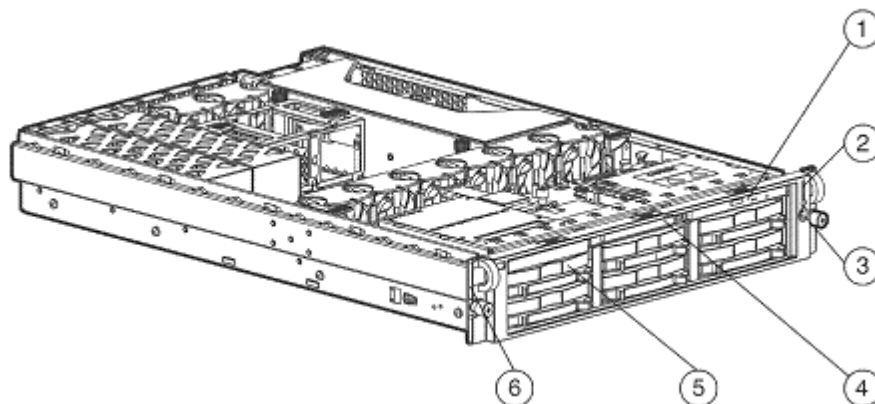


Overview



- | | |
|--|---|
| 1. 24X Max CD-ROM (with easy front ejection removal) | 4. 1.44 MB Diskette Drive |
| 2. Front LEDs (show server status) | 5. Six 1" Wide Ultra3/Ultra320 SCSI hot plug hard drives and one DAT 40 or DAT 72 hot plug tape drive |
| 3. Unit Identification button and LED (for easy in rack server identification) | 6. 2U form factor |

What's New

The ProLiant DL380 G3 is now available with two new high performance processors:

- The 3.2GHz Intel Xeon processor with 2MB of Level 3 cache delivering top performance for the most demanding applications
- The 2.8GHz Intel Xeon processors with 1MB of Level 3 cache offering a significant performance increase over the 3.06GHz/512MB processor at a price point that won't break your budget.

At A Glance

- Integrated Lights-Out (iLO) Management standard on system board
- Five Peer PCI Architecture up to 3.2 GHz processors and a 533MHz Front Side Bus
- ServerWorks GC -LE Chipset
- Integrated Smart Array 5i Plus Controller with optional Battery-Backed Write Cache (BBWC) Enabler option kit
- Three available 64-bit PCI-X slots, including two hot pluggable 100MHz slots and one 133MHz slot
- Two NC7781 PCI-X Gigabit NICs (embedded)
- Support for up to six 1" Wide Ultra3/Ultra320 SCSI hot plug hard drives or for five hot plug hard drives and one AIT hot plug tape drive
- User configurable single/dual channel drive backplane
- Internal hot plug capacity 1.80 TB standard (6 x 300 GB 1" U320 HD)
- 400-Watt Hot Plug Power Supply (with optional redundancy)
- Hot Pluggable Fans (with optional redundancy)
- Sliding rails and cable management arm for easy serviceability and in-rack tool-less access to major components
- Automatic Server Recovery (ASR), ROM Based Setup Utility (RBSU), Insight Manager 7, Status LEDs including system health and UID and SmartStart
- Protected by HP 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 HP Customer Support Center at 1-800-345-1518 for details.
- Microsoft® Windows® 2000 Model

Standard Features

Processor

One of the following depending on Model:

Intel Xeon Processor 3.2 GHz/533MHz - 512KB/2MB
 Intel Xeon Processor 3.2 GHz/533 MHz - 512KB/1MB
 Intel Xeon Processor 3.06 GHz/533 MHz - 512KB/1MB
 Intel Xeon Processor 2.8 GHz/533MHz - 512KB/1MB
 Intel Xeon Processor 3.06 GHz/533MHz - 512KB
 Intel Xeon Processor 2.8 GHz/400MHz - 512KB
 Intel Xeon Processor 2.4 GHz/400MHz - 512KB

Cache Memory

One of the following depending on Model:

2-MB Level 3 cache
 (NOTE: Included with some 3.2 GHz models.)
 1-MB Level 3 cache
 (NOTE: Included with some 2.8 GHz, 3.2 GHz or 3.06 GHz models.)
 512-KB Level 2 cache
 (NOTE: Included with all models.)

Upgradability

Upgradable to dual processing

Chipset

ServerWorks GC -LE Chipset
 NOTE: For more information regarding ServerWorks, please see the following URL:
<http://www.serverworks.com/products/overview.html>.

Memory

Standard	1GB of 2-way interleaved PC2100 DDR SDRAM running at up to 266MHz with Advanced ECC and Online Spare capabilities
Maximum	12 GB (6GB max on 400MHz Front Side Bus Models)

Network Controller

Two NC7781 PCI-X Gigabit NICs (embedded)

Expansion Slots

Slot Number	Bus Speed	Bus Number	Hot Plug	PCI Voltage	Notes
1	64-bit/133MHz PCI-X	A	No	3.3 Volt	Supported RILOE II slot
2	64-bit/100MHz PCI-X	B	Yes	3.3 Volt	
3	64-bit/100MHz PCI-X	B	Yes	3.3 Volt	

NOTE: For more information regarding PCI-X, please see the following URL: www.hp.com/servers/pci-x.

NOTE: All slots can accept universal keyed PCI cards

Storage Controller

Smart Array 5i Plus Controller (integrated on system board)

Standard Features

Storage	Diskette Drive	1.44 MB Diskette Drive
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Hard Drives	None
		NOTE: The system can be operated in single channel (using either the embedded Smart Array 5i Plus controller or a PCI-based controller) or dual channel (with the first 2 drives on 1 channel, driven by the Smart Array 5i Plus controller and 4 drives driven by either the Smart Array 5i Plus or a PCI-based controller).
	Maximum Internal Storage	1.80 TB (6 x 300 GB Ultra320 1")
Interfaces	Serial	1
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	External SCSI (VHDCI)	1
	Network RJ-45	3 (1 for iLO)
	USB	2
		NOTE: Please see the following URL for additional information regarding USB support: http://h18004.www1.hp.com/products/servers/platforms/usb-support.html .
Graphics	Integrated ATI Rage XL Video Controller with 8-MB SDRAM Video Memory	
Form Factor	Rack (2U), (3.5-inch)	
ProLiant Essentials Foundation Pack Software	HP Systems Insight Manager	HP's new HP Systems Insight Manager (HP SIM) helps maximize system uptime and performance and reduce system maintenance costs by providing proactive notification of problems before those problems result in unplanned downtime or reduced productivity. HP SIM are both easy to set up work with the Insight Management Agents, integrated Light-Out and Remote Insight Light-Outs Edition, and Version Control Agents to deliver robust fault, configuration, and asset management as well as remote administration. With HP SIM customers will also be able to take advantage of role-based security; the ability to manage ProLiant, Integrity, and HP 9000 systems; and plug-ins for storage, client, printer, and power management as well as server rapid deployment, performance management, and workload management. For more details on HP SIM visit http://www.hp.com/go/hpsim .
	SmartStart	SmartStart is a tool that simplifies server setup, providing a rapid way to deploy reliable and consistent server configurations. For more information, please visit the SmartStart Web site at: http://www.hp.com/servers/smartstart SmartStart version supported (minimum): SmartStart 6.0

