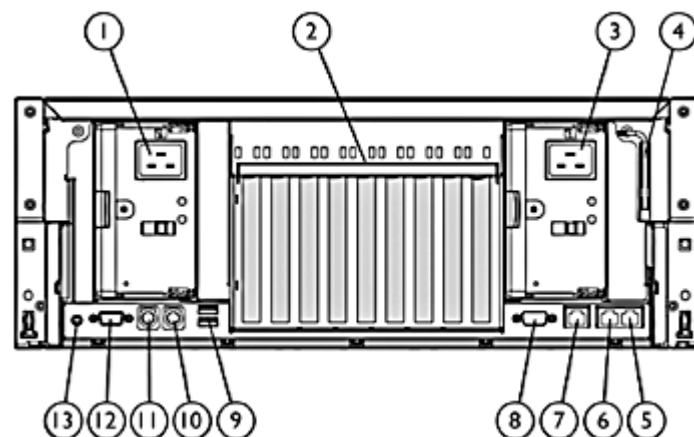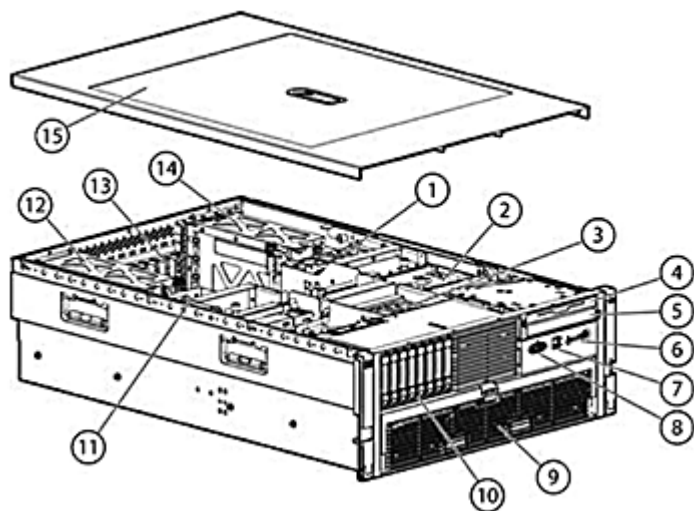*Overview*

Front View:

1. Hot Plug Redundant Fans (standard)
2. System Insight Display
3. Hot Plug Redundant Fans (standard)
4. 1.44 MB Diskette Drive bay
5. DVD/CD-RW drive (standard)
6. Front Panel LED Display (internal and external health, Unit ID light) and Power Button
7. Two USB ports
8. One video port
9. Front accessible processor / memory cage
10. Eight bay Small Form Factor (SFF) Serial Attached SCSI (SAS) drive cage
11. 4U (7" Height) Rack Form Factor
12. Hot Plug Redundant Power Supply
13. Nine PCI I/O Slots (2 64-bit/100MHz PCI-X, 4 PCI-Express x4, 3 PCI-Express x8)
14. Hot Plug Redundant Power Supply
15. Removable Top Access Panel

Rear View:

1. Redundant hot-plug power supply (optional)
2. PCI Express and PCI-X non-hot-plug expansion slots
3. Hot-plug power supply (primary)
4. T-15 Torx screwdriver
5. NIC connector 2
6. NIC connector 1
7. Integrated Lights-Out 2 (iLO 2) connector
8. Serial connector
9. USB connectors (two)
10. Mouse connector
11. Keyboard connector
12. Video connector
13. Rear UID button and LED

At A Glance

Powered by Latest AMD Opteron® Six-Core Processors DL585 G6 is positioned as the leading performance 4P multi-core rack mount server with the expansion capabilities to make it ideal for server virtualization, server consolidation, multi-tiered enterprise application, and corporate infrastructure applications.

- Processors:
    - Six-Core AMD Opteron™ 8400 Series Processors

Overview

- o Up to 6MB shared L3 cache
- o Up to 2.8GHz clock speed
- **Memory**:
  - o Up to 256 GB of memory
  - o 32 slots of PC2-6400 registered DIMMs up to 800MHz
- **Storage Controller**:
  - o Performance Models: HP Smart Array P410/512 MB BBWC Controller(RAID 0/1/1+0/5/5+0)
- **Internal Drive Support**:
  - o Up to 4TB internal storage (8 x 500GB SAS/SATA)
  - o Slimline optical drive bay, DVD/CD-RW standard on some models
- **Network Controller**:
  - o Two embedded NC371i Multifunction Gigabit Network Adapters with TCP/IP Offload Engine, including support for Accelerated iSCSI through an optional Licensing Kit
- **Expansion Slots**:
  - o 9 total slots: (3) x8 PCI-Express; (4) x4 PCI-Express; (2) PCI-X (100MHz)
  - o One slot populated with the HP Smart Array P410 Controller
- **Ports**:
  - o USB: (5) Total USB 2.0 Ports: (2) front; (2) rear; (1) internal
  - o Video: One front and one rear video ports
- **Redundancy**:
  - o Redundant hot plug power supplies and fans
- **Infrastructure Management**:
  - o Convenient slide-out Systems Insight Display for quick and easy front view server diagnostics, along with status LEDs, Automatic Server Recovery (ASR), ROM Based Setup Utility (RBSU)
  - o HP ProLiant Onboard Administrator (powered by the HP Integrated Lights-Out 2 management processor) for simplified server setup, health monitoring and recovery, power and thermal control, and lights-out remote administration.
  - o HP Insight Control (ICE) suites, as product options, deliver essential infrastructure management that can help save time and money by making it easy to deploy, monitor, control and optimize your IT infrastructure through a single, simple management console. ICE suites support both Windows and Linux-based servers and management consoles
  - o HP Insight Dynamics – VSE suite for ProLiant servers, a product option, is an integrated command center that enables you to continuously analyze and optimize your adaptive infrastructure. This advanced infrastructure management software lets you reduce the cost of common data center tasks by as much as 40 percent while keeping pace with your changing business.
- **Operating Systems and Virtualization Software Support for ProLiant Servers**:
  - o Supports Windows, RHEL, SLES, OEL, Solaris, VMware, and HP Citrix Essentials for XenServer
- **Form Factor**:
  - o Delivering maximum performance in a versatile, rack optimized form factor
- **Deployment/Serviceability**:
  - o Tool-less and virtually cable-less internal design
  - o Rapid Deployment racking solution (rack rails and cable management)
  - o Customer Self Repair (CSR): HP products are designed with many CSR parts to minimize repair time and allow for greater flexibility in performing defective parts replacement
- **Warranty**:
  - o This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HP Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.
    NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but

Overview

may involve added complexity. Customers may choose to have HP replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

Standard Features

Processor Two or four of the following depending on model	**Six-Core Processors** AMD Opteron™ processor Model 8439SE (2.8 GHz,105W ACP) AMD Opteron™ processor Model 8425HE (2.1 GHz, 55W ACP) AMD Opteron™ processor Model 8435 (2.6 GHz,75W ACP) AMD Opteron™ processor Model 8431 (2.4 GHz, 75W ACP) NOTE: Processor wattage references reflect Average CPU Power (ACP). For more information on ACP visit: http://www.amd.com/powernow.
Cache Memory	6 MB Level 3 cache memory
Upgradeability	Upgradeable to quad (4) processors
Chipset	NVIDIA NForce Professional 2200 and 2050 chipsets, and AMD-8132 chipset
Memory Protection	Advanced ECC capabilities
Memory	Type REG PC2-6400 DIMMs (DDR2-800) Standard 16 GB (8 x 2 GB) Maximum 256 GB (32 x 8 GB)
Network Controller	Two embedded NC371i Multifunction Gigabit Network Adapters with TCP/IP Offload Engine, including support for Accelerated iSCSI through an optional Licensing Kit

Expansion Slots

Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Device No.	Form Factor	Notes
1	PCI-X	64-bit	N/A	66	1	Full height or half length	
2	PCI-X	64-bit	N/A	66	2	Full length, full height	
3	PCI-Express	x4	x8	73	0	Full length, full height	100MHz
4	PCI-Express	x4	x8	76	0	Full length, full height	100MHz
5	PCI-Express	x8	x16	70	0	Full length, full height	
6	PCI-Express	x4	x8	79	0	Full length, full height	100MHz

Standard Features

7	PCI-Express	x8	x16	2	0	Full length, full height	100MHz
8	PCI-Express	x8	x16	5	0	Full length, full height	Reserved slot for Smart Array P410 Controller
9	PCI-Express	x4	x8	8	0	Full height or half length	

Storage Controller
One of the following depending on Model

Performance Models   HP Smart Array P410/512 MB BBWC Controller (RAID 0/1/1+0/5/5+0)

Storage Data Protection

The Battery-Backed Write Cache (BBWC) Enabler for the Smart Array P410 Controller protects up to 512-MB write cache memory from hard boot, power, controller, or system board failures.

