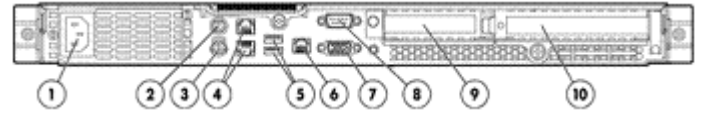
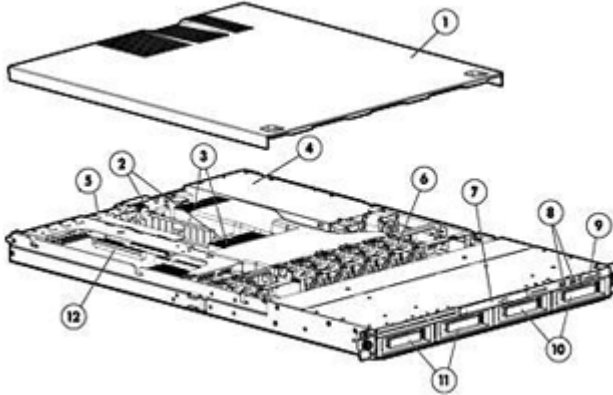


QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Overview

Hot Plug SAS/SATA or Non-Hot Plug SATA Models



Front View:

1. Access panel
2. Memory banks
3. Two (2) AMD Opteron 2400 series processors
4. Power supply
5. Low-profile PCI-Express or PCI-X slot
6. System fans
7. Optical drive bay
8. Front-panel USB 2.0 ports
9. Power switch/system status LEDs
10. Optional 3rd and 4th 3.5" hot-plug SAS/SATA or non-hot plug SATA hard drive bays
11. Standard 1st and 2nd 3.5" hot-plug SAS/SATA or non-hot plug SATA hard drive bays
12. Full height/full length PCI-Express or HTX slot

Rear View:

1. Power supply cable socket
2. PS/2 mouse port
3. PS/2 keyboard port
4. Two (2) RJ45 GbE LAN ports
5. Rear panel USB 2.0 ports
6. Lights-Out 100 10/100Mbps port
7. Video port
8. Serial port
9. Low-profile riser board assembly slot cover
10. Full-sized riser board assembly slot cover

What's New

- Supports up to Support for SATA Hot Plug 3.5" Midline (MDL) Drives

At A Glance

Introducing the HP ProLiant DL165G6, now available with the latest high performance Opteron Six-Core processors and a new high efficiency power supply.

- **Processors:**
 - Supports up to two AMD Opteron™ 2400 series Six-Core processors
 - Supports DirectConnect Architecture
 - Supports Power Now
- **Memory:**
 - 8 DIMM slots supporting up to 32GB REG PC2-6400 DDR2-800 MHz memory with Advanced ECC
 - 8 DIMM slots supporting up to 64GB REG PC2-5300 DDR2-667 MHz memory with Advanced ECC
- **Internal Drive Support:**
 - Internal storage capacity:



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Overview

- SATA Capacity: Support for up to 8.0TB (4 x 2TB) with Hot Plug Model. 8.0TB (4 x 2GB) with Non Hot Plug Model
- SAS Capacity: Support for up to 8.0 TB (4 x 2TB) with Hot Plug Model
- **NOTE:** Installation of the Hot Plug Backplane 1U 2S Kit (445985-B21) is required if ordering third or fourth Hard Drives for Hot Plug models only.
- **Network Controller:**
 - Embedded NC7782 dual-port gigabit server adapter
- **Storage Controllers:**
 - Non-Hot Plug SATA Models: HP Embedded SATA Controller
 - **NOTE:** Raid support requires optional slot based raid controller
 - Hot Plug SATA/SAS Models: HP P212 Smart Array Controller
- **Expansion Slots:**
 - Standard - PCI-Express assembly includes:
 - Slot 1: full-length/full height PCI-Express x16
 - Slot 2: half-length/low-profile PCI-Express x4 (x8 connector) (Reserved in the Hot Plug Model for Smart Array Controller)
 - Optional - PCI-X assembly includes:
 - Slot 2: half-length/low-profile PCI-X 133 (PCI-X slots are 64 bits; 133 MHz capable)
 - Optional - HTX assembly includes: Slot 1: full-length/full height HTX
- **Infrastructure Management:**
 - HP Lights-Out 100i with optional LO100i Advanced Licenses for Virtual KVM and Virtual Media.
 - HP Insight Control for Linux, a product option, delivers essential infrastructure management that can help save time and money by making it easy to deploy, migrate, monitor, control and optimize your IT infrastructure through a single, simple management console. Insight Control for Linux supports Linux-based central management servers.
- **USB Ports:**
 - Up to five USB ports (two front & two rear standard, 1 internal option)
- **Optical Drive:**
 - Support for one (optional): DVD-ROM, DVD/CD RW
- **Power Supply:**
 - 500W High Efficiency Power Supply (Non-Hot Plug, Autoswitching)
- **Form Factor:**
 - Rack (1U)
 - Fixed mounting rails included with all models
- **Deployment/Serviceability:**
 - HP ProLiant DL165 G6 models have fixed rails which provide support for racks with round mounting holes and tool-free support for racks with square mounting holes (including Compaq/HP 7000, 9000, 10000 and HP series), with an adjustment range of 26" - 36"
 - Tool-less access to all system components for easy in-rack serviceability
 - 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:**
 - This product is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for one year 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 Next Day Parts replacement, 0-Years Labor, 0-Years Onsite support. Warranty terms may vary by region. Additional information regarding worldwide limited warranty and technical support is available at: <http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

NOTE: For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

| | |
|---|---|
| Processor One of the following depending on Model | AMD Opteron™ processor Model 2435 (2.6 GHz, 75W ACP) |
| | AMD Opteron™ processor Model 2431 (2.4 GHz, 75W ACP) |
| | NOTE: Offered through Configure-To-Order only. See Factory Integrated Models section for more details. |
| | AMD Opteron™ processor Model 2427 (2.2 GHz, 75W ACP) |
| | AMD Opteron™ processor Model 2425HE (2.1 GHz, 55W ACP) |
| | AMD Opteron™ processor Model 2423HE (2.0 GHz, 55W ACP) |

Upgradeability Upgradeable to two processors

Chipset ServerWorks HT2100 and HT1000

Cache Memory Model Series 24xx
6MB shared L3

Memory Protection Advanced ECC

| | | |
|--|----------|-------------------------------|
| Memory One of the following depending on Model | Type | REG PC2-6400 DIMMs (DDR2-800) |
| | | REG PC2-5300 DIMMs (DDR2-667) |
| | Standard | 4 GB (2 x 2 GB) |
| | Maximum | 64 GB (8 x 8 GB) |

Network Controller Embedded NC7782 dual-port gigabit server adapter

| Expansion Slots # | Technology | Bus Width** | Connector Width | Bus Number* | Form Factor | Notes |
|-------------------|-------------|----------------|-----------------|-------------|-------------------------|-------|
| 1 | PCI Express | x16 | x16 | 3 | Full Height/Full Length | |
| 1 | HTX | N/A | N/A | 9 | Full Height/Full Length | |
| 2 | PCI Express | x4 | x8 | 6 | Low-profile | |
| 2 | PCI-X | 64-bit, 133MHz | N/A | 2 | Low-profile | |

* Default bus assignment. Inserting cards with PCI bridges may alter the actual bus assignment number.

** Slots are enumerated differently based on OS. MS OS's enumerate from lowest to highest Device ID by bus (starting with the lowest bus).