Standard Features

Management Agents	The Management Agents form the foundation for HP's Intelligent Manageability strategy. They provide direct, browser-based access to in-depth instrumentation built into HP servers, workstations, desktops, and portables, and send alerts to Insight Manager 7 and other enterprise management applications in case of subsystem or environmental failures. For additional information about the Management Agents and other management products from, HP please visit the management Web site at: http://www.hp.com/servers/manage
Subscribers Choice	Subscriber's Choice Driver and Support Alerts/Notifications is a web-based email subscription service that provides automatic delivery of software and driver change notifications for ProLiant products. Sign up at http://www.hp.com/go/subscriberschoice and customize your profile to receive various new alerts as they become available, on a weekly or monthly basis.
ROMPaq, support software, and configuration utilities	The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options available in SmartStart or downloadable from Software and Drivers download pages, linked from the SmartStart website at http://www.hp.com/servers/smartstart .
Survey Utility and diagnostics utilities	The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips, available in SmartStart.
Optional ProLiant Essentials Value Packs	Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems and needs: • Rapid Deployment Pack – an automated solution for multi-server deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands. • Workload Management Pack – provides easier management of complex environments, improving overall server utilization and enabling Windows 2000 customers for the first time to confidently deploy multiple applications on a single multiprocessor ProLiant Server. • Integrated Lights-Out Advanced Pack – upgrades the Integrated Lights-Out processor to full virtual presence and control with graphical console and virtual media. • Recovery Server Option Pack – entry-level high availability software that will provide reliable protection and increased uptime against server hardware and operating system failures. • Performance Management Pack – a performance management solution that identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources. • Intelligent Networking Pack - detects and analyzes network bottlenecks or broken network linkages and steers traffic to the optimum route based on network conditions

NOTE: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <http://www.hp.com/servers/proliantessentials> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

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

Standard Features

Industry Standard Compliance

ACPI 1.0b Compliant
PCI 2.2 Compliant
WOL Support
Microsoft® Logo certifications
USB 1.1

Manageability

Insight Manager 7
HP Systems Insight Manager
Redundant ROM
Remote Flash ROM
Management Agent
Automatic Server Recovery (ASR)
Integrated Management Log
Drive Parameter Tracking (with Smart Array Controllers)
Dynamic Sector Repairing (with Smart Array Controllers)
Hot Spare Boot
(NOTE: Upon the event of a failed processor or VRM in a multi-processing environment, the system will automatically reboot and use the remaining good processor(s).)
Pre-Failure Warranty (covers processors, hard drives and memory)

Remote Manageability

Integrated Lights Out (iLO)
Integrated Lights Out Advanced Pack (optional)
Remote Insight Lights-Out Edition II (optional)

Security

Power-on password
Keyboard password
Diskette drive control
Diskette boot control
QuickLock, Network Server Mode
Serial interface control
Administrator's password
Disk configuration lock

Server Power Cords

One Lowline NEMA power cord and One Highline IEC Power cord ships standard

Power Supply

400 Watt, CE Mark Compliant
Optional Hot Plug AC Redundant Power Supply and DC Redundant Power Supply

System Fans

5 fans ship standard. 8 total supported internally for full redundancy
(NOTE: The additional 3 fans are available via Redundant Fan Option Kit (PN 293048-B21).)

Required Cabling

For required cabling information, refer to the Web site at:
<http://h18000.www1.hp.com/products/servers/proliantDL380/>.

Standard Features

OS Support

Microsoft Windows NT® Server
Microsoft Windows 2000
Novell NetWare
Caldera OpenUNIX 8
LINUX (Red Hat, SuSE)

NOTE: For a more complete and up-to-date listing of supported OSs and versions, please visit our OS Support Matrix at: <http://www.hp.com/go/supportos>

NOTE: For an up-to-date listing of the latest drivers available for the ProLiant DL380 G3, please see: <http://h18023.www1.hp.com/support/files/server/us/index.html>.

NOTE: For a more complete and up-to-date information on Linux support, please visit HP Linux Web site at: <http://h18000.www1.hp.com/products/servers/linux/hpLinuxcert.html>.

NOTE: For more complete and up-to-date information on how to buy server operating systems from HP please visit the OS product site at: <http://h18004.www1.hp.com/products/servers/software/OEM.html>

Rack Airflow Requirements

Rack 10000 series Cabinets

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

CAUTION: If a third-party rack is used, observe the following additional requirements to ensure adequate airflow and to prevent damage to the equipment:

- Front and rear doors: If your 42U server rack includes closing front and rear doors, you must allow 830 square inches (5,350 sq cm) of hole evenly distributed from top to bottom to permit adequate airflow (equivalent to the required 64 percent open area for ventilation).
- Side: The clearance between the installed rack component and the side panels of the rack must be a minimum of 2.75 inches (7 cm).

CAUTION: Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels results in improper cooling that can lead to thermal damage.

NOTE: For additional information, refer to the Setup and Installation Guide or the Documentation CD provided with the server, or to the server documentation located in the Support section at the following URL: <http://h18000.www1.hp.com/products/servers/proliantdl380/index.html>.

Rack Kit

Tool-free support for racks with square mounting holes (including Compaq/HP 7000, 9000, 10000 and H9 series), with an adjustment range of 24" - 36".

Telco Rack Support

DL380 G3 Telco Rack Kit:

Support for all 2-post Telco racks requires the use of the standard rack kit and an additional option kit from Rack Solutions (<http://www.racksolutions.com/hp>).

HP Factory Express Capabilities

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

Standard Features

Service and Support

Three-year limited warranty, including hardware diagnostic support, pre-failure warranty (coverage of hard drives, memory and processors). The warranty is fully supported by HP Services and a worldwide network of resellers and service providers. In addition 90-day's getting started software telephone support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services.

NOTE: Limited warranty includes 3 year parts, 3 year labor, 3-year next business day on-site support

Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

A full range of HP Care Pack hardware and software services are available including:

- Installation and start up
- Education courses
- Extended onsite hardware coverage hours from same business day 13 hours, 5 day to 24 hours, 7 days call window with options including 4-hour response or 6-hour Call To Repair
- Comprehensive range of software technical support for Microsoft, Linux, ProLiant Essentials and VMWare-based IT solutions helping to deliver high level of application availability. Response times range from 30 mins for critical problems to 2 hours.
- System Management, Performance Services and Mission Critical Support Solution

HP Care Pack Services include HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the enclosure, as well as 22" and smaller external monitors and tower UPS options up to 3KVA. 22" and smaller external monitors will be covered at the same service level and coverage period as the server. For servers or storage systems installed within a rack, service also covers all HP qualified rack options installed within the same rack.

NOTE: For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our worldwide Web site on the internet at: <http://www.hp.com/hps/carepack>

NOTE: For more complete information on HP Services offerings, customers and resellers, please visit us at: <http://www.hp.com/hps>

NOTE: Additional information regarding worldwide limited warranty and technical support is available at: <http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

Models

DL380R03 X3.2- 2MB/533, 1GB 352529-001	Processor	(1) Intel Xeon Processor 3.2 GHz standard (up to 2 supported)
	Cache Memory	512KB level 2 cache and 2-MB level 3 cache
	Memory	1 GB (Standard) to 12 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 266MHz with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)
DL380R03 X3.2- 1MB/533, 1GB 333705-001	Processor	(1) Intel Xeon Processor 3.2 GHz standard (up to 2 supported)
	Cache Memory	512KB level 2 cache and 1-MB level 3 cache
	Memory	1 GB (Standard) to 12 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 266MHz with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)
DL380R03 X3.06- 1MB/533, 1GB 333704-001	Processor	(1) Intel Xeon Processor 3.06 GHz standard (up to 2 supported)
	Cache Memory	512KB level 2 cache and 1-MB level 3 cache
	Memory	1 GB (Standard) to 12 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 266MHz with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)

Models

DL380R03 X2.8-1MB/533, 1GB 352526-001	Processor	(1) Intel Xeon Processor 2.8 GHz standard (up to 2 supported)
	Cache Memory	512KB level 2 cache and 1-MB level 3 cache
	Memory	1 GB (Standard) to 12 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 266MHz with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)

DL380R03 X3.06-512KB/533, 1GB 310587-001	Processor	(1) Intel Xeon Processor 3.06 GHz standard (up to 2 supported)
	Cache Memory	512-KB level 2 cache
	Memory	1 GB (Standard) to 12 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 266MHz, with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)

DL380R03 X2.8-512KB/400, 1GB 349201-001	Processor	(1) Intel Xeon Processor 2.8 GHz standard (up to 2 supported)
	Cache Memory	512-KB level 2 cache
	Memory	1GB (Standard) to 6 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 200MHz, with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)

