

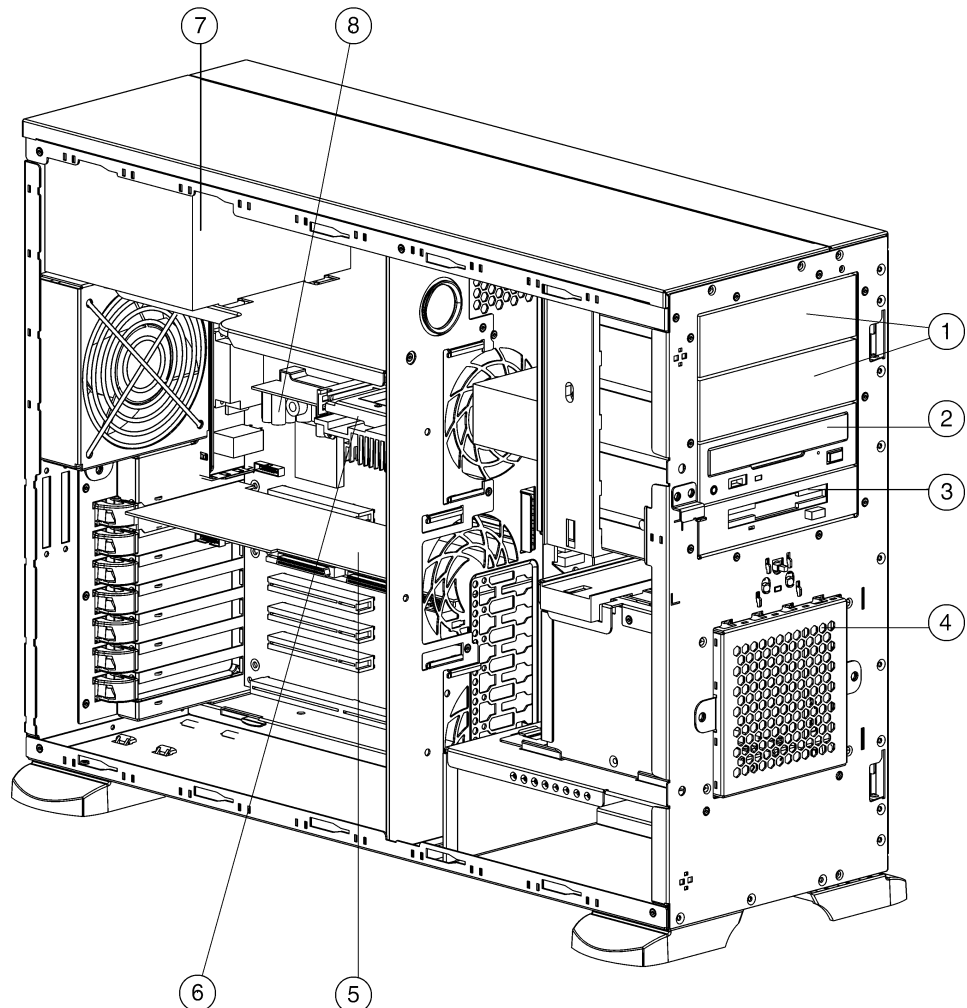
Overview

What's New

- Intel Pentium® III 933 MHz processors (dual processor capability)

At A Glance

- The affordable two-way server that powers your applications today and anticipates your needs for tomorrow
- Intel Pentium III 933 MHz, 866 MHz, 800 MHz or 733 MHz processors
- ServerWorks (RCC) 3.0 Chipset with 133-MHz Front Side Bus
- Hot Plug Models available
- Bundled Models with Tape Drive and software (NA only)
- 256-KB second-level ECC cache standard (full speed)
- 133-MHz GTL Bus Design
- 128-MB PC133-MHz Registered ECC SDRAM DIMM memory standard, expandable to 2-GB
- Seven total slots: two 64-bit PCI, four 32-bit PCI, and one ISA slot (ISA slot dimensions: 12.283 in / 312 mm)
- Compaq NC3163 Fast Ethernet NIC (embedded) 10/100 WOL (Wake On LAN)
- Integrated Dual Channel Wide Ultra2 SCSI Adapter
- Support for up to four 1" Wide Ultra2/Ultra3 SCSI hard drives
- Internal storage capacity of up to 145.6-GB
- Internal mass storage capacity of up to 218.4 GB (including the two removable media bays)
- Standard 4 x 1" Drive Cage (Hot Plug or Non-Hot Plug depending on model)
- Compaq Insight Manager, SmartStart and Automatic Server Recovery (ASR)
- Protected by Compaq Services, including a three-year, next business day, on-site, limited global warranty and extended Pre-Failure Warranty which covers processors, memory, and hard drives — Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details. In Canada, consult the Product Information Center at 1-800-567-1616 for details.



1. 5.25-inch Available Removable Media Bays
2. High Speed IDE CD-ROM Drive
3. 1.44-MB Diskette Drive
4. 4 x 1" Hot Plug or Non-Hot Plug Hard Drive Cage
5. Server Feature Board
6. Processor with Heatsink
7. 300-Watt Power Factor Correction (PFC) Power Supply
8. Processor Power Module