NOTE: Slot 2 is reserved for a storage controller with the Hot Plug Model chassis.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

| | | |
|--------------------|-------------------|---|
| Storage Controller | Non-Hot Plug SATA | HP Embedded SATA Controller NOTE: Raid support requires optional slot based raid controller. |
| | Hot Plug SATA/SAS | HP Smart Array P212 RAID Controller NOTE: Transfer rate: up to 3 Gb/s SATA, up to 3 Gb/s SAS. |

NOTE: A diskette drive or virtual FDD using LO100 Advanced Pack is needed to install storage controller drivers during a Windows operating system installation from a CD.
NOTE: RAID 6 functionality requires the addition of Smart Array Advanced Pack (P/N: 516471-B21).

| | | |
|---------|-----------------|--|
| Storage | Diskette Drives | Via USB only |
| | Optical Drives | Optional 8x IDE (ATAPI) DVD-ROM drive, slim Optional 24x IDE (ATAPI) DVD-ROM/CDRW drive |
| | Hard Drives | Up to 4 Non-hot plug SATA 3.5" drives Up to 4 Hot plug SATA /SAS 3.5" drives |

| | | | |
|--------------------------|-------------------|-------|---------|
| Maximum Internal Storage | Non-Hot Plug SATA | 8.0TB | 4 x 2TB |
| | Hot Plug SATA | 8.0TB | 4 x 2TB |
| | Hot Plug SAS | 8.0TB | 4 x 2TB |

| | | |
|------------|-------------------------|---|
| Interfaces | Parallel | None |
| | Network RJ-45(Ethernet) | Embedded NC7782 dual-port gigabit server adapter |
| | Serial | 1 |
| | Pointing Device (Mouse) | 1 |
| | Graphics | 1 |
| | Keyboard | 1 |
| | USB | Up to 5 (two front & two rear standard, 1 internal option). |

| | |
|----------|---|
| Graphics | 32MB shared supporting 1600x1200x16M resolution |
|----------|---|

| | |
|-------------|------------------------------|
| Form Factor | Rack (1U), (1.75 in/4.45 cm) |
|-------------|------------------------------|



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

Embedded Manageability HP LO100i Advanced

HP Lights-Out 100 with Optional LO100i Advanced Licenses for Virtual KVM and Virtual Media.

Standard Features:

- Embedded IPMI standard reporting
- System event log access
- Remote Serial console (serial redirection)
- Browser, Telnet access
- SMASH-CLP compliant
- IPMI 2.0 compliant

Licensed Features:

- Virtual media (Floppy, CD, USB 2.0)
- Virtual KVM
- Secure Socket Layer (SSL) Encryption
- Secure Shell (SSH) Encryption

NOTE: Flexible and volume quantity (AKA) license kits are available for the Lights-Out 100i Advanced Pack licenses as well as Electronic License To Use (E-LTU). AKA Tracking licenses require a 100 unit minimum forecast at initial contract signing. For these additional part numbers, please refer to each software products. QuickSpecs at this link for more information: www.hp.com/go/lo100

HP Insight Control management software

HP Insight Control for Linux

HP Insight Control for Linux, as a product option, delivers 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. The Insight Control for Linux installs and license software modules that are integrated into HP System Insight Manager.

The HP Insight Control for Linux (IC-Linux) serves environments requiring a Linux-based management consoles. See: www.hp.com/go/ic-linux

HP Insight Control 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>.

Industry Standard Compliance

ACPI V2.0 Compliant
PCI 2.2 Compliant
PXE Support
WOL Support
Microsoft® Logo certifications
IPMI 2.0 Compliant



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

| | |
|--|--|
| Security | Power-on password Setup password SSH and SSL Encryption |
| 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 | 500 Watts, auto-switching, high efficiency, PFC (Power Factor Correcting). |
| System Fans | 6 system fans ship standard; non-hot plug, non-redundant |
| Operating Systems and Virtualization Software Support for ProLiant Servers | Microsoft Windows Server Microsoft Windows Server 2008 Hyper V Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Solaris 10 for x86/x64 based Systems 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: http://www.hp.com/go/supportos and our driver download page http://www.hp.com/support/DL165G6 . |
| 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. |
| Rack Support | The DL Fixed Rail System supports installation in racks with square or round mounting holes (including Compaq/HP 7000, 9000, 10000 and HP series), with an adjustment range of 24" - 36". |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

Telco Rack Support

Installation into Telco 2 post, and 4 post, or threaded holes racks requires a 3rd party option kit. For additional information, please visit: www.hp.com/go/rackandpower

HP Factory Express Capability

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>.

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>

InfiniBand

PCI-Express Generation 2 adapters

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. <http://www.hp.com/products/configurator>.

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.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Standard Features

- **Support Service** - 3-Year 24x7 4 hr Response service support coverage
- **Deployment Service** - Hardware Installation

Enhanced Service - Optimize service level to increase IT performance and availability

- **Support Service** - 3Year 24x7 24 hr Call to repair service support coverage
- **Support Service** - 3-Year 24x7 6 hr Call to repair service support coverage
- **Support Plus** - 24x7 24 hr Call to repair service support including OS coverage Operating

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

For a complete listing of service offerings and information visit:

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

<http://h20219.www2.hp.com/services/us/en/warranty/carepack-servers-proliant.html>



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Models

Hot Plug Serial ATA (SATA)/Serial Attached SCSI (SAS) Models

| | | |
|--|--|--|
| <p>HP DL165G6 2427 2.2 GHz, 4GB, Hot Plug (1P) 538278-xx1</p> | <p>Processor(s) One of the following depending on model</p> <p>Cache Memory</p> <p>Memory One of the following depending on model</p> <p>Network Controller</p> <p>Storage Controller</p> <p>Hard Drive</p> <p>Internal Storage One of the following depending on model</p> <p>Optical Drive</p> <p>Form Factor</p> | <p>(1) AMD Opteron™ processor Model 2427 (2.2 GHz, 75W ACP) (1) AMD Opteron™ processor Model 2435 (2.6 GHz, 75W ACP)</p> <p>6MB shared Level 3 cache</p> <p>4 GB (2 x 2GB) Registered PC2-6400 DDR2 DIMMs (800MHz) with Advanced ECC capabilities 8GB (4 x 2GB) Registered PC2-6400 DDR2 DIMMs (800MHz) with Advanced ECC capabilities</p> <p>Embedded NC7782 dual-port gigabit server adapter</p> <p>HP Smart Array P212 (538278-xx1) HP Smart Array P212/256MB/BBWC (538274-xx1)</p> <p>None Ship Standard (up to 4 Hot Plug SATA or SAS drives supported)</p> <p>SATA: 8.0TB Maximum SAS: 8.0TB Maximum</p> <p>None Ship Standard (1 DVD-ROM or DVD/CD RW supported)</p> <p>Rack (1U)</p> |
| <p>HP DL165 G6 2435 2.6 GHz, 8 GB Hot Plug SAS/SATA (2P) 538274-xx1</p> | | |

Non-Hot Plug Serial ATA (SATA) Models

| | | |
|---|--|--|
| <p>HP DL165 G6 2423HE NHP SATA, 4GB, 1P 538279-xx1</p> | <p>Processor(s)</p> <p>Cache Memory</p> <p>Memory</p> <p>Network Controller</p> <p>Storage Controller</p> <p>Hard Drive</p> <p>Internal Storage</p> <p>Optical Drive</p> <p>Form Factor</p> | <p>(1) AMD Opteron™ processor Model 2423HE (2.0 GHz, 55W ACP)</p> <p>6MB shared Level 3 cache</p> <p>4 GB (2 x 2GB) Registered PC2-6400 DDR2 DIMMs (800MHz) with Advanced ECC capabilities</p> <p>Embedded NC7782 dual-port gigabit server adapter</p> <p>HP Embedded SATA Controller</p> <p>(1) 160GB NHP SATA HDD</p> <p>SATA: 6.16TB maximum</p> <p>None Ship Standard (1 DVD-ROM or DVD/CD RW supported)</p> <p>1U</p> |
|---|--|--|

| | | |
|-------------------------|---------|--------|
| Country Code Key | xx = 00 | U.S. |
| | xx = 20 | Brazil |
| | xx = 29 | Japan |
| | xx = 37 | APD |
| | xx = 42 | Euro |
| | xx = AA | PRC |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

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 is only available as a Factory Installable Option.