Models

DL380R03 X2.8-512KB/400, 1GB, W2K 331441-001	Processor	(1) Intel Xeon Processor 2.8 GHz standard (up to 2 supported)
	Cache Memory	512-KB level 2 cache
	Memory	1 GB (Standard) to 6 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 200MHz, with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded) 10/100/1000 WOL (Wake on LAN) (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Form Factor	Rack (2U), (3.5-inch)
	Diskette Drive	1.44 MB Diskette Drive
	OS	Windows 2000 Server + 5 CALs standard with W2K model (not pre-installed)

DL380R03 X2.4-512KB/400, 1GB 349200-001	Processor	(1) Intel Xeon Processor 2.4 GHz standard (up to 2 supported)
	Cache Memory	512-KB level 2 cache
	Memory	1GB (Standard) to 6 GB (Maximum) of 2-way interleaved capable PC2100 DDR SDRAM running at 200MHz, with Advanced ECC capabilities
	Network Controller	(2) NC7781 PCI-X Gigabit NIC (embedded)
	Storage Controller	Smart Array 5i Plus Controller (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.80 TB max (with optional hard drives)
	Optical Drive	24x IDE CD-ROM (Universal Media Bay)
	Diskette Drive	1.44 MB Diskette Drive
	Form Factor	Rack (2U), (3.5-inch)

Options

ProLiant DL380 G3 Unique Options	DL380 G3 Redundant Fan Option Kit	293048-B21
	NOTE: Hot Plug Redundant Fan Option Kit (PN 293048-B21) contains three fans per kit.	
	Hot Plug AC Redundant Power Supply Module (NEMA cord)	313054-001
	Hot Plug AC Redundant Power Supply Module (IEC cord)	313054-B21
ProLiant Essentials Value Pack Software	Rapid Deployment Pack, 1 User, V1.x	267196-B21
	NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 10 Users, V1.x	269817-B21
	NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	
	ProLiant Essentials Workload Management Pack (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	Flexible Quantity License Kit	302127-B21
	License-Only - for use with a Master License Agreement	302128-B21
	ProLiant Essentials Recovery Server Option Pack	280189-B21
	ProLiant Essentials Performance Management Pack, Single License	306696-B21
	NOTE: This license allows 1 server to be managed by Performance Management Pack.	
	ProLiant Essentials Performance Management Pack, 10 Pack Server License	374055-B21
	Performance Management Pack, flexible license kit	306697-B21
	NOTE: A single pack is shipped with a single license key for the total number of licenses ordered	
	ProLiant Essentials Integrated Lights-Out Advanced Pack (Featuring: sophisticated virtual administration features for ultimate control of servers in the data centers and remote sites)	263825-B21
	ProLiant Essentials Intelligent Networking Pack, 1 License	372906-B21
	ProLiant Essentials Intelligent Networking Pack Flex License	372950-B21
	ProLiant Essentials Intelligent Networking Pack Track License	372951-B21
	ProLiant Essentials Virtual Machine Management Pack, Single-Server License	372214-B21
	NOTE: For use with a single server. Contains one license with a unique license activation key and documentation.	
	ProLiant Essentials Virtual Machine Management Pack, Flexible-Quantity License	372215-B21
	NOTE: For use with multiple servers. This part number can be used to purchase multiple licenses with a single activation key.	
	ProLiant Essentials Virtual Machine Management Pack, Tracking License	372216-B21
	NOTE: For use with signed and implemented Activation Key Agreements only. Purchase of this part number entitles the customer to deploy additional licenses of the product under the terms of the existing Activation Key Agreement.	
	ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License	371645-B21
	ProLiant Essentials Vulnerability and Patch Management Pack, 10-Server License	372029-B21
	ProLiant Essentials Vulnerability and Patch Management Pack, Flexible-Quantity License	371646-B21
	ProLiant Essentials Vulnerability and Patch Management Pack, Tracking license for new servers	371647-B21

Options

ProLiant Essentials Vulnerability and Patch Management Pack, Tracking license for installed servers 378372-B21

NOTE: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to <http://www.hp.com/servers/proliantessentials> or the various ProLiant Essentials Value Pack product QuickSpecs for more information.

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

Software	HP digital asset protection	302316-001
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Processor	Intel Xeon X3.2-2MB/533MHz Processor Option Kit	352568-B21
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NOTE: The 3.2GHz processor option kits are not backwards compatible; they cannot be used to upgrade systems purchased with 2.4 or 2.8GHz 400MHz Front Side Bus processors. This processor option kit supports the ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon X3.2-1MB/533MHz Processor Option Kit	333714-B21
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NOTE: The 3.2GHz processor option kits are not backwards compatible; they cannot be used to upgrade systems purchased with 2.4 or 2.8GHz 400MHz Front Side Bus processors. This processor option kit supports the ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon X3.06-1MB/533MHz Processor Option Kit	333713-B21
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NOTE: The 3.06GHz processor option kits are not backwards compatible; they cannot be used to upgrade systems purchased with 2.4 or 2.8GHz 400MHz Front Side Bus processors. This processor option kit supports the ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon X2.80-1MB/533MHz Processor Option Kit	352567-B21
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NOTE: The 3.06GHz processor option kits are not backwards compatible; they cannot be used to upgrade systems purchased with 2.4 or 2.8GHz 400MHz Front Side Bus processors. This processor option kit supports the ProLiant ML350 G3, ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon 3.06 GHz-512KB/533MHz Processor Option Kit	257916-B21
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NOTE: The 3.06GHz processor option kits are not backwards compatible; they cannot be used to upgrade systems purchased with 2.4 or 2.8GHz 400MHz Front Side Bus processors. This processor option kit supports the ProLiant ML350 G3, ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon 2.80 GHz-512KB/400MHz Processor Option Kit	257915-B21
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NOTE: This processor option kit (PN 257915-B21) is not forwards compatible; it cannot be used in systems purchased with 533MHz Front Side Bus processors. This processor option kit supports the ProLiant ML370 G3 and ProLiant DL380 G3 servers.

	Intel Xeon 2.40 GHz-512KB/400MHz Processor Option Kit	257913-B21
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NOTE: This processor option kit (PN 257913-B21) is not forwards compatible; it cannot be used in systems purchased with 533MHz Front Side Bus processors. This processor option kit supports the ProLiant ML370 G3 and ProLiant DL380 G3 servers.

Options

Memory	512MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 256 MB)	300678-B21
	1024MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 512 MB)	300679-B21
	2048-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2x1024 MB)	300680-B21
	4096MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2x 2048 MB)	300682-B21
	NOTE: The 4096MB of Advanced ECC PC2100 DDR Memory kit (300682-B21) can only be used in 533MHz Front Side Bus models.	
Optical Drives	Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit (Servers)	264007-B21
Hard Drives	Ultra320 SCSI – Universal Hot Plug	
	300-GB 10,000 rpm U320 Universal Hard Drive (1")	350964-B22
	146.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286716-B22
	72.8-GB 10,000 rpm U320 Universal Hard Drive (1")	286714-B22
	72.8-GB 15,000 rpm U320 Universal Hard Drive (1")	286778-B22
	36.4-GB 15,000 rpm U320 Universal Hard Drive (1")	286776-B22
	NOTE: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds. U320 drives require an optional U320 Smart Array Controller to support U320 transfer rates.	
	NOTE: Please see the Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:	
	U320 Hard Drive QS:	
	http://h18000.www1.hp.com/products/quickspecs/11531_na/11531_na.HTML	
Storage Controllers	Battery Backed Write Cache Enabler Option Kit	255514-B21
	Smart Array 5304/256 Controller	283551-B21
	Smart Array 6402/128 Controller	273915-B21
	Smart Array 6404/256 Controller	273914-B21
	Smart Array 641 Controller	291966-B21
	Smart Array 642 Controller	291967-B21
	128-MB Cache Module for Smart Array 5302 Controller	153506-B21
	256-MB Battery-Backed Cache Module	254786-B21
	NOTE: This 256-MB Battery-Backed Cache Module supports the Smart Array 5300 series controllers, HP StorageWorks Modular Smart Array 1000 and the HP StorageWorks Modular Smart Array 500.	
	256MB DDR, Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB DDR, Battery-Backed Cache upgrade kit supports the Smart Array 6400 series controller only.	
	128MB Battery-Backed Cache Enabler	351580-B21
	NOTE: This 128MB BBWC supports the Smart Array 641 Controller and Smart Array 642 Controller.	
	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B21
	Ultra320 Expansion Module for SA-6402	273911-B21
	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21

