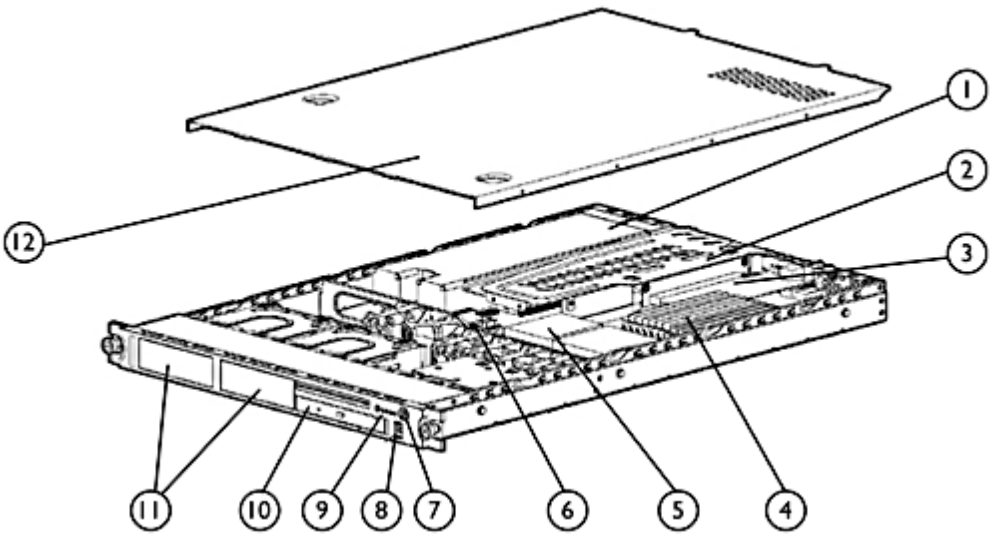
Overview



1. 500W power supply
2. Full-height, full length 133 MHz PCI-X expansion slot which supports PCI-Express with optional riser board
3. Low-profile, half-length 133 MHz PCI-X expansion slot
4. Memory DIMM slots
5. Intel Xeon Processors (Supports up to 2)
6. System fans
7. Power on/off
8. USB port
9. System LEDs
10. Optional CD- or DVD-ROM drive
11. Two Non-Hot Plug SATA OR SCSI 1" Hard Drive Bays
12. Access panel

At A Glance

- Supports 1 or 2 Intel Xeon processors:
  - 2.8GHz 1MB Level 2 Cache 800MHz front-side bus supporting Hyper-Threading Technology
  - 3.4GHz 1MB Level 2 Cache 800MHz front-side bus supporting Hyper-Threading Technology
  - 3.6GHz 2MB Level 2 Cache 800MHz front-side bus supporting Hyper-Threading Technology
- Supports both serial ATA (SATA) and SCSI non-hot plug hard drives
- Includes one full-length and one low-profile 64-bit/133MHz PCI-X slot; PCI Express x8 optional on full-length slot
- IPMI 1.5 support at launch with future support for IPMI 2.0
- HP ProLiant Lights Out 100i Remote Management support standard
- 8 DIMM slots, supporting up 16GB DDR2-400MHz memory
- Optional DVD or CD-ROM drive
- Intel Chipset is E7520
- 1-GB of PC2-3200 DDR2 SDRAM running at 400MHz with Advanced ECC capabilities standard, expandable to 16 GB
- Two integrated Dual Broadcom 10/100/1000 5721 NICs (Wake on LAN and PXE capable)
- Integrated 10/100 NIC dedicated for server management
- Support for up to two 1" SATA/SCSI non-hot plug hard drives
- Two PCI-X 64-bit/133MHz PCI slots operating at 3.3 volts (one full-length, one low-profile)
- Internal storage capacity of up to 500 GB (2 x 250-GB non-hot plug 1" SATA HDDs), or 144GB (2x72GB NHP SCSI HDDs)
- Integrated ATI Rage XL with 8MB SDRAM video
- 500W Power Supply (Non-Hot Plug, autoswitching)
- Four USB ports (two rear, two front)
- Integrated Lights Out 100i
- ROM Setup Utility

Overview

- Protected by HP Services and a worldwide network of resellers and service providers. One-year Next Business Day, on-site limited global warranty. Certain restrictions and exclusions apply. Pre-Failure Notification on processors, memory, and SCSI hard drives. SATA hard drives have a one-year warranty.

