



HP NetServer LX Pro Series



**Powerful, high-availability
superservers for the
enterprise**

HP's most powerful network servers deliver industry-leading performance and availability for business-critical environments without a high-end price tag.

Like all HP NetServers, the HP NetServer LX Pro and LXe Pro come with advanced management tools to increase uptime and ease administration.

Plus, with a choice of two configurations, the HP NetServer LXe Pro and LX Pro, you can optimize for your needs today and easily expand your solution as your needs grow over time.

For mission-critical datacenter environments, HP offers a separate family of rack-optimized servers, the HP NetServer LXr Pro, and its accompanying mass storage, the HP NetServer Rack Storage/8.

All HP products are backed with HP's legendary quality, reliability, and a broad range of support options.

This Server Delivers:

Scalable, superserver performance

- Four-way Pentium® Pro symmetric multiprocessing (SMP) supporting up to 4GB Error Checking and Correcting (ECC) memory
- Dual PCI peer buses for maximum I/O throughput
- Two PCI Ultra/Wide SCSI controllers
- A total of ten I/O slots—none shared
- 6 (LXe Pro) or 12 (LX Pro) hot-swap shelves support up to 109GB internal storage

Maximum system uptime and data protection

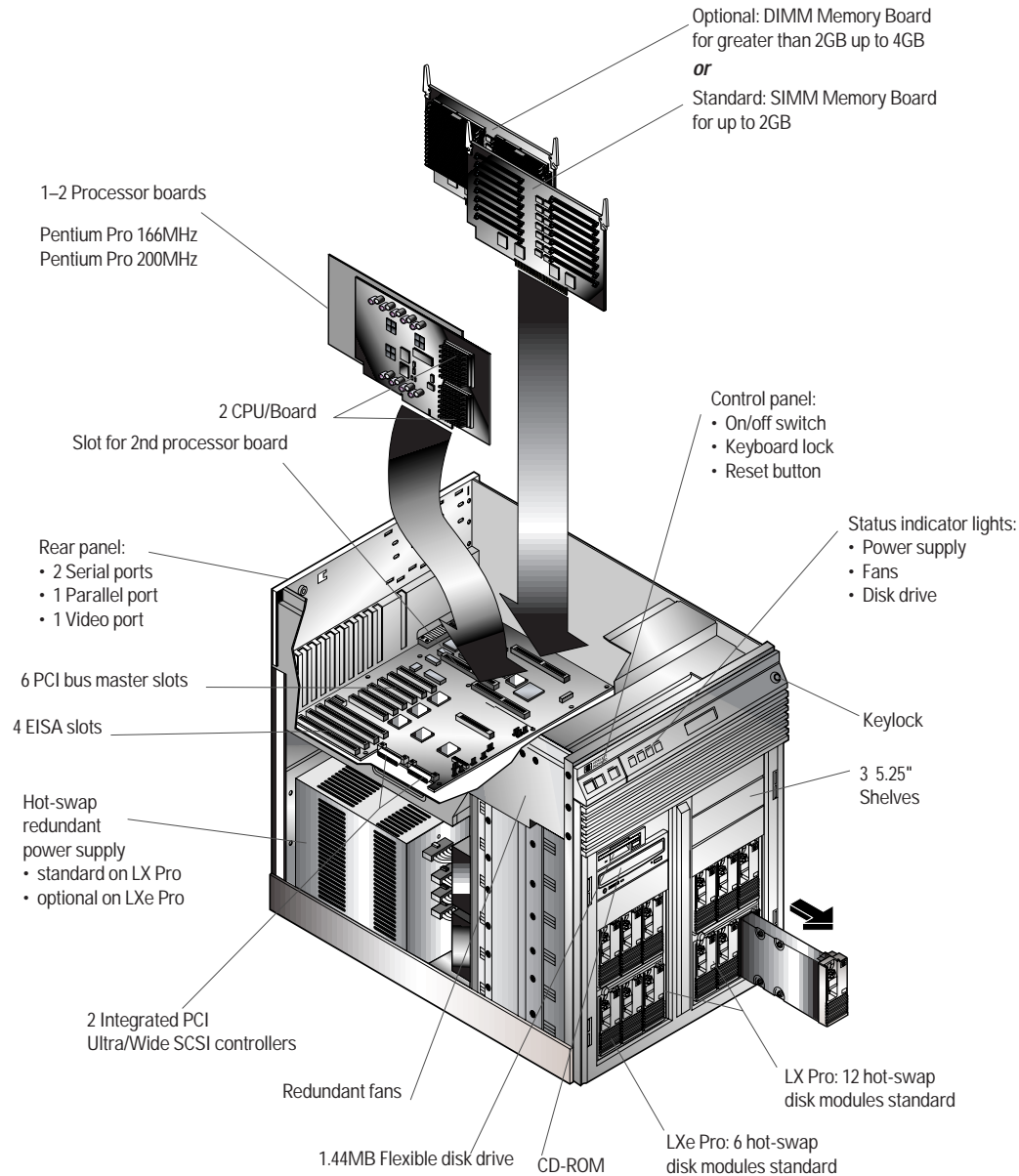
- ECC memory with error reporting
- HP NetRAID three-channel PCI Ultra/Wide SCSI Disk Array Controller for superior data protection
- Modular hot-swap redundant power supply (LX Pro—Standard, LXe Pro—Optional)
- Redundant fans to reduce downtime due to fan failures
- Certified and supported in industry-standard Microsoft® Cluster Server (MSCS)
- Built-in Automatic Server Restart (ASR), temperature, and voltage monitoring