- Standard on most HP ProLiant DL585 G6 models
- Battery charge/life: Up to 48 hours/3 years
- Transportable data protection
- Increases overall controller performance

NOTE: Safely transport your write cache data to another HP ProLiant DL585 G6 in the data center by removing the BBWC and Smart Array P410 Controller Memory Module simultaneously.

Storage

Diskette Drive	1.44MB Diskette Drive bay available
Optical Drive	Slimline DVD/CD-RW Drive Standard on some models - ejectable for security and serviceability
Hard Drives	None standard
Hard Disk Drive Backplane	Internal SAS backplane supports up to eight SFF hard disk drives

Maximum Internal Storage

Hot Plug SFF SAS	4.0 TB	8 x 500GB SFF SAS (internal hot plug)
Hot Plug SFF SATA	4.0 TB	8 x 500GB SFF SATA (internal hot plug)

Interfaces

Serial	1
Pointing Device (Mouse)	1
Video	1 front, 1 rear
Keyboard	1
USB 2.0 Ports	2 front, 2 rear, 1 internal
iLO 2 Remote Management port	1
Network RJ-45 (Ethernet)	2

Standard Features

Graphics	Integrated ATI RN-50 1600x1280x64K 16M color (32 MB DDR1 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

HP Insight Management Control Software	HP Insight Foundation	Managing the growing number of servers can be complex and expensive for your organization. IT managers need to address changing business needs with tools that meet the challenges of managing today's complex Datacenters. HP provides management solutions that are designed to simplify a server's installation, configuration and maintenance throughout the entire server lifecyle. This provides the customer with higher levels of operational efficiency and highly reliable systems: http://www.hp.com/go/foundation. The foundation pack includes: • HP SmartStart • HP Management • HP ProLiant Firmware Maintenance
	ProLiant Onboard Administrator	HP ProLiant Onboard Administrator (powered by the HP Integrated Lights-Out 2 management processor) simplifies server setup, health monitoring, power and thermal control, and lights-out remote administration of ProLiant ML, DL, and BL servers. HP ProLiant Onboard Administrator functions without additional software, and can be accessed from any location via a web browser. It works hand-in-hand with HP Systems Insight Manager, Insight Control suites, and the Insight Dynamics-VSE suite helping customers unlock the value of the ProLiant platform and deliver the highest possible quality of IT service to the business. See www.hp.com/go/ProLiantOA
	HP Insight Control suites	HP Insight Control suites, as product options, deliver essential infrastructure management that can help save time and money by making it easy to deploy, monitor, remote control, and optimize your IT infrastructure through a single, simple management console. ICE suites install and license software modules that are integrated into HP System Insight Manager. Two Insight Control suites are available, to serve environments requiring either Linux-based or Windows-based management consoles: HP Insight Control suite for Linux (ICE-LX), and HP Insight Control suite (ICE). See: www.hp.com/go/insightcontrol HP Insight Control suites include one year of 24 x 7 HP Software Technical Support and Update Service ensuring rapid access to HP support staff and proactive delivery of software updates. For more information about this service, please visit: http://www.hp.com/services/insight.
	HP Insight Dynamics – VSE suite	The HP Insight Dynamics - VSE suite for ProLiant, a product option, is an integrated command center that enables you to continuously analyze and optimize your adaptive infrastructure. This advanced infrastructure management software that allows you to analyze and optimize your adaptive infrastructure to manage physical and virtual resources in the same way. HP

Standard Features

Insight Dynamics - VSE gives you a powerful toolkit to accelerate complex technology projects and simplify daily operations. It enables you to plan capacity and power continuously, balance across physical and virtual resources, ensure cost-effective high availability, and provision infrastructure consistently.

HP Insight Orchestration, an optional extension to Insight Dynamics - VSE, enables IT organizations to provision infrastructure consistently and automatically from pools of shared resources using a self-service portal. Resources provisioned can range from a single virtual machine to complex multi-tier environments and their associated physical and virtual resource requirements.

HP Insight Recovery, also an optional extension for Insight Dynamics - VSE, enables cost-effective disaster recovery for physical and virtual environments. Application environments can be reactivated in minutes with the touch of a button to a remote location.

NOTE: For more information, visit: http://www.hp.com/go/insightdynamics, http://www.hp.com/go/insightorchestration, http://www.hp.com/go/insightrecovery

Industry Standard Compliance	ACPI 1.0a. Compliant
	PCI 2.2 Compliant
	PXE Support
	WOL Support (with embedded NC371i Multifunction Gigabit Network Adapters)
	Physical Address Extension (PAE) Support
	Microsoft® Logo certifications
	USB 2.0 Support

Intelligent Manageability	HP Systems Insight Manager software
	SmartStart
	Redundant ROM
	Remote Flash ROM
	Management Agents
	Integrated Management Log (IML)
	Automatic Server Recovery-2 (ASR-2)
	ROM-Based Setup Utility (RBSU)
	Dynamic Sector Repairing (with Smart Array Controllers)
	Drive Parameter Tracking (with Smart Array Controllers)
	Pre-Failure Warranty (covers processors, SAS hard drives and memory)
	Redundant/adaptive load balancing NIC Support

Standard Features

Availability	• Smart Array P410 Controller with Battery Backed Write Cache (BBWC) provides transportable data protection and increases overall controller performance. Up to 512MB Battery Backed Write Cache protection available on HP ProLiant DL585 G6 models. • Up to eight hot-plug SFF SAS Hard Drives • Dual Hot-Plug Redundant Power Supplies • Hot-Plug Redundant Fans (standard) • Fans are N+1 hot plug redundant and individually removable

Serviceability	• System Insight Display - precisely depicts all major subsystems of the server (PCI I/O, Memory, CPU, Redundant Cooling, Interlock, Thermal) and gives instant visual indication of fault status. Located on top front of server, beneath lid.
	• Tool-less, virtually cable-less interior design
	    ○ Tool-less access to interior of server
	    ○ Two ejectable, slimline Media Bay media drives (DVD/CD-RW standard) are removable without the use of tools
	    ○ Front accessible processors and memory
	    ○ PCI Card Guides locks full length PCI cards in place during transit
	    ○ Six individually removable fans connect without cables to the system board
	    ○ Tool-less removal of system board
	• Quick Deploy Rails
	• Tool-less design "snap in" rail

Manageability	• HP Insight Control suite: essential management, including proactive health management, lights out remote control, optimization of power usage, rapid server deployment, performance analysis, vulnerability scanning and patch management and virtual machine management. For more information, go to: www.hp.com/go/ice. • HP ProLiant Onboard Administrator (powered by the Integrated Light-Out 2 management processor) for simplified server setup, health monitoring and recovery, power and thermal control, and lights-out remote administration

Security	Power-on password Keyboard password Diskette drive control enable/disable Diskette boot control enable/disable External USB port enable/disable Network Server Mode Serial interface control Administrator's password Removable optical drive

Server Power Cords	The HP ProLiant DL585 G6 servers ship standard worldwide with a 6-foot IEC 320-C14 to IEC320-C19 jumper cord. Japanese models also include a 3.6 meter lowline (100V) power cord. If you require a local power cord, please check the Power Specifications below for the appropriate country-specific power cord, or consult the Power Cord Matrix: http://www.hp.com/products/powercords

Standard Features

UPS and PDU Power Cord Matrix	Please see the UPS and PDU cable matrix's on the HP Power Protection and Management page. Under Power Cords, click on the "HP Power Cord Matrix" link. That link will list cable descriptions, requirements, and specifications for UPS and PDU units. Please see the following link: www.hp.com/products/powercords.

Power Supply	910W (low line), 1300W (high line) with 12V main output. Size is 2.8"(H) X 4.9"(W) X 7.5"(L). **NOTE:** One Hot Plug Power Supply ships with Standard Models (optional Redundant Hot Plug Power Supply Option Kit available). High Performance models ship with two Hot Plug Power Supplies.

System Fans	6 Hot plug, redundant fans (individually removable)

Operating Systems and Virtualization Software Support for ProLiant Servers	Microsoft Windows Server 2003 R2 VMware Microsoft Windows Server 2008 Hyper-V Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Oracle Enterprise Linux (OEL) Solaris 10 for x86/x64 based Systems HP Citrix Essentials for XenServer **NOTE:** For more information on HP's Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server, please visit our Support Matrix at: www.hp.com/go/ossupport and our driver download site www.hp.com/support/DL585G6

Rack Airflow Requirements	**Rack 10000 G2 series Cabinets** The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The 10000 G2 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: www.hp.com/servers/dl585.