Standard Features

Processor One of the following depending on Model	Intel Xeon 2.8GHz processor with 1MB second level ECC cache standard, 800MHz front-side-bus supporting Hyper-Threading Technology (Supports up to 2 processors) Intel Xeon 3.4 GHz processor with 1MB second level ECC cache standard, 800MHz front-side-bus supporting Hyper-Threading Technology (Supports up to 2 processors) Intel Xeon 3.6 GHz processor with 2MB second level ECC cache standard, 800MHz front-side-bus supporting Hyper-Threading Technology (Supports up to 2 processors)
Memory Protection	Advanced ECC capabilities

Memory			
	Type	PC2-3200 DDR2 SDRAM running at 400MHz	
	Standard	1 GB (2x512MB)	(2x512MB)
	Maximum	16 GB (8x2GB)	(8x2GB)

Network Controller	Integrated Dual Broadcom 5721 10/100/1000 NICs (Wake on LAN and PXE capable)

Expansion Slots	Slot #	Bus Speed	Bus #*	Device #**	Hot Plug (Y/N)	Voltage/ Connector	Notes
	1	64-bit/133MHz PCI-X	1	0	N	3.3 volts	Full length, full height
	1	X8 PCI Express	5	1	N	3.3 volts	Full length, full height
	2	64-bit/133MHz PCI-X	6	3	N	3.3 volts	Low-profile

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

NOTE: All slots can accept universal keyed PCI cards

* 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).

Storage Controller	Serial ATA (SATA) models offer SATA controller in the chipset; SCSI models will have SCSI controller in a slot (occupies low-profile slot)

Storage		
	Diskette Drives	via USB only
	DVD-ROM	8x IDE (ATAPI) DVD-ROM drive, slim (optional)
	CD-ROM	24x IDE (ATAPI) CD-ROM drive (optional)
	Hard Drives	80 GB, 160GB or 250GB SATA 7200 rpm 1"Drives, or 36GB 15K, 72GB 10K or 146GB 10K SCSI Drives (all non-hot plug)

Maximum Internal Storage			
	SATA	500 GB	2 x 250 GB
	SCSI	144 GB	2 x 72.4 GB

Standard Features

Interfaces	Parallel	None
	Network RJ-45 (Ethernet)	1-Dedicated for HP ProLiant Lights Out 100i Remote Management
	Serial	1
	Pointing Device (Mouse)	1
	Graphics	1
	Keyboard	1
	USB	4 (two front, two rear) NOTE: Please see the following URL for additional information regarding USB support: http://h18004.www1.hp.com/products/servers/platforms/usb-support.html.
	Network RJ-45 (Ethernet)	2
Graphics	Integrated ATI RAGE XL Video Controller with 8MB SDRAM Video Memory	
Form Factor	Rack Mount (1U)	
Industry Standard Compliance	ACPI V2.0 Compliant PCI 2.2 Compliant PXE Support WOL Support Microsoft® Logo certifications IPMI 1.5 Compliant at launch with future support for IPMI 2.0	
Manageability	HP ProLiant Lights Out 100i Remote Management standard	
Security	Power-on password Setup password	
Server Power Cords	One Highline IEC Power cord ships standard (for connection to a Power Distribution Unit)	
Power Supply	500 Watts, auto-switching, PFC (Power Factor Correcting)	
System Fans	6 - Non-hot plug, Non-redundant system fan shipped standard	

Standard Features

OS Support

Microsoft Windows® 2000 Server (32-bit)
Microsoft Windows 2000 Advanced Server (32-bit)
Microsoft Windows 2003 Standard Edition (32-bit)
Microsoft Windows 2003 Enterprise Edition (32-bit)
Microsoft Windows 2003 Web Edition (32-bit)
Microsoft Windows 2003 for Extended Systems Standard Edition (64-bit)
Microsoft Windows 2003 for Extended Systems Enterprise Edition (64-bit)
Red Hat Linux AS/ES/WS 3.0 and 4.0 (32- and 64-bit)
SUSE Linux 8 (32-bit)
SUSE Linux 9 (32- and 64-bit)