Standard Features

Processor	Intel Pentium III 933 MHz processor Intel Pentium III 866 MHz processor Intel Pentium III 800 MHz processor Intel Pentium III 733 MHz processor	
Cache Memory	Integrated 256-KB Level 2 ECC cache (full speed)	
Memory	Standard	128 MB (PC133-MHz ECC Registered SDRAM DIMM memory)
	Maximum	4 GB
Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)	
Expansion Slots	I/O (Total)	7 (6 available)
	64-bit, PCI	2 (2 available)
	32-bit, PCI	4 (3 available)
	ISA	1 (1 available)
	(ISA slot dimensions: 12.283 in /312 mm)	
Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter	
Storage	Diskette Drives	1.44 MB
	CD-ROM	High Speed Max IDE CD-ROM Drive
<i>One of the following</i>	Hard Drives	None
		9.1 GB Wide Ultra2 (7200 rpm) 1"
	Maximum Internal Storage	145.6 GB (internal drive cage only) 218.4 GB (internal drive cage in addition to placing 36.4-GB (1") hard drives in the two removable media bays; brackets required to place these drives come in the bezel blanks that come with the server)
Interfaces	Parallel	1
	Serial	2
	Pointing Device (Mouse)	1
	Graphics	1
	Hot Plug Keyboard	1
	Network RJ-45	1
Graphics	Integrated ATI RAGE IIC Video Controller with 4-MB Video Memory	
Form Factor	Tower or optional 5U rack conversion kit (158438-B21)	
Compaq Software	Compaq <i>Insight Manager</i> [™]	The comprehensive system management tool that monitors the operation of Compaq servers, workstations and clients
	Compaq <i>SmartStart</i> [™]	The server configuration and software integration tool from Compaq
	Array Configuration Utility (ACU) with Smart Array Controllers	Same easy to use yet powerful graphical user interface (GUI) configuration utility and easy to navigate wizards for all Smart Array Controllers

Standard Features

Manageability	Compaq Insight Manager Compaq Insight Manager XE Automatic Server Recovery (ASR) Drive Parameter Tracking (with Smart Array Controller) Dynamic Sector Repairing (with Smart Array Controller) Pre-Failure Warranty (covers processors, memory and hard drives)
Security	Power-on password Setup password Diskette boot control Parallel and serial interface control Disk configuration lock Power switch security
Power Supply	300 Watts, Power Factor Correction (PFC), 100 to 240 VAC Rated Input Voltage (Auto-sensing), CE Mark Compliant
Required Cabling	For required cabling information, refer to the Compaq Web site at http://www.compaq.com/products/servers/proliantML350 . Note: This Web site is available in English only.
OS Support	Microsoft Windows NT Server Microsoft BackOffice Small Business Server Microsoft Windows 2000 Novell NetWare Novell NetWare Small Business Suite SCO OpenServer 5.0.5 SCO UnixWare IBM OS/2 Warp Family LINUX (RedHat, S.U.S.E., TurboLinux Server, Caldera eServer) Note: For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix at: ftp://ftp.compaq.com/pub/products/servers/os-support-matrix-310.pdf . Note: For an up-to-date listing of the latest drivers available for the Compaq ProLiant ML350, please see: http://www.compaq.com/support/files/server/us/index.html .
Service and Support	Compaq Services provides a wide range of service offerings, including a three-year, limited warranty, fully supported by a worldwide network of resellers and service providers, lifetime toll-free 7 x 24 hardware technical phone support, and Pre-Failure Warranty coverage of hard drives, memory, and processors. Disaster recovery services are available through partnership with Comdisco. Note: Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details. In Canada, consult the Product Information Center at 1-800-567-1616 for details.

Standard Features

ML350T01 P933-256K 128MB HP <i>170476-001</i>	Processor(s)	Intel Pentium III 933 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit
ML350T01 P933-256K 128MB NHP 9.1GB Tape <i>170475-003</i>	Processor(s)	Intel Pentium III 933 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Hard Drive(s)	9.1 GB Wide Ultra2 (7200 rpm NHP)
	Internal Storage	218.4 GB maximum
	Bundled with	12/24-GB DAT Tape Drive and VERITAS Backup Exec Quick Start Edition Software
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit
ML350T01 P933-256K 128MB NHP <i>170475-001</i>	Processor(s)	Intel Pentium III 933 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit
ML350T01 P866-256K 128MB HP <i>159843-001</i>	Processor(s)	Intel Pentium III 866 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

Standard Features

ML350T01 P866-256K 128MB NHP 9.1GB Tape <i>159844-003</i>	Processor(s)	Intel Pentium III 866 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Hard Drive(s)	9.1 GB Wide Ultra2 (7200 rpm NHP)
	Internal Storage	218.4 GB maximum
	Bundled with	12/24-GB DAT Tape Drive and VERITAS Backup Exec Quick Start Edition Software
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P866-256K 128MB NHP <i>159844-001</i>	Processor(s)	Intel Pentium III 866 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P800-256K 128MB HP <i>159845-001</i>	Processor(s)	Intel Pentium III 800 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P800-256K 128MB NHP 9.1GB Tape <i>159846-003</i>	Processor(s)	Intel Pentium III 800 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Hard Drive(s)	9.1 GB Wide Ultra2 (7200 rpm NHP)
	Internal Storage	218.4 GB maximum
	Bundled with	12/24-GB DAT Tape Drive and VERITAS Backup Exec Quick Start Edition Software
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

Standard Features

ML350T01 P800-256K 128MB NHP <i>159846-001</i>	Processor(s)	Intel Pentium III 800 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P733-256K 128MB HP <i>158343-001</i>	Processor(s)	Intel Pentium III 733 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P733-256K 128MB 9.1GB HP <i>158343-003</i>	Processor(s)	Intel Pentium III 733 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Hard Drive(s)	9.1 GB Wide Ultra2 (7200 rpm HP)
	Internal Storage	218.4 GB maximum
	Bundled with	12/24-GB DAT Tape Drive and VERITAS Backup Exec Quick Start Edition Software
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

ML350T01 P733-256K 128MB NHP <i>158341-001</i>	Processor(s)	Intel Pentium III 733 MHz
	Cache Memory	Integrated 256-KB Level 2 ECC
	Memory	128 MB (Standard) to 2 GB (Maximum) PC133-MHz ECC Registered SDRAM DIMM
	Network Controller	Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL
	Storage Controller	Integrated Dual Channel Wide Ultra2 SCSI Adapter
	Internal Storage	218.4 GB maximum
	Optical Drive	High Speed IDE CD-ROM Drive
	Form Factor	Tower or optional 5U rack conversion kit

