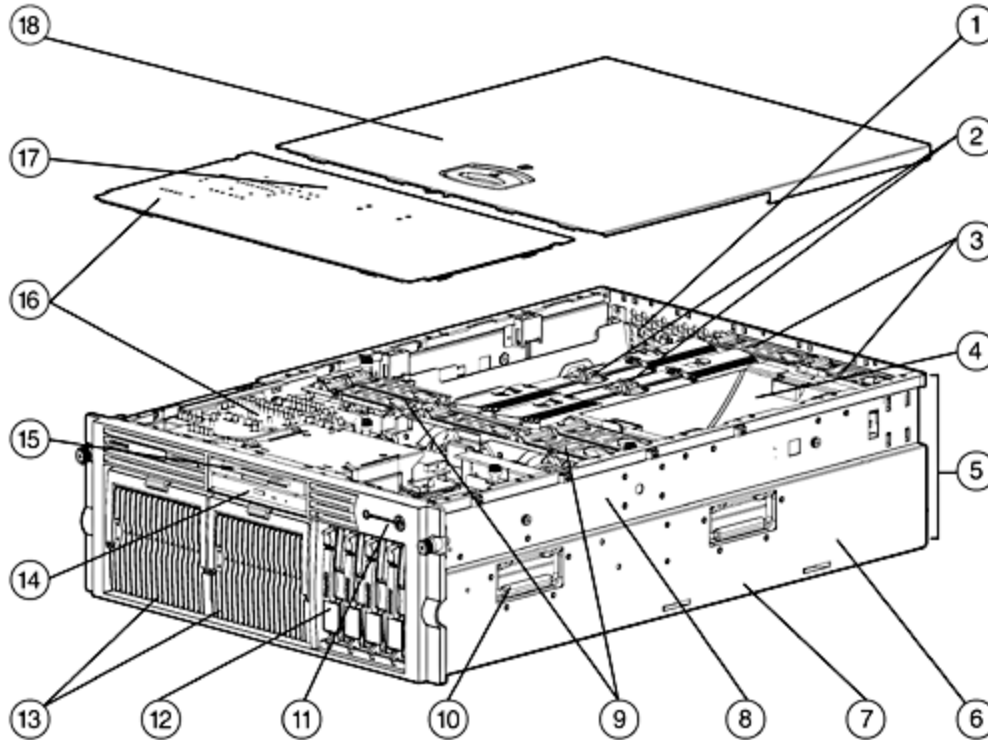


Overview



1. Six 64-bit/100-MHz PCI-X I/O Slots (Four Hot Plug, two Non-Hot Plug)
2. Dual Memory Expansion Boards (8 DIMM slots each - one board standard on all models, 2nd board is optional)
3. Hot Plug Redundant Fans
4. Processor Air Baffle
5. 4U (7" Height) Rack Form Factor
6. Up to 4 Intel Processors MP
7. Integrated Smart Array 5i Plus Controller (Battery Backed Write Cache standard on all 2P models, optional on 1P model)
8. Tool-less "Snap In" rail solution
9. Additional Hot Plug Redundant Fans
10. Server Lifting Handle
11. Front Panel LED Display (internal and external health, Unit ID light) and Power Button
12. Wide Ultra3/U320 Duplex Drive Cage (can be Simplex configured)
13. Dual 800-Watt Hot Plug Redundant Power Supplies (low line or high line), standard on all 2P models (one ships standard on 1P model, requires optional RPS for redundancy)
14. Slim Line Drives: 24X (slim line) CD-ROM IDE Drive
15. Slim Line Drives: Ejectable 1.44 MB (slim line) Diskette Drive
16. QuickFind Diagnostic Display (viewable through Front Access Panel)
17. Removable Front Access Panel
18. Removable Rear Access Panel

What's New

- Intel® Xeon Processors MP at 2.2 GHz/2MB, 2.7 GHz/2MB or 3.0 GHz/4MB
- Integrated Dual Port NC7170 PCI-X Gigabit Server Adapter in a slot

Overview

At A Glance

- Delivering maximum performance and unprecedented availability in a flexible, rack optimized form factor
- Intel Xeon Processors MP
- ServerWorks Grand Champion-HE chipset
- 4x1 interleaved memory, 200MHz DDR SDRAM Memory (PC1600 Registered SDRAM with Advanced ECC functionality)
- 2048MB (2P Models) or 1024MB (1P Model) standard memory, expandable to 32 GB
- HP Advanced Memory Protection (Online Spare, Single Board Mirrored Memory, Hot Plug Mirrored Memory, Hot Add Memory)
- Six, full length 64-bit/100 MHz PCI-X slots, 4 Hot Pluggable
- Integrated Lights-Out Standard Management (iLO) on system board
- Integrated NC7770 PCI-X Gigabit Server Adapter or Integrated HP NC7170 Dual-Port PCI-X 1000T Gigabit Server Adapter in a slot (Depending on model)
- Integrated Smart Array 5i Plus Controller (Dual Channel, Ultra3) with 64-MB total memory on 5i Plus Memory Module
- Battery-Backed Write Cache Enabler module on all 2P models (optional on 1P model)
- Internal Hot Plug Drive Storage of up to 1.20 TB (4 x 300 GB 1" Ultra320 hard drives)
- Redundant Cooling Zones for major subsystems (Memory, I/O, CPUs) assure 7x24 cooling
- Toolless and virtually cable-less internal design
- Innovative diagnostic lighting (QuickFind Diagnostic Display) for rapid response to service events
- Rapid Deployment racking solution (rack rails and cable management)
- Protected by HP Services, including a three-year, Next Business Day on-site, limited, Global warranty and extended Pre-Failure Warranty that covers processors, memory and disk drives - Certain restrictions and exclusions apply.

Standard Features

Processor

One or more of the following depending on Model

Intel Xeon Processor MP at 3.0 GHz\4MB
 Intel Xeon Processor MP at 2.7 GHz\2MB
 Intel Xeon Processor MP at 2.2 GHz\2MB
 Intel Xeon Processor MP at 2.8 GHz\2MB
 Intel Xeon Processor MP at 2.5 GHz\1MB
 Intel Xeon Processor MP at 2.0 GHz\1MB

Cache Memory

One of the following depending on Model

4-MB Integrated Level 3 Cache
NOTE: 3.0 GHz Models only
 2-MB Integrated Level 3 Cache
NOTE: 2.8 GHz, 2.2 GHz, 2.7 GHz Models only.
 1-MB Integrated Level 3 Cache
NOTE: 2.5 GHz, 2.0 GHz Models only.

Upgradability

Upgradable to quad processing

Chipset

ServerWorks Grand Champion-HE chipset

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

Memory

One of the following depending on Model

Standard	2048 MB 200-MHz Double Data Rate (DDR) SDRAM (PC1600 Registered SDRAM Memory with Advanced ECC functionality) (2P Models)
Maximum	32 GB
Standard	1024 MB 200-MHz Double Data Rate (DDR) SDRAM (PC1600-MHz Registered SDRAM Memory with Advanced ECC functionality) (1P Model)
Maximum	32 GB

NOTE: Advanced ECC Memory Technology protects the data even in the event of an entire SDRAM component failure. Embedded in the chipset design, this feature allows the use of Industry-Standard Registered DIMMs.
NOTE: 32 GB achieved with use of 2nd, optional memory board and 2GB Registered DIMM sticks.

Network Controller

One of the following depending on Model

Integrated NC7170 dual port PCI-X Gigabit Server Adapter in a slot (3.0 GHz, 2.7 GHz, 2.2 GHz models only)
 Integrated NC7770 PCI-X Gigabit Server Adapter in a slot

Expansion Slots	Bus speed	Bus number	Hot Plug	PCI Voltage	Notes
1	64-bit / 100 MHz PCI-X	10	No	3.3 Volt	Support RILOE slot
2	64-bit / 100 MHz PCI-X	10	No	3.3 Volt	NC7770/ NC7170 (3.0 GHz, 2.7 GHz, 2.2 GHz models) installed standard
3	64-bit / 100 MHz PCI-X	6	Yes	3.3 Volt	None
4	64-bit / 100 MHz PCI-X	6	Yes	3.3 Volt	None
5	64-bit / 100 MHz PCI-X	2	Yes	3.3 Volt	None
6	64-bit / 100 MHz PCI-X	2	Yes	3.3 Volt	None