Simplified server and network management

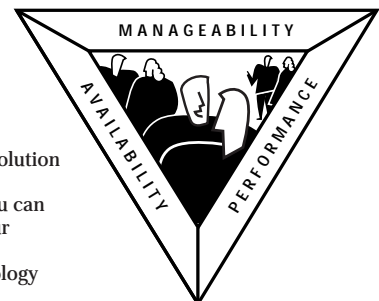
- HP NetServer Navigator bootable CD-ROM with easy-to-use tools to configure, install, and manage the HP NetServer LX Pro and LXe Pro
- HP NetServer Assistant server management software for proactive alerting and problem resolution
- HP OpenView for Windows® network management software for network mapping, alarm management, and security
- Optional HP Remote Assistant card for remote diagnostics and environmental monitoring
- Large number of optional HP backup solutions

data sheet

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HP's MAP strategy ensures that your enterprise networking solution delivers the highest levels of Manageability, Availability, and Performance, all backed with industry-leading support. So you can count on optimum, easy-to-achieve results over the life of your server. Maximum system uptime and data protection in your business-critical environment. And the most advanced technology available today—with plenty of headroom for future growth.



Features

Performance	
Processor	Intel® Pentium® Pro 200MHz processor with up to 4-way multiprocessing
Processor Upgrade	Modular upgrades to dual and quad symmetric multiprocessing
Cache	512KB or 1MB write-back cache per processor
ECC Memory	<ul style="list-style-type: none"> 128MB/512MB ECC memory expandable to 4GB (using optional DIMM Memory) SIMM Memory included (expandable to 2GB)
Mass Storage Subsystem	<ul style="list-style-type: none"> Front-accessible, half-height shelves (17— LX Pro, 9— LXe Pro) One 3.5-inch flexible disk drive (included) One CD-ROM (included) Three standard half-height Twelve hot-swap (LX Pro); Six hot-swap upgradable to twelve hot-swap (LXe Pro) Dual SCSI backplanes for internal disk duplexing
I/O Architecture	<ul style="list-style-type: none"> Dual peer PCI buses I₂O optimized Two PCI Ultra/Wide SCSI controllers integrated on the system board
I/O Expansion	Ten I/O expansion slots: Six PCI bus master, Four EISA
Video	<ul style="list-style-type: none"> Integrated 1024x768, 256-color, noninterlaced 1MB standard video memory Super VGA drivers available with operating system or from HP electronic support services
CD-ROM	One CD-ROM drive included
Flexible Disk Drive	One 1.44MB flexible disk drive included
Availability	
Power Supplies	<ul style="list-style-type: none"> LXe Pro: One power module standard; modular upgrade to redundant power supply LX Pro: Three power modules standard Modular hot-swap universal voltage Redundant Power Supply (allows continuous usage of server during replacement of failed power supply module)
Disk Array Controller (with Model 1 Array)	<ul style="list-style-type: none"> Hot-swap and hot-spare capabilities Support for RAID 0, 1, 3, 5, 10, 30, 50 HP NetRAID three-channel PCI Ultra/Wide SCSI Disk Array Controller provides protection of business-critical data
Cooling	Redundant fans provide fault-tolerant cooling for internal components; superior airflow design
Cluster Support	Supports HP's High-Availability solution, which is built around the server industry-standard Microsoft Cluster Server (MSCS)
Ultra SCSI Controller	Two PCI Ultra/Wide SCSI controllers integrated on system board
Manageability	