Options

NOTE: Please see the following Controller or SCSI Adapter QuickSpecs for Technical Specifications such as PCI Bus, PCI Peak Data Transfer Rate, SCSI Protocols supported, SCSI Peak Data Transfer Rate, Channels, SCSI Ports, Drives supported, Cache, RAID support, and additional information:

http://h18000.www1.hp.com/products/quickspecs/10640_na/10640_na.HTML
(Smart Array 5300 Series)

http://h18000.www1.hp.com/products/quickspecs/11746_na/11746_na.HTML
(Smart Array 6400 Series)

http://h18000.www1.hp.com/products/quickspecs/12067_na/12067_na.HTML
(Smart Array 641)

http://h18000.www1.hp.com/products/quickspecs/12069_na/12069_na.HTML
(Smart Array 642)

http://h18000.www1.hp.com/products/quickspecs/10429_na/10429_na.HTML
(SCSI Adapter)

http://h18000.www1.hp.com/products/quickspecs/11555_na/11555_na.HTML
(U320 Adapter)

Communications	NC6170 Dual Port PCI-X 1000SX Gigabit Server Adapter	313879-B21
	NC6770 PCI-X Gigabit Server Adapter, 1000-SX	244949-B21
	NC7170 Dual Port PCI-X 1000T Gigabit Server Adapter	313881-B21
	NC1020 Cu Gigabit Server Adapter 32 PCI Single Port	353377-B21
	NC7771 PCI-X 10/100/1000-T Server Adapter	290563-B21
NOTE: Any NIC on the option list can be used for redundancy with the embedded NC7781 Network Controller		

DC Power Supply	DC Power Supply for the DL380 (48V)	268290-B21
NOTE: The ProLiant DL380 G3 ships standard with a 100-240 volt auto-switching AC power supply. Each 48-volt DC option kit (PN 268290-B21) contains one power supply. Therefore, to convert to redundant DC power supplies, two must be purchased.		

Redundant Options	Hot Plug AC Redundant Power Supply Module (NEMA cord)	313054-001
	Hot Plug AC Redundant Power Supply Module (IEC cord)	313054-B21

Management Options	Remote Insight Lights-Out Edition II	227251-001
NOTE: USB Virtual Media Not Supported.		
NOTE: The RILOE II USB Virtual Media feature is not supported on the 2.40 and 2.80 GHz versions of the ProLiant DL380 G3 and ProLiant ML370 G3 servers. The RILOE II cannot be used to connect the local client floppy and CD devices as USB virtual devices to the remote server. All other RILOE II features are supported on these servers. The non-USB based RILOE II Virtual Floppy feature is still supported, allowing you to perform functions such as remote ROM upgrades and server deployment. The Virtual Floppy feature requires loading the floppy image in to the RILOE II. For more details, please refer to the user guide of the RILOE II.		

Options

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

Tape Drives

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

External, Rack-Mount, and Array Module Ultrium Tape Drives

HP StorageWorks Ultrium 215 Tape Drive, External (Carbon)	Q1545A
HP StorageWorks Ultrium 215 rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350544-B21
HP StorageWorks Ultrium 215 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7492B
HP StorageWorks Ultrium 230 Tape Drive, External (Carbon)	Q1517A
HP StorageWorks Ultrium 230, Rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350545-B21
HP StorageWorks Ultrium 230 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7470B
HP StorageWorks Ultrium 460 Tape Drive, External (Carbon)	Q1520A
HP StorageWorks Ultrium 460, Rack-mount (Carbon) - Single drive installed in a 3U rack-mount kit	350546-B21
HP StorageWorks Ultrium 460 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	Q1512B
HP StorageWorks Ultrium 960 Tape Drive, External (Carbonite)	Q1539A
HP StorageWorks Ultrium 960 Rack-mount (Carbonite) - Single drive installed in a 3U rack-mount kit	Q1595A

NOTE: Please see the HP StorageWorks Ultrium Tape Drive QuickSpecs for additional options such as controllers, media, and other related items:
http://h18006.www1.hp.com/products/quickspecs/11739_na/11739_na.html
http://h18006.www1.hp.com/products/quickspecs/12128_na/12128_na.html
 For an up-to-date listing of the latest O/S and software support details for HP Ultrium tape drives, please visit: <http://www.hp.com/go/connect>.

External, Hot-Plug, and Array Module DAT Drives

HP StorageWorks DAT 72 Tape Drive, External (Carbon)	Q1523A
HP StorageWorks DAT 72 Tape Drive, Internal Hot-Plug (Carbon)	Q1529A
HP StorageWorks DAT 72 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	Q1524B
HP StorageWorks DAT 40 Tape Drive, External (Carbon)	C5687C
HP StorageWorks DAT 40 Tape Drive, Internal Hot-Plug (Carbon)	Q1546A
HP StorageWorks DAT 40 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7497B
HP StorageWorks DAT 24e Tape Drive, External (Flint)	C1556D
HP StorageWorks DAT 24 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7498A

Options

NOTE: Please see the DAT Tape Drive QuickSpecs for controllers, media, and other options:

http://h18000.www1.hp.com/products/quickspecs/11883_na/11883_na.HTML

For an up-to-date listing of the latest O/S and software support details for HP DAT drives, please visit: <http://www.hp.com/go/connect>.

External DLT VS Tape Drives

HP StorageWorks DLT VS80 Tape Drive, External (Carbon)

337699-B22

NOTE: Please see the DLT VS80 Tape Drive QuickSpecs for additional options such as host bus adapters, controllers, media, and other options:

http://h18006.www1.hp.com/products/quickspecs/11403_na/11403_na.HTM

For an up-to-date listing of the latest O/S and software support details for the DLT VS80, please visit: <http://www.hp.com/go/connect>.

External SDLT Tape Drives

HP StorageWorks SDLT 320 Tape Drive, External (Carbon)

257319-001

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

http://h18006.www1.hp.com/products/quickspecs/11840_na/11840_na.HTML

For an up-to-date listing of the latest O/S and software support details for HP SDLT tape drives, please visit: <http://www.hp.com/go/connect>.

Rack-Mount Tape Drive Enclosures

HP StorageWorks 1U Rack-Mount Kit

A7445A

NOTE: The 1U Rack-mount Kit can support up to 2 half-height tape drives and compatible with multiple Single-Ended and LVD SCSI tape drives including DAT 24, DAT40, DAT72, DLT VS 80, and Ultrium 215 tape drives.

HP StorageWorks 3U Rack-Mount Kit

274338-B21

NOTE: The 3U Rack-Mount Kit can support up to 2 full-height or 4 half-height tape drives and compatible with multiple Single-Ended and LVD SCSI tape drives including DAT, DLT VS80, SDLT 320, Ultrium 215, Ultrium 230, and Ultrium 460 Tape Drives.

HP StorageWorks 5U Rack-Mount Kit

274339-B21

NOTE: The 5U Rack-Mount Kit can support up to 4 full-height tape drives and is compatible with SDLT 320, Ultrium 230, and Ultrium 460 tape drives.

NOTE: Please see the Rack-Mount Tape Drive Kits QuickSpecs for additional information regarding these kits:

http://h18000.www1.hp.com/products/quickspecs/10854_na/10854_na.HTML

HP StorageWorks Tape Array 5300

C7508A

NOTE: The Tape Array 5300 is a 3U enclosure that supports up to 2 full-height or 4 half-height hot-swap array modules, including DAT and Ultrium tape drives. Cables and terminators are not included and must be ordered separately.