Standard Features

Rack Kit	Quick deploy rail system provides tool-free support for racks with square or round mounting holes (including Compaq/HP 7000, 9000, 10000 G2 and HP series), with an adjustment range of 24" - 36". The ambidextrous cable management arm can be mounted on either the left or right side for improved cable management.

Telco Rack Support

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

Factory Express Portfolio for Servers and Storage

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

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

For more information on Factory Express services for your specific server model, please contact your sales representative or go to: http://www.hp.com/go/factory-express.

HP Enterprise Configurator

The HP eConfigure Enterprise Configurator now provides factory default racking for our HP hardware portfolio. This approach is aligned with our strategic direction to meet the needs and expectations of our valued customers. If you require "custom" rack configuration, please contact HP's Customer Business Center or an Authorized Partner for assistance. For additional information please visit: http://www.hp.com/products/configurator

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Service and Support

HP Care Pack Services provide total care and support expertise with committed response designed to meet your IT and business needs.

HP Care Pack services include coverage for the HP branded hardware options qualified for the server that are purchased at the same time or afterward and internal to the enclosure. It also includes the 22" and smaller external monitors and tower UPS options up to 3kVA. These items will be covered at the same service level and for the same coverage period as the server. Coverage of UPS Battery is not included and standard warranty terms & conditions apply. For servers or storage systems installed within a rack, service also covers all HP qualified rack options installed within the same rack.

To fully capitalize on your HP ProLiant servers' capabilities requires a service partner who thoroughly understands your server technology and systems environment. HP Services, an industry leader in provision of multi vender support solutions provides a range of support services designed to meet the varying needs of business. Whether an SMB or large global corporation HP has a ProLiant server support offer to help you speedily deploy and maximize system uptime.

Recommended Service - simplify ProLiant solution implementation, maintenance, and management.

- Support - 3-Year 4-Hour response 24x7 Same Business Day Coverage only

Standard Features

- Service - Installation and Start up only

Enhanced Service - optimize service level to increase IT performance and availability.

- Support - 3-Year Support Plus 24 only

Refer to the information on "Installation & Start-Up" for service on ProLiant server and Microsoft or Linux O/S per the Customer Description and/or Data Sheet; to be delivered on a scheduled basis 8am-5pm, M-F, excluding HP holidays.

NOTE: For a complete listing of service offerings and information visit:
http://www.hp.com/services/proliantservices
http://www.hp.com/go/proliant/carepack

Solutions

Solutions

Designed for enterprise customers running compute- or I/O intensive database and transaction applications, as well as data centers using virtualization and consolidation to reduce server sprawl, the rack optimized 4-processor HP ProLiant DL585 G6 server delivers maximum performance and high availability for highly complex, business critical applications. Specifically, the HP ProLiant DL585 G6 would be excellent for running the following types of applications:

Typical Usage:

- x86 virtualization and consolidation projects
- Electronic Design Automation (EDA)/Semiconductor
- Financial
- Large database applications
- ERP / CRM
- Petrochemical
- Life Science and Material Science
- Video Rendering

HPC Interconnects

NOTE: High Performance Computing (HPC) interconnect technologies are available for this server under the Cluster Platform product portfolio. These high-speed interconnects are fully supported by HP when they are part of these configure to order clusters. Solutions can be defined with a lot of flexibility with the help of configuration tools. Please visit the following URL to configure HPC Clusters with InfiniBand, Gigabit Ethernet or Myrinet Interconnects: http://www.hp.com/techservers/clusters/ucp/index.html

HPC Interconnect	InfiniBand	PCI-X and PCI-Express adapters
	Gigabit Ethernet	Use embedded ports
	Myrinet XP	PCI-X Rev D and Rev E adapters

Models

HP DL585 G6 Performance Models HP ProLiant DL585 G6 8439SE 2.8GHz Six Core 4P 16GB 512BBWC Rack Server 539842-xx1	Processors	AMD Opteron™ 8439SE processor Model (2.8 GHz, 105W ACP)
	Cache Memory	6MB shared L3 cache per processor
	Memory	16GB (8 x 2GB)
	Network Controller	Two embedded NC371i Multifunction Gigabit Network Adapters
	Storage Controller	Smart Array P410/512 MB BBWC Controller (Raid 0,1,1+0, 5, 5+0)
	Hard Drives	None ship standard
	Internal Storage	Up to 4TB of internal storage
	Optical Drive	Slimline DVD/CD-RW Drive (8X/24X) (ejectable)
	Power Supply	Redundant standard on performance models
	Form Factor	Rack 4U

HP ProLiant DL585 G6 8439SE 2.8GHz Six Core 4P 16GB 512BBWC ICE Rack Server 577143-xx1	Processors	AMD Opteron™ 8439SE processor Model (2.8 GHz, 105W ACP)
	Cache Memory	6MB shared L3 cache per processor
	Memory	16GB (8 x 2GB)
	Network Controller	Two embedded NC371i Multifunction Gigabit Network Adapters
	Storage Controller	Smart Array P410/512 MB BBWC Controller (Raid 0,1,1+0, 5, 5+0)
	Manageability	HP Insight Control Management Suites
	Hard Drives	None ship standard
	Internal Storage	Up to 4TB of internal storage
	Optical Drive	Slimline DVD/CD-RW Drive (8X/24X) (ejectable)
	Power Supply	Redundant standard on performance models
	Form Factor	Rack 4U

HP ProLiant DL585 G6 8431 2.4GHz Six Core 4P 16GB 512BBWC Rack Server 539843-xx1	Processors	6-Core AMD Opteron™ 8400 Series Processors
	Cache Memory	6MB shared L3 cache per processor
	Memory	16GB (8 x 2GB)
	Network Controller	Two embedded NC371i Multifunction Gigabit Network Adapters
	Storage Controller	Smart Array P410/512 MB BBWC Controller (Raid 0,1,1+0, 5, 5+0)
	Hard Drives	None ship standard
	Internal Storage	Up to 4TB of internal storage
	Optical Drive	Slimline DVD/CD-RW Drive (8X/24X) (ejectable)
	Power Supply	Redundant standard on performance models
	Form Factor	Rack 4U

Country Code Key	XX=00	US
	XX=20	Brazil
	XX=29	Japan
	XX=37	A/P
	XX=42	Europe
	XX=AA	PRC

Configuration Information - Factory Integrated Models

NOTE: This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, HP recommends the use of an HP approved configurator. Contact your local sales representative for information on CTO product offerings and requirements.
NOTE: HP does not allow factory integration of options into standard models listed above. Configure-to-order servers must start with a CTO Chassis.
NOTE: FIO indicates that this option only available as a Factory Installable Option.

Step 1: Base Configuration

Models	HP ProLiant DL585 G6 Rack CTO Chassis	574409-B21

Factory Integrated Models ship with:

Two embedded NC371i Multifunction Gigabit Network Adapters
Integrated Lights-Out 2 (iLO 2) Standard management
Six (6) Redundant Hot Plug Fans
One Hot Plug Power Supply
Rack 4U Form Factor

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

Processors	**Six-Core Processors**	
	AMD Opteron™ 8431 six-core processor (2.4 GHz, 75W ACP) 2p option kit, FIO	539848-L21
	AMD Opteron™ 8435 six-core processor (2.6 GHz, 75W ACP) 2p option kit, FIO	572373-L21
	AMD Opteron™ 8439SE six-core processor (2.8 GHz, 105W ACP) 2p option kit, FIO	539847-L21
	AMD Opteron™ 8425HE six-core processor (2.1 GHz, 55W ACP) 2p option kit, FIO	539849-L21
Base Memory	2 GB REG PC2-6400 2 x 1 GB Kit	497763-B21
	4 GB REG PC2-6400 2 x 2 GB Kit	497765-B21
	8 GB REG PC2-6400 2 x 4 GB Kit	497767-B21
	8 GB REG PC2-6400 2 x 4 GB Low Power Kit	504351-B21
	16 GB REG PC2-5300 2 x 8 GB	408855-B21
	64 GB REG PC2-5300 8 x 8 GB	495605-B21

NOTE: Memory must be installed in like-pairs, i.e. two of the same size.
NOTE: Memory bus speeds will operate as follows: 2-4 DIMMs at 800MHz; 6 at 667MHz; 8 at 533MHz.