Step 1: Base Configuration

HP Models

Non-Hot Plug SATA Model

HP ProLiant DL165 G6 Non-Hot Plug SATA Rack Chassis

572227-B21

Factory Integrated Model ships with:

Embedded NC7782 dual-port gigabit server adapter

Two available PCI-Express slots, including one full-length/full height and one low-profile/half height slot

HP embedded SATA controller

One Highline IEC Power Cord

6 Fixed, Non-Redundant Fans

Rack (1U), (1.75 in / 4.45 cm)

Tool-less Fixed Rails

Hot Plug SATA/SAS Model

HP ProLiant DL165 G6 Hot Plug SATA/SAS Rack Chassis

572228-B21

Factory Integrated Model ships with:

Embedded NC7782 dual-port gigabit server adapter

One full-length/full height PCI-Express slot.

Low-profile/half height slot houses the HP Smart Array P212 storage controller

One Highline IEC Power Cord

6 Fixed, Non-Redundant Fans

Rack (1U), (1.75 in / 4.45 cm)

Tool-less Fixed Rails

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

HP Processors

NOTE: If 2 processors are desired, select one xxxxx-L21 and one xxxxx-B21.

AMD Opteron™ processor Model 2435 (2.6 GHz, 75W ACP), Option Kit, FIO

572221-L21

AMD Opteron™ processor Model 2431 (2.4 GHz, 75W ACP), Option Kit, FIO

572219-L21

AMD Opteron™ processor Model 2427 (2.2 GHz, 75W ACP), Option Kit, FIO

572142-L21

AMD Opteron™ processor Model 2425HE (2.1GHz, 55W ACP), Option Kit, FIO

572140-L21

AMD Opteron™ processor Model 2423HE (2.0GHz, 55W ACP), Option Kit, FIO

572138-L21



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Configuration Information - Factory Integrated Models

| | | |
|-----------|---|------------|
| HP Memory | HP 2GB (2x1GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497763-B21 |
| | HP 4GB (2x2GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497765-B21 |
| | HP 8GB (2x4GB) Dual Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497767-B21 |
| | HP 8GB (2x4GB) Dual Rank x4 PC2-6400 (DDR2-800) Registered Low Power Memory Kit | 504351-B21 |
| | HP 16GB (2x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 408855-B21 |
| | HP 64GB (8x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 495605-B21 |

HP Hard Drives

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, 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: Required only if P/N 572227-B21 selected in Step 1.

NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Serial-ATA (SATA) Non-Hot Plug Hard Drives (Non-Hot Plug Models Only)

SATA Non-Hot Plug LFF (3.5-inch) Entry (ETY) Drives

| | |
|---|------------|
| HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive | 571232-B21 |
|---|------------|

| | |
|---|------------|
| HP 160GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive | 458947-B21 |
|---|------------|

SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | |
|---|------------|
| HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 507774-B21 |
|---|------------|

| | |
|---|------------|
| HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 507772-B21 |
|---|------------|

| | |
|---|------------|
| HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 458941-B21 |
|---|------------|

| | |
|---|------------|
| HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 458939-B21 |
|---|------------|

HP Storage Controllers

NOTE: A minimum of one Smart Array Controller is required when purchasing Hot Plug CTO Chassis Model (P/N 572228-B21).

NOTE: In order to upgrade to RAID 6, at least 256MB Cache and a Battery is required in addition to the Smart Array Advanced Pack license (516471-B21).

| | |
|------------------------------------|------------|
| HP P212/256MB FIO Smart Array BBWC | 491191-B21 |
|------------------------------------|------------|

| | |
|--------------------------------------|------------|
| HP P212/256MB Smart Array Controller | 462834-B21 |
|--------------------------------------|------------|

| | |
|--|------------|
| HP P212/Zero Memory Smart Array Controller | 462828-B21 |
|--|------------|

| | |
|--|------------|
| HP P410/Zero Memory FIO Smart Array Controller | 462860-B21 |
|--|------------|

| | |
|--------------------------------------|------------|
| HP P410/256MB Smart Array Controller | 462862-B21 |
|--------------------------------------|------------|

| | |
|--|------------|
| HP Smart Array P410/256MB w/ Battery FIO | 491195-B21 |
|--|------------|

| | |
|---|------------|
| HP P410/512MB BBWC Smart Array Controller | 462864-B21 |
|---|------------|



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Configuration Information - Factory Integrated Models

HP Power Supplies

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/hppoweradvisor

HP High Efficiency 500W Multi-output Power Supply Kit

536928-B21

Step 3: Choose Additional Options for Factory Integration

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



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Core Options

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

| | | |
|----------------------|---|------------|
| HP Processors | AMD Opteron™ processor Model 2435 (2.6 GHz, 75W ACP) | 572221-B21 |
| | AMD Opteron™ processor Model 2431 (2.4 GHz, 75W ACP) | 572219-B21 |
| | AMD Opteron™ processor Model 2427 (2.2 GHz, 75W ACP) | 572142-B21 |
| | AMD Opteron™ processor Model 2425HE (2.1GHz, 55W ACP) | 572140-B21 |
| | AMD Opteron™ processor Model 2423HE (2.0GHz, 55W ACP) | 572138-B21 |

| | | |
|------------------|---|------------|
| HP Memory | HP 2GB (2x1GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497763-B21 |
| | HP 4GB (2x2GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497765-B21 |
| | HP 8GB (2x4GB) Dual Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497767-B21 |
| | HP 8GB (2x4GB) Dual Rank x4 PC2-6400 (DDR2-800) Registered Low Power Memory Kit | 504351-B21 |
| | HP 16GB (2x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 408855-B21 |
| | HP 64GB (8x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 495605-B21 |

| | | |
|--------------------------|-----------------|------------|
| HP Optical Drives | DVD-ROM Drive | 447889-B21 |
| | DVD/CD RW Drive | 447891-B21 |

HP Hard Drives

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, 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.

SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | |
|--|------------|
| HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive | 507632-B21 |
| HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive | 454146-B21 |
| HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive | 458928-B21 |

SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | |
|---|------------|
| HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 507774-B21 |
| HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 507772-B21 |
| HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 458941-B21 |
| HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive | 458939-B21 |

SATA Hot Plug LFF (3.5-inch) Entry (ETY) Drives

| | |
|--|------------|
| HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Entry 1yr Warranty Hard Drive | 571230-B21 |
| HP 160GB 3G SATA 7.2K rpm LFF (3.5-inch) Entry 1yr Warranty Hard Drive | 458945-B21 |

SATA Non-Hot Plug LFF (3.5-inch) Entry (ETY) Drives



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Core Options

HP 250GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive 571232-B21

HP 160GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Entry 1yr Warranty Hard Drive 458947-B21

NOTE: 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 3.5" Midline (MDL) Solid State Drives

HP 120GB 3G SATA LFF (3.5-inch) Midline 1yr Warranty Solid State Drive 570763-B21

HP 60GB 3G SATA LFF (3.5-inch) Midline 1yr Warranty Solid State Drive 570761-B21

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/13415_div/13415_div.html
(Worldwide)

SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives

HP 600GB 6G SAS 15K rpm LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 516828-B21

HP 450GB 6G SAS 15K rpm LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 516816-B21

HP 450GB 3G SAS 15K LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 454232-B21

HP 300GB 6G SAS 15K rpm LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 516814-B21

HP 300GB 3G SAS 15K LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 416127-B21

HP 146GB 3G SAS 15K LFF (3.5-inch) Dual Port Enterprise 3yr Warranty Hard Drive 384854-B21

SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives

HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) Dual Port Midline 1yr Warranty Hard Drive 507616-B21

HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) Dual Port Midline 1yr Warranty Hard Drive 507614-B21

HP 1TB 3G SAS 7.2K rpm LFF(3.5-inch) Dual Port Midline 1yr Warranty Hard Drive 461137-B21

HP 750GB 3G SAS 7.2K rpm LFF(3.5-inch) Dual Port Midline 1yr Warranty Hard Drive 461135-B21

NOTE: The purchase of SAS HBA or array controller is required.

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/12244_div/12244_div.html
(Worldwide)



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Core Options

HP Networking

Gigabit Ethernet Adapters

| | |
|--|------------|
| HP NC112T PCIe Gigabit Server Adapter | 503746-B21 |
| HP NC360T PCI Express Dual Port Gigabit Server Adapter | 412648-B21 |
| HP NC375T PCI Express Quad Port Gigabit Server Adapter | 538696-B21 |
| HP NC364T PCI Express Quad Port Gigabit Server Adapter | 435508-B21 |
| HP NC373F PCI Express Multifunction Gigabit Server Adapter | 394793-B21 |
| HP NC373T PCI Express Multifunction Gigabit Server Adapter | 394791-B21 |
| HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter | 458492-B21 |

10 Gigabit Ethernet Adapters

NOTE: No more than two 10GbE I/O devices are supported in a single ProLiant server.

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

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

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

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

HP I/O Expansion Options

| | |
|------------------------|------------|
| HP HTX Riser Board Kit | 445987-B21 |
| HP PCI-X L/P Riser Kit | 452698-B21 |

NOTE: Replaces the standard Half Height (LP) PCI Express slot with a Half Height (LowProfile) PCI-X slot.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

| | | |
|----------------------------------|--|------------|
| HP Entry-Level Server Management | HP LO100i Advanced Pack, No Media 1-Server License including 1 year of 24x7 Technical Support and Updates NOTE: For additional License Kits please see the Lights-Out 100i QuickSpecs at: www.hp.com/go/lo100 . | 530521-B21 |
| HP Insight Software | HP Insight Control for Linux HP Insight Control for Linux, 1-server license, including one year of 24x7 Technical Support and Updates, Electronic TC213AAE HP Insight Control for Linux, No Media, 1-Server license, including one year of 24x7 Technical Support and Updates TC209A HP Insight Control for Linux, Media pack (DVD) - No licenses included TC208A NOTE: Licenses ship without media. The Media Kit for Insight Control for Linux can be ordered separately, or can be downloaded at: http://www.hp.com/go/ic-linux (click on Download button). NOTE: Electronic licenses can be used to purchase multiple licenses with a single activation key, and are available in all countries except China and Japan. Customers in China and Japan should order the physical equivalent. 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 Service. NOTE: For additional License Kits, including electronic licensing options, please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/13019_div/13019_div.html HP Insight Control server deployment HP Insight Control server deployment Electronic License including 1 year 24x7 Technical Support and Updates T9082AAE HP Insight Control server deployment 1-Server License including 1 year 24x7 Technical Support and Updates 452151-B21 NOTE: Licenses ship without media. The Insight Control Media Kit can be ordered separately, or can be downloaded at: http://www.hp.com/go/insightupdates . NOTE: Electronic licenses can be used to purchase multiple licenses with a single activation key, and is available in all countries except China and Japan. Customers in China and Japan should order the physical equivalent. 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 Service. NOTE: For additional license kits please see the Insight Control QuickSpecs at: http://h18004.www1.hp.com/products/quickspecs/12631_div/12631_div.html | |
| HP Graphic Options | HP Graphic Card Power Adapter Kit | 533955-B21 |
| HP Drive Cage Options | Hot Plug HDD Backplane 1U 2S Kit NOTE: Installation of the Hot Plug Backplane 1U 2S Kit (445985-B21) is required if ordering third or fourth Hard Drives for Hot Plug models only. | 445985-B21 |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

HP Storage Controllers

NOTE: The addition of storage controllers for internal hard drive use is intended for use ONLY with the Hot Plug SATA/SAS Model Chassis (572228-B21).

SAS Controllers

Smart Array P212 Controller

HP Smart Array P212/Zero Memory Controller 462828-B21

HP Smart Array P212/256MB Controller 462834-B21

Smart Array P410 Controller

HP Smart Array P410/256MB Controller 462862-B21

HP Smart Array P410/512MB with BBWC Controller 462864-B21

HP Smart Array P410/512MB with FBWC 578230-B21

HP Smart Array P410/1G with FBWC 572532-B21

Smart Array P411 Controller

NOTE: Controllers for use with external storage only.

HP Smart Array P411/256MB Controller 462830-B21

HP Smart Array P411/512MB BBWC 462832-B21

HP Smart Array P411/512MB Flash Backed Write Cache 578229-B21

HP Smart Array P411/1G Flash Backed Write Cache 572531-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
(Smart Array P212 Controller)

http://h18000.www1.hp.com/products/quickspecs/13201_div/13201_div.html
(Smart Array P410 Controller)

http://h18000.www1.hp.com/products/quickspecs/13202_div/13202_div.html
(Smart Array P411 Controller)

Optional upgrades

1G Flash Backed Write Cache 534562-B21

512MB Flash Backed Write Cache 534916-B21

HP Smart Array Advanced Pack No Media 1-Server license including 1yr 24x7 516471-B21

Technical Support

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.

SAS HBA

HP SC08Ge Host Bus Adapter 488765-B21

HP SC08e 6Gb 2-ports Ext PCIe SAS HBA 614988-B21

NOTE: This is a 2 x4 External Port HBA.