NOTE: Please see the Tape Array 5300 QuickSpecs for additional information regarding this product.

http://h18000.www1.hp.com/products/quickspecs/11878_na/11878_na.HTML

Accessories for 3U & 5U Rack-mount Tape Drive Kits

LVD Cable Kit, VHDCI/HD68

168048-B21

NOTE: For use with the 3U Rack-mount Kit and 5U Rack-mount Kit only.

LVD Cable Kit, HD68/HD68

242381-B21

NOTE: For use with the 3U Rack-mount Kit and 5U Rack-mount Kit only.

Accessories for 3U & 5U Rack-mount Tape Drive Kits

PSU/Fan Upgrade Kit - Redundant hot-swap power supply unit and fan for Tape Array 5300.

Options

68-pin HD multi-mode terminator	C2364A
1.0m 68-pin VHDCI to 68-pin HD cable	C2361B
2.5m 68-pin VHDCI to 68-pin HD cable	C2362B
5.0m 68-pin VHDCI to 68-pin HD cable	C2365A
10.0m 68-pin VHDCI to 68-pin HD cable	C2363B
0.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2978B
1.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2979B
0.9m 68-pin HDI to 68-pin HD cable LVD/SE	C2911C
2.5m 68-pin HDI to 68-pin HD cable LVD/SE	C2924C
NOTE: For use with Tape Array 5300 only.	

Tape Autoloaders

DAT Autoloader

HP StorageWorks DAT 72x6 External Autoloader	Q1567A
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NOTE: Please see the DAT Tape Autoloader QuickSpecs for additional options such as host bus adapters, controllers and media:

http://h18000.www1.hp.com/products/quickspecs/11985_na/11985_na.HTML

HP StorageWorks DAT 40x6 Tape Autoloader, External (Flint)	C5717C
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NOTE: Please see the DAT Tape Autoloader QuickSpecs for additional options such as host bus adapters, controllers and media:

http://h18000.www1.hp.com/products/quickspecs/11985_na/11985_na.HTML

HP StorageWorks 1/8 Tape Autoloader

1/8 Ultrium 460 Tape Autoloader, Tabletop	AA927A
1/8 SDLT 320 Tape Autoloader, Tabletop	AA926A
1/8 Ultrium 230 Tape Autoloader, Tabletop	C9572CB
1/8 DLT VS80 Tape Autoloader, Tabletop	C9264CB
1/8 Tape Autoloader Rackmount Kit	C9268R

NOTE: Required to install the 1/8 tape autoloader in a standard 19-inch rack

NOTE: Please reference the 1/8 Tape Autoloader QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>

HP StorageWorks SSL1016 Tape Autoloader

SSL1016 Ultrium 460 Tape Autoloader	330821-B21
SSL1016 SDLT 320 Tape Autoloader	330816-B21

NOTE: Please reference the SSL1016 Tape Autoloader QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

Tape Libraries

HP StorageWorks MSL6000 Tape Library

MSL6030, 1 drive, 30 slots, Ultrium 460, RM	330731-B22
MSL6030, 2 drive, 30 slots, Ultrium 460, RM	330731-B23
MSL6030, 1 drive, 30 slots, Ultrium 460, RM with embedded FC router	330731-B24

Options

MSL6030, 2 drive, 30 slots, Ultrium 460, RM with embedded FC router	330731-B25
MSL6030, 1 drive, 30 slots, Ultrium 460, TT	330788-B21
MSL6030, 2 drive, 30 slots, Ultrium 460, TT	330788-B22
MSL6060, 2 drive, 60 slot, Ultrium 460, RM	331196-B21
MSL6060, 2 drive, 60 slot, Ultrium 460, RM with embedded FC router	331196-B22
MSL6060, 2 drive, 60 slot, Ultrium 460, TT	331195-B21

NOTE: Please reference the MSL6000 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks MSL5026S2 Tape Library

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

NOTE: Please reference the MSL5026S2 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks MSL5052S2 Tape Library

MSL5052S2, 2 drive, 52 slots, SDLT 320, RM	293474-B21
MSL5052S2, 2 drive, 52 slots, SDLT 320, RM with embedded FC router	293474-B24
MSL5052S2, 2 drive, 52 slots, SDLT 320, TT	293476-B21

NOTE: Please reference the MSL5052S2 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks MSL5030 Tape Library

MSL5030, 1 drive, 30 slots, Ultrium 230, RM	301897-B22
MSL5030, 2 drive, 30 slots, Ultrium 230, RM	301897-B23
MSL5030, 1 drive, 30 slots, Ultrium 230, RM with embedded FC router	301897-B24
MSL5030, 2 drive, 30 slots, Ultrium 230, RM with embedded FC router	301897-B25
MSL5030, 1 drive, 30 slots, Ultrium 230, TT	301898-B21
MSL5030, 2 drive, 30 slots, Ultrium 230, TT	301898-B22

NOTE: Please reference the MSL5030 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks MSL5060 Tape Library

Options

MSL5060, 2 drive, 60 slots, Ultrium 230, RM	301899-B22
MSL5060, 2 drive, 60 slots, Ultrium 230, RM with embedded FC router	301899-B23
MSL5060, 2 drive, 60 slots, Ultrium 230, TT	301900-B21

NOTE: Please reference the MSL5060 Tape Library QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks ESL E-Series Tape Libraries

ESL Extended 712e Tape Library, 0 drive, 712 LTO slots	AA934A
ESL Extended 630e Tape Library, 0 drive, 630 SDLT slots	AA935A
ESL E Ultrium 460 drive kit	AA937A
ESL E SDLT 320 drive kit	AA936A

NOTE: Please reference the ESL E-Series Tape Libraries QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

HP StorageWorks ESL9000 Series Tape Libraries

ESL9595 Extended Tape Library, 0 drive, 400 slots (card cage, Interface Mgr card, Command View license)	343378-B21
ESL9322 Extended Tape Library, 0 drive, 222 slots (card cage, Interface Mgr card, Command View license)	343377-B21
ESL9000 Ultrium 460 drive kit	330834-B21
ESL9000 Ultrium 230 drive kit	301930-B21
ESL9000 SDLT 320 drive kit	293414-B21

NOTE: Please reference the ESL9000 Series Tape Libraries QuickSpecs at <http://www.hp.com/go/automation> for additional information needed to create a complete solution; reference current compatibility information at <http://www.hp.com/go/ebs>.

Options

Magneto-Optical Jukeboxes

HP StorageWorks 9.1 GB Mid-range Optical Jukeboxes

300mx, 2 drive, 32 slot jukebox	C1150M
600mx, 4 drive, 64 slot jukebox	C1160M
700mx, 2 drive, 76 slot jukebox	C1170M

NOTE: Please reference the Magneto-Optical Jukebox data sheets at <http://www.hp.com/go/optical> for additional information needed to create a complete solution.

HP StorageWorks 9.1 GB High-end Optical Jukeboxes

1200mx, 4 drive, up to 128 slots	C1104M
1200mx, 6 drive, up to 128 slots	C1105M
2200mx, 4 drive, up to 238 slots	C1111M
2200mx, 6 drive, up to 238 slots	C1107M
2200mx, 10 drive, up to 238 slots	C1110M

NOTE: Please reference the Magneto-Optical Jukebox data sheets at <http://www.hp.com/go/optical> for additional information needed to create a complete solution.

