Overview
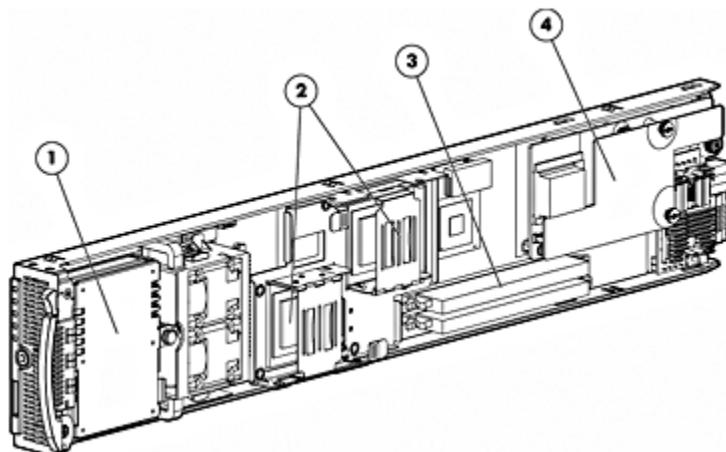

1. Up to two optional small form factor non-hot pluggable ATA hard disk drives

2. Up to two Intel Xeon processors

3. Up to 4GB of memory (using optional PC2100 DDR SDRAM)

4. Dual-Port Fibre Channel Adapter

What's New

- Emulex based Dual port Fibre Channel HBA
- HP McDATA 4 Gb SAN Switch for HP p-Class BladeSystem
- Brocade 4Gb SAN Switch for HP p-Class BladeSystem

At A Glance

This document covers the HP ProLiant BL30p server blade only. For more information on HP BladeSystems p-Class Infrastructure and HP BladeSystem p-Class Interconnect Components, please see the following QuickSpecs:
HP BladeSystem p-Class Infrastructure QuickSpecs:
http://h18000.www1.hp.com/products/quickspecs/12330_div/12330_div.HTML
and HP BladeSystem p-Class Interconnect Components QuickSpecs:
http://h18000.www1.hp.com/products/quickspecs/12331_div/12331_div.HTML

- High density, dual-processor capable server blade for the ProLiant BL p-Class
- Up to two Intel Xeon 3.2-GHz/533-MHz with 2-MB L3 cache processors
- ServerWorks GC-LE chipset
- 1024-MB PC2100-MHz Registered ECC DDR memory (1 x 1-GB), expandable to 4-GB, flex memory supports interleaved and non-interleaved memory configurations
- Integrated Lights-Out (iLO) Advanced Pack with new static IP bay configuration and HP BladeSystem wizard features
- Two (2) NC7781 PCI-X Gigabit NICs (on a mezzanine card)
- One 10/100T NIC (embedded) dedicated to iLO management
- Supports up to two optional small form factor ATA 60-GB hard drives
- BIOS-Enhanced RAID for Linux enables both primary and secondary hard drives to be bootable
- Dual-Port Fibre Channel Adapter (2-Gb) option for SAN connectivity
- HP ProLiant BL30p server blade plugs vertically into blade sleeve and sleeve plugs into 6U blade enclosure
- Local I/O cable provides two USB ports, one video port, one iLO port and serial port
- Integrated Access Tool for blade management and enhanced server blade documentation including Best Practices and Common Procedures guides
- Up to 96 HP ProLiant BL30p server blades fit in 42U rack in non-redundant power configuration; up to 80 HP ProLiant BL30p server blades fit in 42U in full power redundant configuration
- Protected by HP Services and a worldwide network of resellers and service providers. HP ProLiant BL30p Server Blade Limited Warranty includes 3 year Parts, 1 year Labor, 1-year on-site support. Certain restrictions and exclusions apply. Pre-Failure Notification on processors, memory, and SCSI hard drives.

Standard Features (Manageability)

