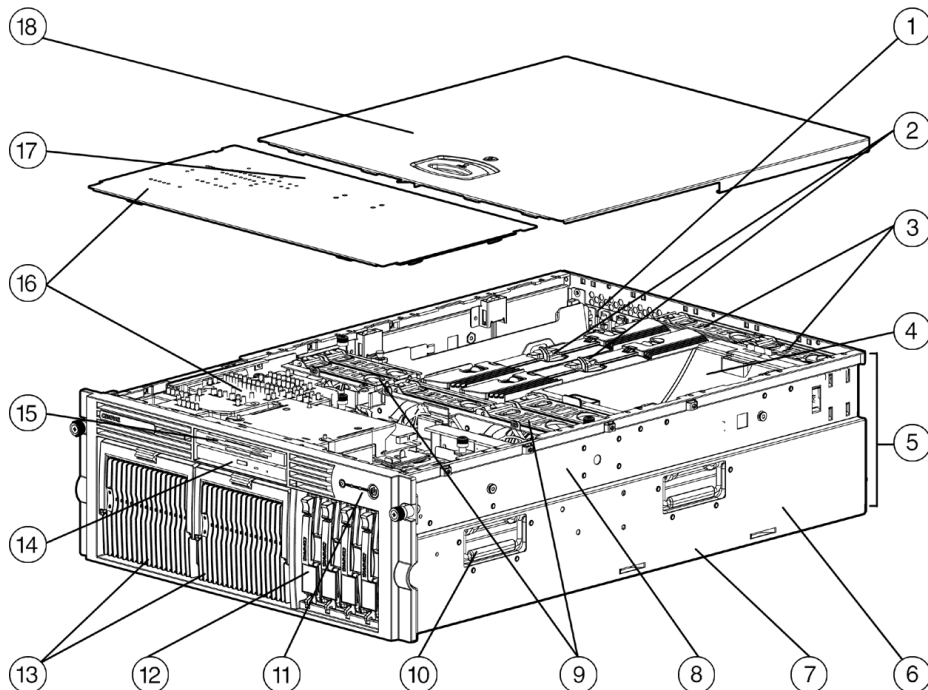


Overview



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 DL580 G2 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 DL580 G2 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 DL580 G2 models (one ships standard on 1P model, requires optional RPS for redundancy)
14. Ejectable Slim Line Drives: Ejectable 24X (slim line) CD-ROM IDE Drive
15. Ejectable 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 Si Plus Controller (Dual Channel, Ultra3) with 64-MB total memory on Si 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 587.2 GB (4 x 146.8-GB 1" Ultra320 SCSI 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. Consult the HP Customer Support Center at 1-800-345-1518 for details.

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

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

Manageability

Integrated Lights-Out (iLO) Standard Management (ASIC on the System Board)

Standard Features

Storage Controllers

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.

- 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

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 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.

NOTE: For complete list of devices supported the Smart Array 5i Plus Controller see the following:

http://h18000.www1.hp.com/products/quickspecs/10890_na/10890_na.HTML

Storage Data Protection

The Battery-Backed Write Cache (BBWC) Enabler protects up to 64-MB write cache memory from hard boot, power, controller, or system board failures.

- Standard on DL580 G2 2P Models, optional on DL580 G2 1P Models
- Battery charge/life: Up to 72 hours/3 years
- Transportable data protection
- Increases overall controller performance

NOTE: Safely transport your write cache data to another DL580 G2 in the data center by removing the BBWC Enabler and 5i Plus Memory Module simultaneously (connected by short cable).

Storage

Diskette Drives	1.44 MB (slim line) – ejectable for security and serviceability
CD-ROM	24x IDE CD-ROM Drive (slim line) – ejectable for security and serviceability
Hard Drives	None
Maximum Internal Storage	587.2 GB (4 x 146.8 GB Wide Ultra 320 1" drives) (internal hot plug Ultra3 drive cage)
Hard Disk Drive Backplane	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. 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. 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.

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

Rack (4U = 7 inches), ships with sliding rails and cable management system
Space saving form factor (4U) provides space efficiencies while providing maximum deployment flexibility

Standard Features

ProLiant Essentials Foundation Pack Software

Insight Manager 7
HP Systems Insight Manager

Insight Manager 7 and HP's new HP Systems Insight Manager help 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. Insight Manager 7 and HP Systems Insight Manager are both easy to set up work with the Insight Management Agents, integrated Light-Out and Remote Insight Light-Out Edition, and Version Control Agents to deliver robust fault, configuration, and asset management as well as remote administration. With HP Systems Insight Manager customers will also be able to take advantage of role-based security; the ability to manage ProLiant, Integrity, and HP9000 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 Systems Insight Manager 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 Insight Manager 7 and other enterprise management applications in case of subsystem or environmental failures. For additional information about the Management Agents and other management products from HP, please visit the management Web site at <http://www.hp.com/servers/manage>.

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.

ROMPaq, support software,
and
configuration utilities

The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options available in SmartStart or downloadable from Software and Drivers download pages, linked from the SmartStart website at <http://www.hp.com/servers/smartstart>.

Survey Utility and diagnostics
utilities

The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips, available in SmartStart.

Optional ProLiant Essentials
Value Packs

Optional software offerings that selectively extend the functionality of an Adaptive Infrastructure to address specific business problems and needs:

- Rapid Deployment Pack - an automated solution for multi-server deployment and provisioning, enabling companies to quickly and easily adapt to changing business demands.
- Workload Management Pack - provides easier management of complex environments, improving overall server utilization and enabling Windows® 2000 customers for the first time to confidently deploy multiple applications on a single multiprocessor ProLiant Server.
- Integrated Lights-Out Advanced Pack - upgrades the Integrated Lights-Out processor to full virtual presence and control with graphical console and virtual media.
- Recovery Server Option Pack - entry-level high availability software that will provide reliable protection and increased uptime against server hardware and operating system failures.
- Performance Management Pack - a performance management solution that identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources.