Ultra Density Optical Jukeboxes

1000ux, 2 drive, 32 slot jukebox	AA965A
1900ux, 4 drive, 64 slot jukebox	AA966A
1900ux, 4 mixed drive, 64 slot jukebox	AA968A
2300ux, 2 drive, 76 slot jukebox	AA967A
3800ux, 4 drive, 128 slot jukebox	AA969A
3800ux, 6 drive, 128 slot jukebox	AA970A
7100ux, 4 drive, 238 slot jukebox	AA973A
7100ux, 10 drive, 238 slot jukebox	AA972A
7100ux, 6 mixed drive, 238 slot jukebox	AA974A

HP StorageWorks Modular Smart Array 500

HP StorageWorks Modular Smart Array 500 Generation 2

335880-B21

NOTE: Please see the Modular Smart Array 500 Generation 2 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: http://h18000.www1.hp.com/products/quickspecs/11956_na/11956_na.HTML

Options

Cluster Options

ProLiant Cluster Starter Kit	364023-B21
NOTE: For additional information regarding the ProLiant Cluster Starter Kit please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11935_na/11935_na.html	
ProLiant Cluster Kit with OpenView Storage Mirroring	364025-B21
NOTE: For additional information regarding the ProLiant Cluster Kit with OpenView Storage Mirroring please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11934_na/11934_na.html	
ProLiant Cluster HA/F200 for the Entry Level SAN	364026-B21
NOTE: For additional information regarding the ProLiant Cluster for Entry Level SAN please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11932_na/11932_na.html	
ProLiant Cluster HA/F500 for the Enterprise SAN	364024-B21
NOTE: For additional information regarding the ProLiant Cluster HA/F500 for Enterprise SAN please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11933_na/11933_na.html	
HP Serviceguard for Linux ProLiant Cluster (2 node license cluster kit) A.11.15	305199-B24
NOTE: Kit includes 2 licenses, documentation and an Ethernet crossover cable.	
HP Serviceguard for Linux (single license version for ordering flexibility and to ease ordering for larger cluster) A.11.15	307754-B24
NOTE: Kit includes single license version and documentation.	
NOTE: For additional information regarding the HP Serviceguard for Linux License, please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11518_na/11518_na.html	
PDC/O5000-EVA Windows RAC Cluster Kit	252478-B25
ProLiant Parallel Database Cluster for Linux - Oracle9i Real Application Cluster	308225-B22
NOTE: For additional information regarding the ProLiant Parallel Database Cluster for Linux, please see the following QuickSpecs at: http://www5.compaq.com/products/quickspecs/11688_na/11688_na.html	
HP Parallel Database Cluster Model PDC/O2000-MSA1000 for Oracle Real Application Cluster on Windows	279406-B24
NOTE: For additional information regarding the HP Parallel Database Cluster Model PDC/O2000-MSA1000, please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/10889_na/10889_na.html	

Options

External Storage - Rack	HP StorageWorks Modular Smart Array 30 SB	302969-B21
	NOTE: Rack-mountable 14 drive enclosure with single bus, redundant power supplies	
	HP StorageWorks Modular Smart Array 30 DB	302970-B21
	NOTE: Rack-mountable 14 drive enclosure with dual bus, redundant power supplies	
	NOTE: The Modular Smart Array Enclosure 30 Family supports the Wide Ultra3, Ultra320 1" Hot Plug Hard Drives.	
	StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - WW	359079-B21
	StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - Japan	359079-291
	StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - APD	359079-371
	StorageWorks Modular Smart Array 30 OpenView Storage Mirroring HA Kit - EURO	359079-421
HP StorageWorks Modular Smart Array 1500 cs	Redundant Power Supply 499W	338296-B21
	Ultra320 Single Bus I/O Module for MSA30	287484-B21
	Ultra320 Dual Bus I/O Module for MSA30	287483-B21
	Modular Smart Array 1500 Controller Shelf	AA986A
	NOTE: Please see the StorageWorks Modular SAN Array 1500 QuickSpecs for additional options and configuration information at: http://www.hp.com/go/MSA1500cs	
HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000	201723-B22
	NOTE: Please see the StorageWorks Modular SAN Array 1000 QuickSpecs for additional options and configuration information at: http://www5.compaq.com/products/quickspecs/11033_na/11033_na.HTML	
Network Storage Router	M2402 2FCX 4SCSI LVD Network Storage Router	262653-B21
	M2402 2FCX 4SCSI HVD Network Storage Router	262654-B21
	M2402 4 channel LVD SCSI Module	262659-B21
	M2402 4 channel HVD SCSI Module	262660-B21
	M2402 2 channel FC Module	262661-B21
StorageWorks Options	StorageWorks Director 2/64	286809-B21
	NOTE: Please see the StorageWorks Director 2/64 QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/11003_na/11003_na.HTML	
	StorageWorks SAN Switch 2/8-EL	322120-B21
	StorageWorks SAN Switch 2/8-EL Upgrade	325888-B21
	StorageWorks SAN Switch 2/16	322118-B21
UPS and PDU Power Cord Matrix	Please see the UPS and PDU cable matrix that lists cable descriptions, requirements, and specifications for UPS and PDU units: ftp://ftp.compaq.com/pub/products/servers/ProLiantstorage/power-protection/powercordmatrix.pdf	

Options

Uninterruptible Power Systems – Rack	HP UPS R1500 XR (1440VA, 1340 Watt), Low Voltage	204404-001
	HP UPS R3000 XR (2880VA, 2700 Watt), Low Voltage	192186-001
	HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage	192186-002
	HP UPS R5500 XR, (5000VA, 4500 Watt), High Voltage	326529-D71
	HP UPS R12000 XR N+x (200-240V) (hardwired)	207552-B22
NOTE: The UPS R12000 XR has a hardwired input and output connection.		
HP Power Distribution Unit with Power Monitoring	HP Power Distribution Unit with Power Monitoring Model S2324 - dual input, 3 phase, 24A	370959-D71
	HP Power Distribution Unit with Power Monitoring Model S1324 - single input, 3 phase, 24A	370960-D71
	HP Power Distribution Unit with Power Monitoring Model S2140 - dual input, 1 phase, 40A	370961-D71
	HP Power Distribution Unit with Power Monitoring Model S1140 - single input, 1 phase, 40A	370962-D71
Modular Power Distribution Units - 1U0U (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) NOTE: This mPDU (252663-D71) may also be used to connect the low volt model of the UPS R3000 XR.	252663-D71
	HP Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) NOTE: Please see the following Modular Power Distribution Unit (Zero-U/1U Modular PDUs) QuickSpecs for additional options including shorter jumper cables and country specific power cords: http://h18000.www1.hp.com/products/quickspecs/11041_na/11041_na.HTML	252663-D72
USB Options	USB Easy Access Keyboard (Carbonite/Silver)	DC168B#ABA
	USB Optical Scroll Mouse (Carbonite)	DD441B
Customer Builder	Please see the Enterprise Configurator for configuration assistance at: http://www.hp.com/products/configurator .	
Third Party Rack Kit	Rack Adapter Kit NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.	332815-B21

Options

HP Rack 5000 Series (Graphite Metallic)	HP 5642 Rack-Unassembled	358254-B21
Rack Options for Rack 5000 Series	Stabilizer Kit for 5642 rack (Graphite Carbon) NOTE: The stabilizing kit is used to prevent rack from tipping over.	374493-B21
	Baying Kit for 5642 rack (Graphite Carbon) NOTE: The baying kit is used to join two or more HP 5642 racks.	374499-B21
HP Rack 10000 Series (Graphite Metallic)	10642 (42U) Infrastructure Rack (Low Voltage)	379006-001
	10642 (42U) Infrastructure Rack (High Voltage)	379005-001
	HP S10614 (14U) Rack Cabinet - Shock Pallet	292302-B22
	HP 10842 (42U, 800mm wide) – Pallet	257415-B21
	HP 10842 (42U, 800mm wide) – Shock Pallet	257415-B22
	HP 10647 (47U) – Pallet	245160-B21
	HP 10647 (47U) – Crated	245160-B23
	HP 10642 (42U) – Pallet	245161-B21
	HP 10642 (42U) – Shock Pallet	245161-B22
	HP 10642 (42U) – Crated	245161-B23
	HP 10636 (36U) – Pallet	245162-B21
	HP 10636 (36U) – Shock Pallet	245162-B22
	HP 10636 (36U) – Crated	245162-B23
	HP 10622 (22U) – Pallet	245163-B21
	HP 10622 (22U) – Shock Pallet	245163-B22
	HP 10622 (22U) – Crated	245163-B23
	NOTE: -B21 (pallet) used to ship empty racks shipped on a truck	
	NOTE: -B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)	
	NOTE: -B23 (crated) used for air shipments of empty racks	
	NOTE: It is mandatory to use a shock pallet in order to ship racks with equipment installed.	
	NOTE: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color: http://h18000.www1.hp.com/products/quickspecs/10995_na/10995_na.HTML	
	NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html .	