Storage Controllers	HP Smart Array P410/256 MB Controller	462862-B21
	HP Smart Array P410/512 MB with BBWC Controller	462864-B21
	HP Smart Array P410/ZM FIO Controller	462860-B21
	HP Smart Array P410/256 FIO Cntrlr w/Battery	491195-B21

Configuration Information - Factory Integrated Models

Optical Drives	**NOTE:** Optical drives are ejectable.	
	Slimline CD-RW/DVD-ROM 24X Combo Drive Option Kit	331903-B21
	Slimline DVD-ROM Drive (8X/24X) Option Kit (Servers)	264007-B21
	HP DVD±R/RW 8X Slim	383975-B21

Step 3: Choose Additional Options for Factory Integration

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

QuickSpecs

Core Options

NOTE: Some options may not be available for factory integration. Please contact an HP sales representative for additional information.

Unique Options		
	HP O8431 DL585G6 Kit	539848-B21
	HP O8435 DL585G6 Kit	572373-B21
	HP O8425HE DL585G6 2P Kit	539849-B21
	HP O8439SE DL585G6 2P Kit	539847-B21
	HP DL585 Video Power Cable	576444-B21

Processors		
	Six-Core Processors	
	AMD Opteron™ 8431 2.40GHz Six Core 75 Watts DL585 G6 Processor Option Kit	539848-B21
	AMD Opteron™ 8435 2.60GHz Six Core 75 Watts DL585 G6 Processor Option Kit	572373-B21
	AMD Opteron™ 8425HE 2.10GHz Six Core 55 Watts DL585 G6 Processor Option Kit	539849-B21
	AMD Opteron™ 8439SE 2.80GHz Six Core 105 Watts DL585 G6 Processor Option Kit	539847-B21

Memory		
	Registered DIMMs	
	HP 2GB Registered PC2-6400 2x1GB DDR2 Memory Kit	497763-B21
	HP 4GB Registered PC2-6400 2x2GB DDR2 Memory Kit	497765-B21
	HP 8GB Registered PC2-6400 2x4GB DDR2 Memory Kit	497767-B21
	HP 8GB Registered PC2-6400 2x4GB Low Power DDR2 Memory Kit	504351-B21
	HP 16GB Registered PC2-5300 2x8GB DDR2 Memory Kit	408855-B21
	HP 64GB Registered PC2-5300 8x8GB DDR2 Memory Kit	495605-B21

NOTE: Memory must be installed in like-pairs, i.e. two of the same size.
NOTE: Memory bus speeds will operate as follows: 2-4 DIMMs at 800MHz; 6 at 667MHz; 8 at 533MHz.

Optical Drives		
	HP 8X/24X SlimLine DVD-ROM Drive	264007-B21
	HP 8X Slim DVD+RW Drive	383975-B21
	HP Slimline CD-RW/DVD-ROM 24X Carbon Combo Drive	331903-B21

NOTE: Optical drives are ejectable.

Core Options

Hard Drives		
	SAS Hot Plug SFF Enterprise (ENT) Drives	
	HP 300GB 6G SAS 10K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	507127-B21
	HP 300GB 3G SAS 10K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	492620-B21
	HP 146GB 6G SAS 15K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	512547-B21
	HP 146GB 3G SAS 15K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	504062-B21
	HP 146GB 6G SAS 10K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	507125-B21
	HP 146GB 3G SAS 10K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	418367-B21
	HP 72GB 6G SAS 15K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	512545-B21
	HP 72GB 3G SAS 15K SFF (2.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive	418371-B21
	HP 36GB 15K rpm Hot Plug SAS 2.5 Dual Port Hard Drive	418369-B21
	HP 120GB 3G SATA SFF (2.5-inch) Midline 1yr Warranty Solid State Drive	572073-B21
	HP 60GB 3G SATA SFF (2.5-inch) Midline 1yr Warranty Solid State Drive	572071-B21

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:
http://h18000.www1.hp.com/products/quickspecs/12244_div/12244_div.html
(Worldwide)

SAS Hot Plug SFF Midline (MDL) Drives

	HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) Midline 1yr Warranty Hard Drive	507610-B21

SATA Hot Plug SFF Entry (ETY) Drives

	HP 250GB 3G SATA 5.4K rpm SFF (2.5-inch) Entry 1yr Warranty Hard Drive	460355-B21
	HP 120GB 1.5G SATA 5.4K rpm SFF (2.5-inch) Entry 1yr Warranty Hard Drive	458924-B21

NOTE: SATA drives have a 1 year warranty. Please see the QuickSpecs for Technical Specifications and additional information:
http://h18000.www1.hp.com/products/quickspecs/13021_div/13021_div.html
(Worldwide)

SATA Hot Plug SFF Midline (MDL) Drives

	HP 500GB 3G SATA 7.2K rpm SFF (2.5-inch) Midline 1yr Warranty Hard Drive	507750-B21
	HP 160GB 3G SATA 7.2K rpm SFF (2.5-inch) Midline 1yr Warranty Hard Drive	530888-B21

NOTE: SATA drives have a 1 year warranty. Please see the QuickSpecs for Technical Specifications and additional information:
http://h18000.www1.hp.com/products/quickspecs/13021_div/13021_div.html
(Worldwide)

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, firmware, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.

Core Options

Networking	**Gigabit Ethernet Adapters**	
	HP NC112T PCI Express Gigabit Server Adapter	503746-B21
	HP NC360T PCI-E Dual Port Gigabit Server Adapter	412648-B21
	HP NC364T PCI-E Quad Port Gigabit Server Adapter	435508-B21

NOTE: There is a maximum of five NC364T PCI Express Quad Port Gigabit Server Adapter NICs allowed in this server.

	HP NC373F PCI-E Multifunction 1000SX Gigabit Svr Adapter	394793-B21
	HP NC373T PCI-E Multifunction Gigabit Server Adapter	394791-B21
	HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter	458492-B21

10 Gigabit Ethernet Adapters

	HP NC522SFP Dual Port 10GbE Gigabit Server Adapter	468332-B21

NOTE: A minimum of two Gigabytes (2 GB) of server memory is required per each NC522SFP adapter.

NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately.

NOTE: Please see the QuickSpecs for Technical Specifications and additional information: www.hp.com/go/ProLiantNICs.

Riser Cage Options	HP 580/570G3/G4/585G2 US Redundant Power Supply	348114-001

Power Supplies

CAUTION: Many HP ProLiant Servers now offer new power options, including Common Slot Power Supplies. These power supplies come in multiple power ratings and higher efficiency levels to offer the Right Size solution to fit your configuration. This provides improved power delivery and the advantage of reclaiming lost power. Prior to making a power supply selection it is "highly recommended" that the "HP Power Advisor" is run to determine the right size power supply for your server configuration. The HP Power Advisor is located at "www.hp.com/go/proliant-energy-efficient" In ProLiant Servers that have more than one power slot (bay), only same size power supplies are recommended. If non-matched power supplies are inserted you will get errors and operation will fail.

Power Supplies

	HP 580/570G3/G4/585G2 Redundant Power Supply	348114-B21

NOTE: If you require a local power cord, please check the Power Specifications below for the appropriate country-specific power cord, or consult the Power Cord Matrix: http://www.hp.com/go/powercordmatrix

Additional Options

Insight Control suites (ICE)	**HP Insight Control suite**	
	HP Insight Control suite No Media 1 Server including 1 year 24x7 Supp Lic	452148-B22
	NOTE: Customer will receive a license entitlement certificate, which must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HP Software Technical Support and Update Service. **NOTE:** For additional License Kits, please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/12631_div/12631_div.html	
	HP Insight Control suite Software Media Kit	436222-B21
	NOTE: Insight Software DVD media without licenses. Contains HP System Insight Manager and Insight software products and components licensed by the Insight Control and Insight Dynamics suites. Uses an integrated installer to perform quick and accurate software installation and updates.	
	HP Insight Control Environment for Linux	
	HP Insight Control suite for Linux Media Kit	464422-B22
	NOTE: This optional Media pack DVD contains the ISO image for HP Insight Control Environment for Linux, HP System Insight Manager, HP Insight Power Manager, HP Insight Virtual Machine Management software, and an integrated installer. Servers must be acquired separately. **NOTE:** This Media pack is optional because the latest ISO image and latest updates may be downloaded at no cost from: http://www.hp.com/go/ice-linux (click on Download button).	
	NOTE: For additional License Kits, please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/13019_div/13019_div.html	