Options

ProLiant ML350 Unique Options	Compaq ProLiant ML350 Hot Plug Drive Cage Upgrade Option Kit (4 x 1")	161275-B21
	Compaq ProLiant ML350 Tower to Rack Conversion Kit	158438-B21
	ProLiant ML350 Internal to External SCSI Cable Option Kit	159547-B21
Processor	P933 Pentium III 256K Processor Option Kit	161086-B21
	Note: This processor option kit (PN 161086-B21) supports the ProLiant ML350 (1 st generation), ProLiant ML370, and ProLiant DL380 servers.	
	P866 Pentium III 256K Processor Option Kit	161085-B21
	Note: This processor option kit (PN 161085-B21) supports the ProLiant ML350 (1 st generation), ProLiant ML370, and ProLiant DL380 servers.	
	P800 Pentium III 256K Processor Option Kit	161084-B21
	Note: This processor option kit (PN 161084-B21) supports the ProLiant ML350 (1 st generation), ProLiant ML370, and ProLiant DL380 servers.	
Memory (DIMMs)	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
	64-MB PC133M-Hz Registered ECC SDRAM DIMM Memory Option Kit	128276-B21
Optical Drives	12X DVD-ROM Drive Option Kit (Carbon)	217053-B21
Internal Storage	Compaq ProLiant ML350 Hot Plug Drive Cage Upgrade Option Kit (4 x 1")	161275-B21
	Note: When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives.	
Hard Drives	Wide Ultra3 SCSI – Universal Hot Plug	
	36.4-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	176496-B22
	18.2-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142673-B22
	9.1-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142671-B22
	Note: When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives.	
	Wide Ultra3 SCSI – Non-Hot Plug	
	36.4-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	176497-B21
	18.2-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142674-B21
9.1-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")	142672-B21	

Options

Hard Drives <i>(continued)</i>	Wide Ultra2 SCSI – Universal Hot Plug	
	18.2-GB Wide Ultra2 SCSI Drive (1")	388144-B22
	9.1-GB Wide Ultra2 SCSI Drive (1")	123065-B22
	<i>Note: When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives.</i>	
	Wide Ultra2 SCSI – Non-Hot Plug	
	18.2-GB Wide Ultra2 SCSI Drive (1")	388143-B21
	9.1-GB Wide Ultra2 SCSI Drive (1")	349526-B21
Storage Controllers	Compaq RAID LC2 Controller	188044-B21
	Smart Array 431 Controller	127695-B21
	Smart Array 3200 Controller	295643-B21
	64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
	64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter	154457-B21
Communications	Compaq NC3122 Dual Port Fast Ethernet NIC	317450-B21
	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	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 NC6134 Gigabit NIC 64 PCI 1000SX	174818-B21
	Compaq NC4621 Token Ring NIC PCI WOL	379956-B21
	IBM 16/4 Token Ring PCI Special	133749-B21
	56K v.90 PCI Modem	171914-001
	Internal Tape Drives	<i>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.</i>
Internal 20/40-GB DAT DDS-4 Tape Drive		157769-B21
Internal 12/24-GB DAT Drive (Opal)		295513-B22
Internal AIT 50-GB Tape Drive		157766-B21
Internal AIT-35GB, LVD		216884-B21
Internal AIT 35-GB Tape Drive		388504-B21
20/40-GB DAT DDS-4 8 Cassette Autoloader, Internal		166504-B21
Internal 20/40-GB DLT Drive (Opal)		340743-B22
12-GB DDS-3 DAT Cassette (10 pack)		295515-B21
DAT Cleaning Cassette		242781-001
DDS-4 Media (10 pack)		152842-001
20/40-GB DAT DDS-4 8 Cassette Magazine with Media		171532-B21
AIT 50-GB Data Cassette (5 pack)		152841-001
AIT 35-GB Data Cassette (5 pack)		402371-B21
AIT Cleaning Cassette		402374-B21
DLT IV Data Cartridges (single pack)		295194-B21

Options

Internal Tape Drives <i>(continued)</i>	DLT IV Data Cartridges (7 pack)	295192-B21
	DLT Cleaning Cartridge	199704-001
	DLT Magazine with five Type IV DLT Tapes	295168-B21
<p>Note: Please see the Compaq 20/40-GB DAT Drive, Compaq 12/24-GB DAT Drive, Compaq AIT 50-GB Tape Drive, Compaq AIT 35-GB LVD, Compaq AIT 35-GB Tape Drive, Compaq 20/40-GB DAT DDS-4 8 Cassette Autoloader, or the Compaq 20/40-GB DLT Drive QuickSpecs for a listing of the latest O/S Support details, at:</p> <p>http://www.compaq.com/products/quickspecs/North_America/10233_na.html</p> <p>Please note that all Web sites are available in English only.</p>		

Management Options	Compaq Remote Insight Lights-Out Edition	157866-001
	Compaq Remote Insight (PCI) LAN + NA Modem	294013-002
	Compaq Remote Insight Board (PCI) LAN/Serial without modem	294013-B24
	Compaq Remote Insight Board (PCI) LAN only	294013-B25

Monitors	TFT8020 18" Flat Panel Monitor (Opal)	326100-001
	TFT8020 18" Flat Panel Monitor (Carbon)	159244-001
	TFT8020 18" Flat Panel Monitor (Opal, bulked-packed, two monitor heads per box)	173610-001
	TFT5010 15" Flat Panel Monitor (Opal)	104741-001
	TFT5010 15" Flat Panel Monitor (Carbon)	154486-001
	TFT5005 15" Flat Panel Monitor (Opal)	201431-001
	TFT5005 15" Flat Panel Monitor (Carbon)	201430-001
	P1210 Color Monitor	210290-xxx
	P910 Color Monitor	210254-xxx
	P710 Color Monitor	210189-xxx
	V1100 Color Monitor	386472-xxx
	V710 Color Monitor	187895-xxx
	V500 Color Monitor	325900-xxx
	S910 Color Monitor	138485-xxx
	S710 Color Monitor	152991-xxx
	S510 Color Monitor	168636-xxx