NOTE: For an up-to-date listing of the latest OS support matrix, please see: http://www.hp.com/go/supportos
NOTE: For an up-to-date listing of the latest drivers available for the HP ProLiant DL140 G2, please see: http://h18023.www1.hp.com/support/files/server/us/index.html
NOTE: For more complete and up-to-date information on how to buy server operating systems from HP please visit the OS product site at: http://h18004.www1.hp.com/products/servers/software/OEM.html
NOTE: Drivers may also found on the base media for some Linux OS's. When configuring your server, please consult your base media driver base, or visit HP.com at: http://h18023.www1.hp.com/support/files/server/us/index.html

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ProLiant Essentials Foundation Pack Software

Optional ProLiant Essentials Value Packs

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

- Intelligent Networking Pack - detects and analyzes network bottlenecks or broken network linkages and steers traffic to the optimum route based on network conditions.
- Vulnerability and Patch Management Pack - identifies and remediates software security vulnerabilities due to missing patches as well operating system configurations that can be exploited by viruses, worms, and other blended threats.

NOTE: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to http://www.hp.com/servers/proliantessentials or the various ProLiant Essentials Value Pack product QuickSpecs for more information.
NOTE: For more information regarding ProLiant Essentials Software, please see the following URL: http://www.hp.com/servers/proliantessentials.

Telco Rack Support

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

Standard Features

Factory Express Portfolio for Servers and Storage

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

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

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

Service and Support

This product is covered by a global limited warranty and supported by HP Services and a worldwide network of resellers and service providers. 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. Additional support may be covered under the warranty or available for an additional fee. Enhancements to warranty services are available through HP Care Pack services or customized service agreements.

NOTE: Limited warranty includes 1 year parts, 0 years Labor, 0 years on-site support.
NOTE: SATA hard drives have a one-year warranty.

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

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

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

HP Care Pack services include coverage for the HP branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as 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, 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.

NOTE: For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our worldwide Web site on the internet at: http://www.hp.com/hps/carepack
NOTE: For more complete information on HP Services offerings, customers and resellers, please visit us at: http://www.hp.com/hps
NOTE: Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html

Models

ProLiant DL140 G2 2.8 GHz Xeon 1GB, 80GB, (1P) SATA 375589-001	Processor	One (1) Intel Xeon 2.8GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	1MB second level ECC cache
	Memory	1 GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	Embedded SATA Controller
	Hard Drive	80-GB NHP SATA 1.5Gb 7,200 rpm Hard Drive (1")
	Internal Storage	500 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)
ProLiant DL140 G2 2.8GHz Xeon 1GB, 36GB, (1P) NHP SCSI 375590-001	Processor	One (1) Intel Xeon 2.8GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	1MB second level ECC cache
	Memory	1 GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	U320 Single Channel PCI-X controller (in low profile slot)
	Hard Drive	36.4 GB 15,000 rpm, U320 Non-Hot Plug Hard Drive, (1")
	Internal Storage	144 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)
ProLiant DL140 G2 3.4 GHz Xeon 1GB, 80GB, (1P) SATA 375592-001	Processor	One (1) Intel Xeon 3.4 GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	1MB second level ECC cache
	Memory	1 GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	Embedded SATA Controller
	Hard Drive	80-GB NHP SATA 1.5Gb 7,200 rpm Hard Drive (1")
	Internal Storage	500 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)

Models

ProLiant DL140 G2 3.4 GHz Xeon 1GB, 36GB, (1P) SCSI 375593-001	Processor	One (1) Intel Xeon 3.4 GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	1MB second level ECC cache
	Memory	1 GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	U320 Single Channel PCI-X controller (in low profile slot)
	Hard Drive	36.4 GB 15,000 rpm, U320 Non-Hot Plug Hard Drive, (1")
	Internal Storage	144 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)
ProLiant DL140 G2 3.6 GHz Xeon 1GB, 80GB, (1P) SATA 383504-001	Processor	One (1) Intel Xeon 3.6 GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	2MB second level ECC cache
	Memory	1GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	Embedded SATA Controller
	Hard Drive	80-GB NHP SATA 1.5Gb 7,200 rpm Hard Drive (1")
	Internal Storage	500 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)
ProLiant DL140 G2 3.6 GHz Xeon 1GB, 36GB, (1P) SCSI 383503-001	Processor	One (1) Intel Xeon 3.6 GHz processor, 800MHz front-side-bus (Supports up to 2)
	Cache Memory	2MB second level ECC cache
	Memory	1GB PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities
	Network Controller	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)
	Storage Controller	U320 Single Channel PCI-X controller (in low profile slot)
	Hard Drive	36.4 GB 15,000 rpm, U320 Non-Hot Plug Hard Drive, (1")
	Internal Storage	144 GB maximum (with optional hard drive)
	Form Factor	Rack Mount (1U)