Standard Features

Manageability	Integrated Lights-Out (iLO) Standard Management (ASIC on the System Board)	
Storage Controllers	<p>Smart Array 5i Plus Controller (integrated on system board), Dual Channel, Ultra3 (supports RAID 0, 1, 1+0, and 5 across internal hard disk drives) with 64 MB of memory.</p> <ul style="list-style-type: none"> ● 64-MB total memory for code, transfer buffers, and read/write cache on the 5i Plus Memory Module ● Connector for Battery Backed Write Cache (BBWC) Enabler <p>NOTE: The Smart Array 5i Plus Controller is integrated on the system board and is designed to support the duplex/simplex drive cage. An external SCSI port is not available on the HP ProLiant DL580 G2. External SCSI solutions require the addition of a PCI or PCI-X option card. Slot based Smart Array controllers can support both internal hard drives as well as external SCSI solutions.</p>	
Storage Data Protection	<p>The Battery-Backed Write Cache (BBWC) Enabler protects up to 64-MB write cache memory from hard boot, power, controller, or system board failures.</p> <ul style="list-style-type: none"> ● Standard on 2P Models, optional on 1P Models ● Battery charge/life: Up to 72 hours/3 years ● Transportable data protection ● Increases overall controller performance <p>NOTE: Safely transport your write cache data to another HP ProLiant DL580 G2 in the data center by removing the BBWC Enabler and 5i Plus Memory Module simultaneously (connected by short cable).</p>	
Storage	Diskette Drive	1.44 MB (slimline) – ejectable for security and serviceability
	Optical Drive	24x IDE CD-ROM Drive (slimline) – ejectable for security and serviceability
	Hard Drives	None
	Maximum Internal Storage	1.20 TB (4 x 300 GB Ultra320 1" drives) (internal hot plug Ultra3 drive cage)
	Hard Disk Drive Backplane	<p>Internal Wide Ultra3/U320 backplane supports up to four 1" hard disk drives and is easily configurable to support simplex (4x1) or duplex mode (2x2) Standard shipping configuration is the duplex mode.</p> <p>NOTE: U320 speeds achieved by installing a slot based U320 Smart Array controller and can control both the internal hard drives as well as external storage solutions.</p> <p>NOTE: Optional SCSI cable assembly 288874-B21 is required for connecting Smart Array Controller in a PCI slot to internal hard drive backplane. Duplex configuration requires two such kits.</p>
Interfaces	Serial	1
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	Rear USB Ports	2
	iLO Remote Management	1
	Network RJ-45	1 / 2
Graphics	Integrated 1280 x 1024, 16M color on PCI local bus, 8-MB of SDRAM video memory	
Form Factor	<p>Rack (4U = 7 inches), ships with sliding rails and cable management system</p> <p>Space saving form factor (4U) provides space efficiencies while providing maximum deployment flexibility</p>	

Standard Features

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 6.40.
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 Systems Insight Manager 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 .
Subscriber's Choice	Subscriber's Choice Driver and Support Alerts/Notifications is a web-based email subscription service that provides automatic delivery of software and driver change notifications for ProLiant products. Sign up at http://www.hp.com/go/subscriberschoice and customize your profile to receive various new alerts as they become available, on a weekly or monthly basis.
ROMPaaS, 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.

Standard Features

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.
- Vulnerability and Patch Management Pack - identifies and remediates software security vulnerabilities due to missing patches as well operating system configurations that can be exploited by viruses, worms, and other blended threats
- Virtual Machine Management Pack - provides central management and control of virtual machines from Microsoft and VMware. Integrated approach provides the ability to manage both physical and virtual resources from a single management console.

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>.

Industry Standard Compliance

ACPI 1.0a. Compliant
PCI 2.2 Compliant
PXE Support
WOL Support
Physical Address Extension (PAE) Support
Microsoft® Logo certifications

Standard Features

Intelligent Manageability Integrated Lights-Out (iLO) Standard Management

- Virtual Text Remote Console
- Virtual Power Button Control
- Dedicated LAN Connectivity
- Automatic IP Configuration via DHCP/DNS/WINS
- Industry Standard 128-bit Secure Sockets Layer (SSL) Security
- IML and iLO Event Logging
- Support for 12 user accounts with customizable access privileges

Integrated Lights-Out (iLO) Advanced Pack (supports Advanced features such as Graphical Remote Console and Virtual Floppy - available as a separate option)

Automatic Server Recovery-2 (ASR-2)

HP Systems Insight Manager

Redundant ROM

Remote Flash ROM

ROM-Based Setup Utility (RBSU)

Integrated Management Log (IML)

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).)

Dynamic sector repairing and drive parameter tracking (with Smart Array controllers)

Redundant/adaptive load balancing NIC Support

Standard Features

Availability

- Standard Advanced ECC functionality detects and corrects single bit and specific multi-bit memory errors (4bit and 8bit) while using industry standard registered DIMMS. Functionality is embedded in the chipset design.
- HP Advanced Memory Protection Technology – delivers unsurpassed memory protection and server availability:
 - Online Spare Memory
Offers a higher level of memory protection than Advanced ECC alone. If the number of single-bit correctable errors on a bank exceeds the pre-defined error threshold, that bank will fail over to the online spare bank without intervention or server interruption. The failed memory can then be replaced at the user's convenience during a scheduled maintenance window.
 - Single-Board Mirrored Memory
Single-board mirrored memory provides a higher level of availability than Advanced ECC and Online Spare Memory because it protects against multi-bit errors. Single-board Mirrored Memory uses mirrored banks on a single memory board that is configured with one redundant bank of memory. The system writes to both banks, but reads from one. If a DIMM(s) has a multi-bit error, the system simply reads from the mirrored bank instead. This process occurs without intervention or server interruption, and the failed DIMM can be replaced during a regularly scheduled shutdown.
 - Hot Plug Mirrored Memory
Hot Plug Mirrored Memory is a fault-tolerant memory feature that provides a higher level of availability than Advanced ECC, Online Spare Memory, or Single-Board Mirrored Memory because it protects against multi-bit errors and does not require any server downtime to replace failed DIMMs. Hot Plug Mirrored Memory requires that two memory boards be installed, one an exact mirror of the other, which run in parallel and provide protection against multi-bit memory errors. When configured for Hot Plug Mirrored Memory, the system writes to both memory boards, but reads from one. If a read error occurs, the system fails over to the redundant memory board. At that point the memory board containing the failed DIMMs can be hot replaced. Once the failed DIMMs are replaced and the memory board re-installed into the server, the system goes back to full mirrored status. All this occurs without bringing the server down.
NOTE: Hot Plug Mirrored Memory and Dual-Board Online Spare Memory require the use of two memory cards. All HP ProLiant DL580 G2 servers ship standard with a single memory board. The second memory board is optional (P/N 203320-B21).
NOTE: All HP Advanced Memory Protection modes are user configurable through the ROM-Based Setup Utility (RBSU) and viewable through Insight Manager 7 and the Integrated Management Log (IML).
- PCI-X Hot Plug Technology (Four 64bit/100-MHz PCI-X hot plug slots available)
- Smart Array 5i Plus Controller with standard Battery Backed Write Cache (BBWC) Enabler provides transportable data protection and increases overall controller performance. Up to 64MB Battery Backed Write Cache protection available on 2P models (BBWC Enabler is optional on 1P model.)
- Redundant Cooling Zones across major server subsystems (Memory, I/O, CPU) provide 7x24 cooling. Each zone is independent of each other and is able to support n+ 1 redundancy, as indicated below:
 - PCI-X expansion zone is 1 + 1 redundant (fans 1 and 2)
 - Memory zone is 1 + 1 redundant (fans 3 and 4)
 - CPU zone is 2 + 1 redundant (fans 5, 6, and 7)

This zone configuration enables the server to withstand up to three fan failures, provided that they are not within the same zone. Each fan is hot plug redundant and individually removable.

- Up to four Hot Plug Ultra3 Drive Bays
- Duplex or Simplex SCSI Backplane (Duplex configuration is standard)
- Dual Hot Plug Redundant Power Supplies (standard on 2P Models, one ships standard on 1P Models.)

Standard Features

Serviceability

- Innovative Diagnostic Lighting
- QuickFind Diagnostic Display – precisely depicts all major subsystems of the server (PCI-X I/O, Memory, CPU, Redundant Cooling, Interlock, Thermtrip) and gives instant visual indication of fault status. Located on top front of server.
- LED display on front panel indicates power, internal health, external health, Unit ID light.
- LED display on Memory board indicates Memory status, health, and protection mode.
- Tool-less, virtually cable-less interior design
 - Tool-less access to interior of server
 - Two ejectable, slimline media drives (diskette and CD-ROM standard with support for optional DVD-ROM drives) are removable without the use of tools
 - Front access power supplies
 - Spring-loaded memory board release latches prevent unseating incidents
 - PCI Card Guides locks full length PCI cards in place during transit
 - SCSI Duplex/Simplex Drive Cage connects directly to system board – no cables.
NOTE: Configure your SCSI Duplex/Simplex Drive Cage by means of simple switch (duplex to simplex) located on the cage itself. System ships standard in Duplex mode.
 - Seven individually removable fans connect without cables to the system board
 - Processor/VRM Retention Cage securely locks both processor and VRM into their respective sockets
 - Tool-less removal of system board
- Quick Deploy Rails
 - Tool-less design "snap in" rail

Security

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

Power Supply

800-Watt (low line or high line) Hot Plug Power Supply

NOTE: One 800-Watt Hot Plug Power Supply ships standard with 1P Models (optional Redundant Hot Plug Power Supply Option Kit).

NOTE: Two 800-Watt Hot Plug Power Supplies ship standard with 2P Models.

System Fans

Standard 7 Hot plug, redundant fans (individually removable)

Maximum 7 Hot plug, redundant fans (individually removable)

- Redundant Cooling Zones across major server subsystems (Memory, I/O, CPU) provide 7x24 cooling. Each zone is independent of each other and is able to support n+ 1 redundancy, as indicated below:
 - PCI-X expansion zone is 1 + 1 redundant (fans 1 and 2)
 - Memory zone is 1 + 1 redundant (fans 3 and 4)
 - CPU zone is 2 + 1 redundant (fans 5, 6, and 7)
- This zone configuration enables the server to withstand up to three fan failures, provided that they are not within the same zone. Each fan is hot plug redundant and individually removable.