CRT Code Key	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)
<p>Note: All models above are NH.</p>		

External Tape Drives	External 20/40-GB DAT DDS-4 Tape Drive	157770-001
	External AIT 50-GB Tape Drive	157767-001
	External AIT 35-GB, LVD	216885-001
	External AIT 35-GB Tape Drive	388507-001
	20/40-GB DAT 8 Cassette Autoloader External	166505-001
	External 20/40-GB DLT Drive (Opal)	340744-B22

Options

External Tape Drives <i>(continued)</i>	12.0-GB DDS-3 DAT Cassette (10 pack)	295515-B21	
	DAT Cleaning Cassette	242781-001	
	DDS-4 Media (10 pack)	152842-001	
	20/40-GB DAT 8 Cassette Magazine with Media	171532-B21	
	AIT 50-GB Data Cassette (5 pack)	152841-001	
	AIT 35-GB Data Cassette (5 pack)	402371-B21	
	AIT Cleaning Cassette	402374-B21	
	DLT IV Data Cartridges (single pack)	295194-B21	
	DLT IV Data Cartridges (7 pack)	295192-B21	
	DLT Cleaning Cartridge	199704-001	
	DLT Magazine with five Type IV DLT Tapes	295168-B21	
	<p>Note: Please see the Compaq 20/40-GB DAT Drive, Compaq AIT 50-GB Tape Drive, Compaq AIT 35-GB LVD, Compaq AIT 35-GB Tape Drive, Compaq 20/40-GB DAT DDS-4 8 Cassette Autoloader, or the Compaq 20/40-GB DLT Drive QuickSpecs for a listing of the latest O/S Support details, at: http://www.compaq.com/products/quickspecs/North_America/10233_na.html</p> <p>Please note that all Web sites are available in English only.</p>		
	External Storage - Tower	Compaq StorageWorks Enclosure Model 4214T (tower)	124875-001
Compaq StorageWorks Enclosure Model 4314T (tower)		190210-001	
<p>Note: The Compaq StorageWorks Enclosure 4200/4300 Family support the Wide Ultra2/Ultra3 1" Hot Plug Hard Drives.</p>			
SCSI Storage Expander II		332609-001	
ProLiant Storage System Tower Model UE		348710-002	
ProLiant Storage System Tower Model U2		304110-B22	
<p>Note: The Compaq ProLiant Storage System Models UE and U2 support the Wide-Ultra SCSI-3 Drives.</p>			
StorageWorks Enclosure 4200 Redundant Power Supply Option		119826-B21	
StorageWorks Enclosure 4200 Ultra2 Dual Bus I/O Module Option		119829-B21	
StorageWorks Enclosure 4200 Ultra3 Single Bus I/O Module Option		190212-B21	
StorageWorks Enclosure 4200 Ultra3 Dual Bus I/O Module Option		190213-B21	
StorageWorks Enclosure Tower to Rack Conversion Kit		150213-B21	
ProLiant Storage System/U Redundant Power Supply Option		224206-001	
StorageWorks DLT Departmental Library	TL891DLX DLT Library, 1 drive Tower, LVD	157300-B21	
	TL891DLX DLT Library, 2 drive Tower, LVD	157300-B22	
	TL891DLX DLT Library, 1 drive Rack, LVD	157305-B21	
	TL891DLX DLT Library, 2 drive Rack, LVD	157305-B22	
	TL891 DLT library unit, 1 drive Table Top, FWD	120875-B21	
	TL891 DLT library unit, 2 drive Table Top, FWD	120875-B22	
	TL891 DLT library unit, 1 drive Rack, FWD	120876-B21	
	TL891 DLT library unit, 2 drive Rack, FWD	120876-B22	
	Add-On 35/70-GB Drive for TL891	120878-B21	
	Add-On 40/80-GB Drive for TL891DLX, LVD	157303-B21	
	Add-On 40/80-GB Drive for TL8x1HVD	157304-B21	

Options

StorageWorks DLT Departmental Library <i>(continued)</i>	MiniLibrary Data Unit <i>Note: Available for TL891 DLT Libraries only.</i>	128670-B21
	MiniLibrary Expansion Unit <i>Note: Available for TL891 DLT Libraries only.</i>	120877-B21
	MiniLibrary Expansion Unit, LVD <i>Note: Available for TL891DLX DLT Library only.</i>	157301-B21
	StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter <i>Note: The StorageWorks Dual Channel Ultra-Wide Differential Library Host Bus Adapter is required to support FWD-based tape libraries.</i>	157299-B21
	DLT IV Data Cartridges (single pack)	295194-B21
	DLT IV Data Cartridges (7 pack)	295192-B21
	DLT Cleaning Cartridge	199704-001
	MiniLibrary pass-through Mechanism Kit <i>Note: Available for TL891 DLT Libraries only.</i>	120880-B21
	10 Slot Magazine <i>Note: Available for TL891 DLT Libraries only.</i>	120881-B21
	MiniLibrary Table Top to Rack Mount Conversion Kit, Metric/RETMA racks <i>Note: Available for TL891 DLT Libraries only.</i>	120882-B21
	MiniLibrary Table Top to Rack Mount Conversion Kit, Compaq racks <i>Note: Available for TL891 DLT Libraries only.</i>	120883-B21
	<i>Note: Please see the TL891DLX, or the TL891 Automated DLT Tape Library Solution QuickSpecs for additional information including Upgrade Kits, Accessories, ProLiant Connectivity Kits, Host Bus Adapters, SCSI Cable Kits, and Localization Kits and additional options needed for a complete solution at: http://www.compaq.com/products/quickspecs/North_America/10233_na.html.</i>	
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	Uninterruptible Power Supply – Tower	Compaq Pro UPS 500 (300 Watt) 120V
UPS Model T700 (100 to 127 Volt/700 Volt Amp)		295372-B21
UPS Model T1000 (100 to 127 Volt/1000 Volt Amp)		242688-001
UPS Model T1500 (100 to 127 Volt/1440 Volt Amp)		242688-003
UPS Model T2000 (100 to 127 Volt/1920 Volt Amp)		242688-005
Multi-Server UPS Card <i>(Not available for UPS T700 or UPS 500)</i>		123508-B21
Scalable UPS Card <i>(Not available for UPS T700 or UPS 500)</i>		123509-B21
SNMP-EN Adapter <i>(Not available for UPS T700 or UPS 500)</i>		347225-B21
High to Low Voltage Transformer (250VA)		388643-B21
<hr/>		
Rack Conversion Kit	Compaq ProLiant ML350 Tower to Rack Conversion Kit	158438-B21
<hr/>		
Other	Internal Wide Ultra3 Cable Option Kit, NHP	166389-B21
	Internal Wide Ultra3 Cable Option Kit, HP	166390-B21
	ProLiant ML350 Internal to External SCSI Cable Option Kit	159547-B21