ProLiant Essentials Foundation Pack Software for the ProLiant BL Server	HP Systems Insight Manger	HP Systems Insight Manager (HP SIM) help maximize system uptime and performance and reduce system maintenance costs by providing proactive notification of problems before those problems result in unplanned downtime or reduced productivity. HP SIM is easy to set up to work with the Insight Management Agents, integrated Light-Out and Remote Insight Light-Out Edition, and Version Control Agents to deliver robust fault, configuration, and asset management as well as remote administration. With HP Systems Insight Manager customers will also be able to take advantage of role-based security; the ability to manage ProLiant, Integrity, and HP9000 systems; and plug-ins for storage, client, printer, and power management as well as server rapid deployment, performance management, and workload management. For more details on HP Systems Insight Manager visit http://www.hp.com/go/hpsim.
	ProLiant Essentials Rapid Deployment Pack	Rapid Deployment Pack (RDP) is an automated deployment and provisioning solution for all ProLiant servers. RDP includes the Altiris Deployment Solution and ProLiant Integration Module featuring ProLiant server pre-configured events for OS installation, and optimized software drivers, firmware and management agents. Every RDP CD includes 10-node trial licenses for evaluation purposes. RDP requires a license for each server deployed and are available for purchase with blade servers. For more information, visit http://www.hp.com/servers/rdp.
	Management Agents	The Management Agents form the foundation for HP's Intelligent Manageability strategy. They provide direct, browser-based access to in-depth instrumentation built into HP servers, workstations, desktops, and portables, and send alerts to HP Systems Insight Manager and other enterprise management applications in case of subsystem or environmental failures. For additional information about the Management Agents and other management products from HP, please visit the management Web site at http://www.hp.com/servers/manage.
	Subscriber's Choice	Subscriber's Choice Driver and Support Alerts/Notifications is a web-based email subscription service that provides software and driver change notifications for ProLiant products. Sign up at http://www.hp.com/go/subscriberschoice. and customize your profile to receive various new alerts as they become available, on a weekly or monthly basis.
	ROMPaq, support software, and configuration utilities	The latest software, drivers, and firmware fully optimized and tested for your ProLiant server and options, available in the RDP CD, SmartStart or downloadable from Software and Drivers download pages, linked from the SmartStart website at http:www.hp.com/go/support.
	Insight Diagnostics Online Edition	The most advanced configuration analysis, reporting and troubleshooting utilities used by HP and at your fingertips, available in SmartStart.

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

Standard Features (Manageability)

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, plus it provides an extra layer of protection. The virus throttle feature of the solution slows the propagation of fast spreading virus.
- Performance Management Pack - identifies and explains hardware performance bottlenecks on ProLiant servers and attached options enabling users to better utilize their valuable resources.
- Virtualization Management Software - Get the most out of server virtualization by unifying the management of physical and virtual servers in HP Systems Insight Manager. The Virtual Machine Management Pack plug-in provides central management and control of VMware and Microsoft virtual machines and provides physical host to virtual machine association. The Server Migration Pack plug-in automates the manual task of migrating servers between physical or virtual platforms.
- 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.
- Workload Management Pack - provides easier management of complex environments, improving overall server utilization and enabling customers for the first time to confidently deploy multiple applications on a single multiprocessor ProLiant Server.

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.

SmartStart

SmartStart is a tool that simplifies single server setup, providing a rapid way to deploy reliable and consistent server configurations. To obtain a copy of SmartStart for your blade server, redeem the coupon that is included with your Blade server or order your copy from the SmartStart web site. For more information, please visit the SmartStart Web site at http://www.hp.com/servers/smartstart.
SmartStart version supported (minimum): SmartStart 7.00

OS Support

Microsoft Windows 2000 Server
Microsoft Windows 2000 Advanced Server
Windows Server 2003, Web Edition
Windows Server 2003, Standard Edition
Windows Server 2003, Enterprise Edition
Red Hat Enterprise Linux 3
Red Hat Enterprise Linux 4
SuSE Linux Enterprise Server 8
SuSE Linux Enterprise Server 9

NOTE: For a more complete and up-to-date listing of supported operating systems and versions, please visit our OS Support Matrices website: http://www.hp.com/go/ossupport

NOTE: For an up-to-date listing of the latest drivers available for the ProLiant BL p-Class, please visit the support website: http://www.hp.com/products/servers/proliant-bl/p-class/info/

Standard Features (Manageability)

Supported Software Options

VMware Virtualization Software

Red Hat Enterprise Linux and management bundle for HP BladeSystems

NOTE: For more information on HP's Certified and Supported HP ProLiant Servers, please visit the VMware Server Support Matrix at:
http://h18004.www1.hp.com/products/servers/software/vmware/hpvmwarecert.html

NOTE: For a more complete and up-to-date information on Linux for HP BladeSystems support, please visit HP Linux website at:
http://h18000.www1.hp.com/products/quickspecs/12321_div/12321_div.HTML

Intelligent Manageability

Integrated Lights-Out (iLO) Advanced Pack

- HP BladeSystem wizard - blade and OS installation and configuration
- Static IP bay configuration
- Virtual Text and Graphical Remote Console
- Virtual CD-ROM and Virtual Floppy
- Virtual Power Button Control
- Dedicated LAN Connectivity
- Automatic IP Configuration via DHCP/DNS/WINS
- Industry Standard 128-bit Secure Sockets Layer (SSL) Security
- IML and iLO Event Logging
- Support for 12 user accounts with customizable access privileges

NOTE: For more information on iLO Advanced visit the website: http://www.hp.com/servers/ilo/