Required Cabling

For required cabling information, refer to the HP Web site at <http://h18000.www1.hp.com/products/servers/proliantDL580/>.

Standard Features

OS Support

Windows Server 2003, Standard Edition
Windows Server 2003, Enterprise Edition
Microsoft Windows 2000 Server
Microsoft Windows 2000 Advanced Server
Microsoft NT Server 4.0 and 4.0ES, 4.0TS
Red Hat Linux RedHat Enterprise Server
SuSE Linux Enterprise Server
United Linux Novell Netware
SCO OpenUNIX
Sun Solaris Intel Platform Edition

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 HP ProLiant DL580 G2, please see: <http://www.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 5,350 sq cm (830 square inches) of hole evenly distributed from top to bottom to permit adequate airflow (equivalent to the required 64 percent open area for ventilation).
- **Side:** The clearance between the installed rack component and the side panels of the rack must be a minimum of 7 cm (2.75 inches).

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

NOTE: For additional information, refer to the Setup and Installation Guide or the Documentation CD provided with the server, or to the server documentation located in the Support section at the following URL:

<http://www5.HP.com/products/servers/proliantdl580/index.html>.

Rack Mounting Requirements

HP ProLiant DL580 G2 rack models provide tool-free support for square hole racks (including Compaq/HP 7000, 9000, 10000 and H9 series) with an adjustment range from 28" – 29" in depth.

Factory Express Portfolio for Servers and Storage

HP Factory Express offers configuration, customization, integration and deployment services for HP servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. HP products supported through Factory Express include a wide array of servers and storage: HP Integrity, HP ProLiant, HP ProLiant Server Blades, HP BladeSystem, HP 9000 servers as well as the MSA1000, VA7xxx, EVA3000 & EVA5000, XP, rackable tape libraries and configurable network switches.

For more information on how to order please contact your sales representative or go to <http://www.hp.com/go/factory-express>.

Standard Features

Service and Support

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

NOTE: Limited warranty includes 3 year parts, 3 year labor, 3-year on-site support.

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

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

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

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>

Solutions

Solutions

Designed for enterprise customers with growing data centers and application and Internet service providers that require a rack optimized 4 processor server that delivers maximum performance and high availability for highly complex, business critical applications. Specifically, the HP ProLiant DL580 G2 would be excellent for running the following types of applications:

Typical Usage:

- Databases
- Large Scale Mail Servers
- ERP/CRM/SCM

For more solutions visit: <http://www.hp.com/solutions/proliantdl580>.

Models

DL580R02 X3.0 GHz-4MB, 2048MB (2P) 347905-xx1	Processor(s)	(2) Intel Xeon Processors MP at 3.0 GHz standard (up to 4 supported)
	Cache Memory	4-MB Integrated Level 3 Cache
	Memory	2048 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (4x1 interleaved memory and HP Advanced Memory Protection Technology)
	Network Controller	Integrated dual port NC7170 PCI-X Gigabit Server Adapter in a slot
	Storage Controller	Smart Array 5i Plus Controller (Dual Channel, Ultra3) with Battery-Backed Write Cache Enabler (integrated on system board)
	Manageability	Integrated Lights-Out (iLO) Standard management (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.20 TB maximum (with optional hard drives)
	Power Supply	Two 800W Hot Plug Redundant Power Supplies (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive (slim line)
Form Factor	Rack 4U	

DL580R02 X2.7 GHz-2MB, 2048MB (2P) 347904-xx1	Processor(s)	(2) Intel Xeon Processors MP at 2.7 GHz standard (up to 4 supported)
	Cache Memory	2-MB Integrated Level 3 Cache
	Memory	2048 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (4x1 interleaved memory and HP Advanced Memory Protection Technology)
	Network Controller	Integrated dual port NC7170 PCI-X Gigabit Server Adapter in a slot
	Storage Controller	Smart Array 5i Plus Controller (Dual Channel, Ultra3) with Battery-Backed Write Cache Enabler (integrated on system board)
	Manageability	Integrated Lights-Out (iLO) Standard management (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.20 TB maximum (with optional hard drives)
	Power Supply	Two 800W Hot Plug Redundant Power Supplies (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive (slim line)
Form Factor	Rack 4U	

DL580R02 X2.2 GHz-2MB, 1024MB (1P) 347903-xx1	Processor(s)	(1) Intel Xeon Processors MP at 2.2 GHz standard (up to 4 supported)
	Cache Memory	2-MB Integrated Level 3 Cache
	Memory	1024 MB PC1600 registered ECC SDRAM (Standard) to 32 GB (Maximum) (4x1 interleaved memory and HP Advanced Memory Protection Technology)
	Network Controller	Integrated dual port NC7170 PCI-X Gigabit Server Adapter in a slot
	Storage Controller	Smart Array 5i Plus Controller (Dual Channel, Ultra3) (integrated on system board)
	Manageability	Integrated Lights-Out (iLO) Standard management (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	1.20 TB maximum (with optional hard drives)
	Power Supply	One 800W Hot Plug Redundant Power Supplies (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Diskette Drive	1.44 MB Diskette Drive (slim line)
Form Factor	Rack 4U	

Models

Country Code Key	XX=00	US
	XX=01	Australia
	XX=03	UK
	XX=20	Brazil
	XX=42	Int'l, Europe, Germany, France
	XX=29	EURO
	XX=37	APD
	XX=AA	PRC

Configuration Information - Factory Integrated Models (EMEA only)

NOTE: HP does not allow factory integration of options into standard models listed above. Configure-to-order servers must start with a CTO Chassis.

NOTE: This product offering does not support HP Factory Express Server Configuration Level 1.

Step 1: Base Configuration

Models	HP ProLiant DL580G2 RACK CTO CHASSIS (EMEA)	336541-B22
	Factory Integrated Model ships with:	
	Integrated Smart Array 5i+ controller	
	Dual Port PCI-X Gigabit NIC in a slot (NC7170 or NC7770)	
	6 (5 available) 100MHz PCI-X slots (4 hot plug, 2 non hot plug)	
	Integrated Lights-Out (iLO)	
	Hot Plug Redundant Fans	
	(1 or 2) 800W Hot Plug Power Supplies	
	Advanced Memory Protection	
	Smart Start & Systems Insight Manager	
	Floppy Disk Drive	
	3 year, next business day, onsite warranty	

Step 2: Choose Required Options (only one of the following from each list unless otherwise noted)

Processors	Intel Xeon Processor 3.0 GHz\4MB FIO Base	345323-L21
	Intel Xeon Processor 2.7 GHz\2MB FIO Base	345322-L21
	Intel Xeon Processor 2.2 GHz\2MB FIO Base	345321-L21
Base Memory	1GB REG PC1600 4X256 ALL	202170-B21
	2GB REG PC1600 4X512 ALL	202171-B21
	4GB REG PC1600 4X1GB ALL	202172-B21
	8GB REG PC1600 4X2GB ALL	202173-B21
Optical Drive	HP ProLiant 8/24X Slim DVD Drv FIO BASE	264007-B21
	Slimline CD-RW/DVD-ROM Combo Option Kit	331903-B21
	CD-ROM DRV 24X CARBON FIO Base	339866-B21

Step 3: Choose Additional Options for Factory Integration

NOTE: For additional options, please refer to the "Options" section below.