Options

Rack Options for HP Rack 10000 Series

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

HP Rack Light Kit (Neon)	361589-B21
HP Rack Plinth Kit (Carbon)	251960-B21
42U Side Panel – Graphite Metallic	246099-B21
36U Side Panel – Graphite Metallic	246102-B21
47U Side Panel – Graphite Metallic	255486-B21
TFT5600 Rack Keyboard Monitor	221546-001
1U Rack Keyboard & Drawer (Carbon)	257054-001

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

HP KVM Switch Options

Server Console Switch (KVM), 0 x 1 x 8 port	336044-B21
Server Console Switch (KVM), 0 x 2 x 16 port	336045-B21
IP Console Switch Box (KVM/IP), 1 x 1 x 16	262585-B21
IP Console Switch Box (KVM/IP), 3 x 1 x 16	262586-B21
HP 1x4 USB/PS2 KVM Switch, TT	371301-D71
PS/2 Interface Adapter, 8 pack	262587-B21
PS/2 Interface Adapter, 1 pack	262588-B21
CAT5 KVM Expansion Module	262589-B21
Serial Interface adapter - 1 Pack with power supply	373035-B21
CAT5e Cable 3', 4 pack	263474-B21
CAT5e Cable 6', 8 pack	263474-B22
CAT5e Cable 12', 8 pack	263474-B23
CAT5e Cable 20', 4 pack	263474-B24
CAT5e Cable 40', 1 pack	263474-B25

NOTE: For additional information regarding HP KVM Switches and options, please see the following URL:

<http://h18004.www1.hp.com/products/servers/proliantstorage/rack-options/list.html#console>

Rack Options for Third Party Cabinet Racks

Round hole rack cabinet rail kit	293052-B21
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NOTE: Support for racks with round mounting holes (include HP Rack System /E and HP Systems) with an adjustment range of 24"- 36".

Options

HP Factory Express

Factory Installation, Racking, and Customization Services

Factory Express Server Configuration Level 1 293355-888

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

Factory Express Server Configuration Level 2 266326-888

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Options

Service and Support

Offerings (HP Care Pack Services)

Hardware Services 4-Hour On-site Service

4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years U4544A

4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic U4544E

4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years U4545A

4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic U4545E

Installation & Start-up Services

Hardware Installation U4554A

Hardware Installation, Electronic U4554E

Installation & Start-Up of a ProLiant server and Microsoft or Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. U4555A

Installation & Start-Up of a ProLiant server and Microsoft or Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays, Electronic U4555E

Support Plus

Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. U4556A

Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays, Electronic U4556E

Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays U4558A

Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays, Electronic U4558E

Support Plus 24

Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. U4557A

Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic U4557E

Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. U4559A

Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays, Electronic U4559E

HP Care Pack Priority Services for ProLiant Servers - Priority Silver

NOTE: For more information, customer/resellers can contact

<http://www.hp.com/services/carepack>.

Memory

HP ProLiant Model DL380 Generation 3 (G3)

Standard Memory

1 GB PC2100 Registered DDR SDRAM DIMM Memory running at 200MHz or 266MHz comes installed (2 x 512-MB SDRAM)

NOTE: Early models (2.4GHz and 2.8GHz 400MHz Front Side Bus) shipped standard with 512MB of memory, these models are no longer available.

Standard Memory Plus Optional Memory

Up to 9,216-MB memory is available with the optional installation of PC2100 Registered DDR SDRAM DIMM Memory Option Kit

NOTE: 2.4GHz models and some 2.8GHz models support a maximum of 6GB of Memory. See model listings.

Standard Memory Replaced with Optional Memory

Up to 12,288-MB of memory is available with the removal of the standard 512-MB of memory and the optional installation of PC2100 Registered DDR SDRAM DIMM Memory Option Kit

NOTE: 2.4GHz models and some 2.8GHz models support a maximum of 6GB of Memory. See model listings.

NOTE: Chart does not represent all possible configurations.

Memory		Slot					
		1	2	3	4	5	6
Standard	1024MB	512MB	512MB	Empty	Empty	Empty	Empty
Optional	9,216MB	512MB	512MB	2048MB	2048MB	2048MB	2048MB
Maximum	12,288MB	2048MB	2048MB	2048MB	2048MB	2048MB	2048MB

NOTE: In the online spare configuration, the ROM automatically configures the last populated back as the spare memory. If only banks A and B are populated, bank B is the spare bank. If banks A, B, and C are populated, bank C is the spare bank, Online spare memory is configured through RBSU.

Following are memory options available from HP:

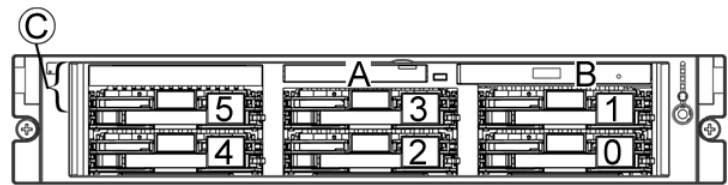
- 4096MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2x 2048 MB)
 - 2048-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2x1024MB)
 - 1024-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit 2 x 512MB)
 - 512-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 256MB)
- 300682-B21

300680-B21

300679-B21

300678-B21
- NOTE:** The 4096MB of Advanced ECC PC2100 DDR Memory kit (300682-B21) can only be used in 2.8GHz/533/1MB and 3.06GHz and faster models.

Storage



- 0 - 5 Six 6" Wide Ultra3 SCSI hot plug hard drive bays
- A 1.44-MB Diskette Drive
- B 24x IDE CD-ROM (Universal Media Bay)
- C Six 1" Wide Ultra3/Ultra320 SCSI hot plug hard drives or for five hot plug hard drives and one DAT 40 or DAT 72 hot plug tape drive

Drive Support

Removable Media

	Quantity Supported	Position Supported	Controller
1.44-MB Diskette Drive	1	A	Integrated
IDE CD-ROM Drive	1	B	Integrated IDE
Slimline DVD-ROM (8x24x) Option Kit (Servers)	1	B	Integrated IDE

Hard Drives

Ultra320 Hot Pluggable Drives

	Quantity Supported	Position Supported	Controller
1-inch	Up to 6	0-5	Smart Array 5i Controller (integrated on system board)
300-GB 10,000 rpm			Smart Array 5304/256 Controller
146.8-GB 10,000 rpm			Smart Array 6402/128 Controller
72.8-GB 10,000 rpm			Smart Array 6404/256 Controller
72.8-GB 15,000 rpm			Smart Array 641 Controller
36.4-GB 15,000 rpm			Smart Array 642 Controller

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

Storage

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 30 Family	Up to 13	External	Smart Array 5304/256 Controller Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Modular Smart Array 500 G2 System	1	External	Please see the Modular Smart Array 500 G2 QuickSpecs for the latest list of supported HBAs: http://www.hp.com/go/msa500
Modular Smart Array 1000	Please see the Modular Smart Array 1000 QuickSpecs below to determine configuration requirements	External	Please see the Modular Smart Array 1000 QuickSpecs (URL below) for the latest list of supported HBAs
Modular Smart Array 1500 cs	Please see the Modular Smart Array 1500 cs QuickSpecs below to determine configuration requirements	External	Please see the Modular Smart Array 1500 cs QuickSpecs (URL below) for the latest list of supported HBAs
Modular Smart Array 1000: http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML			
Modular Smart Array 1500: http://www.hp.com/go/MSA1500cs			