Storage Controllers	**SAS Controllers**	
	Smart Array P212 Controller	
	HP Smart Array P212/256 Controller	462834-B21
	HP Smart Array P212/Zero Memory Controller	462828-B21
	NOTE: Please see the following QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13203_div/13203_div.html (HP Smart Array P212 Controller)	
	Smart Array P410 Controller	
	HP Smart Array P410/512 BBWC Controller	462864-B21
	HP Smart Array P410/256 Controller	462862-B21
	NOTE: Please see the following QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13201_div/13201_div.html (HP Smart Array P410 Controller)	
	Smart Array P411 Controller	
	HP Smart Array P411/512 BBWC Controller	462832-B21
	HP Smart Array P411/256 Controller	462830-B21
	NOTE: Please see the following QuickSpecs for Technical Specifications and additional information: http://h18000.www1.hp.com/products/quickspecs/13202_div/13202_div.html (HP Smart Array P411 Controller)	

Additional Options

Smart Array P800 Controller

HP Smart Array P800 Controller	381513-B21

NOTE: Please see the following QuickSpecs for Technical Specifications and additional information:
http://h18000.www1.hp.com/products/quickspecs/12616_div/12616_div.html
(HP Smart Array P800 Controller)

Optional Upgrades

HP Smart Array Advanced Pack No Media 1 Server 1yr 24x7 Support Software	516471-B21

NOTE: This part number can be used to purchase a single license or to order multiple licenses with a single activation key. Customers will receive a license entitlement certificate via e-mail. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Include one year of 24x7 HP Software Technical Support Services.
http://h18000.www1.hp.com/products/quickspecs/13200_div/13200_div.html
(Smart Array Advanced Pack)

SCSI HBA

HP Single Channel Ultra320 PCI-E SC11Xe Host Bus Adapter	412911-B21

NOTE: Please see the following QuickSpecs for Technical Specifications and additional information:
http://h18000.www1.hp.com/products/quickspecs/12566_div/12566_div.html
(SC11Xe HBA)

HP StorageWorks U320e SCSI Dual Channel Host Bus Adapter	AH627A

NOTE: Please refer to the HBA QuickSpecs for additional information at:
http://www.hp.com/products/hba.

Power Cords	HP Mini SAS to 8484 32in/35in Cable Assembly	496016-B21

HPC Specific Options	HP InfiniBand 4X DDR PCI-E 0 Memory Dual Port HCA	483513-B21
	HP InfiniBand 4X DDR PCI-E Dual Port Host Adapter	409376-B21

NOTE: Please see the QuickSpecs for additional information:
http://h18000.www1.hp.com/products/quickspecs/13078_div/13078_div.html

Tape Storage	Tape Drives	

USB Rack-Mount Tape Solutions

HP StorageWorks DAT 160 USB (1) in 1U Rack-mount Kit	AG703A

NOTE: Pre-configured with one DAT 160 USB tape drive.

HP StorageWorks DAT 160 USB Internal Tape Drive	Q1580A

SAS Rack-Mount Tape Solutions

HP StorageWorks LTO-4 Ultrium 1760 (1) SAS Tape Drive in 1U Rack-mount Kit	EH946A

NOTE: Pre-configured with one LTO-4 Ultrium 1760 SAS tape drive.

HP StorageWorks 1U SAS Rack Mount Kit	AE459A

NOTE: Supports up to (2) half-height SAS tape drives.

HP StorageWorks DAT 160 SAS Internal Tape Drive	Q1587A

NOTE: Mounts inside the 1U SAS Rack-Mount Kit (AE459A)

Additional Options

HP StorageWorks Ultrium 448 SAS Internal Drive	DW085A
NOTE: Mounts inside the 1U SAS Rack-Mount Kit (AE459A)	
HP StorageWorks Ultrium 920 SAS Internal Tape Drive	EH847A
NOTE: Mounts inside the 1U SAS Rack-Mount Kit (AE459A)	
HP StorageWorks LTO-4 Ultrium 1760 SAS Internal WW Tape Drive	EH919A

SCSI Rack-Mount Tape Solutions

HP StorageWorks LTO-4 Ultrium 1840 (1) SCSI Tape Drive in 3U Rack-mount Kit	EH926A
HP StorageWorks Ultrium 448 (1) SCSI Tape Drive in 1U Rack-mount Kit	DW028B
HP StorageWorks Ultrium 920 (1) SCSI Tape Drive in 1U Rack-mount Kit	EH903A

NOTE: HP P212 Smart Array Controller SAS (462828-B21) is recommended for a dedicated HBA for SAS tape connection.
NOTE: 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
NOTE: For the complete listing of Tape Drive offerings, please see: http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html

Tape Autoloaders

HP StorageWorks DAT Autoloader

HP StorageWorks DAT 72x10 Tape Autoloader	AE313B

HP StorageWorks 1/8 G2 Tape Autoloader

HP StorageWorks 1/8 G2 LTO-4 Ultrium 1760 SAS Tape Autoloader	AK377A
HP StorageWorks 1/8 G2 Ultrium 920 SAS Autoloader	AH558A
HP StorageWorks 1/8 Ultrium 448 G2 Tape Autoloader	AH164A
HP StorageWorks MSL2024 1 Ultrium 448 Drive Library	AG116A

NOTE: Required to install the 1/8 G2 Autoloaders in a standard 19-inch rack; includes rails and rackmount instructions.

HP StorageWorks 1/8 G2 Tape Autoloader Rack Kit	AH166A

NOTE: Please reference the 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 MSL2024 Tape Library

HP StorageWorks MSL2024 1 LTO-4 Ultrium 1840 Tape Library	AJ033A
HP StorageWorks MSL2024 1 LTO-4 Ultrium 1760 SAS Tape Library	AK378A
HP StorageWorks MSL2024 1 Ultrium 960 Drive Library	AG115A
HP StorageWorks MSL2024 Ultrium 920 SAS Tape Library	AH559A

HP StorageWorks MSL4048 Tape Library

HP StorageWorks MSL4048 1 LTO-4 Ultrium 1840 Tape Library	AJ035A
HP StorageWorks MSL4048 2 LTO-4 Ultrium 1760 SAS Tape Library	AK380A
HP StorageWorks MSL4048 Ultrium 920 SAS Tape Library	AH560A

NOTE: Please reference the MSL 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.

Additional Options

Disk-Based Backup	**RDX Removable Disk Backup**	
	HP StorageWorks RDX500 External Removable Disk Backup System	AJ935A
	NOTE: 500GB of Disk Storage.	
	NOTE: Please see the HP RDX Removable Disk Backup System QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/13036_div/13036_div.html	
	D2D Backup	
	HP StorageWorks D2D2502i Backup System	EJ001A
	1.5 TB of usable network disk backup capacity.	
	HP StorageWorks D2D2504i Backup System	EJ002A
	3.0 TB of usable network disk backup capacity.	
	HP StorageWorks Disk-to-disk 130 Backup System with LTO-3 Ultrium 920 SAS Tape Drive	EH952A
	NOTE: Please see the HP D2D Backup Systems QuickSpecs for additional information: http://www.hp.com/go/d2d	

StorageWorks Options	NOTE: The following is a list of all Fibre Channel Host Bus Adapters for Windows and Linux. For detailed compatibility information please see: http://h18006.www1.hp.com/storage/saninfrastructure/hba.html	
	Brocade Fibre Channel HBAs	
	HP StorageWorks 41B PCIe 4Gb Fibre Channel Single Port Host Bus Adapter	AP767A
	HP StorageWorks 42B PCIe 4Gb Fibre Channel Dual Port Host Bus Adapter	AP768A
	HP StorageWorks 82B PCIe 8Gb Fibre Channel Dual Port Host Bus Adapter	AP770A
	HP StorageWorks 81B PCIe 8Gb Fibre Channel Single Port Host Bus Adapter	AP769A
	Emulex Fibre Channel HBAs	
	HP StorageWorks 81E 8Gb Single Port PCI-e Fibre Channel Host Bus Adapter	AJ762A
	HP StorageWorks 82E 8Gb Dual Port PCI-e Fibre Channel Host Bus Adapter	AJ763A
	HP StorageWorks FC2142SR 4Gb PCIe Host Bus Adapter	A8002A
	HP StorageWorks FC2242SR 4Gb PCIe DC Host Bus Adapte	rA8003A
	QLogic Fibre Channel HBAs	
	HP StorageWorks 81Q PCI-e Fibre Channel Host Bus Adapter	AK344A
	HP StorageWorks 82Q 8Gb Dual Port PCI-e Fibre Channel Host Bus Adapter	AJ764A
	HP StorageWorks FC1142SR 4Gb PCIe Host Bus Adapter	AE311A
	HP StorageWorks FC1242SR 4Gb PCIe DC Host Bus Adapter	AE312A