Models

Country Code Key	XX=00	NA
	XX=01	Australia
	XX=03	UK
	XX=04	Germany
	XX=05	France
	XX=20	BRZ
	XX=29	Japan
	XX=37	AP
	XX=42	Euro
	XX=AA	PRC

Configuration Information - Factory Integrated Models (North America only)

NOTE: For Configure to Order requirements within EMEA region, please consult local Sales Contact.
NOTE: HP does not allow factory integration of options into standard models listed above.
Configure-to-order servers must start with a CTO Chassis.
NOTE: This product offering does not support HP Factory Express Server Configuration Level 1.

Step 1: Base Configuration

SATA Model	HP ProLiant DL140 G2 SATA Rack Chassis (North America)	389452-405
	Factory Integrated Model ships with:	
	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)	
	Embedded SATA Controller	
	Two available 64-bit/133MHz PCI-X slots, including one full-length/full height and one low-profile/half height slot	
	500 Watt power supply	
	One Highline IEC Power cord	
	6 non-hot plug fans	
	Rack (1U)	
SCSI Model	HP ProLiant DL140 G2 SCSI Rack Chassis (North America)	376343-405
	Factory Integrated Model ships with:	
	Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)	
	One available 64-bit/133MHz PCI-X slot, (full-length/full height) The low-profile/half height slot houses the SCSI controller.	
	500 Watt power supply	
	One Highline IEC Power cord	
	6 non-hot plug fans	
	Rack (1U)	
	NOTE: The selection of SCSI Model (P/N 376343-405), requires the selection of (1) SCSI Controller. Please see Step 3 of this section for compatible SCSI Controllers.	

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

Base Processors	Intel X2.8GHz/800-1MB FIO BASE	383334-L21
	NOTE: If 2 processors are desired, select one 383334-L21and one 383334-B21.	
	Intel X3.4GHz/800-1MB FIO BASE	383335-L21
	NOTE: If 2 processors are desired, select one 383335-L21and one 383335-B21.	
	Intel X3.6GHz/800-2MB FIO BASE	378283-L21
	NOTE: If 2 processors are desired, select one 378283-L21and one 378283-B21.	
Base Memory	1GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x512 MB)	343055-B21
	2GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x1024 MB)	343056-B21
	4GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x2048 MB)	343057-B21

Configuration Information - Factory Integrated Models (North America only)

Hard Disk Drive	250-GB SATA 1.5Gb 7,200 rpm Hard Drive (1")	399165-B21
	160-GB SATA 1.5Gb 7,200 rpm Hard Drive (1")	399164-B21
	80-GB NHP SATA 1.5Gb 7,200 rpm Hard Drive (1")	383410-B21
	36.4 GB 15,000 rpm, U320 Non-Hot Plug Hard Drive (1")	357012-B21
	72.8 GB 10,000 rpm, U320 Non-Hot Plug Hard Drive (1")	332751-B21
	146.8 GB 10,000 rpm, U320 Non-Hot Plug Hard Drive (1")	356990-B21

Step 3: Choose Additional Options for Factory Integration

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

Controllers	HP Low Profile U320 DL140 G2/DL145 G2 Controller, FIO	390402-B21
	HP Single Channel U320 SCSI Controller	374654-B21
	HP Dual Channel U320 SCSI Controller	268351-B21
	NOTE: Must choose one of the above listed Controllers when selecting the SCSI Model (P/N 376343-405) in step 1 of this section	