Options

CarePacs

Hardware Services 4-Hour On-site Service

4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (2-5-2 Part Number for U.S.)	FM-EL4HR-36
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL4HR-36
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (6-3 Part Number for U.S.)	162676-002
4-Hour On-site Service, 5-Day x 9-Hour Coverage, 3 Years (6-3 Part Number for Canada)	162676-122
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (2-5-2 Part Number for U.S.)	FM-EL724-36
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (2-5-2 Part Number for Canada)	FP-EL724-36
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (6-3 Part Number for U.S.)	162675-002
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (6-3 Part Number for Canada)	162675-122

Installation & Start-up Services

Hardware Installation (2-5-2 Part Number for U.S.)	FM-ELINS-IN
Hardware Installation (2-5-2 Part Number for Canada)	FP-ELINS-IN
Hardware Installation (6-3 Part Number for U.S.)	401791-002
Hardware Installation (6-3 Part Number for Canada)	401791-122
O/S & Hardware Installation (2-5-2 Part Number for U.S.) (Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation))	FP-CXHSI-01
O/S & Hardware Installation (6-3 Part Number for U.S.) (Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation))	160555-002

Business Solutions Priority Service Plan – Priority Level

5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), three years (2-5-2 Part Number for U.S.)	FP-CX101-36
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), three years (2-5-2 Part Number for Canada)	FP-CZ101-36
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), three years (6-3 Part Number for U.S.)	155323-002
5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), three years (6-3 Part Number for Canada)	155323-122

Business Solutions Priority Service Plan – Priority 24 Level

7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), three years (2-5-2 Part Number for U.S.)	FP-CX201-36
7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), three years (6-3 Part Number for U.S.)	155327-002

Business Solutions Priority Service Plan – Priority Plus Level

7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, three years (2-5-2 Part Number for U.S.)	FP-CX301-36
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, three years (2-5-2 Part Number for Canada)	FP-CZ301-36
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, three years (6-3 Part Number for U.S.)	155331-002
7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, three years (6-3 Part Number for Canada)	155331-122

Options

CarePacs (continued)

Business Solutions Priority Service Plan – Priority Premier Level

7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (2-5-2 Part Number for U.S.) FP-CX501-36

7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (2-5-2 Part Number for Canada) FP-CZ501-36

7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (6-3 Part Number for U.S.) 155335-002

7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (6-3 Part Number for Canada) 155335-122

Business Solutions Priority Service Plan – Priority Executive Premier Level

7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (2-5-2 Part Number for U.S.) FP-CX701-36

7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (2-5-2 Part Number for Canada) FP-CZ701-36

7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (6-3 Part Number for U.S.) 155339-002

7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, three years (6-3 Part Number for Canada) 155339-122

Note: For more information, customer/resellers can contact www.Compaq.com/services. Please note that this Web site is available in English only.

Memory

Compaq ProLiant ML350 All 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 1664-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 2048 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.

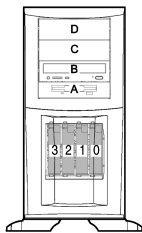
Note: Charts do not represent all possible memory configurations.

Memory		Slot			
		1	2	3	4
Standard	128 MB	128 MB	Empty	Empty	Empty
Optional	1664 MB	128 MB	512 MB	512 MB	512 MB
Maximum	2048 MB	512 MB	512 MB	512 MB	512 MB

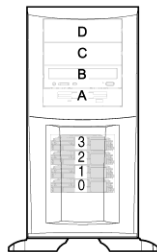
Following are memory options available from Compaq:

- 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
- 64-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128276-B21

Storage



Non-Hot Plug Drive Cage



Hot Plug Drive Cage

0, 1, 2, 3	4 x 1" SCSI Hard Drive Bays
A	3.5 in Diskette Drive
B	High Speed CD-ROM
C, D	Available half-height bay