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

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

Standard Features

Industry Standard Compliance

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

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)

Insight Manager 7

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 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 DL580 G2 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, slim line 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: <ftp://ftp.HP.com/pub/products/servers/os-support-matrix-310.pdf>.

NOTE: For an up-to-date listing of the latest drivers available for the HP ProLiant 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>.

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

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.

HP Factory Express Capabilities

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

Standard Features

Service and Support

HP Services provides a three-year, limited warranty, including Pre-Failure Warranty (coverage of hard drives, memory and processors) fully supported by a worldwide network of resellers and service providers and lifetime toll-free 7 x 24 hardware technical phone support. In addition, available service offerings include:

NOTE: Limited Warranty includes 3 year Parts, 3 year Labor, 3-year on-site support.

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

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

NOTE: For more information, visit <http://www.hp.com/services/carepack>.

Please see the following URL regarding Warranty Information For Your HP Products:

<http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>.

For additional information regarding Worldwide Limited Warranty and Technical Support, please see the following URL:

<ftp://ftp.compaq.com/pub/supportinformation/ejourney/176738.pdf>.

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

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 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 X2.8 GHz-2MB, 2048MB (2P) 325134-001	Processor(s)	(2) Intel Xeon Processors MP at 2.8 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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

DL580R02 X2.5-1MB, 2048MB (2P) 325133-001	Processor(s)	(2) Intel Xeon Processors MP at 2.5 GHz standard (up to 4 supported)
	Cache Memory	1-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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

DL580R02 X2.0-1MB, 1024MB (1P) 325132-001	Processor(s)	(1) Intel Xeon Processors MP at 2.0 GHz standard (up to 4 supported)
	Cache Memory	1-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 NC7770 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	587.2 GB maximum (with optional hard drives)
	Power Supply	One 800W Hot Plug Redundant Power Supply (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Form Factor	Rack 4U

Models

DL580R02 X2.0 GHz-2MB, 2048MB (2P) 202176-001	Processor(s)	(2) Intel Xeon Processors MP at 2.0 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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

DL580R02 X1.9-1MB, 2048MB (2P) 202175-001	Processor(s)	(2) Intel Xeon Processors MP at 1.9 GHz standard (up to 4 supported)
	Cache Memory	1-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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

DL580R02 X1.6-1MB, 2048MB (2P) 201203-001	Processor(s)	(2) Intel Xeon Processors MP at 1.6 GHz standard (up to 4 supported)
	Cache Memory	1-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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

Models

DL580R02 X1.4-512KB, 2048MB (2P) 201202-001	Processor(s)	(2) Intel Xeon Processors MP at 1.4 GHz standard (up to 4 supported)
	Cache Memory	512-KB 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 NC7770 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	587.2 GB 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
	Form Factor	Rack 4U

DL580R02 X1.5-1MB, 1024MB (1P) 202174-001	Processor(s)	(1) Intel Xeon Processor MP at 1.5 GHz standard (up to 4 supported)
	Cache Memory	1MB 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 NC7770 PCI-X Gigabit Server Adapter in a slot
	Storage Controller	Smart Array 5i Plus Controller (Dual Channel, Ultra3)
	Manageability	Integrated Lights-Out (iLO) Standard management (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	587.2 GB maximum (with optional hard drives)
	Power Supply	One 800W Hot Plug Redundant Power Supply (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Form Factor	Rack 4U

DL580R02 X1.4-512KB, 1024MB (1P) 201201-001	Processor(s)	(1) Intel Xeon Processor MP at 1.4 GHz standard (up to 4 supported)
	Cache Memory	512-KB 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 NC7770 PCI-X Gigabit Server Adapter in a slot
	Storage Controller	Smart Array 5i Plus Controller (Dual Channel, Ultra3)
	Manageability	Integrated Lights-Out (iLO) Standard management (integrated on system board)
	Hard Drives	None ship standard
	Internal Storage	587.2 GB maximum (with optional hard drives)
	Power Supply	One 800W Hot Plug Redundant Power Supply (low line or high line)
	Optical Drive	24x IDE slim-line CD-ROM Drive
	Form Factor	Rack 4U

Options

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	278535-001
	800W Hot Plug Redundant Power Supply -inc IEC	278535-B21
	DL580 G2 Third Party Racking Kit	287528-B21
	DL580 G2 Folding Cable Management Arm	289294-B21
	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.	
	Cord, AC Line, 20A, 250V, 12'	235604-001
	Cord, AC Line, 15A, 125V	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 ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the 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 ProLiant DL580 G2 server. Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections. Do not use the cord with any other 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 ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the 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 ProLiant DL580 G2 server. Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections. Do not use the cord with any other 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 6FT	313227-B21
	NOTE: Power cord (313227-B21) connects ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the	

Options

ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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 ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord:

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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

ProLiant Essentials Value Pack Software

Rapid Deployment Pack, 1 User, V1.x

267196-B21

NOTE: This license allows 1 server to be managed and deployed via the Deployment Server.

Rapid Deployment Pack, 10 Users, V1.x

269817-B21

NOTE: This license allows 10 servers to be managed and deployed via the Deployment Server.