Automatic Server Recovery-2 (ASR-2)
Redundant ROM
Remote Flash ROM
ROM Based Setup Utility (RBSU)
Advanced Configuration and Power Interface Specification Ready (ACPI)
Server and Interconnect Switch Health Logs
Redundant Power Supply Utility
Pre-Failure Warranty (covers processors, as well as hard drives and memory)
Interconnect Switch Management System and Utilities (Interconnect Switch option)
Integrated Management Log (IML)
Dynamic sector repairing and drive parameter tracking (with Smart Array controllers)
Network adapter teaming set-up utility

Availability

Dual-Port Fibre Channel Mezzanine Card for redundant SAN connections
Redundant ROM on each server blade
ECC Memory
Network adapter teaming (network fault tolerance, transmit load balancing, switch-assisted load balancing)

Security

Power-on password
Administrator's password
Integrated Lights-Out provides user authentication via directory services or 12 customizable user accounts
Integration Lights-Out supports SSH and SSL encryption
Integrated Lights-Out can be disabled via a Global Setting

Standard Features (Manageability)

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, 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.

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: Server Blade Limited Warranty includes 3 year Parts, 1 year Labor, 1-year on-site support.

Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.
A full range of HP Care Pack hardware and software services are available including:

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

HP has introduced a new building block approach which allows customers to purchase the right coverage at the right time whether purchasing an initial server blade plus enclosure or purchasing additional ProLiant server blades over time. HP will offer two sets of Care Pack services, one designed to support the server blade and one designed to support the enclosure.

HP Care Pack services for HP ProLiant Server Blades cover the server blade and all HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the server.

HP Care Pack services for HP BladeSystem p-Class Server Blade Enclosure covers the enclosure including patch panels, HP supported Ethernet interconnects, power enclosure with power supplies and power distribution.

NOTE: For more information regarding the Blade service portfolio visit our worldwide web site on the internet at: http://h20219.www2.hp.com/services/cache/81725-0-0-225-121.html
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

Standard Features (Manageability)

Models

HP ProLiant BL30p X3.2-2MB, 1GB (2P) 360329-B21	**Processor(s)**	Two (2) Intel Xeon 3.2-GHz standard (up to 2 supported)
	Cache Memory	2-MB Level 3 writeback per processor
	Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266-MHz (1 x 1-GB); 2-way interleaved when an identical pair installed
	Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (on a mezzanine card) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
	Hard Drives	None ship standard
	Internal Storage	Up to 120-GB maximum (with optional hard drives)
	Optical Drive	None
	Form Factor	Plugs vertically into HP BladeSystem p-class blade sleeve. Blade sleeve supports 1 or 2 HP ProLiant BL30p server blades. Blade sleeve plugs vertically into HP BladeSystem p-Class Enhanced Server Blade Enclosure.

ProLiant BL30p X3.2-1MB, 1GB (2P) 368271-B21	**Processor(s)**	Two (2) Intel Xeon 3.2-GHz standard (up to 2 supported)
	Cache Memory	1-MB Level 3 writeback per processor
	Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266-MHz (1 x 1-GB); 2-way interleaved when an identical pair installed
	Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (embedded) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
	Hard Drives	None ship standard
	Internal Storage	Up to 120-GB maximum (with optional hard drives)
	Optical Drive	None
	Form Factor	Plugs vertically into HP BladeSystem p-class blade sleeve. Blade sleeve supports 1 or 2 HP ProLiant BL30p server blades. Blade sleeve plugs vertically into HP BladeSystem p-Class Enhanced Server Blade Enclosure.

ProLiant BL30p X3.06/533MHz-512KB, 1GB (2P) 354566-B21	**Processor(s)**	Two (2) Intel Xeon 3.06-GHz standard (up to 2 supported)
	Cache Memory	512-KB Level 2 writeback per processor
	Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266MHz (1 x 1-GB), 2-way interleaved when an identical pair installed
	Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (embedded) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
	Hard Drives	None ship standard
	Internal Storage	Up to 120-GB maximum (with optional hard drives) 2 x 60-GB
	Optical Drive	None
	Form Factor	Plugs vertically into HP BladeSystem p-class blade sleeve. Blade sleeve supports 1 or 2 HP ProLiant BL30p server blades. Blade sleeve plugs vertically into HP BladeSystem p-Class Enhanced Server Blade Enclosure.

QuickSpecs

Models

ProLiant BL30p X3.06/533MHz-512KB, 1GB (1P) 354050-B21	Processor(s)	One (1) Intel Xeon 3.06-GHz standard (up to 2 supported)
	Cache Memory	512-KB Level 2 writeback per processor
	Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266-MHz (1 x 1-GB), 2-way interleaved when an identical pair installed
	Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (embedded) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
	Hard Drives	None ship standard
	Internal Storage	Up to 120-GB maximum (with optional hard drives)
	Optical Drive	None
	Form Factor	Plugs vertically into HP BladeSystem p-class blade sleeve. Blade sleeve supports 1 or 2 HP ProLiant BL30p server blades. Blade sleeve plugs vertically into ProLiant BL p-Class Enhanced Server Blade Enclosure.