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://h18004.www1.hp.com/products/quickspecs/13082_div/13082_div.html
(SC08Ge HBA)



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

| | | |
|-----------------------|---|------------|
| HP InfiniBand Options | HP IB 4X DDR PCI-e Dual Port HCA | 448397-B21 |
| | HP IB 4X DDR PCI-e Dual Port 0 Memory HCA | 483513-B21 |
| | HP 10 GbE PCI-e G2 Dual Port Adapter | 516937-B21 |

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/13078_div/13078_div.html

HP Backup & Recovery Software

Data Protector Express

| | |
|---|---------|
| HP Data Protector Express 4.0 SP1 Backup Server | BB117BA |
| HP Data Protector Express 4.0 SP1 for Microsoft Small Business Server | BB118BA |
| HP Data Protector Express Backup Server 4.0 SP1 Upgrade from Data Protector Express Single Server Edition | BB117BT |

NOTE: Only one of these Data Protector Express base products is required. To see available options: <http://www.hp.com/go/dataprotectorexpress>

HP Tape Backup

NOTE: For the complete range of StorageWorks tape drives, autoloaders, libraries and media see: <http://www.hp.com/go/tape>. For hardware and software compatibility of HP StorageWorks tape backup products see: <http://www.hp.com/go/connect>.

| | |
|---|--------|
| HP StorageWorks DAT 320 USB Internal Tape Drive | AJ825A |
|---|--------|

| | |
|---|--------|
| HP StorageWorks DAT 320 SAS Internal Tape Drive | AJ830A |
|---|--------|

NOTE: Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.

| | |
|---|--------|
| HP StorageWorks LTO-2 Ultrium 448 SAS Internal Tape Drive | DW085A |
|---|--------|

NOTE: Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.

| | |
|---|--------|
| HP StorageWorks LTO-3 Ultrium 920 SAS Internal Tape Drive | EH847A |
|---|--------|

NOTE: Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.

| | |
|--|--------|
| HP StorageWorks 1/8 G2 LTO-3 Ultrium 920 SAS Tape Autoloader | AH558A |
|--|--------|

NOTE: Requires HP 1U Tape Autoloader Rack-Mount Kit (AH166A) for rack installation. Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.

| | |
|---|--------|
| HP StorageWorks MSL2024 Tape Library with one LTO-3 Ultrium 920 SAS Drive | AH559A |
|---|--------|

NOTE: Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.

| | |
|--|--------|
| HP StorageWorks MSL2024 Tape Library with one LTO-5 Ultrium 3000 SAS Drive | BL537A |
|--|--------|

NOTE: Connection using HP P212 Smart Array Controller SAS (462828-B21) recommended.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

Disk Backup

NOTE: For the complete range of StorageWorks D2D Backup Systems see: <http://www.hp.com/go/d2d>. For the complete range of StorageWorks RDX drives and media see: <http://www.hp.com/go/rdx>. For hardware and software compatibility of HP StorageWorks disk backup products see: <http://www.hp.com/go/connect>.

HP StorageWorks D2D Backup Systems with Backup Data Deduplication

NOTE: These are network connected appliances with connectivity using the iSCSI protocol. If the server requires a hardware iSCSI initiator, the QLogic QLA4050 Host Bus Adapter is recommended.

HP StorageWorks D2D2502i Backup System

EJ001B

NOTE: 1.5TB of usable network disk backup capacity. Network connected appliance with connectivity using the iSCSI protocol. If the server requires a hardware iSCSI initiator, the QLogic QLA4050 Host Bus Adapter is recommended.

HP StorageWorks D2D2504i Backup System

EJ002B

NOTE: 3.0TB of usable network disk backup capacity. Network connected appliance with connectivity using the iSCSI protocol. If the server requires a hardware iSCSI initiator, the QLogic QLA4050 Host Bus Adapter is recommended.

USB Removable Media RDX Disk Backup Systems

HP StorageWorks RDX320 Internal Removable Disk Backup System

AJ767A

NOTE: 320GB of disk capacity per data cartridge.

HP StorageWorks RDX500 Internal Removable Disk Backup System

AJ934A

NOTE: 500GB of disk capacity per data cartridge.

HP StorageWorks RDX750 Internal Removable Disk Backup System

AW577A

NOTE: 750GB of disk capacity per data cartridge.

HP StorageWorks Options

StorageWorks Fibre Channel HBA

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 81B PCIe 8Gb FC Single Port HBA

AP769A

HP 82B PCIe 8Gb FC Dual Port HBA

AP770A

HP 41B PCIe 4Gb FC Single Port HBA

AP767A

HP 42B PCIe 4Gb FC Dual Port HBA

AP768A

Emulex Fibre Channel HBAs

HP StorageWorks 81E 8Gb SP PCI-e FC HBA

AJ762A

HP StorageWorks 82E 8Gb Dual-port PCI-e FC HBA

AJ763A

QLogic Fibre Channel HBAs

HP StorageWorks 81Q 8Gb PCI-e FC HBA

AK344A

HP StorageWorks 82Q 8Gb Dual Port PCI-e FC HBA

AJ764A

StorageWorks SCSI HBA

HP U320e SCSI Host Bus Adapter

AH627A

NOTE: Recommended for MSL SCSI Tape Library connect.

NOTE: Recommended Dual Channel Ultra320 SCSI Controller for connecting multi-drive MSL tape libraries to ProLiant servers.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

StorageWorks Converged Network Adapter
HP CN1000E 2P Converged Network Adapter

AW520A

HP Disk Storage Systems MSA SAN Storage Arrays

HP StorageWorks 50 Modular Smart Array 364430-291

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)

HP StorageWorks MSA60 Array 418408-B21

NOTE: Please see the QuickSpecs for additional options and configuration information at:

http://h18000.www1.hp.com/products/quickspecs/12627_div/12627_div.html

HP StorageWorks MSA70 Array 418800-B21

NOTE: Please see the QuickSpecs for additional options and configuration information at:

http://h18000.www1.hp.com/products/quickspecs/12652_div/12652_div.html

HP Uninterruptible Power Systems HP Rack-mountable UPS

HP R1500 G2 UPS

HP, R1.5kVA UPS, 1U, NA AF419A

HP, R1.5kVA UPS, 1U, INTL AF418A

HP, R1.5kVA UPS, 1U, JPN/TW AF421A

NOTE: Please see QuickSpecs for Technical Specifications and additional information:

http://h18000.www1.hp.com/products/quickspecs/12507_div/12507_div.html
(Worldwide)

HP R/T3000 Uninterruptible Power System (UPS)

HP R/T3000 UPS, High voltage, NA/JPN AF453A

HP R/T3000 UPS, High voltage, detachable inlet cord INTL 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 UPS, INTL AF416A

HP R5500 VA UPS, NA/JPN AF426A

NOTE: Please see the QuickSpecs for additional information:

http://h18000.www1.hp.com/products/quickspecs/11871_div/11871_div.html
(Worldwide)

NOTE: For additional information on HP Uninterruptible Power Systems please go to:
www.hp.com/servers/rackups.

NOTE: For additional information on sizing your server, please reference:
<http://www.upssizer.com>



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

| | | |
|----------------------------------|--|------------|
| HP Power Distribution Units | Monitored PDUs | |
| | HP Monitored Power Distribution Unit: Full Rack Version | |
| | HP 8.6 kVA S1324 Monitored PDU- single input, 3Ø, 24A (NA/JPN) | AF504A |
| | HP 8.3 S1140 Monitored PDU- single input, 1Ø, 40A (NA/JPN) | AF506A |
| | HP 11 kVA S1316 Monitored PDU- single input, 3Ø, 16A (INTL) | AF508A |
| | HP 7.3 kVA S1132 Monitored PDU- single input, 1Ø, 32A (INTL) | AF510A |
| | HP Monitored Power Distribution Unit: Half Rack Version | |
| | HP 4.9 kVA S124 Monitored PDU- single input, 1Ø, 24A (NA/JPN) | AF914A |
| | HP 7.3 kVA S132 Monitored PDU- single input, 1Ø, 32A (INTL) | AF915A |
| | Modular Power Distribution Units 1U/0U (Up to 32 outlets) | |
| | 4.9 kVA Modular PDU, 24A | 252663-D72 |
| | 7.3kVA Model - mPDU, 32A, High (INT'L) | 252663-B31 |
| 8.3 kVA Modular PDU, 40A, NA/JPN | 252663-D73 | |