Options

HP ProLiant DL580 Unique Options

8192MB PC1600 Registered ECC SDRAM Memory Kit (4 x 2048 MB)	202173-B21
4096MB PC1600 Registered ECC SDRAM Memory Kit (4 x 1024 MB)	202172-B21
2048MB PC1600 Registered ECC SDRAM Memory Kit (4 x 512 MB)	202171-B21
1024MB PC1600 Registered ECC SDRAM Memory Kit (4 x 256 MB)	202170-B21
Hot Plug Memory Expansion Board	203320-B21
NOTE: The Hot Plug Memory Expansion Board provides 8 additional DIMM slots for powering memory-intensive applications.	
800W Hot Plug Redundant Power Supply US	278535-001
800W Hot Plug Redundant Power Supply AUST	278535-011
800W Hot Plug Redundant Power Supply EURO	278535-021
800W Hot Plug Redundant Power Supply UK	278535-031
800W Hot Plug Redundant Power Supply JPN2	278535-291
800W Hot Plug Redundant Power Supply -inc IEC	278535-B21
DL580 G2 Third Party Racking Kit	287528-B21
DL580 G2 24" - 19" Rack Adapter Kit	332815-B21
DL580 G2 Folding Cable Management Arm	289294-B21
DL580 G2 Cable Assembly, SCSI, Ultra3, LVDS	288874-B21
NOTE: All HP ProLiant DL580 G2 models ship standard with the integrated Smart Array 5i Plus Controller, which has been designed to deliver maximum performance and availability across the internal SCSI Duplex backplane.	
<ul style="list-style-type: none"> ● The Ultra3 SCSI cable is required only if the customer chooses to bypass the Smart Array 5i Plus Controller and connect slot-based SCSI adapters or RAID controllers to the internal SCSI Duplex backplane. ● Two cables are required to maintain the standard, duplexed configuration of the backplane. ● One cable is required if the simplex configuration is chosen 	
The backplane is easily configured to simplex mode by means of a simple switch duplex to simplex) located on the top of the backplane itself.	
Cord, AC Line, 20A, 250V, US 12'	235604-001
Cord, AC Line, 15A, 125V, North America	235603-001
Cable, 10A, IEC320-C20 to IEC320-C19	295633-B22
NOTE: Power cord (295633-B22) connects ProLiant servers to PDUs or UPSs with IEC320-C19 output connections.	
Cable, 10A, IEC320-C14 to IEC320-C19 8FT	291034-B21
NOTE: Power cord (291034-B21) connects HP ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the HP ProLiant DL580 G2 server. Please NOTE the following important precautions when deploying this power cord:	
<ul style="list-style-type: none"> ● Use the cord only in conjunction with the HP ProLiant DL580 G2 server. ● Use the cord to connect the HP ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections. ● Do not use the cord with any other HP ProLiant or third party server. ● Do not use the cord with any other office equipment or computers. ● Do not use the cord as an extension cord. ● Do not plug the cord into a wall outlet. ● Failure to adhere to these precautions may invalidate the server warranty. 	
Cable, 10A, IEC320-C14 to IEC320-C19 10FT	310927-B21
NOTE: Power cord (310927-B21) connects HP ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the HP ProLiant DL580 G2 server. Please NOTE the following important precautions when deploying this power cord:	
<ul style="list-style-type: none"> ● Use the cord only in conjunction with the HP ProLiant DL580 G2 server. ● Use the cord to connect the HP ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections. ● Do not use the cord with any other HP ProLiant or third party server. ● Do not use the cord with any other office equipment or computers. 	

Options

- Do not use the cord as an extension cord.
- Do not plug the cord into a wall outlet.
- Failure to adhere to these precautions may invalidate the server warranty

Cable, 10A, IEC320-C14 to IEC320-C19 6FT

313227-B21

NOTE: Power cord (313227-B21) connects HP ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the HP ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord

- Use the cord only in conjunction with the HP ProLiant DL580 G2 server.
- Use the cord to connect the HP ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other HP ProLiant or third party server.
- Do not use the cord with any other office equipment or computers.
- Do not use the cord as an extension cord.
- Do not plug the cord into a wall outlet.
- Failure to adhere to these precautions may invalidate the server warranty

Cable, 10A, IEC320-C14 to IEC320-C19 12FT

313228-B21

NOTE: Power cord (313228-B21) connects HP ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the HP ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord:

- Use the cord only in conjunction with the HP ProLiant DL580 G2 server.
- Use the cord to connect the HP ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other HP ProLiant or third party server.
- Do not use the cord with any other office equipment or computers.
- Do not use the cord as an extension cord.
- Do not plug the cord into a wall outlet.
- Failure to adhere to these precautions may invalidate the server warranty

Qty:25 cable, 16Amp, AS-3112 to C19 AUST

295529-011

Qty:25 cable, 13 Amp, BS-1363 to C19 UK

295529-031

Qty:25 cable, 16 Amp, CEE 7/7 "SCHUKO" to C19 EURO

295529-021

Options

ProLiant Essentials Value Pack Software	Rapid Deployment Pack, 1 User, V1.x	267196-B21
	NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 1 User, V1.x (Japan)	267196-291
	NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 10 Users, V1.x	269817-B21
	NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	
	Rapid Deployment Pack, 10 Users, V1.x (Japan)	269817-291
	NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.	
	Flexible Quantity License Kit	302127-B21
	License-Only - for use with a Master License Agreement	302128-B21
	ProLiant Essentials Workload Management Pack (Featuring Compaq Resource Partitioning Manager version 2.0)	303284-B21
	Integrated Lights-Out (iLO) Advanced Pack	263825-B21
	Performance Management Pack, single server	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 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	
ProLiant Essentials Vulnerability and Patch Management Pack, Tracking license for installed servers	378372-B21	
ProLiant Essentials Vulnerability and Patch Management Pack, 1-Server 10-Desktop Bundle License	389941-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

Options

Processor	Intel Xeon MP X3.00 GHz-4MB Processor Option Kit	345323-B21
	NOTE: This processor option kit (PN 345323-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.70 GHz-2MB Processor Option Kit	345322-B21
	NOTE: This processor option kit (PN 345322-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.20 GHz-2MB Processor Option Kit	345321-B21
	NOTE: This processor option kit (PN 345321-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.80 GHz-2MB Processor Option Kit	325254-B21
	NOTE: This processor option kit (PN 325254-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.	
	Intel Xeon MP X2.50 GHz-1MB Processor Option Kit	325253-B21
NOTE: This processor option kit (PN 325253-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.		
Intel Xeon MP X2.0 GHz-1MB Processor Option Kit	325252-B21	
NOTE: This processor option kit (PN 325252-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.		
Intel Xeon MP X2.0 GHz-2MB Processor Option Kit	307276-B21	
NOTE: This processor option kit (PN 307276-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.		
Intel Xeon MP X1.9 GHz-1MB Processor Option Kit	311228-B21	
NOTE: This processor option kit (PN 311228-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.		
Intel Xeon MP X1.50 GHz-1MB Processor Option Kit	191220-B21	
NOTE: This processor option kit (PN 191220-B21) supports the HP ProLiant ML570 G2 and the HP ProLiant DL580 G2.		
Memory (DIMMs)	8192MB PC1600 Registered ECC SDRAM Memory Kit (4 x 2048MB)	202173-B21
	4096MB PC1600 Registered ECC SDRAM Memory Kit (4 x 1024MB)	202172-B21
	2048MB PC1600 Registered ECC SDRAM Memory Kit (4 x 512MB)	202171-B21
	1024MB PC1600 Registered ECC SDRAM Memory Kit (4 x 256MB)	202170-B21
	Hot Plug Memory Expansion Board	203320-B21
	NOTE: The Hot Plug Memory Expansion Board provides 8 additional DIMM slots for powering memory-intensive applications.	
Optical Drives	Slimline CD-RW/DVD-ROM 24X Combo Drive Option Kit (Servers)	331903-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit (Servers)	264007-B21
	HP DVD+R/RW 8X Slim	383975-B21

Options

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
146.8-GB 15,000 rpm Ultra320 SCSI Hard Drive (1")	347708-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 or U320 SCSI HBA to support U320 transfer rates.

NOTE: Please see the Hard Drive QuickSpecs for Technical Specifications such as capacity, height, width, interface, transfer rate, seek time, physical configuration, and operating temperature:

U320 Hard Drive QS:

http://h18000.www1.hp.com/products/quickspecs/11531_div/11531_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11531_na/11531_na.HTML

(North America)

Options

Storage Controllers	Smart Array 6402/128 Controller	273915-B21
	Smart Array 6404/256 Controller	273914-B21
	Smart Array 641 Controller	291966-B21
	Smart Array 642 Controller	291967-B21
	256MB Battery-Backed Cache Module	254786-B21
	NOTE: This 256-MB Battery-Backed Cache Module supports the Smart Array 5300 series controllers, HP Modular Smart Array 1000 and the HP Modular Smart Array 500.	
	256MB DDR, Battery-Backed Cache Upgrade Kit for SA-6400	273913-B21
	NOTE: This 256-MB Battery-Backed Cache Module upgrade kit supports the Smart Array 6400 series controller only.	
	Battery-Backed Write Cache Enabler Option Kit	255514-B21
	NOTE: This Battery-Backed Write Cache Enable Option Kit (PN 255514-xx1) is optional for the 1P Model only.	
	Battery-Backed Write Cache Enabler Option Kit (Japan)	255514-291
	NOTE: This Battery-Backed Write Cache Enable Option Kit (PN 255514-xx1) is optional for the 1P Model only.	
	128MB Battery-Backed Cache Enabler	351580-B21
	NOTE: This 128MB BBWC supports the Smart Array 641 Controller and Smart Array 642 Controller.	
	DL580 G2 Cable Assembly, SCSI, Ultra3, LVDS	288874-B21
	NOTE: All DL580 G2 models ship standard with the integrated Smart Array 5i Plus Controller, which has been designed to deliver maximum performance and availability across the internal SCSI Duplex backplane.	
	<ul style="list-style-type: none"> ● The Ultra3 SCSI cable is required only if the customer chooses to bypass the Smart Array 5i Plus Controller and connect slot-based SCSI adapters or RAID controllers to the internal SCSI Duplex backplane. ● Two cables are required to maintain the standard, duplexed configuration of the backplane. ● One cable is required if the simplex configuration is chosen. 	
	The backplane is easily configured to simplex mode by means of a simple switch duplex to simplex) located on the top of the backplane itself.	
	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B21
	64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS	284688-B21
	Ultra320 Expansion Module for SA-6402	273911-B21
	NOTE: Please see the following Controller or SCSI Adapter QuickSpecs for Technical Specifications such as PCI Bus, PCI Peak Data Transfer Rate, SCSI Protocols supported, SCSI Peak Data Transfer Rate, Channels, SCSI Ports, Drives supported, Cache, RAID support, and additional information: http://h18000.www1.hp.com/products/quickspecs/11587_div/11587_div.HTML (Smart Array 6400 Series) http://h18000.www1.hp.com/products/quickspecs/12067_div/12067_div.HTML (Smart Array 641) http://h18000.www1.hp.com/products/quickspecs/12069_div/12069_div.HTML (Smart Array 642) http://h18000.www1.hp.com/products/quickspecs/10429_div/10429_div.HTML (SCSI Adapter) http://h18000.www1.hp.com/products/quickspecs/11555_div/11555_div.HTML (U320 Adapter)	