ProLiant 3.2-GHz BL30p Server Blade Multi-Pack 368272-B21
NOTE: Multi-pack contains 8 HP ProLiant BL30p server blades, 4 HP ProLiant BL30p server blade sleeves and 8 licenses for Rapid Deployment Pack.

Processor(s)	Each blade is configured with Two (2) Intel Xeon 3.2-GHz standard (up to 2 supported)
Cache Memory	2-MB Level 3 writeback per processor
Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266-MHz (1 x 1-GB), 2-way interleaved when identical pair installed
Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (embedded) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
Hard Drives	None ship standard
Internal Storage	Up to 120-GB maximum (with optional hard drives) 2 x 60-GB

ProLiant 3.06-GHz BL30p Server Blade Multi-Pack 354051-B21
NOTE: Multi-pack contains 8 HP ProLiant BL30p server blades, 4 HP ProLiant BL30p server blade sleeves and 8 licenses for Rapid Deployment Pack.

Processor(s)	Each blade is configured with Two (2) Intel Xeon 3.06-GHz standard (up to 2 supported)
Cache Memory	512-KB Level 2 writeback per processor
Memory	1024-MB (standard) to 4-GB (maximum) of PC2100 DDR SDRAM running at 266-MHz (1 x 1-GB), 2-way interleaved when identical pair installed
Network Adapter	Two (2) NC7781 PCI-X Gigabit NICs (embedded) with WOL and PXE One (1) 10/100T NIC (embedded) dedicated to iLO management
Hard Drives	None ship standard
Internal Storage	Up to 120-GB maximum (with optional hard drives) 2 x 60-GB

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 Server Blade Configuration

Model	HP ProLiant BL30p Configurable Model (North America)	367243-405

Configurable Model ships with:
- Two NC7781 PCI-X Gigabit NICs (on a mezzanine card) plus one 10/100T NIC for iLO
- Integrated Lights-Out (iLO) Management with Advanced Pack features

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

Processor	Intel Xeon 3.06-GHz/512-KB cache Processor Kit (option)	354053-L21
	NOTE: If 2 processors are desired, select one 354053-L21and one 354053-B21	
	Intel Xeon 3.2-GHz/533-1M cache Processor Kit (option)	368273-L21
	NOTE: If 2 processors are desired, select one 368273-L21and one 368273-B21	
	Intel Xeon 3.2-GHz/533-2M cache Processor Kit (option)	364306-L21
	NOTE: If 2 processors are desired, select one 364306-L21and one 364306-B21	

Memory	**NOTE:** Two-way interleaving memory is enabled when an identical pair of DIMMs is installed.	
	For 1GB Total Memory choose A or B:	
	A) 2 x 512 MB PC2100 DDR SDRAM DIMMs	300679-B21
	B) 1 x 1GB PC2100 DDR SDRAM DIMM	287497-B21
	For 2GB Total Memory choose two:	
	1 x 1GB PC2100 DDR SDRAM DIMM	287497-B21
	For 4GB Total Memory:	
	2 x 2048MB PC2100 DDR SDRAM DIMM 2x2048	300682-B21

Step 3: Choose Additional Options for Factory Integration

Hard Drive	ATA Hard Drive Kit for ProLiant BL35p and ProLiant BL30p, 2.5" parallel ATA drive, 60GB, 5400 rpm	354052-B21
Fibre Channel Option	Emulex based BL25/30/35/45p Dual Port Fibre Channel HBA	394588-B21
	Dual-Port Fibre Channel Adapter (2-Gb) Kit for HP ProLiant BL30p or HP ProLiant BL35p server blades	354054-B21
	NOTE: The HP ProLiant BL30p/BL35p Dual Port Fibre Channel Adapter is QLogic based.	

NOTE: For additional options, including HP BladeSystem p-Class blade sleeve, enhanced server blade enclosure, interconnect options and power subsystem options, please refer to the "Options" section below.

Options

NOTE: Some options may not be factory integratable. Please contact your local sales representative for additional information.

Unique Options	HP BladeSystem p-Class Blade Sleeve Kit (option)	354101-B21
	NOTE: Each blade sleeve supports one or two HP ProLiant BL30p/HP ProLiant BL35p server blades. HP ProLiant BL30p and BL35p server blades may be mixed within the blade sleeve.	