DRIVE SUPPORT

	Quantity Supported	Position Supported	Controller
Removable Media			
1.44-MB Diskette Drive	Up to 1	A	Integrated
IDE CD-ROM Drive	Up to 2	B, C	Integrated IDE
DVD-ROM Drive Option Kit	Up to 2	B, C	Integrated IDE
Hard Drives			
<i>Wide Ultra2 Hot Pluggable Drives</i>			
1-inch 18.2-GB 9.1-GB	Up to 4	0-3	Integrated Dual Channel Wide Ultra2 SCSI Adapter Compaq RAID LC2 Controller Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
<i>Wide Ultra2 SCSI – Non-Hot Plug</i>			
1-inch 18.2-GB 9.1-GB	Up to 4 Up to 6	0-3 0-3 & C, D	Integrated Dual Channel Wide Ultra2 SCSI Adapter Compaq RAID LC2 Controller Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
<i>Wide Ultra3 Hot Pluggable Drives</i>			
1-inch 36.4-GB 10,000 rpm 18.2-GB 10,000 rpm 9.1-GB 10,000 rpm	Up to 4	0-3	Integrated Dual Channel Wide Ultra2 SCSI Adapter Compaq RAID LC2 Controller Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
<i>Wide Ultra3 SCSI – Non-Hot Plug</i>			
1-inch 36.4-GB 10,000 rpm 18.2-GB 10,000 rpm 9.1-GB 10,000 rpm	Up to 4 Up to 6	0-3 0-3 & C, D	Integrated Dual Channel Wide Ultra2 SCSI Adapter Compaq RAID LC2 Controller Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter

Storage

DRIVE SUPPORT *(continued)*

	Quantity Supported	Position Supported	Controller
External Storage			
StorageWorks Enclosure 4200/4300 Family (supports Wide Ultra2/Ultra3 1" drives)	Up to 7	External	Integrated Dual Channel Wide Ultra2 SCSI Adapter Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
ProLiant Storage System Models U2 ProLiant Storage System Models UE (supports Wide-Ultra SCSI-3 drives)	Up to 7	External	Integrated Dual Channel Wide Ultra2 SCSI Adapter Smart Array 431 Controller Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
SCSI Storage Expander II	Up to 3	External	Integrated Dual Channel Wide Ultra2 SCSI Adapter Smart Array 3200 Controller 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter

Maximum Storage Capacity – (SCSI Attached)

Internal	145.6 GB (4 x 36.4 GB hard drives)
External	3.057 TB (12 x 36.4 GB) x 7
Total	3.203 TB

Maximum Storage Capacity – (SCSI Attached)

Internal	218.4 GB (4 x 36.4 GB + 2 x 36.4 GB hard drives)
External	3.057 TB (12 x 36.4 GB) x 7
Total	3.276 TB

Storage

DRIVE SUPPORT *(continued)*

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://www.compaq.com/products/quickspecs/North_America/10233_na.html

Please note that all Web sites are available in English only.

20/40-GB DAT DDS-4 Tape Drive Internal 12/24-GB DAT Drive	Up to 2	C	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
20/40-GB DAT DDS-4 8 Cassette Autoloader	Up to 2	C	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
Internal 20/40-GB DLT	Up to 1	C	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 50-GB Internal AIT 35-GB, LVD Internal AIT 35-GB Internal	Up to 1	C	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
AIT 50-GB External AIT 35-GB, LVD External AIT 35-GB External	2	External	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
External 20/40-GB DLT	Up to 3	External	Integrated Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter
TL891DLX DLT Library	2 drives per SCSI channel	External	64-bit Dual Channel Wide Ultra2 SCSI Adapter 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter
TL891 DLT Library (1 – 2 Drive)	2 drives per SCSI channel	External	StorageWorks Dual Channel Ultra-Wide Differential Library HBA

Technical Specifications

System Unit	Dimensions (HxWxD) (with feet/bezel)	18.5 x 10.5 x 26 in/46.99 x 26.67 x 66.04 cm
	Dimensions (HxWxD) (without feet/bezel)	17.5 x 10.5 x 24 in/44.45 x 26.67 x 60.96 cm
	Weight (approximate)	60 lbs/27.24 kg (without hard drives)
Input Requirements (per power supply)	Rated Input Voltage	90 to 132 VAC/180 to 264 VAC
	Rated Input Frequency	100 to 120 VAC/200 to 240 VAC
	Input Power	690W @ 110 VAC /
	Rated Input Current	6A/3A
Line Frequency	50 to 60 Hz	
BTU Rating	1,560 BTU/hr	
SCSI Connectors	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 (159547-B21) and either of the two SCSI knockouts.)	
Power Supply Output Power (per power supply)	Rated Steady-State Power	300W
	Maximum Peak Power	400W
Temperature Range	Operating	50° to 95° 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)	-4° to 140° F/-20° to 60°C
	Altitudes up to 9,842.5 ft/3,000m	
	Shipping (up to 72 hours)	-40° to 140° F/-40° to 60°C
	Altitudes up to 29,855.5 ft/9100m	
Relative Humidity (non-condensing)	Operating	20% to 80%
	Non-operating	5% to 90%
Acoustic Noise	Idle	
	(Fixed Disk Drives Spinning)	
	L _{WA} d (BELS)	5.02
	L _{pAm} (dBA)	35.9
	Operating (Random Seeks to Fixed Disks)	
	L _{WA} d (BELS)	5.87
L _{pAm} (dBA)	40.9	

Technical Specifications

1.44-MB Diskette Drive	Diskette Size	3.5 in	
	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		

Hot Plug Wide Ultra2 SCSI Hard Drives	18.2 GB 388144-B22	Capacity	18209.3 MB		
		Height	1 in/25.4 mm		
		Width	3.5 in/88.9 mm		
		Interface	Wide Ultra2 SCSI		
		Transfer Rate Synchronous (Maximum)	80 MB/s		
	Seek Time (typical reads, including settling)	Single Track	0.8 ms		
		Average	5.2 ms		
		Full-Stroke	12 ms		
		Rotational Speed	10,000 rpm		
		Physical Configuration	Logical Blocks 35,565,080		
		Operating Temperature	50° to 95°F/10° to 35°C		
	9.1 GB 123065-B22	Capacity	9100.0 MB		
		Height	1 in/25.4 mm		
			Width	3.5 in/88.9 mm	
			Interface	Wide Ultra2 SCSI	
			Transfer Rate Synchronous (Maximum)	80 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms	
			Average	7.0 ms	
Full-Stroke			15 ms		
Rotational Speed			7200 rpm		
		Physical Configuration	Logical Blocks 17,773,524		
		Operating Temperature	50° to 95°F/10° to 35°C		