Options

Communications	HP NC310F PCI-X 1000SX Gigabit Server Adapter	368169-B21
	HP NC6170 PCI-X Dual Port 1000SX Gigabit Server Adapter	313879-B21
	HP NC7170 PCI-X Dual Port 1000T Gigabit Server Adapter	313881-B21
	HP NC7771 PCI-X Single Port 1000T Gigabit Server Adapter	290563-B21
	HP NC570C PCI-X Dual-port 4x Fabric Adapter	376158-B21
	HP 24-Port 4x Fabric Copper Switch	376227-B21
	HP 1m 4x Fabric Copper Cable	376232-B21
	HP 3m 4x Fabric Copper Cable	376232-B22
	HP 5m 4x Fabric Copper Cable	376232-B23

Redundant Options	800W Hot Plug Redundant Power Supply US	278535-001
	800W Hot Plug Redundant Power Supply AUST	278535-011
	800W Hot Plug Redundant Power Supply EURO	278535-021
	800W Hot Plug Redundant Power Supply UK	278535-031
	800W Hot Plug Redundant Power Supply JPN2	278535-291
	800W Hot Plug Redundant Power Supply -inc IEC	278535-B21

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

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.

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 448 Tape Drive, External (Carbonite)	DW017A
HP StorageWorks Ultrium 448, Rack-mount (Carbonite) - Single drive installed in a 1U rack-mount kit	DW028A
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_div/11739_div.html (Worldwide)

http://h18006.www1.hp.com/products/quickspecs/11739_na/11739_na.html (North America)

Options

http://h18006.www1.hp.com/products/quickspecs/12128_div/12128_div.html (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/12128_na/12128_na.html
 (North America)

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

External, Hot-Plug, and Rack-Mount 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 DAT 24e External Tape Drive	C1556D
HP StorageWorks DAT 24 Array Module (Carbon) - Offline hot-swap drive for Tape Array 5300	C7498A

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

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

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) NA	337699-B22
HP StorageWorks DLT VS80 Tape Drive, External (Carbon) Int'l	337699-B31
HP StorageWorks DLT VS80 Tape Drive, External (Carbon) Japan	337699-291

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

http://h18006.www1.hp.com/products/quickspecs/11403_div/11403_div.HTML (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/11403_na/11403_na.HTML
 (North America)

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

External and Rack-mount SDLT Tape Drives

HP StorageWorks SDLT 320 Tape Drive, External (Carbon) NA	257319-001
HP StorageWorks SDLT 320 Tape Drive, External (Carbon) Int'l	257319-B31
HP StorageWorks SDLT 320 Tape Drive, External (Carbon) Japan	257319-291

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_div/11840_div.HTML (Worldwide)
http://h18006.www1.hp.com/products/quickspecs/11840_na/11840_na.HTML
 (North America)

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

Rack-Mount Tape Drive Enclosures

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

Options

these kits:

http://h18000.www1.hp.com/products/quickspecs/10854_div/10854_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/10854_na/10854_na.HTML
(North America)

HP StorageWorks Tape Array 5300

C7508A

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

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

http://h18000.www1.hp.com/products/quickspecs/11878_div/11878_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11878_na/11878_na.HTML
(North America)

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

LVD Cable Kit, VHDCI/HD68

168048-B21

NOTE: For use with the 3U 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.

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

68-pin HD multi-mode terminator

C2364A

1.0m 68-pin VHDCI to 68-pin HD cable

C2361B

2.5m 68-pin VHDCI to 68-pin HD cable

C2362B

5.0m 68-pin VHDCI to 68-pin HD cable

C2365A

10.0m 68-pin VHDCI to 68-pin HD cable

C2363B

0.5m 68-pin HDI to 68-pin HD cable LVD/SE

C2978B

1.5m 68-pin HDI to 68-pin HD cable LVD/SE

C2979B

0.9m 68-pin HDI to 68-pin HD cable LVD/SE

C2911C

2.5m 68-pin HDI to 68-pin HD cable LVD/SE

C2924C

NOTE: For use with Tape Array 5300 only

Options

Tape Autoloaders

DAT Autoloader

HP StorageWorks DAT 72x6 Tape Autoloader, External (Carbon)

Q1567A

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

http://h18006.www1.hp.com/products/quickspecs/11905_div/11905_div.html
(Worldwide)

http://h18006.www1.hp.com/products/quickspecs/11905_na/11905_na.html
(North America)

HP StorageWorks 1/8 Tape Autoloader

1/8 Ultrium 460 Tape Autoloader, Tabletop

AA927A

1/8 SDLT 320 Tape Autoloader, Tabletop

AA926A

1/8 Ultrium 230 Tape Autoloader, Tabletop

C9572CB

1/8 DLT VS80 Tape Autoloader, Tabletop

C9264CB

1/8 Tape Autoloader Rackmount Kit

C9268R

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

NOTE: Please reference the 1/8 Tape Autoloader QuickSpecs at <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

MSL6030, 2 drive, 30 slots, Ultrium 460, RM with embedded FC router

330731-B25

MSL6060, 2 drive, 60 slot, Ultrium 460, RM

331196-B21

MSL6060, 2 drive, 60 slot, Ultrium 460, RM with embedded FC router

331196-B22

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

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

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

Options

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

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

HP StorageWorks MSL5060 Tape Library

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

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 Extended 322e Tape Library, 0 drive, 322 LTO slots	AA939B
ESL Extended 286e Tape Library, 0 drive, 286 SDLT slots	AA940B
ESL E-Series Ultrium 460 drive kit	AA937A
ESL E-Series Ultrium 460-FC drive kit	AA941A
ESL E-Series SDLT 320 drive kit	AA936A
ESL E-Series e2400-FC 2G Interface Controller	AA928A

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>

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, 128 slots	C1104M
1200mx, 6 drive, 128 slots	C1105M
2200mx, 4 drive, 238 slots	C1111M
2200mx, 6 drive, 238 slots	C1107M
2200mx, 10 drive, 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.

HP StorageWorks Ultra Density Optical Storage

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, 6 drive, 238 slot jukebox	AA971A
7100ux, 10 drive, 238 slot jukebox	AA972A
7100ux, 6 mixed drive, 238 slot jukebox	AA974A

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.

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 (North America) http://h18000.www1.hp.com/products/quickspecs/11935_div/11935_div.html (Worldwide)	
	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11934_div/11934_div.html (Worldwide)	
	ProLiant Cluster HA/F200 for the Entry Level SAN	364026-B21
	ProLiant Cluster HA/F200 for the Entry Level SAN (Japan)	364026-291
	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11932_div/11932_div.html (Worldwide)	
	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11933_div/11933_div.html (Worldwide)	
	HP Serviceguard for Linux ProLiant Cluster A.11.15 for SUSE SLES 8 / UnitedLinux 1.0 and Red Hat EL 3 (2 node license cluster kit)	305199-B24
	HP Serviceguard for Linux ProLiant Cluster A.11.16 for SUSE SLES 9 and Red Hat EL 3 (2 node license cluster kit)	305199-B25
	HP Serviceguard for Linux License A.11.15 for SUSE SLES 8 / UnitedLinux 1.0 and Red Hat EL 3 (single license version)	307754-B24
	HP Serviceguard for Linux A.11.16 for SUSE SLES9 and Red Hat EL 3 (single license version)	307754-B25
	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11518_div/11518_div.html (Worldwide)	

Options

External Storage – Rack	HP StorageWorks Modular Smart Array 20	335921-B21
	NOTE: Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies.	
	HP StorageWorks Modular Smart Array 20 Starter Kit	366172-B21
	NOTE: Rack-mountable 12 (SATA) drive enclosure with U320 Host connectivity, redundant power supplies. Includes Smart Array 6402/128 Controller.	
	NOTE: The Modular Smart Array Enclosure 20 Family supports the SATA 1.5Gb/s 1" Hot Plug Hard Drives.	
	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	
Redundant Power Supply 499W	338296-B21	
	Ultra320 Dual Bus I/O Module for MSA30	287483-B21
	Ultra320 Single Bus I/O Module for MSA30	287484-B21
HP StorageWorks Modular Smart Array 500 G2	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11956_div/11956_div.HTML (Worldwide)	
HP StorageWorks Modular Smart Array 1500 cs	Modular Smart Array 1500 Controller Shelf	AA986A
	NOTE: Please see the StorageWorks Modular SAN Array 1500 cs 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 Modular Smart Array 1000 QuickSpecs for additional options and configuration information at http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML (Worldwide)	
StorageWorks Options	StorageWorks SAN Switch 2/16	322118-B21
	StorageWorks SAN Switch 2/8-EL Upgrade Kit	325888-B21
	StorageWorks SAN Switch 2/16-EL Upgrade Kit	325889-B21
	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 (North America) http://h18000.www1.hp.com/products/quickspecs/11003_div/11003_div.HTML (Worldwide)	

Options

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>.