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

ProLiant Essentials Recovery Server Option Pack

280189-B21

Integrated Lights-Out (iLO) Advanced Pack

263825-B21

ProLiant Essentials Performance Management Pack v2.0, Single License

306696-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 ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.70 GHz-2MB Processor Option Kit	345322-B21
	NOTE: This processor option kit (PN 345322-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.20 GHz-2MB Processor Option Kit	345321-B21
	NOTE: This processor option kit (PN 345321-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.80 GHz-2MB Processor Option Kit	325254-B21
	NOTE: This processor option kit (PN 325254-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.50 GHz-1MB Processor Option Kit	325253-B21
	NOTE: This processor option kit (PN 325253-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.0 GHz-1MB Processor Option Kit	325252-B21
	NOTE: This processor option kit (PN 325252-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X2.0 GHz-2MB Processor Option Kit	307276-B21
	NOTE: This processor option kit (PN 307276-B21) supports the ProLiant ML570 G2 and the DL580 G2.	
	Intel Xeon MP X1.9 GHz-1MB Processor Option Kit	311228-B21
	NOTE: This processor option kit (PN 311228-B21) supports the ProLiant ML570 G2 and the 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 ProLiant ML570 G2 and the ProLiant DL580 G2.	
	Intel Xeon MP X1.60 GHz-1MB Processor Option Kit	226776-B21
	NOTE: This processor option kit (PN 226776-B21) supports the ProLiant DL580 G2 only.	
	Intel Xeon MP X1.40 GHz-512KB Processor Option Kit	226775-B21
	NOTE: This processor option kit (PN 226775-B21) supports the ProLiant ML570 G2 and the 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		
	16X DVD-ROM Drive Option Kit (Carbon)	217053-B21
	CD-RW/DVD ROM combo Drive Option Kit	331346-B21
NOTE: The DVD-ROM drive is supported in the CD-ROM bay and in the removable media bay. If placed in the removable media bay, it requires the 2-Device IDE cable (PN 305381-B21).		

Options

Hard Drives	Ultra 320 SCSI – Universal Hot Plug	
	36.4GB 10,000 rpm, U320 Universal Hard Drive, 1"	286713-B22
	72.8GB 10,000 rpm, U320 Universal Hard Drive, 1"	286714-B22
	146.8GB 10,000 rpm, U320 Universal Hard Drive, 1"	286716-B22
	18.2GB 15,000 rpm, U320 Universal Hard Drive, 1"	286775-B22
	36.4GB 15,000 rpm, U320 Universal Hard Drive, 1"	286776-B22
	72.8GB 15,000 rpm, U320 Universal Hard Drive, 1"	286778-B22

NOTE: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds. 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_na/11531_na.HTML

Options

Storage Controllers

Smart Array 532 Controller	225338-B21
Smart Array 5304/256 Controller	283551-B21
Smart Array 6402/128 Controller	273915-B21
Smart Array 6404/256 Controller	273914-B21
Smart Array 641 Controller	291966-B21
Smart Array 642 Controller	291967-B21
Ultra3 Channel Expansion Module for Smart Array 5300 Controller	153507-B21
128MB Cache Module for Smart Array 5302 Controller	153506-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 255514-001) is optional for the DL560 1P Model only.	
64 MB Battery Backed Write Cache Enabler	291969-B21
NOTE: This 64 MB BBWC supports the Smart Array 641 Controller and Smart Array 642 Controller.	
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
Smart Array 6404/256 Controller	273914-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/11063_na/11063_na.HTML (Smart Array 5i Plus)	
http://h18000.www1.hp.com/products/quickspecs/10851_na/10851_na.HTML (Smart Array 532)	
http://h18000.www1.hp.com/products/quickspecs/10640_na/10640_na.HTML (Smart Array 5300 Series)	
http://h18000.www1.hp.com/products/quickspecs/11587_na/11587_na.HTML (Smart Array 6400 Series)	
http://h18000.www1.hp.com/products/quickspecs/11563_na/11563_na.HTML (Smart Array 641)	
http://h18000.www1.hp.com/products/quickspecs/11563_na/11563_na.HTML (Smart Array 642)	
http://h18000.www1.hp.com/products/quickspecs/10429_na/10429_na.HTML (SCSI Adapter)	
http://h18000.www1.hp.com/products/quickspecs/11555_na/11555_na.HTML (U320 Adapter)	

Options

Communications	NC6170 Dual Port PCI-X 1000SX Gigabit Server Adapter	313879-B21
	NC6770 PCI-X Gigabit Server Adapter, 1000-SX	244949-B21
	NC7170 Dual Port PCI-X 1000T Gigabit Server Adapter	313881-B21
	NC7771 PCI-X Gigabit Server Adapter	290563-B21
Redundant Options	800W Hot Plug Redundant Power Supply	278535-001
	800W Hot Plug Redundant Power Supply -inc IEC	278535-B21
Management Options	Remote Insight Lights-Out Edition II	227251-001
Security	HP/Atalla AXL600L SSL Accelerator Card for ProLiant Servers	524545-B21
	Compaq AXL300 Accelerator PCI Card (HW SSL Encryption) for ProLiant Servers	227933-B21
Monitors	Rackmount Flat Panel Monitors	
	TFT5110R Flat Panel Monitor (Carbon)	281683-B21
	TFT7210R Rack Mounted 17" Monitor	348373-B21
	NOTE: Monitors larger than 17" may be too heavy for use in rack systems.	
	NOTE: For a complete list of Monitors please view the following URL: http://h18004.www1.hp.com/products/monitors/	
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 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
	NOTE: Please see the HP StorageWorks Ultrium 215, 230, and 460 Tape Drive QuickSpecs for additional options such as controllers, media, and other related items: http://h18006.www1.hp.com/products/quickspecs/11739_na/11739_na.html	
	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	

Options

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

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

For an up-to-date listing of the latest O/S and software support details for HP DAT drives, please

visit: <http://www.hp.com/go/connect>

External DLT VS Tape Drives

HP StorageWorks DLT VS80 Tape Drive, External (Carbon)

337699-B22

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

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

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)

257319-001

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

http://h18006.www1.hp.com/products/quickspecs/11406_na/11406_na.HTML

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

Rack-Mount Tape Drive Enclosures

HP StorageWorks 3U Rack-Mount Kit

274338-B21

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

HP StorageWorks 5U Rack-Mount Kit

274339-B21

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

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

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

HP StorageWorks Tape Array 5300

C7508A

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

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

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

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

LVD Cable Kit, VHDCI/HD68

168048-B21

NOTE: For use with the 3U Rackmount Kit and 5U Rackmount Kit only.

LVD Cable Kit, HD68/HD68

242381-B21

NOTE: For use with the 3U Rackmount Kit and 5U Rackmount Kit only.