Options

Processor	Intel Xeon 2.8GHz/1MB Processor Option Kit	383334-B21
	Intel Xeon 3.4GHz/1MB Processor Option Kit	383335-B21
	Intel Xeon 3.6GHz/2MB Processor Option Kit	378283-B21
Memory (DIMMs)	4GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x2048 MB)	343057-B21
	2GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x1024 MB)	343056-B21
	1GB of Advanced PC2 PC3200 DDR2 SDRAM DIMM Memory Kit (2x512 MB)	343055-B21
Optical Drives	DVD-ROM Drive	361040-B21
	24x CD-ROM Drive	349046-B21
	Multibay II DVD/CD-RW Combo Drive NOTE: When purchasing the Multibay II DVD/CD-RW Combo Drive, (P/N PA850A), the USB 2.0 Multibay II Cradle (P/N PA509A) is required.	PA850A
	USB 2.0 MultiBay II Cradle, External NOTE: When purchasing the Multibay II DVD/CD-RW Combo Drive,(P/N 850A), the USB 2.0 Multibay II Cradle,(P/N PA509A) is required	PA509A
Communications	HP NC370F PCI-X Multifunction 1000SX Gigabit Server Adapter NOTE: A minimum of 1 GB of memory is required for NC370x adapters, with a maximum of two NC370x adapters permitted in a server.	374193-B21
	HP NC370T PCI-X Multifunction 1000TGigabit Server Adapter NOTE: A minimum of 1 GB of memory is required for NC370x adapters, with a maximum of two NC370x adapters permitted in a server.	374191-B21
	HP NC150T PCI 4-port Gigabit 1000T Combo Switch Adapter	367132-B21
	HP NC310F PCI-X 1000SX Gigabit Server Adapter	368169-B21
	HP NC320T PCI Express 1000T Gigabit Server Adapter	367047-B21
	HP NC1020 PCI 1000T Gigabit Server Adapter	353377-B21
	HP NC7170 PCI-X Dual Port 1000T Gigabit Server Adapter	313881-B21
	HP NC7771 PCI-X 1000T Gigabit Server Adapter	290563-B21
	HP NC570C PCI-X Dual-port 4x Fabric Adapter	376158-B21
	HP NC571C PCI Express Dual-port 4x Fabric Adapter	376160-B21
	HP 24-Port 4x Fabric Copper Switch	376227-B21
	HP 4x Fabric 1m Copper Cable	376232-B21
	HP 4x Fabric 3m Copper Cable	376232-B22
	HP 4x Fabric 5m Copper Cable	376232-B23
	Myrinet-Fiber/PCI-X Interface (Dual channel Rev. D card)	360040-B21
	Myrinet -Fiber/PCI-X Interface, M3F-PCIXD-2	257894-006
	Myrinet 2XP PCI-X, Fiber F-Series, 2MB NIC	390456-B21
	NOTE: For HPC interconnect adapters please refer to the HPC Interconnect section below.	

Options

Rack Kits	1U Cable Management Arm NOTE: Package contains two cable management arms	365403-B21
Hard Drives	**SATA - Non-Hot Plug**	
	250-GB SATA 1.5Gb 7,200 rpm Hard Drive (1")	349239-B21
	160-GB SATA 1.5Gb 7,200 rpm Hard Drive (1")	349238-B21
	80-GB NHP SATA 1.5Gb 7,200 rpm Hard Drive (1")	383410-B21
	U320 SCSI- Not-Hot Plug	
	36.4 GB 15,000 rpm, U320 Non-Hot Plug Hard Drive (1")	357012-B21
	72.8 GB 10,000 rpm, U320 Non-Hot Plug Hard Drive (1")	332751-B21
	146.8 GB 10,000 rpm, U320 Non-Hot Plug Hard Drive (1")	356990-B21
	*NOTE: When deploying systems with either 160GB or 250 GB NHP SATA drives, you will need to remove the drive from the carrier shipped with the drive and install it into the drive carrier that ships with the server. Please see installation sheet for details.	
Tape Drives	HP StorageWorks DAT 40 USB Tape Drive, External (Carbonite)	DW023A
	HP StorageWorks DAT 72 USB Tape Drive, External (Carbonite)	DW027A
	HP StorageWorks Ultrium 232 Tape Drive, External	DW065A
	HP StorageWorks DAT 24 Tape Drive, External (Flint)	C1556D
	HP StorageWorks DAT 40 Tape Drive, External (Carbon)	C5687C
	HP StorageWorks DAT 72 Tape Drive, External (Carbon)	Q1523A
	1U Rack-Mount Kit with DAT 72 drive	A7443A
	1U Rack-Mount Kit with Ultrium 215 drive	A7444A
	NOTE: When attaching to an external tape drive, autoloader or jukebox, you must also purchase a HBA NOTE: For a complete listing of HP tape drive offerings supported with the DL140 G2, visit http://www.hp.com/products1/storage/compatibility/tapebackup/ISS/index.html	
Storage Controllers and options	HP U320 Internal SCSI Cable Kit	385749-B21
	64-Bit/133-MHz Single Channel Ultra320 SCSI HBA G2	374654-B21
	HP PL100 SCSI RAID Controller	355671-B21
	64-Bit/133-MHz Dual Channel Ultra320 SCSI Adapter	268351-B21
	HP PCI Express Riser Board Kit	378841-B21