Uninterruptible Power Systems – Rack

HP UPS R1500 XR (1440VA, 1340 Watt), Low Voltage (NA)	204404-001
HP UPS R1500 XR (1500VA, 1340 Watt), High Voltage (Int'l)	204404-B31
HP UPS R1500 XR (1500VA, 1340 Watt), Low Voltage (Japan)	204404-291
HP UPS R3000 XR (2880VA, 2700 Watt), Low Voltage (NA)	192186-001
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (NA)	192186-002
HP UPS R3000 XR (2400VA, 2250 Watt), Low Voltage (Japan)	192186-291
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Japan)	192186-292
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (Int'l - detachable cord)	192186-B31
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A IEC309 Plug)	192186-B32
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A CEE 7/7 SCHUKO Plug)	192186-B33
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage (16A BS-546 Plug)	192186-AR1
HP UPS R5500 XR, (5000VA, 4500 Watt), High Voltage (NA/Jpn)	326529-D71
HP UPS R5500 XR, (6000VA, 5400 Watt), High Voltage (Int'l)	326529-B31
HP UPS R12000 XR N+x (200-240V) (WW-hardwired)	207552-B22

NOTE: The UPS R12000 XR has a hardwired input and output; requires a 100A circuit.

HP Power Distribution Unit with Power Monitoring

HP Power Distribution Unit with Power Monitoring Model S2324 - dual input, 3 phase, 24A (NA/JPN)	370959-D71
HP Power Distribution Unit with Power Monitoring Model S1324 - single input, 3 phase, 24A (NA/JPN)	370960-D71
HP Power Distribution Unit with Power Monitoring Model S2140 - dual input, 1 phase, 40A (NA/JPN)	370961-D71
HP Power Distribution Unit with Power Monitoring Model S1140 - single input, 1 phase, 40A (NA/JPN)	370962-D71
HP Power Distribution Unit with Power Monitoring Model S2316 - dual input, 3 phase, 16A (INTL)	370963-D71
HP Power Distribution Unit with Power Monitoring Model S1316 - single input, 3 phase, 16A (INTL)	370964-D71
HP Power Distribution Unit with Power Monitoring Model S2132 - dual input, 1 phase, 32A (INTL)	370965-D71
HP Power Distribution Unit with Power Monitoring Model S1132 - single input, 1 phase, 32A (INTL)	370966-D71

Options

Modular Power Distribution Units 1U/0U (Up to 32 outlets) NOTE: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	Modular Power Distribution Units (mPDU), High Volt Model, 16A (200-240 VAC) (WW) NOTE: This model has a detachable input power cord and is adaptable to country specific requirements. The 16A PDU also connects to the high volt models of the UPS R3000 XR and R6000 models. Cable P/N 340653-001 required if connecting to UPS R3000 XR (192186-002 NA -High Volt model only).	252663-B24
	Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC) (NA, Japan) NOTE: This model has a detachable input power cord and is adaptable to country specific requirements. The 16A PDU also connects to the high volt models of the UPS R3000 XR and R6000 models. Cable P/N 340653-001 required if connecting to UPS R3000 XR (192186-002 NA -High Volt model only).	252663-D71
	Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC) (NA, Japan) NOTE: L6-30 input.	252663-D72
	Modular Power Distribution Units (mPDU), High Volt Model, 32A (200-240 VAC) (Int'l)	252663-B31
	Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC) (WW) NOTE: The 40A model has a hardwired input. NOTE: Please see the following Modular Power Distribution Unit (Zero-U/1U Modular PDUs) QuickSpecs for additional options including cables: http://h18000.www1.hp.com/products/quickspecs/11041_na/11041_na.HTML (North America) http://h18000.www1.hp.com/products/quickspecs/11041_div/11041_div.HTML (Worldwide)	252663-B21
USB Options	USB 2-Button Optical Scroll Mouse (Carbonite/Silver) USB 1.44-MB External Diskette Drive (Carbonite)	DC172B DC141B
Custom Builder	Please see the Enterprise Configurator for configuration assistance at: http://www.hp.com/products/configurator .	
Third Party Rack Kit	DL580 G2 rack model support: The DL580 G2 Third Party rack kit 287528-B21 provides support for any rack, square hole or round hole, (including HP Rack System /E and HP Systems), with an adjustment range from 23 1/2" – 34" deep. NOTE: The Third party rack kit is required for round hole racks or for square hole racks that do not conform to the adjustment range of the standard rail that ships with the server.	287528-B21
Telco Rack Support	DL580 G2 rack model support: Support for all 2-post Telco racks requires the Third Party option kit 287528-B21, plus an additional option kit from Rack Solutions. The Rack Solutions brackets can be purchased at: http://www.racksolutions.com/hp .	287528-B21
	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 Rack S10614 (14U) Rack Cabinet – Shock Pallet	292302-B22	
	HP Rack 10842 (42U, 800mm wide) – Pallet	257415-B21	
	HP Rack 10842 (42U, 800mm wide) – Shock Pallet	257415-B22	
	HP Rack 10647 (47U) – Pallet	245160-B21	
	HP Rack 10647 (47U) – Crated	245160-B23	
	HP Rack 10642 (42U) – Pallet	245161-B21	
	HP Rack 10642 (42U) – Shock Pallet	245161-B22	
	HP Rack 10642 (42U) – Crated	245161-B23	
	HP Rack 10636 (36U) – Pallet	245162-B21	
	HP Rack 10636 (36U) – Shock Pallet	245162-B22	
	HP Rack 10636 (36U) – Crated	245162-B23	
	HP Rack 10622 (22U) – Pallet	245163-B21	
	HP Rack 10622 (22U) – Shock Pallet	245163-B22	
	HP Rack 10622 (22U) – Crated	245163-B23	
	<p>NOTE: -B21 (pallet) used to ship empty racks shipped on a truck -B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels) -B23 (crated) used for air shipments of empty racks</p> <p>NOTE: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color: http://h18000.www1.hp.com/products/quickspecs/10995_div/10995_div.HTML (Worldwide) http://h18000.www1.hp.com/products/quickspecs/10995_na/10995_na.HTML (North America)</p> <p>NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html.</p>		
	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-xx1	
Country Code Key (for TFT5600 Rack Keyboard Monitor (PN 221546-xx1))			

Options

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

1U Rack Keyboard & Drawer (Carbon)

257054-xx1

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

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

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, RM (ALL)	371302-B21
HP 1x4 USB/PS2 KVM Switch, TT, (EURO)	371301-A21
HP 1x4 USB/PS2 KVM Switch, TT (UK)	371301-031
HP 1x4 USB/PS2 KVM Switch, TT, (AUST/NZ)	371301-011
HP 1x4 USB/PS2 KVM Switch, TT, (NA/JPN)	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>

Options

Service and Support Offerings (HP Care Pack Services)

Hardware Services On-site Service

4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years	U4607A
4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	U4607E
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years	U4608A
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4608E

6-Hour Call to Repair, On-site Service 7-Day x 24-Hour Coverage, 3 Years (U.S. Part Number)

6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years	U4609A
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	U4609E

Installation & Start-up Services

Hardware Installation	U4617A
Hardware Installation, Electronic	U4617E
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.	U4618A
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	U4618E

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.	U4619A
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	U4619E
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	U4621A
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	U4621E

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.	U4620A
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	U4620E
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.	U4622A
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	U4622E

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

Memory

HP ProLiant DL580 G2 2P Models

Standard Memory

2048 MB 200MHz Double Data Rate (DDR) SDRAM (PC1600 Registered SDRAM Memory with Advanced ECC functionality)

Standard Memory Plus Optional Memory and Optional Memory board

Up to 26,624 MB memory is available with the optional installation of PC1600 Registered ECC SDRAM Memory kits and a second, optional memory board.

Standard Memory Replaced with Optional Memory and Optional memory board

Up to 32,768 MB of memory is available with the removal of the standard 2048 MB of memory, the optional installation of PC1600 Registered ECC SDRAM Memory kits, and a second, optional memory board.

NOTE: Memory must be added in banks of four DIMMS. This chart does not represent all possible memory configurations.

Standard Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Standard	2048 MB	512 MB	512 MB	512 MB	512 MB	Empty	Empty	Empty	Empty
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty

Optional Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Optional (Standard Memory Plus Optional Memory Board and Optional Memory)	26,624 MB	512 MB	512 MB	512 MB	512 MB	2048 MB	2048 MB	2048 MB	2048 MB
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		2048 MB	2048 MB	2048 MB	2048 MB	2048MB	2048 MB	2048 MB	2048 MB

Maximum Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Maximum (Standard Memory Replaced with Optional Memory with Optional Memory board)	32,768 MB	2048 MB	2048 MB	2048MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB

The following memory options are available from HP:

- 1024MB PC1600 Registered ECC SDRAM Memory Kit (4 x 256MB) 202170-B21
- 2048MB PC1600 Registered ECC SDRAM Memory Kit (4 x 512MB) 202171-B21
- 4096MB PC1600 Registered ECC SDRAM Memory Kit (4 x 1024MB) 202172-B21
- 8192MB PC1600 Registered ECC SDRAM Memory Kit (4 x 2048MB) 202173-B21

Expand your memory capacity with the Hot Plug Memory Expansion Board. Provides 8 additional DIMM slots for powering memory-intensive applications.