Installation and Monitoring	<p>HP NetServer Navigator bootable CD-ROM includes:</p> <ul style="list-style-type: none"> Automated, menu-driven installation and configuration application that helps you install, configure/reconfigure, and optimize the performance of the HP NetServer LX Pro and LXe Pro HP NetServer Assistant software that provides monitoring, proactive alerting, and problem identification for subsystems such as redundant power supplies, SCSI controllers, hard disk drives, ECC memory, and uninterruptible power supplies HP OpenView for Windows, the industry-leading network management platform Integration to leading enterprise system management tools such as HP OpenView™ and Computer Associates' TNG
Rackmounting	Rackmountable in standard 19-inch rack to save floor space in multi-server environments
Remote System Management	Optional remote management solution for "lights out" server management
Serviceability	<ul style="list-style-type: none"> Casters for mobility, removable for rackmounting FLASH BIOS support for quick system BIOS updates Removable side and top covers for easy system maintenance

Features



Flexibility	
Supported Operating Systems	Banyan® VINES®; IBM® OS/2® Warp Server and Warp Server SMP; Microsoft® Windows® NT™ Server; Novell® NetWare® and IntranetWare™; SCO® OpenServer™ and UnixWare™
Security and Safety	
System Security	<ul style="list-style-type: none"> Startup password Keyboard lock button with optional screen blanking
Service and Support	
Warranty	<ul style="list-style-type: none"> 3-year, next-business-day, on-site limited warranty from HP or authorized resellers (standard business hours) worldwide
Support Options	<ul style="list-style-type: none"> Optional 4-hour response during standard business hours, or 24 hours a day, 7 days a week available as HP SupportPack from resellers Free telephone support for basic setup, installation, and troubleshooting in U.S., Canada, and Europe during warranty LAN Support and Comprehensive Network Support available as HP SupportPack from resellers Site preparation and installation services available as HP SupportPack from resellers
Other Specifications	
Operating Temperature	41° to 95° F (5° to 35° C)
Operating Humidity	20% to 80% noncondensing
Acoustic Emissions	Sound level (LpA): <58 dB(A)
Power Supply	Auto-ranging 90 to 140 VAC, or 180 to 264 VAC at 47–63Hz
Power Availability	790W continuous
Power Consumption	1200/1440W maximum (LX Pro) continuous with 110/220V supply
System Dimensions	24.6"H x 16.6"W x 25.4"D; (63cm x 42.5cm x 65cm)
System Weight	131–187lb (59–85kg), depending on configuration
Regulatory Compliance	
Electromagnetic Compliance	<ul style="list-style-type: none"> CISPR 22 Class B (International) EN 55022 Class B (EU Countries) EN 50082-1, Generic Immunity (EU Countries), includes: IEC 801-2, ESD; IEC 801-3, RI; IEC 801-4, FT FCC Class B Verified (USA)* C-Tick (Australia) BCI<P Class B (Taiwan) M of C Class A (Korea) VCCI Class 2 (Japan) ENG1000-3-2 Harmonic Current ENG1000-3-3 Voltage Fluctuation and Flicker
Safety Compliance	<ul style="list-style-type: none"> CSA Certified (Canada, File LR106647) EN 60950 Compliance (International) TÜV Certified (Germany) UL Listed (USA, File E139742) <p>* FCC ID B94HPLS106</p>