Options

ProLiant Essentials Licensing and Packaging	**ProLiant Essentials Intelligent Networking Pack**	
	ProLiant Essentials Intelligent Networking Pack Windows Edition, Single Server License NOTE: For use with a single server. Contains one license with a unique license activation key and documentation. NOTE: For additional ProLiant Intelligent Networking Pack License Kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11925_div/11925_div.HTML	372906-B21
	ProLiant Essentials Vulnerability and Patch Management Pack	
	ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License NOTE: For use with a single server. Contains one license with a unique license activation key and documentation. NOTE: For additional ProLiant Vulnerability and Patch Management Pack License Kits, please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/12111_div/12111_div.HTML NOTE: Flexible and volume quantity license kits are available for ProLiant Essentials Value Packs. Refer to http://www.hp.com/servers/proliantessentials or the various ProLiant Essentials Value Pack product QuickSpecs for more information. NOTE: For more information regarding ProLiant Essentials Software, please see the following URL: http://www.hp.com/servers/proliantessentials.	371645-B21

HP KVM Switch Options	HP 1x4 USB/PS2 KVM Switch, TT (NA/JPN)	371301-D71
	HP 1x4 USB/PS2 KVM Switch, TT (AU/NZ)	371301-011
	HP 1x4 USB/PS2 KVM Switch, TT (UK)	371301-031
	HP 1x4 USB/PS2 KVM Switch, TT (EU)	371301-A21
	HP 1x4 USB/PS2 KVM Switch, RM (ALL)	371302-B21
	HP PS2 KVM Cable with audio, 6', 2-pack	371730-B21
	HP USB KVM Cable with audio, 6', 2-pack	371729-B21

USB Options	128MB USB Drive Key	DQ819B
	256MB USB Drive Key	DL973B
	USB Optical Scroll Mouse (Carbonite)	DC172B
	USB 1.44-MB External Diskette Drive	DC141B

Service and Support Offerings (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	

HPC Interconnects

NOTE: High Performance Computing (HPC) interconnect technologies are available for the DL140 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

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

Memory

HP ProLiant DL140 G2 (all models)

Standard Memory

1GB (2x512MB) of PC2-3200 DDR2 SDRAM running at 400MHz, with Advanced ECC capabilities Memory installed.

Maximum Memory

Up to 16GB memory is available with the optional installation of PC2-3200 Registered ECC DDR SDRAM DIMM Memory kits.

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

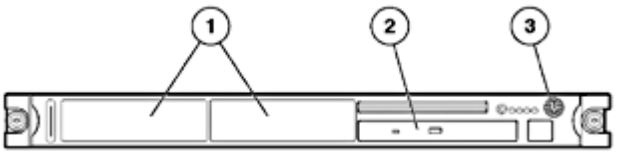
NOTE: Chart does not represent all possible memory configurations.

Memory	Slot							
	1	2	3	4	5	6	7	8
Standard (1GB)	512MB	512MB	Empty	Empty	Empty	Empty	Empty	Empty
Maximum (16GB)	2GB	2GB	2GB	2GB	2GB	2GB	2GB	2GB

Following are memory options available from HP:

4096MB of Advanced ECC PC2-3200 DDR SDRAM DIMM Memory Kit (2 x 2048 MB)	343057-B21
2048MB of Advanced ECC PC2-3200 DDR SDRAM DIMM Memory Kit (2 x 1024 MB)	343056-B21
1024MB of Advanced ECC PC2-3200 DDR SDRAM DIMM Memory Kit (2 x 512 MB)	343055-B21

Storage



1	Two 1" Non-hot plug SATA or SCSI Hard Drive Bays
2	Optional CD- ROM or DVD drive
3	Power On/Off

Number of drive positions to match table below.