Technical Specifications

Non-Hot Plug Wide Ultra2 SCSI Hard Drives	18.2 GB	Capacity	18209.3 MB	
	388143-B21	Height	1 in/25.4 mm	
		Width	3.5 in/88.9 mm	
		Interface	Wide Ultra2 SCSI	
		Transfer Rate Synchronous (Maximum)	80 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	7.0 ms
			Full-Stroke	15 ms
		Physical Configuration	Rotational Speed	7200 rpm
			Logical Blocks	35,565,080
	Operating Temperature	50° to 95°F/10° to 35°C		
	9.1 GB	Capacity	9100.0 MB	
	349526-B21	Height	1 in/25.4 mm	
		Width	3.5 in/88.9 mm	
		Interface	Wide Ultra2 SCSI	
		Transfer Rate Synchronous (Maximum)	80 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	7.1 ms
			Full-Stroke	16 ms
		Physical Configuration	Rotational Speed	7200 rpm
			Logical Blocks	17,773,524
	Operating Temperature	50° to 95°F/10° to 35°C		
Hot Plug Wide Ultra3 SCSI Hard Drives	36.4 GB 10K	Capacity	36400 MB	
	176496-B22	Height	1 in/25.4 mm	
		Width	3.5 in/88.9 mm	
		Interface	Wide Ultra3 SCSI	
		Transfer Rate Synchronous (Maximum)	160 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	5.2 ms
			Full-Stroke	12 ms
		Physical Configuration	Rotational Speed	10,000 rpm
			Logical Blocks	71,132,000
	Operating Temperature	50° to 95°F/10° to 35°C		
	18.2 GB 10K	Capacity	18209.3 MB	
	142673-B22	Height	1 in/25.4 mm	
		Width	3.5 in/88.9 mm	
		Interface	Wide Ultra3 SCSI	
		Transfer Rate Synchronous (Maximum)	160 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	5.2 ms
			Full-Stroke	12 ms
		Physical Configuration	Rotational Speed	10,000 rpm
			Logical Blocks	35,566,080
	Operating Temperature	50° to 95°F/10° to 35°C		

Technical Specifications

Hot Plug Wide Ultra3 SCSI Hard Drives <i>(continued)</i>	9.1 GB 10K 142671-B22	Capacity	9100.0 MB	
		Height	1 in/25.4 mm	
		Width	3.5 in/88.9 mm	
		Interface	Wide Ultra3 SCSI	
		Transfer Rate Synchronous (Maximum)	160 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	5.0 ms
			Full-Stroke	12 ms
		Rotational Speed	10,000 rpm	
		Physical Configuration	Logical Blocks	17,773,524
		Operating Temperature	50° to 95°F/10° to 35°C	

Technical Specifications

40X Max IDE CD-ROM Drive	Disk	Applicable Disk	CD-ROM, CD-XA, CD-DA (Mode 1, Mode 2, Form 1 and 2) Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined) CD-R
		Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)
	Block Size	Mode 1 Mode 2 CD-DA CD-XA	2,048 bytes 2,340 bytes, 2,336 bytes 2,352 bytes 2,328 bytes
	Interface	IDE (ATAPI)	
	Access Times (typical)	Random Full-Stroke	100 ms 150 ms
	Audio Output Level	Line-Out	0.7 VRMS at 47 kOhms
	Data Transfer Rate	Sustained Burst	150 KB/s (1X audio) 16.67 Mbytes/sec
	Cache Buffer	128 KB	
	Start-up Time (typical)	< 7 seconds	
	Stop Time	< 4 seconds	
	Laser Parameters	Type Wave Length	Semiconductor Laser GaA1As 780 ± 25 nm
	Operating Conditions	Temperature Humidity	41° to 113°F/5° to 45°C 10% to 80%
	Dimensions	(HxWxD, maximum) Weight	1.7 x 5.85 x 8.11 in/4.29 x 150 x 208 cm 2.09 lbs/0.95 kg

Technical Specifications

32X Max IDE CD-ROM Drive	Disk	Applicable Disk	CD-ROM (Mode 1 and 2) CD-DA, CD-XA (Mode 2, Form 1 and 2), CD-I ready Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined) CD-WO
		Capacity	650 MB
		Diameter	4.7 in, 3.15 in/12 cm, 8 cm
		Rotational Speed	5200 rpm maximum
		Center Hole	0.6 in/15 mm diameter
		Thickness	1.2 mm
		Track Pitch	1.6 μ m
		Block Size	Mode 1
		Mode 2	2,340, 2,336, 1,024 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
		Headphone	0.6 VRMS at 32 Ohms (maximum volume)
	Data Transfer Rate	Sustained	150 KB/s (single)
		Burst	150 to 4800 KB/s
	Cache Buffer	128 KB	
	Start-up Time (typical)	< 7 seconds	
	Stop Time	< 4 seconds	
	Laser Parameters	Type	Semiconductor Laser GaA1As
		Wave Length	780 \pm 25 nm
		Divergence Angle	53.5 $^{\circ}$ \pm 1.5 $^{\circ}$
		Output Power	0.14mW
	Operating Conditions	Temperature	41 $^{\circ}$ to 113 $^{\circ}$ F/5 $^{\circ}$ to 45 $^{\circ}$ C
		Humidity	10% to 80%
	Dimensions	(HxWxD, maximum)	1.69 x 5.91 x 8.2 in/4.29 x 15.01 x 20.8 cm
		Weight	2.09 lbs/0.95 kg