Additional Options

HP StorageWorks Modular Smart Array	**MSA SAN Storage Arrays**	
	HP StorageWorks Modular Smart Array 50 Enclosure NOTE: Please see the QuickSpecs for additional options and configuration information at: http://h18000.www1.hp.com/products/quickspecs/12245_div/12245_div.html (Worldwide)	364430-B21
	HP StorageWorks MSA60 Array NOTE: Please see the QuickSpecs for additional options and configuration information at: http://h18000.www1.hp.com/products/quickspecs/12627_div/12627_div.html	418408-B21
	HP StorageWorks MSA70 Array NOTE: Please see the QuickSpecs for additional options and configuration information at: http://h18000.www1.hp.com/products/quickspecs/12652_div/12652_div.html	418800-B21
	HP StorageWorks 2012sa Dual Controller Modular Smart Array NOTE: Please see the Modular Smart Array 2000sa QuickSpecs for additional options and configuration information at: http://h18000.www1.hp.com/products/quickspecs/13045_div/13045_div.html (Worldwide)	AJ753A
	HP StorageWorks 2012sa Single Controller Modular Smart Array NOTE: Please see the Modular Smart Array 2000sa QuickSpecs for additional options and configuration information at: http://h18000.www1.hp.com/products/quickspecs/13045_div/13045_div.html (Worldwide)	AJ752A

Uninterruptible Power Systems	**HP Rack-mountable UPS**	
	HP R/T3000 Uninterruptible Power System (UPS)	
	HP R/T3000 Low Voltage NA/JP Uninterruptable Power System	AF452A
	HP R/T3000 High Voltage NA/JP Uninterruptible Power System	AF453A
	HP R/T3000 High Voltage Intl Uninterruptible Power System	AF454A
	NOTE: Please see the QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/13417_div/13417_div.html (Worldwide)	
	HP Rack-Mountable R5500 UPS	
	HP R5500 VA 3U INT Uninterruptible Power System NOTE: Please see UPS QuickSpecs for additional information: http://h18000.www1.hp.com/products/quickspecs/11871_div/11871_div.html (Worldwide)	AF416A
	NOTE: For additional information on HP Uninterruptable Power Systems please go to: www.hp.com/servers/rackups.	

Additional Options

Power Distribution Units	Monitored PDUs	
	HP Monitored Power Distribution Unit: Half Rack Version	
	HP Single Input 3 Phase 48A Monitored Power Distribution Unit	AF916A
	Modular PDUs	
	HP 24A Low Voltage Modular Power Distribution Unit	252663-D71
	HP 24A High Voltage Modular Power Distribution Unit	252663-D72
	HP 32A High Voltage Modular Power Distribution Unit	252663-B31
	HP 40A High Voltage Modular Power Distribution Unit	252663-B21

NOTE: This mPDU (252663-B21), 40A model has a hardwired input.

	HP 16A High Voltage Modular Power Distribution Unit	252663-B24

NOTE: For additional information on HP Power Distribution Units including accessories please go to: www.hp.com/go/pdu (Worldwide)

HP Rack Series	Rack 10000 G2 series	
	HP S10614 (14U) Rack	292302-B22

NOTE: It is mandatory to use a shock pallet when shipping racks with equipment installed.
NOTE: xxxxxx-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels).
NOTE: Please see the Rack 10000 G2 QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:
http://h18000.www1.hp.com/products/quickspecs/12402_div/12402_div.html (Worldwide)
NOTE: For additional information regarding Rack Cabinets, please see the following URL: http://www.hp.com/go/rackandpower.

HP Rack Options	Keyboards and Monitors	
	HP TFT7600 Rackmount Keyboard 17in US Monitor	AG052A
	HP TFT7600 Rackmount Keyboard 17in UK Monitor	AG053A
	HP TFT7600 Rackmount Keyboard 17in DE Monitor	AG054A
	HP TFT7600 Rackmount Keyboard 17in FR Monitor	AG055A
	HP TFT7600 Rackmount Keyboard 17in IT Monitor	AG056A
	HP TFT7600 Rackmount Keyboard 17in ES Monitor	AG057A
	HP TFT7600 Rackmount Keyboard 17in DK Monitor	AG058A
	HP TFT7600 Rackmount Keyboard 17in NO Monitor	AG059A
	HP TFT7600 Rackmount Keyboard 17in SE/FI Monitor	AG060A
	HP TFT7600 Rackmount Keyboard 17in CH Monitor	AG061A
	HP TFT7600 Rackmount Keyboard 17in PT Monitor	AG062A
	HP TFT7600 Rackmount Keyboard 17in BE Monitor	AG063A
	HP TFT7600 Rackmount Keyboard 17in JP Monitor	AG064A
	HP TFT7600 Rackmount Keyboard 17in RU Monitor	AG065A
	HP TFT7600 Rackmount Keyboard 17in Intl Monitor	AG066A
	HP 1U US Rackmount Keyboard with USB	AG072A

Additional Options

HP 1U UK Rackmount Keyboard with USB	AG073A
HP 1U DE Rackmount Keyboard with USB	AG074A
HP 1U FR Rackmount Keyboard with USB	AG075A

NOTE: For additional information regarding Rack Options, please see the following URL: http://www.hp.com/go/rackandpower.

Console switches (KVM)

HP 1x4 USB/PS2 KVM Console Switch	AF611A
HP 1x4 KVM Console 6ft PS2 Cable	AF612A
HP 1x4 KVM Console 6ft USB Cable	AF613A
HP 0x2x16 Server Console Switch with Virtual Media	AF600A
HP 2x1x16 IP Console Switch with Virtual Media	AF601A
HP 4x1x16 IP Console Switch with Virtual Media	AF602A
HP 16 Port Serial Console Server	AF101A
HP 48 Port Serial Console Server	AF102a
HP Server Console 0x2x16 Port Analog Switch	AF617A
HP Server Console 0x2x8 Port Analog Switch	AF616A

USB Options		
	HP USB 2-Button Optical Scroll Mouse	DC172B
	HP USB Standard Keyboard US	DT528A#ABA
	HP 4GB USB Flash Media Key Kit	580385-B21

NOTE: Blank USB media device is supported for use with ProLiant iVirtualization. USB media must be installed in the internal slot of the ProLiant server. Learn more at http://www.hp.com/go/proliantvirtualization

Service and Support Offerings (HP Care Pack Services)		
	Hardware Services On-site Service	
	HP 3 year 4 hour 13x5 ProLiant DL58x Hardware Support	U4607E
	HP 3 year 4 hour 24x7 ProLiant D58x Hardware Support	U4608E
	Hardware Services 6-Hour Call to Repair On-site Service	
	HP 3 year 6 hour 24x7 Call to Repair ProLiant DL58x Hardware Support	U4609E
	Installation & Start-up Services	
	HP Install ProLiant DL58x Service	U4617E
	HP Startup ProLiant DL58x Service	U4618E
	Support Plus	
	HP 3 year Support Plus Microsoft ProLiant DL58x Service	U4619E
	Support Plus 24	
	HP 3 year Support Plus 24 Microsoft ProLiant DL58x Service	U4620E
	HP 3 year Support Plus 24 SuSE ProLiant DL58x Service	U6316E
	HP 3 year Support Plus 24 Red Hat Advanced Server DL58x Service	U9239E

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

Memory

NOTE: Standard memory configurations listed do not apply to "Factory Integrated Models."
HP ProLiant DL585 G6 Models
Standard Memory (One of the following, depending on Model)
16 GB PC2-6400 DDR2 SDRAM memory running at 800 MHz
8 GB PC2-6400 DDR2 SDRAM memory running at 800 MHz
DIMMs must be installed in pairs.

- DIMM installed on the same memory bank must have the same part number.
- DIMMs installed in different banks can be of different sizes.
- DIMMs must be installed in decreasing capacity with the largest DIMMs installed in the banks furthest away from each processor.
- DIMM banks are active only when the corresponding processor socket is populated.

NOTE: Memory must be installed in like-pairs, i.e. two of the same size.
NOTE: Memory bus speeds will operate as follows: 2-4 DIMMs at 800MHz; 6 at 667MHz; 8 at 533MHz.