Drive Support

Removable Media

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

Hard Drives

SATA - Non-Hot Plug

	Quantity Supported	Position Supported	Controller
1-inch			
80/160/250GB	Up to 2	1	Embedded SATA Controller

NOTE: When deploying 160GB or 250GB NHP SATA drives, you must remove the drive from the carrier that ships with the drive and install it into the drive carrier that ships with the server. Please see installation sheet for more details.

SCSI- Non-Hot Plug

	Quantity Supported	Position Supported	Controller
1-inch			
36GB 15k or 72GB 10k	Up to 2	1	Ultra 320 Single Channel PCI-X card (in low profile slot) on SCSI models

Power Specifications

Spare Kit	389322-001
Operational Input Voltage Range (V rms)	90Vac to 264Vac full range
Frequency Range (Nominal) (Hz)	47 Hz to 63 Hz

Nominal Input Voltage (Vrms)	100	115	200	220	230	240
Max Rated Output Wattage Rating	500	500	500	500	500	500
Nominal Input Current (A rms)	6.84	5.78	3.25	2.91	2.75	2.63
Max Rated Input Wattage Rating (Watts)	684	665	649	641	632	632
Max. Rated VA (Volt-Amp)	820	820	820	820	820	820
Efficiency (%)	73	75	77	78	79	79
Power Factor	1.00	1.00	.99	.98	.98	.98
Leakage Current (mA)	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
Maximum Inrush Current (A peak)	60	60	60	60	60	60
Maximum Inrush Current duration (mS)	1	1	1	1	1	1

System Specifications

	Power	
ProLiant DL140 G2 Fully Configured	110V/60Hz	220V/50Hz
Fully Loaded System Input Wattage (W)	682	660
Fully Loaded System Input Current (A rms)	6.2	3.0
Fully Loaded System Thermal (BTU- Hr)	2327	2252
Fully Loaded System VA (Volt-Amp)	682	660
System Leakage with all power supplies loaded (mA)	<3.5	<3.5
System Inrush Current with all power supplies loaded (A)	60	60
Power cord requirements	Nema 5-15P to IEC320-C13	IEC320-C13 to IEC320-C14
**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 Part Number-All Countries	307348-B21
Power Cord - 12' (US)	307372-001

System Unit	Dimensions (HxWxD) (with feet)	1.70 x 16.78 x 26.75 in (4.32 x 42.62 x 67.95 cm)	
	Weight (approximate)	35 lb (15.87 kg)	Fully configured
	Input Requirements (per power supply)	Range Input Voltage	90 to 140 VAC/180 to 264 VAC
		Normal Line Voltage	115 or 230 VAC
	Line Frequency	47 to 63 Hz	
	Rated Input Current load	7.1A at 115VAC, 3.6A at 230VAC	
	BTU Rating	BTU-Hr	2371
	Power Supply Output Power (per power supply)	Rated Steady-State Power	500W
		Maximum Peak Power	645W
	Temperature Range	Operating	50° to 95° F (10° to 35° C)
		Shipping	-40° to 140° F (-40° to 60° C)
	Relative Humidity (non-condensing)	Operating	10% to 85%
		Non-operating	10% to 95%
	Acoustic Noise	Idle (Fixed Disk Drives Spinning)	
		L WAd (BELS)	6.31
		Operating (Random Seeks to Fixed Disks)	
		L WAd (BELS)	6.32

Non-Hot Plug SATA Hard Drives	80 GB 7.2K 383410-B21	Capacity	80027 MB	
		Height	1.028 in (2.61 cm)	
		Width	4.0 in (10.16 cm)	
		Interface	SATA 150	
		Transfer Rate Synchronous (Maximum)	150 MB/s	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	9.0 ms
			Full-Stroke	17.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	160,086,528
		Operating Temperature	41° to 131° F (5° to 55° C)	

Technical Specifications

Integrated Dual Broadcom 10/100/1000 NICs (Wake on LAN and PXE capable)	Network Interface Compatibility	10Base-T/100Base-TX/1000Base-TX	
		IEEE 802.3 10Base-T	
		IEEE 802.3 1000Base-T	
		IEEE 802.3 100Base-TX	
	Data Transfer Method	64-bit, 133MHz PCI(X)1.0	
	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)

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