Accessories

	Product Accessory*	Product No.
Memory	<ul style="list-style-type: none"> 16MB SIMM (60ns) 32MB SIMM (60ns) 64MB SIMM (60ns) 128MB SIMM (60ns) 512MB DIMM Kit (includes four 128MB DIMMs) DIMM memory board with 512MB (for configurations requiring greater than 2GB and up to 4GB memory) 	D4891A D4892A D4290A D4893A D4968A D4967A
Processor, Processor Board Upgrades	<ul style="list-style-type: none"> HP NetServer LX Pro 6/166 processor upgrade (6/166 CPU chip) HP NetServer LX Pro 6/166 processor board HP NetServer LX Pro 6/200 processor upgrade (6/200 CPU chip) HP NetServer LX Pro 6/200 processor board HP NetServer LX Pro 6/200 1MB dual processor upgrade card (two 6/200 1MB CPU chips) 	D4288A D4286A D4867A D4866A D4966A
HP NetServer LXe Upgrades	<ul style="list-style-type: none"> HP NetServer LXe power supply module HP NetServer LXe hot-swap storage upgrade 	D4292A D4927A
Storage Devices	<ul style="list-style-type: none"> 2.1GB Fast SCSI-2 disk drive (common tray)¹ 4.2GB Fast SCSI-2 disk drive (common tray)¹ 2.1GB hot-swap Ultra SCSI-2 disk module 4.2GB hot-swap Ultra SCSI-2 disk module 9.1GB hot-swap Ultra SCSI-2 disk module 4.2GB, 10,000rpm hot-swap Ultra SCSI disk module 1.2MB, 5.25-inch flexible disk drive¹ CD-ROM, 3.5-inch SCSI-2^{1,2} HP NetServer hot-swap tray³ HP NetServer LXe/LX Pro SCSI internal cable kit 3.5-inch hard disk drive mounting trays (3-pack-non-hot-swap)¹ Tape/DAT/CD-ROM mounting trays (3-pack-no front panel)¹ 	D2077A D3341A D3582C D3583C D4289A D4903A D2036A D2992B D3349B D4282A D2198A D2199A
External Storage Cabinet	<ul style="list-style-type: none"> HP NetServer Rack Storage/8 HP NetServer Storage System/6 	D4902A D3604B
Disk Array Controller	HP NetRAID PCI Disk Array Controller card ⁴	D4943A
Backup Storage	<ul style="list-style-type: none"> HP SureStore DAT24e, 24GB external tape drive HP SureStore DAT24x6e, 144GB external Autoloader HP SureStore DLT30e, 30GB external DLT HP SureStore DLT40e, 40GB external DLT HP SureStore DLT Library 4115r (rackmount) with one DLT 4000 drive, 15 slots, 300GB native capacity, and up to 600GB compressed capacity HP SureStore DLT Library 4215r (rackmount) with two DLT 4000 drives, 15 slots, 300GB native capacity, and up to 600GB compressed capacity 	C1556A C1559A C1549A C1579A C5151F C5153F
Network Interface Cards	<ul style="list-style-type: none"> HP DeskDirect 10/100VG PCI adapter HP DeskDirect 10/100TX PCI adapter 	J2585B J3171A
Remote Management	HP Remote Assistant Card	D2967C ⁵ /D2968C ⁵ /D2969C ⁷
Monitor	Ultra VGA 15-inch display	D2825A
Uninterruptible Power Supply	Optimized rackmount UPS devices, customized for the HP rack environment, are available from APC. For additional information, contact your local APC reseller, or see APC's web page at http://www.apcc.com/english/allys/prtnr/hp	
HP NetServer Racks*	<ul style="list-style-type: none"> HP NetServer LX Pro Rackmount kit 15" Universal Monitor Rackmount kit 2-meter rack with side panels and rear doors, quartz color 2-meter rack only (without side panels or rear door), quartz color HP Ballast weight kit HP Console Switch 8-port Filler panel, 1U (set of 6) 	J1455A E7708A J1487B J1488A C2790A J1497A E7725A
<p>* For a complete list of all accessories and configuration guidelines, download HP NetServer Order Assistant, HP NetServer Rack-Optimized Ordering Guide, and HP NetServer Rack Assistant from http://www.hp.com/go/netserver</p> <div> <div> ¹ For use in standard half-height shelf only Three shelves available </div> <div> ² Standard on all models ³ For selected non-HP drives only ⁴ Standard on array models. For use with internal storage in Model 1, must order D4963A cable kit </div> <div> ⁵ For use in regions other than North and South America, Europe, and Asia Pacific ⁶ For use in North and South America ⁷ For use in Europe and Asia Pacific </div> </div>		