The following memory options are available from HP:

2 GB REG PC2-6400 2 x 1 GB Kit	497763-B21
4 GB REG PC2-6400 2 x 2 GB Kit	497765-B21
8 GB REG PC2-6400 2 x 4 GB Kit	497767-B21
8 GB REG PC2-6400 2 x 4 GB Low Power Kit	504351-B21
16 GB REG PC2-5300 2 x 8 GB	408855-B21
64 GB REG PC2-5300 8 x 8 GB	495605-B21

Standard Memory Configuration (2.2GHz model) Total Memory = 4 GB								
	1 (Slot furthest from processor)	2	3	4	5	6	7	8 (Slot closest to processor)
Processor 1 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 2 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 3 Memory Bus	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty
Processor 4 Memory Bus	Empty	Empty	Empty	Empty	Empty	Empty	Empty	Empty

Standard Memory Configuration (2.3GHz model) Total Memory = 8 GB								
	1 (Slot furthest from processor)	2	3	4	5	6	7	8 (Slot closest to processor)
Processor 1 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty

Memory

	1	2	Empty	Empty	Empty	Empty	Empty	Empty
Processor 2 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 3 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 4 Memory Bus	1 GB	1 GB	Empty	Empty	Empty	Empty	Empty	Empty

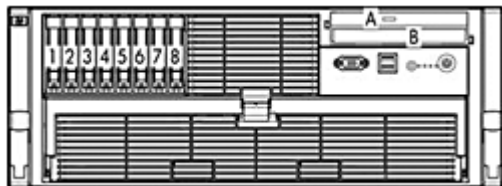| Standard Memory Configuration (2.4GHz and 2.5GHz models) Total Memory = 16 GB								
	1 (Slot furthest from processor)	2	3	4	5	6	7	8 (Slot closest to processor)
Processor 1 Memory Bus	2 GB	2 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 2 Memory Bus	2 GB	2 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 3 Memory Bus	2 GB	2 GB	Empty	Empty	Empty	Empty	Empty	Empty
Processor 4 Memory Bus	2 GB	2 GB	Empty	Empty	Empty	Empty	Empty	Empty

Examples of other optional configurations include, but are not limited to:

Example #1: Optional Memory Configuration with DIMM mixing Standard Memory plus Optional Memory and Processors Total Memory = 34 GB								
	1	2	3	4	5	6	7	8
Processor 1 Memory Bus	2 GB	2 GB	1 GB	1 GB	512 MB	512 MB	512 MB	512 MB
Processor 2 Memory Bus	2 GB	2 GB	1 GB	1 GB	512 MB	512 MB	512 MB	512 MB
Processor 3 Memory Bus	2 GB	2 GB	2 GB	2 GB	1 GB	1 GB	512 MB	512 MB
Processor 4 Memory Bus	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	512 MB	512 MB
Example #2: Optional Memory Configuration with Partial Bus Population Standard Memory plus Optional Memory and Processors Total Memory = 8 GB								
	1	2	3	4	5	6	7	8
Processor 1 Memory Bus	512 MB	512 MB	512 MB	512 MB	Empty	Empty	Empty	Empty
Processor 2 Memory Bus	512 MB	512 MB	512 MB	512 MB	Empty	Empty	Empty	Empty
Processor 3 Memory Bus	512 MB	512 MB	512 MB	512 MB	Empty	Empty	Empty	Empty
Processor 4 Memory Bus	512 MB	512 MB	512 MB	512 MB	Empty	Empty	Empty	Empty

QuickSpecs

Memory

Example #3: Maximum Memory Configuration Maximum Memory (Standard replaced with Optional Memory) Total Memory = 256 GB								
	1	2	3	4	5	6	7	8
Processor 1 Memory Bus	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB
Processor 2 Memory Bus	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB
Processor 3 Memory Bus	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB
Processor 4 Memory Bus	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB

Storage

A   Ejectable: Slimline Diskette or Optical Drive (Optional)

B   Ejectable: Slimline Optical Drive (DVD/CD-RW Standard)

1-8   SFF SAS Internal Drive cage

Drive Support

	Quantity Supported	Position Supported	Controller
Ejectable Slimline Drives			
1.44-MB slimline Diskette Drive	Up to 1	A or B Based on Boot Device Selector Switch	Integrated
IDE Slimline DVD-ROM Drive (8X/24X)	Up to 2	A or B	Integrated IDE
IDE Slimline CD-RW/DVD-ROM Combo Drive	Up to 2	A or B	Integrated IDE
IDE DVD±R/RW 8X Drive	Up to 2	A or B	Integrated IDE

Hard Drives
NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, firmware, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.
NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

SAS Hot Plug SFF Enterprise (ENT) Drives

	Quantity Supported	Position Supported	Controller
300GB 6G SAS 10K DP 300GB 3G SAS 10K DP 146GB 6G SAS 15K DP 146GB 3G SAS 15K DP 146GB 6G SAS 10K DP 146GB 3G SAS 10K DP 72GB 6G SAS 15K DP 72GB 3G SAS 15K DP 72GB 3G SAS 10K DP	Up to 8	1-8	HP Smart Array P800/512 BBWC Controller HP Smart Array P212/Zero Memory Controller HP Smart Array P212/256 MB Controller HP Smart Array P410/256 MB Controller HP Smart Array P410/512 MB BBWC Controller HP Smart Array P411/256 MB Controller HP Smart Array P411/512 MB BBWC Controller

SAS Hot Plug SFF Midline (MDL) Drives

	Quantity Supported	Position Supported	Controller
500GB 6G SAS 7.2K DP	Up to 8	1-8	HP Smart Array P800/512 BBWC Controller HP Smart Array P212/Zero Memory Controller HP Smart Array P212/256 MB Controller

Storage

HP Smart Array P410/256 MB Controller
HP Smart Array P410/512 MB BBWC Controller
HP Smart Array P411/256 MB Controller
HP Smart Array P411/512 MB BBWC Controller

SATA Hot Plug Entry (ETY) Drives

	Quantity Supported	Position Supported	Controller
250GB 3G SATA 5.4K 120GB 1.5G SATA 5.4K	Up to 8	1-8	HP Smart Array P800/512 BBWC Controller HP Smart Array P212/Zero Memory Controller HP Smart Array P212/256 MB Controller HP Smart Array P410/256 MB Controller HP Smart Array P410/512 MB BBWC Controller HP Smart Array P411/256 MB Controller HP Smart Array P411/512 MB BBWC Controller

SATA Hot Plug Midline (MDL) Solid State Drives

	Quantity Supported	Position Supported	Controller
60GB 3.0G SATA SSD 120GB 3.0G SATA SSD	Up to 8	1-8	HP Smart Array P800/512 BBWC Controller HP Smart Array P212/Zero Memory Controller HP Smart Array P212/256 MB Controller HP Smart Array P410/256 MB Controller HP Smart Array P410/512 MB BBWC Controller HP Smart Array P411/256 MB Controller HP Smart Array P411/512 MB BBWC Controller

External Storage

	Quantity Supported	Position Supported	Host Controller or Adapter
50 Modular Smart Array	Up to 4	External	HP Smart Array P800/512 BBWC Controller
60 Modular Smart Array	Up to 4	External	HP Smart Array P212/Zero Memory Controller HP Smart Array P212/ 256 MB Controller
	Up to 8		HP Smart Array P800/512 BBWC Controller HP Smart Array P411/256 MB Controller HP Smart Array P411/512 MB BBWC Controller
70 Modular Smart Array	Up to 2	External	HP Smart Array P212/Zero Memory Controller HP Smart Array P212/ 256 MB Controller
	Up to 4		HP Smart Array P800/512 BBWC Controller HP Smart Array P411/256 MB Controller HP Smart Array P411/512 MB BBWC Controller
HP 2000sa Modular Smart Array Controller	Up to 4	External	HP SC08Ge Host Bus Adapter

Storage

Maximum Storage Capacity - (External Enclosures Attached)

Internal	2.4TB (8 x 300GB SFF SAS ENT drives)
External	1120 TB (56 MSA60 enclosures @ 20 drives per enclosure x 1 TB SATA/SAS MDL Drives)
Total	1122.4 TB

Tape and Disk-Based Backup

NOTE: For a complete listing of compatible tape and disk-based backup offerings, please visit: www.hp.com/go/connect

	Position Supported	Controller	Controller Part Number
HP StorageWorks SCSI Tape Drives, External LTO-2 Ultrium 448 LTO-3 Ultrium 960 LTO-3 Ultrium 920 LTO-4 Ultrium 1760 LTO-4 Ultrium 1840 DAT 40 DAT 72 DAT 160 1U Rack-Mount Kit 3U Rack-Mount Kit	External	HP SC11Xe Host Bus Adapter	412911-B21
HP StorageWorks USB Tape Drives, External DAT 40 USB DAT 72 USB DAT 160 USB 1U Rack-Mount Kit	External	USB 2.0 Port	N/A
HP StorageWorks SAS Tape Drives, External DAT 160 SAS LTO-2 Ultrium 448 SAS LTO-3 Ultrium 920 SAS LTO-4 Ultrium 1760 SAS LTO-4 Ultrium 1840 SAS 1U Rack-Mount Kit 3U Rack-Mount Kit	External	HP Smart Array P212/Zero Memory Controller	462828-B21
HP StorageWorks SCSI Tape Automation, External DAT 72x10 Autoloader 1/8 G2 Autoloader MSL2024 MSL4048 MSL8096 MSL6000	External	HP SC11Xe Host Bus Adapter HP U320e SCSI Host Bus Adapter NOTE: Recommended for MSL tape libraries.	412911-B21 AH627A