ProLiant BL30p/BL35p Dual-Port Fibre Channel Adapter	Emulex-based Dual Port Fibre Channel Adapter (2-Gb) Kit (option)	394588-B21
	NOTE: Supports the HP ProLiant 25p/30p/35p/45p Server Blades	
	Dual-Port Fibre Channel Adapter (2-Gb) Kit (option) for HP ProLiant BL30p or HP ProLiant BL35p server blades*	354054-B21
	NOTE: This Fibre-Channel adapter is Qlogic-based	
	*__NOTE:__ When using this adapter, Patch Panel 2, CGESM, or a GbE2 Interconnect Switch Kit (with Storage Connectivity Kit) must be used to provide pass through of the Fibre Channel signals.	

ProLiant Essentials Value Pack Software	**ProLiant Essentials Intelligent Networking Windows Edition and Linux Edition**	
	ProLiant Essentials Intelligent Networking Pack Windows Edition, Single Server License	372906-B21
	NOTE: For use with a single server. Contains one license with a unique license activation key and documentation.	
	ProLiant Essentials Intelligent Networking Pack Linux Edition, Single Server License	397004-B21
	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/12062_div/12062_div.HTML http://h18000.www1.hp.com/products/quickspecs/12327_div/12327_div.HTML	
	ProLiant Essentials Performance Management Pack	
	ProLiant Essentials Performance Management Pack, Single-Server License	306696-B21
	NOTE: For use with a single server. Contains one license with a unique license activation key, HP Management CD and documentation. **NOTE:** The most recent version of the software can always be downloaded at http://www.hp.com/products/pmp.	
	NOTE: For additional ProLiant Performance Management Pack License Kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11925_div/11925_div.HTML	
	ProLiant Essentials Rapid Deployment Pack Windows Edition and Linux Edition Release	
	Rapid Deployment Pack, Single-Server License	267196-B21
	NOTE: This license allows 1 server to be deployed and managed via RDP.	
	Rapid Deployment Pack, Single-Server License (Japan)	267196-291
	NOTE: This license allows 1 server to be deployed and managed via RDP.	
	NOTE: For additional ProLiant Essentials Rapid Deployment Pack License Kits please see the QuickSpecs at: http://h18000.www1.hp.com/products/quickspecs/11053_div/11053_div.HTML http://h18000.www1.hp.com/products/quickspecs/11713_div/11713_div.HTML	
	ProLiant Essentials Server Migration Pack	
	ProLiant Essentials Server Migration Pack, Single-Migration License	375345-B21

Options

NOTE: Contains one license, enabling 1 server migration, with a unique license activation key and documentation.

NOTE: This license allows 1 server to be migrated from a physical server to a virtual machine. Or this license can be used to migrate a virtual machine from one virtualization layer i.e. VMware GSX to a different virtualization layer such as VMware ESX or Microsoft Virtual Server 2005.

NOTE: For additional ProLiant Server Migration Pack License Kits please see the QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/12328_div/12328_div.HTML

ProLiant Essentials Workload Management Pack

ProLiant Essentials Workload Management Pack, Single Server License	303284-B21

NOTE: For additional ProLiant Workload Management Pack License Kits please see the QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/11452_div/11452_div.HTML

ProLiant Essentials Virtual Machine Management Pack

ProLiant Essentials Virtual Machine Management Pack, Single-Server License	372214-B21

NOTE: For use with a single server. Contains one license with a unique license activation key and documentation.

NOTE: For additional ProLiant Virtual Machine Management Pack License Kits please see the QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/12328_div/12328_div.HTML

ProLiant Essentials Vulnerability and Patch Management Pack

ProLiant Essentials Vulnerability and Patch Management Pack, Single-Server License	371645-B21

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

Processor	Intel Xeon 3.06-GHz / 512-KB cache Processor Kit (option)	354053-B21

NOTE: There is no option kit offered for the HP ProLiant BL30p server blade with Intel Xeon 3.2GHz processor because all models ship with two processors installed.

QuickSpecs

Options

Memory (SDRAM DIMMs)	4096-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 2-GB)	300682-B21
	2048MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 1 GB)	300680-B21
	2048 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 2048 MB)	301044-B21
	1024-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 1-GB)	287497-B21
	NOTE: This DIMM option is an identical match to the DIMM installed on the HP ProLiant BL30p server blade base model and therefore provides 2-way interleaving when installed on a base model HP ProLiant BL30p server blade.	
	1024-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 512-MB)	300679-B21

Hard Drives	ATA Hard Drive Kit for ProLiant BL35p and ProLiant BL30p, 2.5" parallel ATA drive, 60-GB, 5400 rpm (option)	354052-B21