- Hot Plug Memory Expansion Board 203320-B21

HP ProLiant DL580 G2 1P Models

Standard Memory

1024 MB 200MHz Double Data Rate (DDR) SDRAM (PC1600 Registered SDRAM Memory with Advanced ECC functionality)

Standard Memory Plus Optional Memory and Optional memory board

Up to 25,600 MB memory is available with the optional installation of PC1600 Registered ECC SDRAM Memory kits and a second, optional memory board.

Standard Memory Replaced with Optional Memory and optional memory board

Up to 32,768 MB of memory is available with the removal of the standard 1024 MB of memory, the optional installation PC1600 Registered ECC SDRAM Memory kits, and a second, optional memory board.

NOTE: Memory must be added in banks of four DIMMS. This chart does not represent all possible memory configurations.

Memory

Standard Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Standard	1024 MB	256 MB	256 MB	256 MB	256 MB	Empty	Empty	Empty	Empty
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty

Optional Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Optional (Standard Memory Plus Optional Memory Board and Optional Memory)	25,600 MB	256 MB	256 MB	256 MB	256 MB	2048MB	2048MB	2048MB	2048MB
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		2048MB	2048MB	2048MB	2048MB	2048MB	2048MB	2048MB	2048MB

Maximum Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Maximum (Standard Memory Replaced with Optional Memory with Optional Memory board)	32,768 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB	2048 MB

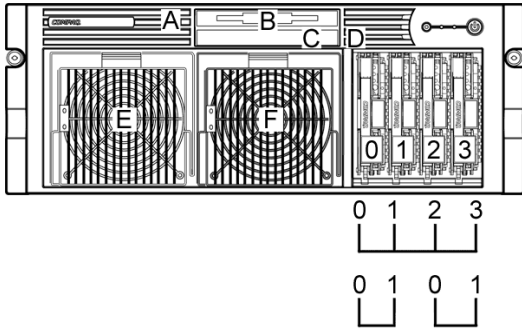
The following memory options are available from HP:

- 1024MB PC1600 Registered ECC SDRAM Memory Kit (4 x 256MB) 202170-B21
- 2048MB PC1600 Registered ECC SDRAM Memory Kit (4 x 512MB) 202171-B21
- 4096MB PC1600 Registered ECC SDRAM Memory Kit (4 x 1024MB) 202172-B21
- 8192MB PC1600 Registered ECC SDRAM Memory Kit (4 x 2048MB) 202173-B21

Expand your memory capacity with the Hot Plug Memory Expansion Board. Provides 8 additional DIMM slots for powering memory-intensive applications.

- Hot Plug Memory Expansion Board 203320-B21

Storage



- A Diskette Drive eject button
- B Ejectable: 24x IDE CD-ROM (Slimline)
- C Ejectable: 1.44-MB Diskette Drive (Slimline)
- D CD-ROM Drive eject button
- E 800-Watt (low line or high line) Redundant Hot Plug Power Supply
- F 800-Watt (low line or high line) Primary Hot Plug Power Supply
- 0-3 Wide Ultra3 Drive Cage (Duplex or Simplex configurable). Duplex is standard shipping configuration

Drive Support

	Quantity Supported	Position Supported	Controller
Ejectable Slim Line Drives			
1.44-MB slim-line Diskette Drive	Up to 1	C	Integrated
IDE slim-line CD-ROM Drive	Up to 1	B	Integrated IDE
Slimline DVD-ROM Drive (8X/24X) Option Kit	Up to 1	B or C	Integrated IDE

Hard Drives

Ultra320 Hot Pluggable Drives

	Quantity Supported	Position Supported	Controller
1-inch	Up to 4	0-3	Smart Array 5i Plus Controller (integrated on system board)
300-GB 10,000 rpm			Smart Array 6402/128 Controller
146.8-GB 10,000 rpm			Smart Array 641 Controller
72.8-GB 10,000 rpm			Smart Array 642 Controller
146.8-GB 15,000 rpm			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
72.8-GB 15,000 rpm			
36.4-GB 15,000 rpm			

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

Storage

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 30 Family	Up to 20	External	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 System	1	External	Smart Array 532 Controller (used as Host Bus Adapter) Please see the Modular Smart Array 500 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_div/11033_div.HTML (Worldwide)

http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML (North America)

Modular Smart Array 1500 cs: <http://www.hp.com/go/MSA1500cs>

Maximum Storage Capacity – (External Enclosure Attached)

Internal	1.20 TB (4 x 300-GB Ultra320 SCSI 1" Drives)
External	84.00 TB (20 x (14 x 300-GB Ultra320 SCSI 1" Drives))
Total	85.20 TB

Tape Drives, Tape Autoloaders, & Tape Libraries

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

http://h18000.www1.hp.com/products/quickspecs/North_America/10233.html (North America)

<http://h18000.www1.hp.com/products/quickspecs/Division/10233.html> (Worldwide)

NOTE: For an up-to-date listing of the latest O/S Support details for each of the Tape Autoloaders and Tape Libraries listed below, please see the following:

http://h18000.www1.hp.com/products/quickspecs/North_America/10809.html (North America)

<http://h18000.www1.hp.com/products/quickspecs/Division/10809.html> (Worldwide)

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 Tape Drives, Internal Hot Plug DAT 40 Tape Drive DAT 72 Tape Drive	Up to 1	0 & 1 or 2 & 3	Smart Array 5i Plus Controller (integrated on system board) 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
HP StorageWorks Tape	Up to 2	External	64-Bit/133-Mhz Dual Channel Ultra320 SCSI Adapter

Storage

Drives, External

DAT 72 Tape Drive
 DAT 40 Tape Drive
 DAT 24 Tape Drive
 Ultrium 215
 Ultrium 230
 Ultrium 448
 Ultrium 460
 SDLT 320 Tape Drive

64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks Tape Drives, External

Ultrium 960

1

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks Tape Drives, External

DLT VS80 Tape Drive

Up to 3

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks Autoloaders, External

DAT 72x6 Tape Autoloader
 1/8 Tape Autoloader
 SSL1016 Tape Autoloader

1 autoloader per SCSI channel

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks Rack-mount Tape Drive Enclosures

1U Rack-Mount Kit
 3U Rack-Mount Kit
 5U Rack-Mount Kit

1 per SCSI channel

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks Tape Libraries, External

MSL6060 (Ultrium 460 -based)
 MSL6030 (Ultrium 460 -based)
 MSL5026S2 (SDLT 320-based)
 MSL5052S2 (SDLT 320-based)
 MSL5030 (Ultrium 230 -based)
 MSL5060 (Ultrium 230 -based)

Please reference the [MSL Tape Library QuickSpecs to determine configuration requirements](#)

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

HP StorageWorks ESL E-Series Tape Libraries

ESL 712e
 ESL 630e
 ESL 322e
 ESL 286e

Please reference the [ESL e-series & ESL9000 Series Tape Libraries QuickSpecs to determine configuration requirements](#)

External

64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Power Specifications

Part Number	278535-001
Spare Kit	192201-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	800	800	800	800	800	800
Nominal Input Current (A rms)	11.7	9.9	5.2	4.9	4.7	4.5
Max Rated Input Wattage Rating (Watts)	1143	1111	1067	1067	1067	1053
Max. Rated VA (Volt-Amp)	1166	1134	1088	1088	1088	1074
Efficiency (%)	70	72	75	75	75	76
Power Factor	0.98	0.98	0.98	0.98	0.98	0.98
Leakage Current (mA)	.43	.50	.90	.96	1.00	1.04
Maximum Inrush Current (A peak)	25	25	25	25	25	25
Maximum Inrush Current duration	20	20	20	20	20	20

System Specifications

HP ProLiant DL580 G2 Fully Configured

Up to 4 Processors, 16 Memory Slots, 4 Hard Drives, 6 PCI Slots, and 2 Hot Plug Power Supplies

Nominal Input Voltage (Vrms)	100	115	208	220	230	240
Fully Loaded System Input Wattage (W)	954	928	890	890	890	879
Fully Loaded System Input Current (A rms)	10	8.5	4.4	4.1	4.0	3.7
Fully Loaded System Thermal (BTU- Hr)	3253	3163	3063	3063	3063	2996
Fully Loaded System VA (Volt-Amp)	1004	976	909	909	909	897
System Leakage with all power supplies loaded (mA)	.87	1.00	1.81	1.91	2.00	2.09
System Inrush Current with all power supplies loaded (A)	50	50	50	50	50	50
Power cord requirements	Nema 5-15P to IEC320-C19			Option no./Spare no: 235603-001/237457-001		
	PDU Jumper Cord IEC320-C19 to IEC320-C20			Option no./Spare no: 295633-B21/295508-001		
	PDU Jumper Cord IEC320-C14 to IEC320-C19			Option no./Spare no: 291034-001/292241-001		

NOTES:

ActiveAnswers Power Calculation

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

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

To drill down to calculators:

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: DL580 G2
- Click on: "Power Calculator" link (You may need to scroll down to see it.)

