
	(Fixed Disk Drives Spinning)	
	L <sub>WA</sub> d (BELS)	6.4
	L <sub>pAm</sub> (dBA)	45
	Operating (Random Seeks to Fixed Disks)	
	L <sub>WA</sub> d (BELS)	6.7
L <sub>pAm</sub> (dBA)	48	

## Technical Specifications

<b>System Unit – Rack</b>	<b>Dimensions (HxWxD)</b>	8.61 x19 x 24 in/21.87 x48.26 x 60.96 cm	
	<b>Weight (approximate)</b>	60 lb/27.24 kg (without hard drives)	
<b>Input Requirements</b> (per power supply)	Rated Input Voltage	100 to 120 VAC/200 to 240 VAC	
	Rated Input Frequency	50 to 60 Hz	
	Input Power	538W @ 110 VAC	
	Rated Input Current	6A/3A	
<b>Line Frequency</b>	50 to 60 Hz		
<b>BTU Rating</b>	1,839 BTU/hr		
<b>SCSI Connectors</b>	Two internal HD68 connectors (Support for either two internal, two external, or a mix of internal/external is available. This is achieved using an internal to external SCSI cable option kit (PN 159547-B21 or PN 159547-B22) and either of the two SCSI knockouts.)		
<b>Power Supply Output Power</b> (per power supply)	Rated Steady-State Power	3050W	
<b>Temperature Range</b>	Operating	50° to 93°F/10° to 35°C (No direct sustaining sunlight)  Altitude range derating: 33.8°F/1°C per 984.25 ft/300 m up to 9,842.5 ft/3,000 m	
	Storage (up to one year) Altitudes up to 9,842.5 ft/ 3,000m	-4° to 140°F/-20° to 60°C	
	Shipping (up to 72 hours) Altitudes up to 29,855.5 ft/ 9100m	-20° to 140°F/-29° to 60°C	
<b>Relative Humidity</b> (non-condensing)	Operating	5% to 80%	
	Non-operating	5% to 90%	
<b>Acoustic Noise</b>	Idle		
	(Fixed Disk Drives Spinning)		
	<b>L<sub>WA</sub></b> (BELS)	5.02	
	<b>L<sub>pA</sub></b> (dBA)	35.9	
	Operating (Random Seeks to Fixed Disks)		
	<b>L<sub>WA</sub></b> (BELS)	5.87	
<b>L<sub>pA</sub></b> (dBA)	40.9		

## Technical Specifications

1.44-MB Diskette Drive	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)	500/250 Kb/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 (ATAPI) CD-ROM Drive	Disk	Applicable Disk	CD-ROM, CD-XA, CD-DA (Mode 1, Mode 2, Form 1 and 2) Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined) CD-R	
		Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)	
	Block Size	Mode 1	2,048 bytes	
		Mode 2	2,340 bytes, 2,336 bytes	
		CD-DA	2,352 bytes	
		CD-XA	2,328 bytes	
	Interface	IDE (ATAPI)		
	Access Times (typical)	Random	100 ms	
		Full-Stroke	150 ms	
	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 150 x 208 cm		
	Weight	2.09 lb/0.95 kg		

## Technical Specifications

<b>Integrated Dual Channel Wide Ultra3 SCSI Adapter</b>	<b>Drives Supported</b>	Up to 28 SCSI devices (14 per channel)
	<b>Data Transfer Method</b>	64-bit PCI bus-master
	<b>SCSI Channel Transfer Rate</b>	80 MB/s per channel
	<b>Maximum Transfer Rate per PCI Bus (peak)</b>	133 MB/s per channel
	<b>SCSI Protocols</b>	Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast SCSI-2
	<b>Electrical Protocol</b>	Low Voltage Differential (LVD)
	<b>SCSI Termination</b>	Active Termination
	<b>External SCSI Connectors</b>	Two 80-Pin VHDCI connectors
	<b>Internal SCSI Connectors</b>	Two 68-Pin Wide-Ultra SCSI-3 connectors
	<b>Video Controller</b>	<b>Controller Chip</b>
<b>Video DRAM</b>		8-MB Video SDRAM
<b>Data Transfer Method</b>		32-bit PCI
<b>Support Resolution</b>		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	
<b>Connector</b>	VGA	

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