Tape Libraries	**HP StorageWorks MSL6000 Tape Library**	
	Ultrium 960 technology	
	MSL6030, 1 drive, 30 slots, Ultrium 960	AD606A
	MSL6030, 1 drive, 30 slots, Ultrium 960, with embedded FC router	AD608A
	MSL6060, 2 drive, 60 slots, Ultrium 960	AD607A
	MSL6060, 2 drive, 60 slots, Ultrium 960, with embedded FC router	AD609A
	SDLT 600 technology	
	MSL6052, 2 drive, 52 slots, SDLT 600	AD587A
	MSL6052, 2 drive, 52 slots, SDLT 600, with embedded FC router	AD588A
	Ultrium 460 technology	
	MSL6030, 1 drive, 30 slots, Ultrium 460	AD598A
	MSL6030, 1 drive, 30 slots, Ultrium 460, with embedded FC router	AD600A
	MSL6030, 2 drive, 60 slots, Ultrium 460, with embedded FC router	AD601A
	NOTE: Please reference the MSL6000 Tape Library QuickSpecs at http://www.hp.com/go/automation for additional information needed to create a complete solution; reference current compatibility information at http://www.hp.com/go/ebs	
	HP StorageWorks Virtual Library Systems	
	HP 6105 Virtual Library System	AF728A
	HP 6510 Virtual Library System	AF729A
	HP 6840 Virtual Library System	AG051A
	NOTE: Please reference the Virtual Library System QuickSpecs at http://www.hp.com/go/automation for additional information needed to create a complete solution. Reference current compatibility information at www.hp.com/go/ebshttp://www.hp.com/go/ebs	

QuickSpecs

Options

Magneto-Optical Jukeboxes	**HP StorageWorks 9.1-GB Optical Jukeboxes**	
	600mx, 4 drive, 64 slot jukebox	C1160M
	1200mx, 4 drive, up to 128 slots	C1104M
	2200mx, 6 drive, up to 238 slots	C1107M

NOTE: Please see the HP StorageWorks Magneto-Optical Products data sheet for a complete listing of available jukeboxes at:
http://www.hp.com/products1/storage/products/archivalprod/brochures/MO_family_pb.pdf

NOTE: Please reference the Magneto-Optical Jukebox data sheets at http://www.hp.com/go/optical for additional information needed to create a complete solution

Ultra Density Optical Jukeboxes	1900ux, 4 drive, 64 slot jukebox	AA966A
	3800ux, 4 drive, 128 slot jukebox	AA969A
	7100ux, 6 drive, 238 slot jukebox	AA971A

NOTE: Please see the HP StorageWorks Ultra Density Optical Jukeboxes QuickSpecs for a complete listing of available jukeboxes at:
http://h18006.www1.hp.com/products/quickspecs/11944_div/11944_div.html

NOTE: Please reference the Ultra Density Optical Jukebox QuickSpecs at http://www.hp.com/go/optical for additional information needed to create a complete solution.

HP StorageWorks Modular Smart Array 1000	HP StorageWorks Modular Smart Array 1000	201723-B22

NOTE: Please see the StorageWorks Modular Smart Array 1000 QuickSpecs for additional options and configuration information at:
http://h18000.www1.hp.com/products/quickspecs/11033_na/11033_na.HTML (North America)
http://h18000.www1.hp.com/products/quickspecs/11033_div/11033_div.HTML (Worldwide)

Cluster Options	ProLiant Cluster Kit with OpenView Storage Mirroring	364025-B21
	HP HA/F200 for Entry SAN Cluster	364026-B22
	HP HA/F200 for Entry SAN Cluster (Japan)	364026-292

NOTE: For additional information regarding the ProLiant Cluster for HA/F100, HA/F200 for Modular Smart Array 1000 please see the following QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/11035_na/11035_na.html (North America)
http://h18000.www1.hp.com/products/quickspecs/11035_div/11035_div.html (Worldwide)

	ProLiant Cluster Starter kit	364023-B21

NOTE: For additional information regarding the HP ProLiant Cluster for ProLiant Cluster HA/F500 for Enterprise Virtual Array please see the following QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/11055_na/11055_na.html (North America)
http://h18000.www1.hp.com/products/quickspecs/11055_div/11055_div.html (Worldwide)

Options

NOTE: For additional information regarding the HP ProLiant Cluster for HA/F500 please see the following QuickSpecs at:
http://h18000.www1.hp.com/products/quickspecs/10232_na/10232_na.html (North America)
http://h18000.www1.hp.com/products/quickspecs/10232_div/10232_div.html (Worldwide)