Power Cords	Power Cord Part Number
Country	
US	295529-001
AUST	295529-011
EURO	295529-021
UK	295529-031
Japan	295529-291

Technical Specifications

System Unit Rack	Chassis Footprint (HxWxD)	6.94 x 19 x 26.5 in (17.6 x 48.3 x 67.3 cm)	
	Weight	66 lb (29.9 kg)	
	No hard drives installed, one power supply		
	Input Requirements	Rated Input Voltage	100 to 120 VAC/200 to 240 VAC
		Rated Input Frequency	50 to 60 Hz
		Input Power	1135W @ 110 VAC/1125W @ 220 VAC
		Rated Input Current	12A (100 VAC), 9.8A (120 VAC), 4.9A (220 VAC)
	Max BTU Rating	4000 BTU	
	Power Supply Output Power (per power supply)	Rated Steady-State Power	800W/800W (lowline/highline)
		Maximum Peak Power	800W/800W (lowline/highline)
	Temperature Range	Operating	50° to 95° F (10° to 35° C)
		Non-operating	-20° to 140° F (-29° to 60° C)
		Shipping	-22° to 122° F (-30° to 50° C)
Relative Humidity (non-condensing)	Operating	10% to 70%	
	Non-operating	5% to 95%	
Maximum Wet Bulb Temperature	101.7° F (38.7° C)		
Acoustic Noise	NOTE: Listed are the declared A-weighted sound power levels LWAd and the declared average bystander position sound pressure levels LpAm when operating in a 23° C ambient environment. Noise emissions were measured in accordance with ECMA 74 and declared in accordance with ECMA 109.		
	Idle (Fixed Disk Drives Spinning)		
	L WAd (BELS)	7.0	
	L pAm (dBA)	54	

NOTE: These values apply to 2U rack configuration. Configuration tested included 2 processors, two 10,000 rpm hard drive, 1 power supplies, 1 power supply fan and 4 CPU fans.

Technical Specifications

24X Max (or higher) IDE CD-ROM Drive Slim Line	Disk	Applicable Disk	CD-DA, CD-ROM (Mode 1 and 2) CD-XA, CD-I (Mode 2, Form 1 and 2) Photo CD (Single and Multi-session) Mixed Mode (Audio and Data combined)
		Capacity	540 MB (Mode 1, 12 cm) 650 MB (Mode 2, 12 cm)
		Diameter	4.7 x 3.15 in (12 x 8 cm)
		Rotational Speed	4200 rpm maximum
		Center Hole	0.6 in/15 mm diameter
		Thickness	1.2 mm
		Track Pitch	1.6 μ m
	Block Size	Mode 1	2,048
		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	2000 ms
	Audio Output Level	Line-Out	0.7 VRMS at 47 kOhms
	Headphone	0.6 VRMS at 32 kOhms (maximum volume)	
Data Transfer Rate	Sustained	150 KB/s (sustained 1X)	
	Burst	2100 to 3600 KB/s	
Cache Buffer	128 KB		
Start-up Time (typical)	< 7seconds		
Stop Time	< 4seconds		
Laser Parameters	Type	Semiconductor Laser GaAlAs	
	Wave Length	780 \pm 25 nm	
	Divergence Angle	53.5 $^{\circ}$ \pm 1.5 $^{\circ}$	
	Output Power	0.14 mW	
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 5.75 x 8.19 in (4.29 x 15 x 20.8 cm)	
	Weight	2.66 lb (1.2 kg)	

Slim Line CD-RW/DVD-ROM 24X Combo Drive (Multibay)	Shipping Dimensions	13.88 x 11.38 x 9.25 in (35.26 x 28.91 x 23.50 cm)
	Shipping Weight	5 lb (2.27 kg)
Disk	Applicable Disk	DVD-ROM DVD-R (Read Only) 2.6 GB/side DVD-RAM (Read Only) 5.2 GB/side DVD-RAM (Read Only) CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD Audio disc CD-Extra CD-RW CD-R CD Text PhotoCD

Technical Specifications

		CD-I (mode 2)	
		CD-I Ready	
		CD-Bridge	
	Capacity	DVD-ROM	DVD-SL 4.7 GB/side
			DVD-DL 8.5 GB/side
			Double Sided 9.40 GB/side
		DVD-R	3.95 GB/side
		DVD-RAM	2.6 GB/side and 5.2 GB/
		CD-ROM	Mode-1 650 MB (550 MB)
			Mode-2 742 MB (640 MB)
	Block Size	DVD	2,048 bytes
		CD	2,352 (Mode-0)
			2352, 2340, 2336, 2048 bytes (Mode-1)
			2352, 2340, 2336, 2048 bytes (Mode-2)
	Diameter	120 mm, 80 mm (with adapter at vertical mounting mode)	
Loading Mechanism	Tray type		
Interface	EIDE (ATAPI)		
Access Times (typical)	Random	DVD-ROM < 120 ms, CD-ROM < 110 ms	
	Full-Stroke	DVD-ROM < 240 ms, CD-ROM < 160 ms	
Audio Output Level (typical)	Line-out	CD 0.7 Vrms at 47 Kohms Load	
Data Transfer Rate (sustained)	DVD-ROM	Single Layer	10.8 MB/sec. Max.
	DVD-RAM	2.77 MB/sec. Max	
	CD-ROM	7.2 MB/sec. Max.	
Cache Buffer	2 MB		
Spin-up Time (typical)	less than 10 seconds		
MTBF	120,000 Power On Hours (POH)		
Ambient Temperature	Operating	-22° to 140° F (-30° to 60° C)	
Relative Humidity	Operating	10% to 80%	
	Storage/Transportation	5% to 95%	
Dimensions	(HxWxD, maximum)	0.5 x 5.04 x 5.1 in (12.7x128x129.4 mm)	
Option Kit Contents	DVD-ROM drive with installation guide, warranty card, registration card		

Technical Specifications

Integrated Lights-Out Standard (integrated on system board)	Architecture	32-bit PCI-based health and remote management ASIC (Application Specific Integrated Circuit)
	Processor	32-bit RISC processor core running at 66 MHz
	Upgradability	Option firmware upgradable via flash ROM.
	Video Support	Utilizes the host server's embedded video chip. Supports VGA/SVGA, 640 x 480 (256 to 16.7M colors), 800 x 600 (256 to 16.7M colors), 1024 x 768 (256 to 65K colors), 1280 x 1024 (256 colors)
	Interfaces	One Ethernet network connection (10/100 Mb/s)
	Memory	2-MB Flash ROM
		8-MB SDRAM
	Operating System Support	Microsoft Windows NT 4.0 Server
		Windows NT 4.0 Enterprise Edition
		Windows 2000 Server
		Windows 2000 Advanced Server
		Red Hat 7.x
		SuSE 7.0
Client Browser Support	Novell NetWare 5.x, 6.x	
	Microsoft Internet Explorer 5.5 or later.	
iLO Standard Features	Virtual Text Remote Console	
	Virtual Power Button Control	
	Dedicated LAN Connectivity	
	Automatic IP Configuration via DHCP/DNS/WINS	
	Industry Standard 128-bit Secure Sockets Layer (SSL) Security	
	IML and iLO Event Logging	
iLO Advanced Features (optional)	Support for up to 12 user accounts with customizable access privileges	
	Virtual Graphical Remote Console	
	Virtual Floppy Drive	

Technical Specifications

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 (only one connected)
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.		
	SCSI Ports (external/internal)	0/1
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)	2
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

Technical Specifications

HP NC7170 Dual Port PCI-X 1000T Gigabit Server Adapter	Network Interface	Two 10/100/1000-T ports		
	Compatibility	IEEE 802.3 10Base-T		
		IEEE 802.3ab 1000Base-T		
		IEEE 802.3u 100Base-TX		
		IEEE 802.3ad, IEEE 802.3p, and IEEE 802.3Q		
	Data Transfer Method	64-bit/133MHz PCI-X, compatible with 64/100, 64/66, 64/33 and 32/33		
	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-T (Half and Full-Duplex)		2000 Mb/s		
Connector	Two RJ-45			
Cable Support	10Base-T	10Base-T		
	10/100/1000Base-T	10/100/1000Base-T		
NC7770 PCI-X Gigabit Server Adapter	Network Interface	10/100/1000-T		
	Compatibility	IEEE 802.3 10Base-T		
		IEEE 802.3ab 1000Base-T		
		IEEE 802.3u 100Base-TX		
	Data Transfer Method	64-bit/133MHz 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-T (Half and Full-Duplex)	2000 Mb/s	
Connector	RJ-45			
Cable Support	10Base-T	Category 3,4 or 5 UTP up to 328 ft (100 m)		
	10/100/1000Base-T	Category 5 UTP (2 pair); up to 328 ft (100 m)		

© Copyright 2005 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

Microsoft and Windows NT are US registered trademarks of Microsoft Corporation. Intel is a US registered trademark of Intel Corporation. Unix is a registered trademark of The Open Group.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.