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

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

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 40x6 Tape Autoloader, External (Flint)

C5717C

NOTE: Please see the [DAT 40x6 Tape Autoloader QuickSpecs](#) for additional options such as host bus adapters, controllers and media:

http://h18000.www1.hp.com/products/quickspecs/11882_na/11882_na.HTML

HP StorageWorks 1/8 Tape Autoloader

1/8 Ultrium 460 Tape Autoloader, Tabletop

AA927A

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

SSL1016 DLT1 Tape Autoloader

330815-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, rackmount

330731-B22

MSL6030, 2 drive, 30 slots, Ultrium 460, rackmount

330731-B23

MSL6030, 1 drive, 30 slots, Ultrium 460, rackmount with embedded FC router

330731-B24

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

330731-B25

MSL6030, 1 drive, 30 slots, Ultrium 460, tabletop

330788-B21

MSL6030, 2 drive, 30 slots, Ultrium 460, tabletop

330788-B22

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

331196-B21

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

331196-B22

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

331195-B21

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

HP StorageWorks MSL5026S2 Tape Library

MSL5026S2, 1 drive, 26 slots, SDLT 320, rackmount

293472-B22

MSL5026S2, 2 drive, 26 slots, SDLT 320, rackmount

293472-B23

MSL5026S2, 1 drive, 26 slots, SDLT 320, rackmount with embedded FC router

293472-B24

MSL5026S2, 2 drive, 26 slots, SDLT 320, rackmount with embedded FC router

293472-B25

MSL5026S2, 1 drive, 26 slots, SDLT 320, tabletop

293473-B21

MSL5026S2, 2 drive, 26 slots, SDLT 320, tabletop

293473-B22

NOTE: Please reference the [MSL5026S2 Tape Library QuickSpecs](#) at <http://www.hp.com/go/automation> for additional information needed to create a complete solution;

Options

reference current compatibility information at <http://www.hp.com/go/ebs>

HP StorageWorks MSL5052S2 Tape Library

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

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

HP StorageWorks MSL5030 Tape Library

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

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

HP StorageWorks MSL5060 Tape Library

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

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

HP StorageWorks ESL9000 Series Tape Libraries

ESL9595 Extended Tape Library, 0 drive, 400 slots (card cage, Interface Mgr card, Command View license)	343378-B21
ESL9595 Library, 0 drive, 400 slots	330833-B21
ESL9322 Extended Tape Library, 0 drive, 222 slots (card cage, Interface Mgr card, Command View license)	343377-B21
ESL9595 Library, 0 drive, 222 slots	330832-B21
ESL9000 Ultrium 460 drive kit	330834-B21
ESL9000 Ultrium 230 drive kit	301930-B21
ESL9000 SDLT 320 drive kit	293414-B21
ESL9000 400 to 500 slot upgrade	330842-B21
ESL9000 500 to 595 slot upgrade	330842-B22
ESL9000 400 to 595 slot upgrade	330842-B23
ESL9000 222 to 322 slot upgrade	330840-B21
ESL9000 E2400-160 FC Interface Controller (one controller for every four drives)	330839-B21
License for Direct Backup Engine ESL	343375-B21

Options

License for Secure Manager ESL

343376-B21

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

Magneto-Optical Jukeboxes

HP StorageWorks 9.1 GB Mid-range Optical Jukeboxes		
300mx, 2 drive, 32 slot jukebox		C1150M
600mx, 4 drive, 64 slot jukebox		C1160M
700mx, 2 drive, 76 slot jukebox		C1170M
NOTE: Please reference the Magneto-Optical Jukebox data sheets at http://www.hp.com/go/optical for additional information needed to create a complete solution.		
HP StorageWorks 9.1 GB High-end Optical Jukeboxes		
1200mx, 4 drive, up to 128 slots		C1104M
1200mx, 6 drive, up to 128 slots		C1105M
2200mx, 4 drive, up to 238 slots		C1111M
2200mx, 6 drive, up to 238 slots		C1107M
2200mx, 10 drive, up to 238 slots		C1110M
NOTE: Please reference the Magneto-Optical Jukebox data sheets at http://www.hp.com/go/optical for additional information needed to create a complete solution.		

Options

Cluster Options

ProLiant Cluster HA/F100 for Modular Smart Array 1000	252408-B24
ProLiant Cluster HA/F200 for Modular Smart Array 1000	252409-B24
NOTE: For additional information regarding the ProLiant Cluster for HA/F100, HA/F200 for Modular Smart Array 1000 please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11035_na/11035_na.html	
ProLiant Cluster HA/F100 for Windows NT and 2000 Advanced Server	309816-B21
ProLiant Cluster HA/F200 for Windows NT and 2000 Advanced Server	380357-B23
NOTE: For additional information regarding the ProLiant Cluster for HA/F100, HA/F200 for Windows NT and 2000 Advanced Server please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/10777_na/10777_na.html	
ProLiant Cluster HA/F500 Basic Kit	103250-B24
ProLiant Cluster HA/F500 Enhanced Kit	379937-B27
ProLiant Cluster HA/F500 Enhanced DT Kit	164227-B25
NOTE: For additional information regarding the ProLiant Cluster for HA/F500 please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/10232_na/10232_na.html	
ProLiant Cluster HA/F500 for Enterprise Virtual Array	313047-B23
ProLiant Cluster HA/F500 Enhanced Kit for Enterprise Virtual Array	254623-B24
ProLiant Cluster HA/F500 Enhanced DT Kit for Enterprise Virtual Array	306791-B21
NOTE: For additional information regarding the ProLiant Cluster HA/F500 for Enterprise Virtual Array please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11055_na/11055_na.html	
HP Serviceguard for Linux ProLiant Cluster	305199-B21
NOTE: Kit includes 2 licenses, documentation and an Ethernet crossover cable.	
HP Serviceguard for Linux ProLiant Cluster (2 node license cluster kit for Red Hat AS 2.1) A.11.14	305199-B22
NOTE: Kit includes 2 licenses, documentation and an Ethernet crossover cable.	
HP Serviceguard for Linux ProLiant Cluster (2 node license cluster kit) A.11.15	305199-B24
NOTE: Kit includes 2 licenses, documentation and an Ethernet crossover cable.	
HP Serviceguard for Linux (single license version for ordering flexibility and to ease ordering for larger cluster for Red Hat AS 2.1) A.11.14	307754-B22
NOTE: Kit includes single license version and documentation.	
HP Serviceguard for Linux (single license version for ordering flexibility and to ease ordering for larger cluster) A.11.15	307754-B24
NOTE: Kit includes single license version and documentation.	
NOTE: For additional information regarding the HP Serviceguard for Linux License, please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11518_na/11518_na.html	
HP Parallel Database Cluster Model PDC/O2000-MSA1000 for Oracle Real Application Cluster on Windows	279406-B24
NOTE: For additional information regarding the HP Parallel Database Cluster Model PDC/O2000-MSA1000, please see the following QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/10889_na/10889_na.html	
ProLiant Parallel Database Cluster for Linux - Oracle9i Real Application Cluster	308225-B22
NOTE: For additional information regarding the ProLiant Parallel Database Cluster for Linux, please see the following QuickSpecs at: http://www5.compaq.com/products/quickspecs/11688_na/11688_na.html	
PDC/O5000-EVA Windows RAC Cluster Kit	252478-B24