USB Options	USB 1.44-MB External Diskette Drive (Carbonite)	DC141B
	USB Optical Scroll Mouse (Carbonite)	DD441B
	256MB HP Drive Key II (USB 2.0)	PH657A
HP Rack 5000 Series (Graphite Metallic)	HP 5642 Rack - Unassembled	358254-B21
Rack Options for Rack 5000 Series (Graphite Metallic)	Stabilizer kit for 5642 Rack (Graphite Carbon) **NOTE:** The stabilizing kit is used to prevent rack from tipping over	374493-B21
	Baying Kit for 5642 Rack (Graphite Carbon) **NOTE:** The baying kit is used to join two or more HP5642 racks.	374499-B21
Rack 10000 Series (Graphite Metallic)	Rack, HP Infrastructure 42U (HV)	379005-001
	Rack, HP Infrastructure 42U (LV)	379006-001
	HP Rack 10842 (42U) - Pallet **NOTE:** Server Blade Enclosures must be field integrated into the 10842 racks. Factory integration of Server Blade Enclosures into the 10842 is not supported.	257415-B21
	HP Rack 10842 (42U) - Shock Pallet **NOTE:** Server Blade Enclosures must be field integrated into the 10842 racks. Factory integration of Server Blade Enclosures into the 10842 is not supported.	257415-B22
	HP S10614 (14U) Rack Cabinet - Shock Pallet	292302-B22
	HP Rack 10647 (47U) Cabinet - Pallet	245160-B21
	HP Rack 10647 (47U) Cabinet - Crated	245160-B23
	HP Rack 10642 (42U) Cabinet - Pallet	245161-B21
	HP Rack 10642 (42U) Cabinet - Shock Pallet	245161-B22
	HP Rack 10642 (42U) Cabinet - Crated	245161-B23
	HP Rack 10636 (36U) Cabinet - Pallet	245162-B21
	HP Rack 10636 (36U) Cabinet - Shock Pallet	245162-B22
	HP Rack 10636 (36U) Cabinet - Crate	245162-B23
	HP Rack 10622 (22U) Cabinet - Pallet	245163-B21
	HP Rack 10622 (22U) Cabinet - Shock Pallet	245163-B22
	HP Rack 10622 (22U) Cabinet - Crated	245163-B23

NOTE: -B21 (pallet) used to ship empty racks shipped on a truck
-B22 (shock pallet) used to ship racks with equipment installed (by custom systems, VARs and Channels)
-B23 (crated) used for air shipments of empty racks
Not all HP equipment is qualified to be shipped in the Rack 10000 series.

Options

Rack Options for HP Rack 10000 Series	HP Rack Plinth Kit (Carbon)	251960-B21
	HP Rack Light Kit (Neon)	361589-B21
	42U Side Panel – Graphite Metallic	246099-B21
	36U Side Panel – Graphite Metallic	246102-B21
	47U Side Panel – Graphite Metallic	255486-B21

TFT7210R Rack Mounted 17" Monitor	348373-B21
TFT5600 Rack Keyboard Monitor	221546-xx1
1U Rack Keyboard & Drawer (Carbon)	257054-xx1

Country Code Key (for TFT5600 RKM Rack Keyboard Monitor (PN 221546-xx1)and 1U Rack Keyboard & Drawer (Carbon)(P/N 257-54-xx1))

XX = 00	US	XX = 09	Norway
XX = 03	UK	XX = 10	Sweden/Finland
XX = 04	Germany	XX = 11	Switzerland
XX = 05	France	XX = 13	Portugal
XX = 06	Italy	XX = 18	Belgium
XX = 07	Spain	XX = 29	Japan
XX = 08	Denmark	XX = B3	International

HP KVM Switch Options	HP BladeSystem CAT5 KVM Interface Adapter - 1 pack	AF100A
	IP Console Switch Box (KVM/IP), 1 x 1 x 16	262585-B21
	IP Console Switch Box (KVM/IP), 3 x 1 x 16	262586-B21
	HP KVM CAT5 0x1x8 Server Console	336044-B21
	HP KVM CAT5 0x2x16 Server Console Switch	

Options

Service and Support Offerings (HP Care Pack Services)

NOTE: The HP Care Pack service part numbers below for ProLiant BL p-Class server blades, cover the server blade and all HP branded hardware options qualified for the server, purchased at the same time or afterwards, internal to the server.

Hardware Services On-site Service

Next Business Day On-Site Service, 5-Day x9-Hour Coverage, 3 Years, Electronic	UD186E
4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	UD187E
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	UD188E
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	UD189E

NOTE: The HP Care Pack service part numbers below for HP BladeSystem p-Class server blade enclosure covers the enclosure including patch panels, HP supported Ethernet interconnects, power enclosure with power supplies and power distribution.

Hardware Services On-site Service

4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	HC031E
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	HC032E
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	HC033E

NOTE: The HP Care Pack service part numbers below covers the HP BladeSystem Brocade and McData SAN Switches.