| | | |
|--|---|--------|
| HP Rack Series (Carbon/Graphite Metallic) | HP Rack 10000 G2 Series (Graphite Metallic) | |
| | 10642 G2 (42U) Rack Cabinet - Pallet | AF001A |
| | 10642 G2 (42U) Rack Cabinet - Shock Pallet | AF002A |
| | NOTE: It is mandatory to use a shock pallet when shipping racks with equipment installed. | |
| | NOTE: xxxxx-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels). | |
| | NOTE: Please see the QuickSpecs for Technical Specifications and additional information: 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 | HP KVM Switch Options | |
| | Server console switch 0x2x8 | AF616A |
| | Server console switch 0x2x16 | AF617A |
| | 0x2x16 KVM Server Console G2 Switch with Virtual Media and CAC | AF618A |
| | 0x2x32 KVM Server Console G2 Switch with Virtual Media and CAC | AF619A |
| | 1x1Ex8 KVM IP Console Switch G2 with Virtual Media and CAC | AF620A |
| | 2x1Ex16 KVM IP Console Switch G2 with Virtual Media and CAC | AF621A |
| | 4x1Ex32 KVM IP Console Switch G2 with Virtual Media and CAC | AF622A |
| | NOTE: For additional information regarding KVM switches, Serial Console servers, rack mount monitors, keyboards and all related options please see the following URL: http://www.hp.com/go/kvm . | |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Additional Options

| | | |
|-----------------------|-----------------------------|------------|
| HP USB and SD Options | HP USB Internal Cable Kit | 451363-B21 |
| | USB P/S2 Optical Mouse | DC369A |
| | HP USB 04 Standard Keyboard | DT528A#ABA |

| | | |
|-----------------------------------|---|--------|
| HP Care Pack Services | Hardware Services 4-Hour On-site Service | |
| | 13-Hour x 5-Day Coverage, 3 Years, Electronic | U9509E |
| | 24-Hour x 7-Day Coverage, 3 Years, Electronic | U9510E |
| | Hardware Services Next Business Day On-Site Service | |
| | 9-Hour x 5-Day Coverage, 3 Years, Electronic | U9508E |
| | Hardware Services 6-Hour Call to Repair On-Site Service | |
| | 6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic | U9511E |
| Hardware Installation, Electronic | U9520E | |
| | NOTE: For more information, customer/resellers can contact: http://www.hp.com/services/carepack | |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Memory

NOTE: Memory configurations listed do not apply to "Factory Integrated Models".

HP ProLiant DL165 G6 (all models)

Standard Memory

4 GB (2 x 2 GB) PC2-6400 DIMM memory, with Advanced ECC Capabilities memory installed.

Maximum Memory

Up to 64GB memory is available with the optional installation of PC2-5300 Registered DIMM memory kits.

Memory should be installed in pairs and matched for optimum performance.

NOTE: Chart does not represent all possible memory configurations.

NOTE: Each processor support 4 DIMM sockets. Both processors sockets must be populated in order to use all 8 DIMM sockets.

| Memory | Slot | | | | | | | |
|-----------------|------|------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Standard (4 GB) | 2 GB | 2 GB | Empty | Empty | Empty | Empty | Empty | Empty |
| Maximum (64 GB) | 8 GB | 8 GB | 8 GB | 8 GB | 8 GB | 8 GB | 8 GB | 8 GB |

HP Memory

Following are memory options available from HP:

| | |
|---|------------|
| HP 2GB (2x1GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497763-B21 |
| HP 4GB (2x2GB) Single Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497765-B21 |
| HP 8GB (2x4GB) Dual Rank PC2-6400 (DDR2-800) Registered Memory Kit | 497767-B21 |
| HP 8GB (2x4GB) Dual Rank x4 PC2-6400 (DDR2-800) Registered Low Power Memory Kit | 504351-B21 |
| HP 16GB (2x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 408855-B21 |
| HP 64GB (8x8GB) Dual Rank PC2-5300 (DDR2-667) Registered Memory Kit | 495605-B21 |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Storage



- 1-4 Non-hot plug 3.5" SATA or Hot-plug SAS/SATA hard drive bays
- A Optional DVD-ROM, or DVD/CD RW

Drive Support

Removable Media

| | Quantity Supported | Position Supported | Controller |
|-----------|--------------------|--------------------|-----------------------------------|
| DVD-ROM | Up to 1 | A | Integrated IDE (ATAPI) (optional) |
| DVD/CD RW | Up to 1 | A | Integrated IDE (ATAPI) (optional) |

Hard Drives

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, 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.

SATA Non-Hot Plug LFF (3.5-inch) Entry (ETY) Drives

| | Quantity Supported | Position Supported | Controller |
|--|--------------------|--------------------|-----------------------------|
| 250GB 3G SATA 7.2K 160GB 3G SATA 7.2K | Up to 4 | 1-4 | HP Embedded SATA Controller |

SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | Quantity Supported | Position Supported | Controller |
|--|--------------------|--------------------|-----------------------------|
| 2TB 3G SATA 7.2K 1TB 3G SATA 7.2K 500GB 3G SATA 7.2K 250GB 3G SATA 7.2K | Up to 4 | 1-4 | HP Embedded SATA Controller |

SATA Hot Plug LFF (3.5-inch) Entry (ETY) Drives

NOTE: Installation of the Hot Plug Backplane 1U 2S Kit (445985-B21) is required if ordering third or fourth Hard Drives for Hot Plug models only.

| | Quantity Supported | Position Supported | Controller |
|--|--------------------|--------------------|--|
| 250GB 3G SATA 7.2K 160GB 3G SATA 7.2K | Up to 4 | 1-4 | 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 |

SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | Quantity Supported | Position Supported | Controller |
|--|--------------------|--------------------|------------|
| | | | |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Storage

| | | | |
|--------------------|---------|-----|--|
| 2TB 3G SATA 7.2K | Up to 4 | 1-4 | HP Smart Array P212/Zero Memory Controller |
| 1TB 3G SATA 7.2K | | | HP Smart Array P212/256 MB Controller |
| 500GB 3G SATA 7.2K | | | HP Smart Array P410/256 MB Controller |
| | | | HP Smart Array P410/512 MB BBWC Controller |

SATA Hot Plug 3.5" Midline (MDL) Solid State Drives

| | Quantity Supported | Position Supported | Controller |
|---------------|--------------------|--------------------|--|
| 120GB 3G SATA | Up to 4 | 1-4 | HP SC40Ge 4-Port Internal SAS HBA with RAID 0, 1 |
| 60GB 3G SATA | | | NOTE: When using the SC40Ge with SATA Hard Drives, 1.5G SATA Hard Drives are required. Transfer rate: 1.5 Gb/s SATA, 3 Gb/s SAS |
| | | | HP Smart Array P400 Controller |
| | | | HP Smart Array P800 Controller |

SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives

| | Quantity Supported | Position Supported | Controller |
|------------------|--------------------|--------------------|--|
| 600GB 6G SAS 15K | Up to 4 | 1-4 | HP Smart Array P212/Zero Memory Controller |
| 450GB 6G SAS 15K | | | HP Smart Array P212/256 MB Controller |
| 450GB 3G SAS 15K | | | HP Smart Array P410/256 MB Controller |
| 300GB 6G SAS 15K | | | HP Smart Array P410/512 MB BBWC Controller |
| 146GB 3G SAS 15K | | | |

SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives

| | Quantity Supported | Position Supported | Controller |
|-------------------|--------------------|--------------------|--|
| 2TB 6G SAS 7.2K | Up to 4 | 1-4 | HP Smart Array P212/Zero Memory Controller |
| 1TB 6G SAS 7.2K | | | HP Smart Array P212/256 MB Controller |
| 1 TB 3G SAS 7.2K | | | HP Smart Array P410/256 MB Controller |
| 750GB 3G SAS 7.2K | | | HP Smart Array P410/512 MB BBWC Controller |

External Storage

| | Quantity Supported | Position Supported | Controller |
|------------------------|--------------------|--------------------|--|
| 50 Modular Smart Array | Up to 4 | External | HP Smart Array E500/256 MB Controller |
| | | | HP Smart Array P800/512 BBWC Controller |
| 60 Modular Smart Array | Up to 4 | External | HP Smart Array E500/256MB Controller |
| | | | HP Smart Array P212/Zero Memory Controller |
| | | | HP Smart Array P212/256 MB Controller |
| | Up to 8 | External | 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 | External | HP Smart Array E500/256MB Controller |
| | | | HP Smart Array P800/512 BBWC Controller |
| | | | HP Smart Array P411/256 MB Controller |
| | | | HP Smart Array P411/512 MB BBWC Controller |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Storage

Tape and Disk-Based Backup

NOTE: For the complete range of StorageWorks tape drives, autoloaders, libraries and media, including the internal fitting models, see: <http://www.hp.com/go/tape>. For the complete range of StorageWorks D2D Backup Systems see: <http://www.hp.com/go/d2d>. For the complete range of StorageWorks RDX drives and media see: <http://www.hp.com/go/rdx>. For hardware and software compatibility of HP StorageWorks disk and tape backup products see: <http://www.hp.com/go/connect>.

| | Position | Recommended Controller | Part Number |
|---|----------------------|--|-------------|
| HP StorageWorks SCSI Tape Drives LTO-1 Ultrium 232 LTO-2 Ultrium 448 LTO-3 Ultrium 920 LTO-3 Ultrium 960 LTO4 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 Please check the full compatibility information at: http://www.hp.com/go/connect | 412911-B21 |
| HP StorageWorks SCSI Rack Mount Kits 1U Rack-Mount Kit 3U Rack-Mount Kit | External | HP SC11Xe Host Bus Adapter Please check the full compatibility information at: http://www.hp.com/go/connect | 412911-B21 |
| HP StorageWorks USB Tape Drives DAT 40 DAT 72 DAT 160 DAT 320 | Internal or External | USB 2.0 Port | N/A |
| HP StorageWorks USB Rack Mount Kits 1U USB Rack-Mount Kit | External | USB 2.0 Port | N/A |
| HP StorageWorks SAS Tape Drives DAT 160 DAT 320 LTO-2 Ultrium 448 LTO-3 Ultrium 920 LTO-4 Ultrium 1760 LTO-4 Ultrium 1840 LTO-5 Ultrium 3000 LTO-5 Ultrium 3280 | Internal or External | HP Smart Array P212 SAS controller Please check the full compatibility information at: http://www.hp.com/go/connect | 462828-B21 |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Storage

| | | | |
|---|----------------------|---|------------|
| HP StorageWorks SAS Rack Mount Kits 1U Rack-Mount Kit 3U Rack-Mount Kit | External | HP Smart Array P212 SAS controller Please check the full compatibility information at: http://www.hp.com/go/connect | 462828-B21 |
| HP StorageWorks SCSI Tape Autoloaders DAT 72x10 Autoloader 1/8 G2 Autoloader | External | HP SC11Xe Host Bus Adapter Please check the full compatibility information at: http://www.hp.com/go/connect | 412911-B21 |
| HP StorageWorks SCSI Tape Libraries MSL2024 MSL4048 MSL8096 MSL6000 | External | HP U320e SCSI Dual Channel Controller Please check the full compatibility information at: http://www.hp.com/go/connect | AH627A |
| HP StorageWorks SAS Tape Autoloaders and Libraries 1/8 G2 Autoloader MSL2024 MSL4048 MSL8096 | External | HP Smart Array P212 SAS controller Please check the full compatibility information at: http://www.hp.com/go/connect | 462828-B21 |
| HP StorageWorks Fibre Channel Tape Libraries MSL2024 MSL4048 MSL8096 MSL6000 | External | Please consult the EBS connectivity matrix at: http://www.hp.com/go/ebs for connectivity information and the supported Fibre Channel HBAs shown in this QuickSpecs. | |
| HP StorageWorks USB RDX Removable Disk Backup System RDX160 RDX320 RDX500 RDX750 | Internal or External | USB 2.0 port | N/A |
| HP StorageWorks D2D Backup Systems, iSCSI D2D2500i D2D4000i | External | Embedded Network Controller. If the server requires a hardware iSCSI initiator, the QLogic QLA4050 Host Bus Adapter is recommended. | |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Storage

HP StorageWorks D2D
Backup Systems, Fibre
Channel
D2D4000fc

External

Direct server attach is not supported, requires connection via SAN fabric. See: <http://www.hp.com/go/connect>



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Power Specifications

| | | | | | | |
|--|-----------------------|------|------|------|------|------|
| HP 500W Power Supply | | | | | | |
| Part Number - AC 500W PSU | 515915-B21 Option Kit | | | | | |
| Input Voltage Range (Vrms) | 100 to 240 | | | | | |
| Frequency Range (Nominal) (Hz) | 47/63 | | | | | |
| Nominal Input Voltage (Vrms) | 100 | 120 | 200 | 220 | 230 | 240 |
| Maximum Rated Output Wattage | 500 | 500 | 500 | 500 | 500 | 500 |
| Nominal Input Current (A rms) | 5.74 | 4.99 | 2.86 | 2.58 | 2.46 | 2.36 |
| Max Rated Input Wattage Rating (Watts) | 568 | 568 | 562 | 556 | 556 | 556 |
| Max. Rated VA (Volt-Amp) | 574 | 574 | 573 | 567 | 567 | 567 |
| Efficiency (%) at Max. Rated Output Wattage | 88 | 88 | 89 | 90 | 90 | 90 |
| Power Factor | 0.99 | 0.99 | 0.98 | 0.98 | 0.98 | 0.98 |
| Leakage Current (mA) | 0.42 | 0.50 | 0.81 | 0.91 | 0.95 | 1.00 |
| Max. Inrush Current (A peak) | 30 | 30 | 30 | 30 | 30 | 30 |
| Max. Inrush Current duration (mS) | 20 | 20 | 20 | 20 | 20 | 20 |
| Maximum British Thermal Unit Rating (BTU-Hr) | | | | | | |

NOTE:

To review typical system power ratings use the Active Answers Power Advisor which is available via the online tool located at URL: www.hp.com/go/proliant-energy-efficient or www.hp.com/go/hppoweradvisor



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

System Specifications

Power

| | | |
|--|--------------------------|--------------------------|
| ProLiant DL165 G6 Fully Configured | 115V/60Hz | 220V/50Hz |
| Fully Loaded System Input Wattage (W) | 568 | 556 |
| Fully Loaded System Input Current (A rms) | 4.99 | 2.58 |
| Fully Loaded System Thermal (BTU- Hr) | 1939.15 | 1898.18 |
| Fully Loaded System VA (Volt-Amp) | 574 | 567 |
| System Inrush Current with all power supplies loaded (A) | 30 | 30 |
| Power cord requirements | Nema 5-15P to IEC320-C13 | IEC320-C13 to IEC320-C14 |

NOTE: Power shown is for a fully configured system consisting of (2) CPU, (8) double-sided DIMMs, (2) HDDs, (1) CD-ROM, and (2) PCI cards.