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Configuration and Models

	Model	Processor	Cache	ECC Memory	Hot-Swap Shelves	Redundant Power Supply	Product No.
HP NetServer LXe Pro 6/166	Model 1	Pentium Pro 166MHz	512KB	64MB	6	Optional	D4878B
	Model 1 Array ¹	Pentium Pro 166MHz	512KB	64MB	6	Optional	D4924B
HP NetServer LXe Pro 6/200	Model 1	Pentium Pro 200MHz	512KB	64MB	6	Optional	D4920B
	Model 1 Array ¹	Pentium Pro 200MHz	512KB	64MB	6	Optional	D4925B
HP NetServer LX Pro 6/166 SMP	Model 1 Array ¹	Dual Pentium Pro 166MHz	512KB	128MB	12	Standard	D4269B
HP NetServer LX Pro 6/200	Model 1	Pentium Pro 200MHz	512KB	64MB	12	Standard	D4311B
	Model 1 Array ¹	Pentium Pro 200MHz	512KB	64MB	12	Standard	D4312B
HP NetServer LX Pro 6/200 SMP	Model 1 Array ¹	Dual Pentium Pro 200MHz	512KB	128MB	12	Standard	D4315B
	Model 1 Array ¹	Dual Pentium Pro 200MHz	512KB	512MB	12	Standard	D4958B
HP NetServer LX Pro 6/200 1MB SMP	Model 1 Array ¹	Pentium Pro 200MHz	1MB	512MB	12	Standard	D4964B
HP NetServer LX Pro Dual Processor Upgrade Card with two CPU chips	—	Pentium Pro 200MHz	1MB	—	—	—	D4966A
HP NetServer LX Pro 6/166 Processor Upgrade	—	Pentium Pro 166MHz	512KB	—	—	—	D4288A
HP NetServer LX Pro 6/166 Processor Board	—	—	—	—	—	—	D4286A
HP NetServer LX Pro 6/200 Processor Upgrade	—	Pentium Pro 200MHz	512KB	—	—	—	D4867A
HP NetServer LX Pro 6/200 Processor Board	—	—	—	—	—	—	D4866A
HP NetServer LXe Power Supply Module	—	—	—	—	—	—	D4292A
HP NetServer LXe Hot-Swap Storage Upgrade	—	—	—	—	—	—	D4927A

¹ All Model 1 Array models include a PCI Disk Array Controller

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HP SupportPacks

3-year, 4-hour response (standard business hours)	H5520A
24-hours-a-day, 3-year, 7-days-a-week response	H5521A
Installation and Configuration	H5751A
LAN Support, 5 incidents	H5570A
LAN Support, 5 incidents, 24-hours-a-day, 7-days-a-week response	H5571A
LAN Support, 10 incidents	H5572A
LAN Support, 10 incidents, 24-hours-a-day, 7-days-a-week response	H5573A
Comprehensive Network Support, standard hours	H5576A
Comprehensive Network Support, 24-hours-a-day, 7-days-a-week, response	H5577A

For Additional Information

HP WWWWeb server	http://www.hp.com/go/netserver
HP NetServer FTP server	ftp://ftp.netserver.hp.com
HP NetServer BBS	1-408-553-3500
HP FAX Response system	1-208-344-4809 (worldwide from fax only)

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