Hardware Services On-site Service

Next Business Day On-site Service, 5-Day x 9-Hour Coverage, 3 Years, Electronic	UC007E
4-Hour On-site Service, 5-Day x 13-Hour Coverage, 3 Years, Electronic	UC008E
4-Hour On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	UC009E
6-Hour Call to Repair, On-site Service, 7-Day x 24-Hour Coverage, 3 Years, Electronic	UC023E

Installation & Start-up Services

HP Installation & Startup Service for HP BladeSystem Infrastructure **NOTE:** provides for an integrated hardware and software implementation that includes remote service planning, onsite deployment of hardware and software, installation verification testing and customer orientation. Hardware deployment covers the installation of a single BladeSystem enclosure that include server blades (up to 16), Ethernet network interconnect, and power options. Software deployment covers the installation and configuration of HP Systems Insight Manager (SIM), HP Rapid Deployment Pack (RDP), and deploy up to two operating system editions of either Windows or Linux, using scripted operating system installation software.	UC905E
ProLiant BL p-Class Blade Server Hardware Installation, Electronic	UA219E
ProLiant BL p-Class Enclosure and Server Blade Hardware Installation, Electronic	U4971E
Provides for the Installation and Start-up of Rapid Deployment Pack, Electronic **NOTE:** Provides for the installation on a Customer supplied server designated as a Deployment Server. Includes the deployment of a single server. This new server will be deployed using either one of the pre-configured scripts or an image. In addition, the service will provide for the capture and storage of the configuration of the newly deployed server and orientation on product usage. To be delivered during standard office ours, standard office days.	U5683E
Provides for the Installation and Start-up of Rapid Deployment Pack Implementation of Rapid Deployment Pack (Basic) (Electronic)	UA042E

Options

HP ProLiant Essentials Vulnerability and Patch Management Pack Installation and Startup Service. (Electronic)	UC929E

NOTE: Service coverage: onsite installation of the Vulnerability and Patch Management (VPM) software on a customer designated server, configuration of the VPM software to acquire security patches, enabling the VPM software to scan up to five (5) systems, applying the security patches to the designated servers, generating a report from VPM that shows the vulnerability assessment results, and providing customer with an orientation to the software.

Provides for the Installation and Start-up of System Insight Manager (Electronic)	UA041E
Provides for the Installation and Start-up of System Insight Manager (Electronic)	UA040E

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

Software Operating Environment Care Packs

Microsoft Software Operating Environment Software Telephone 9x5 - 3 incident (Electronic)	U8169E
Red Hat Software Operating Environment Software Telephone 9x5 - 10 incident (Electronic)	U3402E
SUSE Software Operating Environment Software Telephone 9x5 - 3 incident (Electronic)	U9615E
ProLiant Essentials Operating Environment, - 5 Day, 8x5,1 year, 3 incident (Electronic)	U8222E

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

Memory

HP ProLiant BL30p Server Blade (all models)
Standard Memory
1024-MB PC2100 MHz Registered DDR SDRAM DIMM installed (1 x 1-GB SDRAM DIMM)

Standard Memory Replaced with Optional Memory
Up to 4096-MB of DDR SDRAM DIMM memory is available with the removal of standard memory and the installation of optional SDRAM DDR DIMM memory expansion kits.

Memory		Slot	
		1	**2**
Standard	1024 MB	1024 MB	
Optional	1024 MB	512 KB	512 KB
Optional	2048 MB	1024 MB	1024 MB
Maximum	4096 MB	2048 MB	2048 MB

Following are memory options available from HP:
- 4096-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 2 GB)   300682-B21
- 2048MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 1 GB)   300680-B21
- 2048 MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 2048 MB)   301044-B21
- 1024-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (1 x 1 GB)   287497-B21
- 1024-MB of Advanced ECC PC2100 DDR SDRAM DIMM Memory Kit (2 x 512 MB)   257974-B21

Technical Specifications

HP ProLiant BL30p Server Blade	**Dimensions**	Height	4.1 cm (1.61 in)
		Depth	64.4 cm (25.35 in)
		Width	12.0 cm (4.72 in)
	Weight	Maximum	4.54 kg (10 lb)
	Temperature Range*	Operating	10°C to 35°C (50°F to 95°F)
		Shipping	-40°C to 60°C (-40°F to 140°F)
		Storage	-20°C to 60°C (-4°F to 140°F)
		Maximum Wet Bulb Temperature	-30°C (86°F)
	Relative Humidity**	Operating	10% to 90%
		Shipping	10% to 90%
		Storage	10% to 95%

* NOTE: Operating temperature has an altitude derating of 1°C per 304.8 m (1.8°F per 1,000 ft) to 3048 m (10,000 ft) is applicable. No direct sunlight. Upper operating limit is 3,048 m (10,000 ft) or 70 Kpa/10.1 psia. Upper non-operating limit is 9,144 m (30,000 ft) or 30.3 KPa/4.4 psia.

** NOTE: Storage maximum humidity of 95% is based on a maximum temperature of 45°C (113°F). Altitude maximum for storage is 70 KPa.