Options

External Storage – Rack	StorageWorks Enclosure Model 4314R (rack-mountable)	190209-001
	StorageWorks Enclosure Model 4354R (rack-mountable)	190211-001
	NOTE: The StorageWorks Enclosure 4300 Family supports the Wide Ultra3, Ultra320 1" Hot Plug Hard Drives.	
	StorageWorks Enclosure 4200 Redundant Power Supply Option	338296-B21
	StorageWorks Enclosure 4200 Ultra3 Single Bus I/O Module Option	190212-B21
	StorageWorks Enclosure 4200 Ultra3 Dual Bus I/O Module Option	190213-B21
	StorageWorks Enclosure Tower to Rack Conversion Kit	150213-B21
	HP StorageWorks Modular Smart Array 30 SB	302969-B21
	HP StorageWorks Modular Smart Array 30 DB	302970-B21
	Ultra320 Dual Bus I/O Module for MSA30	287483-B21
	Ultra320 Single Bus I/O Module for MSA 30	287484-B21

HP StorageWorks Modular Smart Array 500	HP StorageWorks Modular Smart Array 500	201724-B21
	Modular Smart Array 500 Starter Kit	351504-B21
	(includes Modular Smart Array 500 and 2 SA-532 Adapters)	
	Modular Smart Array 500 High Availability Kit	351281-B21
	(includes Modular Smart Array 500 controller, 4-port IO Module, Smart Array Multipath Software and 2 SA-532 Adapters)	
	Modular Smart Array 500 Controller	218252-B21
	128-MB Cache Module for Smart Array Controller	153506-B21
	NOTE: 128-MB Cache Module for Smart Array Controller (PN 153506-B21) is an upgrade cache module (128 MB Standard) for Modular Smart Array 500 Controller	
	256-MB Battery-Backed Cache Module	254786-B21
	NOTE: Please see the Modular Smart Array 500 QuickSpecs for additional information including configuration steps and additional options needed for a complete solution at: http://h18000.www1.hp.com/products/quickspecs/11050_na/11050_na.HTML	

HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000	201723-B22
	Modular Smart Array 1000 Controller	218231-B22
	Modular Smart Array Fibre Channel I/O Module	218960-B21
	Modular Smart Array 1000 Fibre Channel Adapter (FCA) 2101	245299-B21
	Modular Smart Array hub 2/3	286763-B21
	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	

StorageWorks Options	StorageWorks SAN Switch 2/8-EL	322120-B21
	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	

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	204404-001
HP UPS R3000 XR (2880VA, 2700 Watt), Low Voltage	192186-001
HP UPS R3000 XR (3000VA, 2700 Watt), High Voltage	192186-002
HP UPS 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	326529-D71
Rack-Mountable UPS R6000 (6000VA, 6000 Watt) High Voltage	347207-001
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.

UPS Options

SNMP Serial Port Card	192189-B21
NOTE: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	
Six Port Card	192185-B21
NOTE: Supports tower and rack UPS XR models ranging from 1000 – 3000VA.	
High to Low Voltage Transformer (250VA)	388643-B21
NOTE: Supports R6000 UPS series only. 2.5 amps @ 125 Volts max output across two NEMA 5-15.	
Extended Runtime Module, R1500 XR	218971-B21
NOTE: 2U each, two ERM maximum.	
Extended Runtime Module, R3000 XR	192188-B21
NOTE: 2U each, one ERM maximum.	
Extended Runtime Module, R6000	347224-B21
NOTE: 3U each, two ERM maximum.	
Extended Runtime Module R5500XR,WW	326564-B21
NOTE: 3U each, two ERM maximum.	
Extended Runtime Module, R12000 XR, 4U	217800-B21
NOTE: 4U each, two ERM maximum.	
R1200 XR Backplate Receptacle Kit, (2) L6-30R	325361-001
NOTE: The R12000 XR Backplate Kit has a hardwired input.	
R1200 XR Backplate Receptacle Kit, (2) IEC-309R	325361-B21
NOTE: The R12000 XR Backplate Kit has a hardwired input.	
SNMP-EN Adapter	347225-B21
NOTE: Supports R6000 UPS series only.	
Multi-Server UPS Card	123508-B21
NOTE: Supports R6000 UPS series only.	
Scalable UPS Card	123509-B21
NOTE: Supports R6000 UPS series only.	
Cable, 16A, 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 6FT	313227-B21
NOTE: Power cord (291034-B21) connects ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the ProLiant DL580 G2 server. Please NOTE the following important precautions when deploying this	

Options

power cord:

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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 ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord:

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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 8FT

291034-B21

NOTE: Power cord (291034-B21) connects ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord:

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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 ProLiant DL580 G2 servers to PDUs or UPSs with IEC320-C13 output connections. This power cord has been specifically designed to work with the ProLiant DL580 G2 server. Please **NOTE** the following important precautions when deploying this power cord:

- Use the cord only in conjunction with the ProLiant DL580 G2 server.
- Use the cord to connect the ProLiant DL580 G2 server only to PDUs or UPSs with IEC320-C13 output connections.
- Do not use the cord with any other 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

Options

Modular Power	Modular Power Distribution Units (mPDU), High Volt Model, 16A (200-240 VAC)	252663-B24
Distribution Units 1U/0U (Up to 32 outlets) NOTE: 1U/0U mounting brackets shipped with the unit (optimized for 10000 and 9000 series racks).	<p>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).</p> <p>Modular Power Distribution Units (mPDU), Low Volt Model, 24A (100-127 VAC)</p>	252663-D71
	<p>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).</p> <p>Modular Power Distribution Units (mPDU), High Volt Model, 24A (200-240 VAC)</p>	252663-D72
	<p>NOTE: L6-30 input.</p> <p>Modular Power Distribution Units (mPDU), High Volt Model, 40A (200-240 VAC)</p>	252663-B21
	<p>NOTE: The 40A model has a hardwired input.</p> <p>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</p>	
Power Distribution Unit Options	Third Party Modular Power Distribution Unit Mounting Kit	310777-B21
	<p>NOTE: This kit allows you to mount the Modular Power Distribution Units in racks other than the 9000/10000 Series racks (any racks using the standard 19" rail). For more details please refer the Modular Power Distribution Unit QuickSpecs.</p> <p>4.5' IEC C 13 to IEC C14 Power Distribution Unit Jumper Cable (1 per pack)</p>	142257-006
	4.5' IEC C 13 to IEC C14 Power Distribution Unit Jumper Cable (15 per pack)	142257-007
USB Options	USB Easy Access Keyboard (Carbonite/Silver)	DC168B#ABA
	USB Optical Scroll Mouse (Carbonite)	DD441B
	USB 1.44-MB External Diskette Drive (Carbonite)	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	332815-B21
	NOTE: This kit allows HP rack servers to fit in racks that are 24" wide.	

Options

HP Rack 10000 Series (Graphite Metallic)

HP Rack S10614 (14U) Rack Cabinet – Shock Pallet	292302-B22
HP Rack 10842 (42U, 800mm wide) – Pallet	257415-B21
HP Rack 10842 (42U, 800mm wide) – Shock Pallet	257415-B22
HP Rack 10647 (47U) – Pallet	245160-B21
HP Rack 10647 (47U) – Crated	245160-B23
HP Rack 10642 (42U) – Pallet	245161-B21
HP Rack 10642 (42U) – Shock Pallet	245161-B22
HP Rack 10642 (42U) – Crated	245161-B23
HP Rack 10636 (36U) – Pallet	245162-B21
HP Rack 10636 (36U) – Shock Pallet	245162-B22
HP Rack 10636 (36U) – Crated	245162-B23
HP Rack 10622 (22U) – Pallet	245163-B21
HP Rack 10622 (22U) – Shock Pallet	245163-B22
HP Rack 10622 (22U) – Crated	245163-B23

NOTE: -B21 (pallet) used to ship empty racks shipped on a truck

-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)

-B23 (crated) used for air shipments of empty racks

NOTE: Please see the Rack 10000 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:

http://h18000.www1.hp.com/products/quickspecs/10995_na/10995_na.HTML

NOTE: For additional information regarding Rack Cabinets, please see the following URL:

<http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html>.

Rack Options for HP Rack 10000 Series

Rack Blanking Panels – Graphite (Multi)	253214-B26
NOTE: Contains one each of 1U, 2U, 4U and 8U.	
Rack Blanking Panels – Graphite (1U)	253214-B21
NOTE: The Rack Blanking Panels (PN 253214-B21) contains 10 each of (1U).	
Rack Blanking Panels – Graphite (2U)	253214-B22
NOTE: The Rack Blanking Panels (PN 253214-B22) contains 10 each of (2U).	
Rack Blanking Panels – Graphite (3U)	253214-B23
NOTE: The Rack Blanking Panels (PN 253214-B23) contains 10 each of (3U).	
Rack Blanking Panels – Graphite (4U)	253214-B24
NOTE: The Rack Blanking Panels (PN 253214-B24) contains 10 each of (4U).	
Rack Blanking Panels – Graphite (5U)	253214-B25
NOTE: The Rack Blanking Panels (PN 253214-B25) contains 10 each of (5U).	
800mm Wide Stabilizer Kit (Graphite)	255488-B21
NOTE: Supported by the Rack 10842 cabinet only.	
600mm Stabilizer Kit – Graphite	246107-B21
Baying Kit for Rack 10000 series (Carbon)	248929-B21
42U Side Panel – Graphite Metallic	246099-B21
110V Fan Kit (Graphite)	257413-B21
NOTE: Roof Mount Includes power cord with IEC320-C13 to Nema 5-15P.	
220V Fan Kit (Graphite)	257414-B21
NOTE: Roof Mount Includes power cord with IEC320-C13 to Nema 6-15P.	
36U Side Panel – Graphite Metallic	246102-B21
47U Side Panel – Graphite Metallic	255486-B21
9000/10000 Series Offset Baying Kit (42U)	248931-B21
NOTE: This kit can be used to connect 9000 and 10000 series racks of the same U height together.	

Options

Kit contents include hardware for connecting racks and a panel to cover the 100mm gap at the rear of the two racks.

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

Ballast Option Kit	120672-B21
9000/10000 Series Offset Baying Kit (42U)	248931-B21

NOTE: This kit can be used to connect 9000 and 10000 series racks of the same U height together. Kit contents include hardware for connecting racks and a panel to cover the 100mm gap at the rear of the two racks.