Maximum Storage Capacity – (Enclosure SCSI Attached)

Internal	1.80 TB (6 x 300 GB Ultra320 1")
External	54.60 TB (13 x (14 x 300 GB Ultra320 1"))
Total	58.20 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://h18000.www1.hp.com/products/quickspecs/North_America/10233.html

NOTE: For an up-to-date listing of the latest O/S Support details for each of the Tape Autoloaders and Tape Libraries listed below, please see the following: http://h18000.www1.hp.com/products/quickspecs/North_America/10809.html

NOTE: For complete listing of tape drive offerings see <http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html>

	Quantity Supported	Position Supported	Controller
HP StorageWorks DAT 40	Up to 2	0+1, 2+3,	Smart Array 5i Plus Controller (integrated on system board)

Storage

Tape Drive, Internal Hot-Plug HP StorageWorks DAT 72 Tape Drive, Internal Hot-Plug	4+5, or 5+C	Smart Array 5304/256 Controller Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller Smart Array 641 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 215, External Ultrium 230, External Ultrium 460, External	Up to 2 External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DAT 72 Tape Drive, External HP StorageWorks DAT 40 Tape Drive, External HP StorageWorks DAT 24 Tape Drive, External	Up to 2 External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DLT VS80 Tape Drive, External	Up to 2 External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks SDLT 320 Tape Drive, External	Up to 2 External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DAT 72x6 Tape Autoloader, External HP StorageWorks DAT 40x6 Tape Autoloader, External 1/8 Ultrium 460 Tape Autoloader 1/8 SDLT 320 Tape Autoloader 1/8 Ultrium 230 Tape Autoloader 1/8 DLT VS80 Tape Autoloader SSL1016 Ultrium 460 Tape Autoloader SSL1016 SDLT 320 Tape Autoloader SSL1016 DLT1 Tape Autoloader	1 autoloader per SCSI channel External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Storage

MSL6000 (Ultrium 460 - based) Tape Library	Please reference the MSL Tape Library QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter
MSL5026S2 (SDLT 320-based) Tape Library			64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
MSL5052S2 (SDLT 320-based) Tape Library			
MSL5030 (Ultrium 230 - based) Tape Library			
MSL5060 (Ultrium 230 - based) Tape Library			
ESL712e	Please reference the ESL e-series & ESL9000 Series Tape Libraries QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter
ESL630e			64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
ESL9322 ETLA			
ESL9595 ETLA			

Power Specifications

Part Number	194989-001
Spare Kit	199382-B21
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	400	400	400	400	400	400
Nominal Input Current (A rms)	5.8	5.0	2.7	2.5	2.4	2.3
Max Rated Input Wattage Rating (Watts)	571	563	548	541	541	541
Max. Rated VA (Volt-Amp)	583	575	559	552	552	552
Efficiency (%)	70	71	73	74	74	74
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)	50	50	50	50	50	50
Maximum Inrush Current duration	20	20	20	20	20	20

System Specifications

ProLiant DL380 Generation 3 Fully Configured

Up to 2 Processors, 6 Memory Slots, 6 Hard Drives, 3 PCI Slots, and 2 Hot Plug Power Supplies

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Fully Loaded System Input Wattage (W)	431	411	406	400	395	390
Fully Loaded System Input Current (A rms)	4.3	3.6	2.0	1.9	1.8	1.7
Fully Loaded System Thermal (BTU-Hr)	1421	1401	1383	1365	1347	1330
Fully Loaded System VA (Volt-Amp)	425	419	414	408	403	398
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)	100	100	100	100	100	100
Power cord requirements	Nema 5-15P to IEC320-C13			Option no./Spare no.: See Chart below		
	IEC320-C13 to IEC320-C14			Option no./Spare no.: 142259-001/142258-B21		

NOTES:

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

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: DL380 G3
- Click on: "Power Calculator" link. (You may need to scroll down to see it.)

Power Specifications

Power Cords (Nema 5-15P to IEC320-C13)	
Standard Power Cord Part Number/Option Power Cord Part Number	163719-002/227099-001
Power Cords (IEC320-C13 to IEC320-C14)	
Standard Power Cord Part Number/Option Power Cord Part Number	142263-003/142257-003

Technical Specifications

System Unit	Dimensions (HxWxD)	3.38 x 17.50 x 25.75 in (8.59 x 44.45 x 65.41 cm)
	Weight	Maximum: 60 lb (27.22 kg) No drives: 47.18 lb (20.41 kg)
Input Requirements (per power supply)	Range Line Voltage	90 to 132 VAC/180 to 265 VAC
	Nominal Line Voltage	100 to 120 VAC/220 to 240 VAC
	Rated Input Current	6A (110V) to 3A (220V)
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	600W
BTU Rating		1,475 BTU/HR
SCSI Connectors		One external VHDCI connector
Power Supply	Rated Steady-State Power	400W
Output Power (per power supply)	Maximum Peak Power	400W
Temperature Range	Operating	50° to 95° F (10° to 35° C)
	Shipping	-40° to 158° F (-40° to 70° C)
Relative Humidity (non-condensing)	Operating	10% to 90%
	Shipping	5% to 95%
Maximum Wet Bulb Temperature		82.4° F (28° C)
Acoustic Noise	Idle Minimum (Fixed Disk Drives Spinning)	
	L WAd (BELS)	7.2
	L pAm (dBA)	56
	Operating Minimum (Random Seeks to Fixed Disks)	
	L WAd (BELS)	7.3
	L pAm (dBA)	57
Integrated Smart Array 5i Plus Controller	Data Compatible with all Smart Array Controllers	Yes
	Instant Upgrades to other Smart Array Controllers	Yes
	Consistent Software Manageability Tools	Yes
	PCI-X Bus	64-bit, 100 MHz (integrated on system board)
	PCI-X Peak Data Transfer Rate	800 MB/s
	SCSI Protocols Supported	Ultra3, Ultra2
	SCSI Peak Data Transfer Rate	160 MB/s per channel
		NOTE: For ProLiant servers having TWO internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 320 MB/s total; 160 MB/s per channel and Channels is 2.
	Channels	2
		NOTE: For ProLiant servers having two internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 320 MB/s total; 160 MB/s per channel and Channels is 2.

Technical Specifications

SCSI Ports (external/internal)	0/2 NOTE: For ProLiant servers having two internal drive bays on separate SCSI ports: SCSI Peak Data Transfer Rate is 320 MB/s total; 160 MB/s per channel and Channels is 2.
Drives Supported (maximum)	Maximum = total number of drives NOTE: Maximum is the total number of internal drives on each specific ProLiant server.
Cache	64 MB Read and/or Write Cache
Battery-Backed Write Cache	Yes, with installation of Battery-Backed Write Cache Enabler, up to 64MB
RAID Support	0, 1, 1+0, 5
Logical Drives (maximum)	Maximum = total number of drives
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

NC7781 PCI-X Gigabit
NIC (embedded)
10/100/1000 WOL
(Wake On LAN)

Network Interface	10Base-T/100Base-TX/1000 BaseTX
Compatibility	IEEE 802.3/802.3u compliant
Data Transfer Method	64-bit bus-master PCI-X
Network Transfer Rate	10Base-T (Half-Duplex), 10 Mb/s 10Base-T (Full-Duplex) 20 Mb/s 100Base-TX (Half-Duplex) 100 Mb/s 100Base-TX (Full-Duplex) 200 Mb/s 1000Base-TX (Half-Duplex) 1000 Mb/s 1000Base-TX (Full-Duplex) 2000 Mb/s
Connector	RJ-45
Cable Support	10Base-T Categories 3, 4 or 5 UTP; up to 328 ft (100 m) 100Base-TX Category 5 UTP; up to 328 ft (100 m) 1000BaseTX Category 5 UTP; up to 328 ft (100 m)

Technical Specifications

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