Power Cord AF556A

Server Power Cords

One 6' Highline (IEC-IEC) power cord ships standard

NOTE: HP ProLiant DL servers no longer ship standard with NEMA power cords (163719-002) that allow connection to 110V US wall outlets in a home or office. ProLiant DL servers are primarily connected to PDU's in data center racks so they now ship standard with only a PDU power cord (416151-B21). If a user wishes to power a ProLiant DL server using a 110V receptacle (NEMA-15), the NEMA power cord (227099-001) must be ordered separately.

If customers require a local power cord, they can check the power cord matrix for the appropriate cord. Please see the following power cord matrix: <http://www.hp.com/go/powercordmatrix>.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Technical Specifications

| | | | |
|--------------------|---|---|--|
| System Unit | Dimensions (H x W x D) (with bezel) | 1.70 x 17.64 x 26.85 in (4.32 x 44.80 x 68.20 cm) | |
| | Weight (approximate) | Maximum (all hard drives, power supplies, and processors installed) | 37.00 lb (16.78 kg) |
| | | Minimum (one hard drive, power supply, and processor installed) | 30.00 lb (13.69 kg) |
| | Input Requirements (per 500W power supply) | Rated Line Voltage | 100 to 127 VAC 200 to 240 VAC |
| | | Rated Input Current | 4.99A (at 115 VAC), 2.46A (at 230 VAC) |
| | | Rated Input Frequency | 47 to 63 Hz |
| | | Rated Input Power | 574W (at 100 VAC) 573W (at 200 VAC) |
| | BTU Rating | Maximum | 500W 1700 BTU / hr (at 100 VAC) 1700 BTU/hr (at 200 VAC) |
| | Power Specifications | To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: www.hp.com/go/hppoweradvisor | |
| | | - Click on the system of interest. Example: DL165 G6 - Follow the instructions of the next screens. | |
| | Power Supply Output (per power supply) | Rated Steady-State Power | 500 Watts (at 100 VAC), 500 Watts (at 200 VAC) |
| | | Maximum Peak Power | 500 Watts (at 100 VAC), 500 Watts (at 200 VAC) |
| | Optional High Efficiency Power Supply Specifications | | |
| | Input Requirements (per power supply) | Rated Line Voltage | 90-132 VAC, 200-240 VAC |
| | | Rated Input Current | 9.4 A (at 115 VAC), 7.8 A (at 230 VAC) |
| | | Rated Input Frequency | 47 to 63 Hz |
| | | Rated Input Power | 1075 W (at 100 VAC), 1375W (at 200 VAC) |
| | BTU Rating | Maximum | 3070.93 BTU/hr (at 100 VAC), 4094.57 BTU/hr (at 200 VAC) |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Technical Specifications

| | | |
|--|--|---|
| Power Specifications | To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: www.hp.com/go/proliant-energy-efficient | |
| | <ul style="list-style-type: none"> - Click on the system of interest. Example: DL165 G6 - Follow the instructions of the next screens. | |
| Power Supply Output (per power supply) | Rated Steady-State Power | 900 W (at 100 VAC), 1200 W (at 200 VAC) |
| | Maximum Peak Power | 900 W (at 100 VAC), 1200 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. |
| 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 | |
| | LWAd | 6.82 B |
| | LpAm | 51.93 dBA |
| | Operating | |
| | LWAd | 6.84 B |
| | LpAm | 51.93 dBA |
| Emissions Classification | FCC Rating | Class A |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Technical Specifications

(EMC)

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.

HP 160GB 3G SATA
7.2K rpm LFF (3.5-inch)
Non-hot Plug Entry 1yr
Warranty Hard Drive

458947-B21

| | | | | | | | | | |
|---|---|--------------|--------|----------------|-------------|-------------|---------|------------------|-----------|
| Capacity | 160,041 MB | | | | | | | | |
| Height | 1.028 in (2.61 cm) | | | | | | | | |
| Width | 4.0 in (10.16 cm) | | | | | | | | |
| Depth | 5.787 in (147.0 mm) | | | | | | | | |
| Interface | Serial ATA | | | | | | | | |
| Transfer Rate Synchronous (Maximum) | 1.5Gb/s | | | | | | | | |
| Native Command Queuing | N/A | | | | | | | | |
| Seek Time (typical reads, including settling) | <table> <tr> <td>Single Track</td> <td>2.0 ms</td> </tr> <tr> <td>Average</td> <td><11 ms</td> </tr> <tr> <td>Full-Stroke</td> <td>23.0 ms</td> </tr> <tr> <td>Rotational Speed</td> <td>7,200 rpm</td> </tr> </table> | Single Track | 2.0 ms | Average | <11 ms | Full-Stroke | 23.0 ms | Rotational Speed | 7,200 rpm |
| Single Track | 2.0 ms | | | | | | | | |
| Average | <11 ms | | | | | | | | |
| Full-Stroke | 23.0 ms | | | | | | | | |
| Rotational Speed | 7,200 rpm | | | | | | | | |
| Physical Configuration | <table> <tr> <td>Bytes/Sector</td> <td>512</td> </tr> <tr> <td>Logical Blocks</td> <td>312,581,808</td> </tr> </table> | Bytes/Sector | 512 | Logical Blocks | 312,581,808 | | | | |
| Bytes/Sector | 512 | | | | | | | | |
| Logical Blocks | 312,581,808 | | | | | | | | |
| Operating Temperature | 41° to 131° F (5° to 55° C) | | | | | | | | |

Embedded SATA
Controller

| | |
|---|------------------------------|
| Drives Supported | Up to 4 SATA devices |
| Channels | 4 1.5Gb SATA |
| Storage Capacity | 3.0TB internal storage |
| Data Transfer Method | 32-bit/33-MHz PCI bus-master |
| Maximum SATA Channel Transfer Rate | 1.5Gb/s per channel |
| Maximum Transfer Rate per PCI Bus (peak) | 266 MB/s per channel |
| Protocols | SATA PIO Mode[0-4] |
| Cable | SATA |
| Internal ATA Connectors | Four SATA connectors |

NOTE: Raid support requires optional slot based raid controller.



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Technical Specifications

| | | | | |
|--|--------------------------------------|--|----------|--|
| HP 4 Internal Port SAS HBA with RAID | Drives Supported | Up to 4 SATA/SAS drives | | |
| | Channels | 4 | | |
| | Storage Capacity | 1.8TB SAS, 3.0TB SATA | | |
| | Data Transfer Method | PCI-Express | | |
| | Maximum SAS Channel Transfer Rate | 3Gb/s per channel | | |
| | Maximum SAS transfer rate | 300Mb/sec per port | | |
| | Protocols Supported | SSP, STP, SMP | | |
| Internal Connectors | 1 SAS | | | |
| Embedded NC7782 dual-port gigabit server adapter | Network Interface | 10Base-T/ 100Base-TX/ 1000Base-TX | | |
| | Compatibility | IEEE 802.3 10Base-T | | |
| | | IEEE 802.3 1000Base-T | | |
| | | IEEE 802.3 100Base-TX | | |
| | Data Transfer Method | PCI-X | | |
| | Controller | BCM5704c | | |
| | 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) | | |
| | 10/100/1000Base-TX | Category 5 UTP (2 Pair); up to 328 ft (100 m) | | |
| Environment-friendly Products and Approach | End-of-life Management and Recycling | <p>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.</p> <p>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.</p> | | |



QuickSpecs

HP ProLiant DL165 Generation 6 (G6)

Technical Specifications

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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