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

Rack Rail Adapter Kit (25" depth)	120675-B21
100 kg Sliding Shelf	234672-B21
Monitor/Utility Shelf - Graphite	253449-B21
Depth Adjustable Fixed Rail	332558-B21
Cable Management D-Rings Kit	168233-B21
KVM USB Interface Adapter	336047-B21
Server Console Switch 1 x 4 port (100-230 VAC)	400336-001
Server Console Switch, 0 x 1 x 8 port	336044-B21
Server Console Switch, 0 x 2 x 16 port	336045-B21
IP Console Switch Box, 1 x 1 x 16	262585-B21
IP Console Switch Box, 3 x 1 x 16	262586-B21
IP Console Interface Adapter, 8 pack	262587-B21
IP Console Interface Adapter, 1 pack	262588-B21
IP Console Expansion Module	262589-B21
CPU to Server Console Cable, 12'	110936-B21
CPU to Server Console Cable, 3'	110936-B24
CPU to Server Console Cable, 7'	110936-B25
IP CAT5 Cable 3', 4 pack	263474-B21
IP CAT5 Cable 6', 8 pack	263474-B22
IP CAT5 Cable 12', 8 pack	263474-B23
IP CAT5 Cable 20', 4 pack	263474-B24
IP CAT5 Cable 40', 1 pack	263474-B25
Switch Box Connector Kit (115V)	144007-001
Switch Box Connector Kit (230V)	144007-002
TFT5600 Rack Keyboard Monitor	221546-001
Local Access Cable Kit	232985-B21
1U Rack Keyboard & Drawer (Carbon)	257054-001
NOTE: The 1U Rack Keyboard & Drawer (PN 257054-001) is to be used with the Keyboards for Racks with Trackball (PN 158649-001).	
Input Device Adjustable Rails	287139-B21
NOTE: Input Device Adjustable Rails (287139-B21) are for use with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.	
Input Device Telco Rail	287138-B21
NOTE: Input Device Adjustable Rails (287138-B21) are for use ONLY with the TFT5110R, TFT5600RKM and integrated keyboard/drawer which is used in mounting into third party racks.	
Keyboard/Monitor/Mouse extension cables	169989-001
NOTE: For additional information regarding Rack Options, please see the following URL: http://h18000.www1.hp.com/products/servers/proliantstorage/rack-options/index.html .	

Options

HP Factory Express

Factory Installation, Racking, and Customization Services

Factory Express Server Configuration Level 1 293355-888

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

Factory Express Server Configuration Level 2 266326-888

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

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

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

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

NOTE: Includes Level 1 Customer Intent for standard mounted servers and storage units plus standard cable mgmt, RAID configuration, servers & storage, power distribution, networking gear and accessories (price/ra520ck).

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

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

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

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

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

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

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

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

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

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 (Canadian Part Number) FP-MI3EC-36

4-Hour On-site Service, 5-Day x 13-Hour, 3 Years (U.S. Part Number) 331087-002

4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (Canadian Part Number) FP-MI7EC-36

4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years (U.S. Part Number) 401782-002

6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years (Canadian Part Number) FP-MICEC-36

Options

Installation & Start-up Services

Hardware Installation (Canadian Part Number)	FP-MIINS-EC
Hardware Installation (U.S. Part Number)	401793-002
Installation & Start-Up of a ProLiant server and Microsoft O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (U.S. Part Number)	240015-002
Installation & Start-Up of a ProLiant server and Microsoft O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (Canadian Part Number)	FM-MSTEC-03
Installation & Start-Up of a ProLiant server and Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (U.S. Part Number)	331093-002
Installation & Start-Up of a ProLiant server and Linux O/S per the Customer Description and/or Data Sheet. To be delivered on a scheduled basis 8am-5pm, M-F, excl. HP holidays. (Canadian Part Number)	FM-LSTEC-03

Support Plus

Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (U.S. Part Number)	239936-002
Onsite HW support, 8am-9pm, M-F, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (Canadian Part Number)	FM-M01E3-36
Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (U.S. Part Number)	331091-002
Onsite HW support, 8am-9pm, M-F, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 8am-9pm, M-F 2hr response time excl. HP holidays. (Canadian Part Number)	FM-L01E3-36

Support Plus 24

Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (U.S. Part Number)	239938-002
Onsite HW support 24x7, 4hr response and Microsoft O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (Canadian Part Number)	FM-M02E3-36
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (U.S. Part Number)	331092-002
Onsite HW support 24x7, 4hr response and Linux O/S SW Tech support offsite, onsite at HP's discretion, 24x7 2hr response time incl. HP holidays. (Canadian Part Number)	FM-L02E3-36

Options

HP Care Pack Priority Services for ProLiant Servers - Priority Silver

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday - Friday, 8AM - 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review (2-5-2 Part Number for Canada)	FM-M04E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday - Friday, 8AM - 5PM local time, 2-hr response after hours for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System Operating System, Technical Account Manager, Technical Newsletter, SW activity review (6-3 Part Number for U.S.)	239940-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239942-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M24E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday - Friday, 8AM - 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (2-5-2 Part Number for Canada)	FM-N04E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Software Support, 1-hr response, Monday - Friday, 8AM - 5PM local time, 2-hr response after hours for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review (6-3 Part Number for U.S.)	239980-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada.)	FM-N24E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Silver Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239982-002

HP Care Pack Priority Services for ProLiant Servers - Priority Gold

24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (2-5-2 Part Number for Canada)	FM-M08E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (6-3 Part Number for U.S.)	239944-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M28E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239946-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (2-5-2 Part Number for Canada)	FM-N08E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (6-3 Part Number for U.S.)	239984-002
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada)	FM-N28E3-36
24 x 7 HW, 4-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239986-002

Options

HP Care Pack Priority Services for ProLiant Servers - Priority Gold Executive

24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (2-5-2 Part Number for Canada)	FM-M09E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System, Technical Account Manager, Technical Newsletter, SW activity review, proactive revision management, Upgrade impact planning, 2 System Healthcheck per year (6-3 Part Number for U.S.)	239948-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (2-5-2 Part Number for Canada)	FM-M29E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Windows NT, Windows 2000, Professional, Server or Advanced Server Operating System (6-3 Part Number for U.S.)	239950-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (2-5-2 Part Number for Canada.)	FM-N09E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Software Support, 30 minute response (critical), 1-hr response (non-critical), for Novell NetWare Operating System, Technical Account Manager, Technical Newsletter, SW activity review, Upgrade impact planning (6-3 Part Number for U.S.)	239988-002
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (2-5-2 Part Number for Canada)	FM-N29E3-36
24 x 7 HW, 2-hr response, Named HW engineer; 24 x 7 Gold Subsequent System Support for Novell NetWare Operating System (6-3 Part Number for U.S.)	239990-002