Technical Specifications

Integrated Dual Channel Wide Ultra2 SCSI Adapter	Drives Supported	Up to 28 SCSI devices (14 per channel)
	Data Transfer Method	64-bit PCI bus-master
	SCSI Channel Transfer Rate	80 MB/s per channel
	Maximum Transfer Rate per PCI Bus (peak)	133 MB/s per channel
	SCSI Protocols	Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast SCSI-2
	Electrical Protocol	Low Voltage Differential (LVD)
	SCSI Termination	Active Termination
	External SCSI Connectors	Two 80-Pin VHDCI connectors
	Internal SCSI Connectors	Two 68-Pin Wide-Ultra SCSI-3 connectors

Compaq RAID LC2 Controller	Protocol	Wide Ultra2 SCSI
	SCSI Electrical Interface	Low Voltage Differential (LVD)
	Drives Supported	Wide Ultra3 and Wide Ultra2 SCSI hard drives (Ultra3 drives will operate at 80 MB/s maximum transfer rate)
	SCSI Port Connectors	Single Internal SCSI port
	Data Transfer Method	32-bit PCI bus-master
	Maximum Transfer Rate on System Bus (peak)	133 MB/s
	Simultaneous Drive Transfer Channels	One
	Channel Transfer Rate	80 MB/s per channel
	Software Upgradable Firmware	Yes
	Cache Memory	8-MB Cache Performance Engine
RAID Support	0, 1, 0+1, 5	
	<i>Note: A minimum of three drives is required for RAID 5.</i>	
Logical Drives Supported	32	

64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter	Drives Supported	Up to 14 SCSI devices
	Storage Capacity	254.8 GB
	Data Transfer Method	64-bit/66-MHz PCI bus-master
	SCSI Channel Transfer Rate	160 MB/s per channel
	Maximum Transfer Rate per PCI Bus (peak)	532 MB/s per channel
	SCSI Protocols	Wide Ultra3 SCSI Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast-Wide SCSI-2 Fast SCSI-2
	Electrical Protocol	Low Voltage Differential (LVD)
	SCSI Termination	Active Termination
	External SCSI Connectors	One 68-pin Wide-Ultra SCSI-3 connector
	Internal SCSI Connectors	Two 68-pin Wide-Ultra SCSI-3 connectors (one LVD and one SE) One 50-pin Narrow Ultra connector

Technical Specifications

64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter	Drives Supported	Up to 28 SCSI devices (14 per channel)	
	Storage Capacity	509.6 GB	
	Data Transfer Method	64-bit/66-MHz PCI bus-master	
	SCSI Channel Transfer Rate	160 MB/s per channel	
	Maximum Transfer Rate per PCI Bus (peak)	532 MB/s per channel	
	SCSI Protocols	Wide Ultra3 SCSI Wide Ultra2 SCSI Wide-Ultra SCSI-3 Fast SCSI-2	
	Electrical Protocol	Low Voltage Differential (LVD)	
	SCSI Termination	Active Termination	
	External SCSI Connectors	Two 68-pin VHDCI connectors	
	Internal SCSI Connectors	Two 68-pin Wide-Ultra SCSI-3 connectors One 50-pin Narrow Ultra connector	
	Smart Array 3200 Controller	Data Compatible with all Smart Array Controllers	Yes
		Instant Upgrades to other Smart Array Controllers	Yes
Consistent Software Manageability Tools		Yes	
PCI Bus		64-bit, 33 MHz	
PCI Peak Data Transfer Rate		266 MB/s	
SCSI Protocols Supported		Ultra2, Wide-Ultra	
SCSI Peak Data Transfer Rate		320 MB/s total, 80 MB/s per channel	
Channels		4	
SCSI Ports (external/internal)		4/2	
Drives Supported (maximum)		56	
<i>Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200/4300 family (14 hard disk drive enclosure).</i>			
Cache		64-MB battery backed read-write	
RAID Support		0, 1, 0+1, 4, 5	
Logical Drives (maximum)		32	
Online Configuration		Yes	
Online Capacity Expansion		Yes	
Logical Drive Capacity Extension		Yes	
Online Stripe Size Migration		Yes	
Online RAID Level Migration		Yes	
Online Spare Support		Yes	
Automatic Data Recovery		Yes	
Drive Roaming		Yes	
Redundant Controllers		No	

Technical Specifications

Smart Array 431 Controller	Data Compatible with all Smart Array Controllers	Yes	
	Instant Upgrades to other Smart Array Controllers	Yes	
	Consistent Software Manageability Tools	Yes	
	PCI Bus	64-bit, 66MHz	
	PCI Peak Data Transfer Rate	533 MB/s	
	SCSI Protocols Supported	Ultra3, Ultra2, Wide-Ultra	
	SCSI Peak Data Transfer Rate	160 MB/s	
	Channels	1	
	SCSI Ports (external/internal)	1/1	
	Drives Supported (maximum)	14	
	Note: Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200/4300 family (14 hard disk drive enclosure).		
	Cache	16-MB cache engine	
	RAID Support	0, 1, 0+1, 5	
	Logical Drives (maximum)	32	
	Online Configuration	Yes	
	Online Capacity Expansion	Yes	
	Logical Drive Capacity Extension	Yes	
	Online Stripe Size Migration	Yes	
	Online RAID Level Migration	Yes	
	Online Spare Support	Yes	
	Automatic Data Recovery	Yes	
	Drive Roaming	Yes	
	Redundant Controllers	No	

Video Controller	Controller Chip	ATI RAGE XL
	Video DRAM	4-MB Video SDRAM
	Data Transfer Method	32-bit PCI
	Support Resolution	Supported Color Depths:
	640 x 480	16.7M, 64K, 256, 16
	800 x 600	16.7M, 64K, 256, 16
	1024 x 768	16.7M, 64K, 256, 16
	1152 x 864	16.7M, 64K, 256, 16
	1280 x 1024	16.7M, 64K, 256, 16
	1600 x 1200	64K, 256, 16
Connector	VGA	