Storage

HP StorageWorks SAS Tape Automation, External 1/8 G2 Autoloader MSL2024 MSL4048	External	HP Smart Array P212/Zero Memory Controller	462828-B21
HP StorageWorks Fibre Tape Automation, External MSL2024 MSL4048 MSL8096 MSL6000	External	Please consult the EBS connectivity matrix at: http://www.hp.com/go/ebs for detailed connectivity information.	N/A
HP StorageWorks RDX Removable Disk Backup System RDX160 RDX320 RDX500	External	USB 2.0 Port	N/A
HP StorageWorks D2D Backup Systems D2D120 D2D130 D2D2503i D2D4004i	External	Embedded Network Controller	N/A

QuickSpecs

Power Specifications

Part number	348114-001
Operational Input Voltage Range (Vrms)	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	910	910	1300	1300	1300	1300
Nominal Input Current (A rms)	11.9	10.2	7.7	7.3	6.9	6.6
Max Rated Input Wattage Rating (Watts)	1163	1148	1566	1566	1548	1548
Max. Rated VA (Volt-Amp)	1186	1172	1598	1598	1579	1579
Efficiency (%)	80	81	83	83	84	84
Power Factor	0.98		0.98			
Leakage Current (mA)	0.43	0.50	0.90	0.96	1.00	1.04
Max. Inrush Current (A peak)	100	100	100	100	100	100
Max. Inrush Current duration (mS)	10					

NOTE: To review typical system power ratings use the HP Power Advisor which is available online located at url: www.hp.com/go/proliant-energy-efficient or www.hp.com/go/hppoweradvisor

- Click on: "ProLiant Servers"
- Click on the Server of interest. Example: DL585 G6
- Click on: "Power Calculator" link. (You may need to scroll down to see it)
- There are certain Dual-core, lowline, max configurations that are not supported. All highline configurations are supported. Consult the Power Calculator to determine if your lowline configuration is supported.

Standard Rack Model Power Cords / Jumper Cords	Description
Asia Pacific	IEC320-C14 to IEC320-C19 Jumper Cord
Europe	IEC320-C14 to IEC320-C19 Jumper Cord
Japan	JIS C8303 to IEC320-C19
	IEC320-C14 to IEC320-C19 Jumper Cord
PRC	IEC320-C14 to IEC320-C19 Jumper Cord
USA	IEC320-C14 to IEC320-C19 Jumper Cord

QuickSpecs

Technical Specifications

System Unit	Dimensions (H x W x D) (with bezel)	6.94 x 19 x 26.5 in (17.6 x 48.3 x 67.3 cm)	
	Weight (approximate)	Maximum (all hard drives, power supplies, and processors installed)	95 lb (43 kg)
		Minimum (one hard drive, power supply, and processor installed)	79 lb (36 kg)
	Input Requirements (per power supply)	Rated Line Voltage	90 - 132 VAC, 180 - 264 VAC
		Rated Input Current	12 A (at 100 VAC), 8 A (at 200 VAC)
		Rated Input Frequency	47 to 63 Hz
		Rated Input Power	1161 W (at 100 VAC), 1598 W (at 200 VAC)
	BTU Rating	Maximum	3985 BTU/hr (at 100 VAC), 5457 BTU/hr (at 200 VAC)
	Power Specifications	NOTE: To review typical system power ratings use the HP Power Advisor which is available online located at url: www.hp.com/go/proliant-energy-efficient or www.hp.com/go/hppoweradvisor	

- Click on the system of interest. Example: DL585 G6
- Follow the instructions of the next screens

	Power Supply Output (per power supply)	Rated Steady-State Power	910 W (at 100 VAC), 1300 W (at 200 VAC)
		Maximum Peak Power	960 W (at 100 VAC), 1420 W (at 200 VAC)
	System Inlet Temperature	Operating	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F).
		Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
	Relative Humidity (non-condensing)	Operating	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.
		Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Technical Specifications

Altitude	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Acoustic Noise		Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).

Idle

L WAd	7.7 B
L pAm	58 dBA

Operating

L WAd	7.7 B
L pAm	58 dBA

Emissions Classification (EMC)	FCC Rating	Class A
	Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

Slimline CD-RW/DVD-ROM 24X Combo Drive	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

Technical Specifications

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 (12.7 x 128 x 129.4 mm)	
Option Kit Contents	DVD-ROM drive with installation guide, warranty card, registration card		

Integrated Lights-Out 2 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
	Upgradeability	Option firmware upgradeable via flash ROM

Technical Specifications

Video Support	Utilizes the host server's embedded video chip. Supports VGA/SVGA, 640 x 480 (256 to 16.7M colors), 800 x 600 (256 to 16.7M colors), 1024 x 768 (256 to 65K colors), 1280 x 1024 (256 colors)
Interfaces	One Ethernet network connection (10/100 Mb/s)
Memory	2-MB Flash ROM
	8-MB SDRAM
Operating System and Virtualization Software Support	Microsoft Windows Server Windows Server 2008 Hyper-V Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Oracle Enterprise Linux (OEL) Solaris 10 for x86/x64 based systems VMware XenSource
	NOTE: For more information on HP's Certified and Support Operating System & Virtualization Software, visit our Support Matrix at: www.hp.com/go/ossupport For our driver download page: www.hp.com/support/DL585G6
Client Browser Support	Microsoft Internet Explorer 6.0 SP1 or later.
	Mozilla Firefox 2.0 or later (on supported Windows and Linux client systems)
	Mozilla Firefox 1.75 or later (for supported Linux client systems)
iLO 2 Standard Features	Virtual Text Remote Console
	Virtual KVM
	Virtual Power Button Control
	Virtual UID Control
	Power Regulator Control
	Dedicated LAN Connectivity
	Secure access using web browser
	Secure access using Secure Shell (SSH) client
	Serial connectivity
	Automatic IP Configuration via DHCP/DNS/WINS
	Industry Standard 128-bit Secure Sockets Layer (SSL) Security
	IML and iLO2 Event Logging
	Support for up to 12 user accounts with customizable access privileges
iLO Advanced Features (optional)	Virtual Graphical Remote Console
	Virtual Floppy/USB Key drive
	Virtual CD-ROM drive
	Directory Services Integration
	Processor States Reporting
	Terminal Services Integration

QuickSpecs

Technical Specifications

Smart Array P410 Controller	Disk Drive and Enclosure Interface - Transfer rate	6Gb/s SAS (Serial Attached SCSI) 3Gb/s SATA (Serial ATA)	
	SAS Connectors	2 internal (Mini-SAS) x8 wide port connectors	
	Cache Memory Speed	DDR2-800MHz with 40 or 72-bit wide bus provides up to 4.2 GB/s maximum bandwidth.	
	Server Interface	x8 5G PCIe 2.0 provides 4GB/s maximum bandwidth.	
	SAS Speed	x8 3G SAS provides 2.4GB/s maximum bandwidth.	
	Cache Memory	40-bit 256MB ECC protected cache (72-bit 512MB BBWC module upgrades available); transportable with battery-backed upgrade	
	Logical Drives Supported	Up to 64 logical drives	
	Maximum Logical Drive Capacity	Greater than 2TB	
	Host Memory Addressing	64-bit, supporting greater than 4GB server memory space	
	RAID Support	RAID 6, 6+0 (Advanced Data Guarding) NOTE: The minimum of 256 MB cache, battery kit, and Smart Array Advanced Pack License Key upgrade is required to enable RAID 6, 6+0	
		RAID 5, 5+0 (Distributed Data Guarding) NOTE: The 256 MB is required to enable RAID 5, 5+0 support of the Smart Array P410i	
		RAID 1+0 (Striping & Mirroring)	
		RAID 0 (Striping)	

Two embedded NC371i Multifunction Gigabit Server Adapters	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	PCI Express, four lanes (x4)	
	Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s
		10Base-T (Full-Duplex)	20 Mb/s
		100Base-TX (Half-Duplex)	100 Mb/s
		100Base-TX (Full-Duplex)	200 Mb/s
		1000Base-TX (Half and Full-Duplex)	2000 Mb/s
	Connector	RJ-45	
	Cable Support	10Base-T	Categories 3, 4, or 5 UTP; up to 328 ft (100 m)
		10/100/1000 Base-TX	Category 5 UTP up to 328 ft (100 m)

Technical Specifications

Environment-friendly Products and Approach	End-of-life Management and Recycling	Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.