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 DL580 G2 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

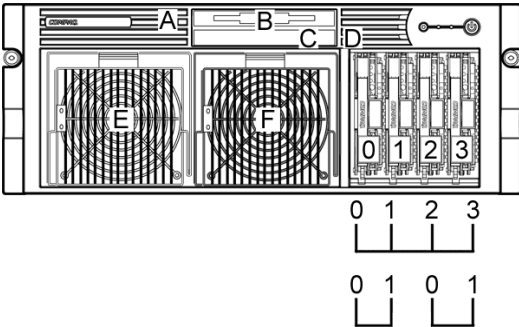
Standard Memory Summary		Standard Memory Board (Slots)							
		1	2	3	4	5	6	7	8
Standard	1024 MB	256 MB	256 MB	256 MB	256 MB	Empty	Empty	Empty	Empty
		Optional 2nd Memory Board (Slots)							
		1	2	3	4	5	6	7	8
		Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty

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 DL580 G2 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)
146.8-GB 10,000 rpm			Smart Array 532 Controller
72.8-GB 10,000 rpm			Smart Array 5302/128 Controller
36.4-GB 10,000 rpm			Smart Array 5304/256 Controller
72.8-GB 15,000 rpm			Smart Array 6402/128 Controller
36.4-GB 15,000 rpm			Smart Array 641 Controller
18.2-GB 15,000 rpm			Smart Array 642 Controller
			64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter
NOTE: All U320 Universal Hard Drives are backward compatible to U2 or U3 speeds. U320 drives require an optional U320 Smart Array Controller or U320 SCSI HBA to support U320 transfer rates.			

Storage

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
Modular Smart Array 30 Family Up to 20		External	Smart Array 5304/256 Controller Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Modular Smart Array 500 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 1000: http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML			

Maximum Storage Capacity – (External StorageWorks Enclosure Attached)

Internal	587.2 GB (4 x 146.8-GB Ultra320 SCSI 1" Drives)
External	41.104 TB (20 x (14 x 146.8-GB 1" Ultra320 SCSI Drives))
Total	41.691 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://www5.compaq.com/products/quickspecs/North_America/10233.html

NOTE: For an up-to-date listing of the latest O/S Support details for each of the Tape Storage Systems listed below, please see the following:
http://www5.compaq.com/products/quickspecs/North_America/10809.html

	Quantity Supported	Position Supported	Controller
HP StorageWorks DAT 40 Tape Drive, Internal Hot-Plug HP StorageWorks DAT 72 Tape Drive, Internal Hot-Plug	Up to 1	0 & 1 or 2 & 3	Smart Array 5i Plus Controller (integrated on system board) Smart Array 532 Smart Array 5304/256 Controller Smart Array 6402/128 Controller Smart Array 6404/256 Controller Smart Array 642 Controller Smart Array 641 Controller 64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DAT 72 Tape Drive, External HP StorageWorks DAT 40 Tape Drive, External HP StorageWorks DAT 24 Tape Drive, External	Up to 2	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
Ultrium 215, External Ultrium 230, External Ultrium 460, External	Up to 2	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS

Storage

HP StorageWorks DLT VS80 Tape Drive, External	Up to 3	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks SDLT 320 Tape Drive, External	Up to 2	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
HP StorageWorks DAT 40x6 Tape Autoloader, External	Up to 3	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
1/8 Ultrium 460 Tape Autoloader 1/8 Ultrium 230 Tape Autoloader 1/8 DLT VS80 Tape Autoloader SSL1016 Ultrium 460 Tape Autoloader SSL1016 SDLT320 Tape Autoloader SSL1016 DLT1 Tape Autoloader	1 autoloader per SCSI channel	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
MSL6000 (Ultrium 460 -based) Tape Library MSL5026S2 (SDLT 320-based) Tape Library MSL5052S2 (SDLT 320-based) Tape Library MSL5030 (Ultrium 230 -based) Tape Library MSL5060 (Ultrium 230 -based) Tape Library	Please reference the MSL Tape Library QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz Dual Channel Ultra320 SCSI Adapter 64-Bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter, Alternate OS
ESL9322 ESL9595	Please see the ESL9000 Series Tape Libraries QuickSpecs to determine configuration requirements	External	64-Bit/133Mhz 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

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 Cord Part Number	295529-001
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TechSpecs

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	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.		

1.44-MB Diskette Drive	Size	3.5 in	
	LED Indicators (front panel)	Green	
	Read/Write Capacity per Diskette	1.44 MB/720 KB formatted	
	(high/low density)		
	Drive Supported	One	
	Drive Height	One-third	
	Drive Rotation	300 rpm	
	Transfer Rate Synchronous (Maximum) (high/low)	500/250 KB/s	
	Bytes/Sector	512	
	Sectors/Track (high/low)	18/9	
	Tracks/Side (high/low)	80/80	
	Access Times	Track-to-Track (high/low)	3/6 ms
		Average (high/low)	169/94 ms
		Settling Time	15 ms
		Latency Average	100 ms
	Cylinders (high/low)	80/80	
	Read/Write Heads	Two	

TechSpecs

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

		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			

TechSpecs

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
	OperatingSystem Support	Microsoft Windows NT 4.0 Server
		Windows NT 4.0 Enterprise Edition
		Windows 2000 Server
		Windows 2000 Advanced Server
		Red Hat 7.x
	Client Browser Support	SuSE 7.0
		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
	iLO Advanced Features (optional)	IML and iLO Event Logging
		Support for up to 12 user accounts with customizable access privileges
		Virtual Graphical Remote Console
		Virtual Floppy Drive

TechSpecs

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

TechSpecs

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-Duplex)	1000 Mb/s
		1000Base-T (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)

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