HP NetServer LX Pro Series





Powerful, high-availability superservers for the enterprise

HP NetServer LXe Pro 6/166 HP NetServer LXe Pro 6/200 HP NetServer LX Pro 6/166 HP NetServer LX Pro 6/166 SMP HP NetServer LX Pro 6/200 HP NetServer LX Pro 6/200 SMP

HP's most powerful network servers deliver a top-of-theline solution without a high-end price tag. Based on the Pentium® Pro processor, the HP NetServer LX Pro Series gives you the performance you need for your busy enterprise network.

The HP NetServer LX Pro Series offers four-way Pentium Pro symmetric multiprocessing (SMP), dual PCI peer buses, and up to 2GB memory to handle demanding server-based applications with unsurpassed performance. Superior fault-tolerant features ensure you of maximum uptime and data protection.

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.

Like all HP NetServers, the HP NetServer LX Pro and LXe Pro come with advanced management tools to help run your network smoothly. They are the ultimate choice for network power that's affordable and scalable over the

This Server Delivers:

Scalable, su	perserver
performance	•

- Four-way Pentium Pro symmetric multiprocessing (SMP) supporting up to 2GB Error Checking and Correcting (ECC) memory
- Dedicated cache—512KB for each processor
- A total of ten I/O slots—none shared
- Dual PCI peer buses for maximum I/O throughout
- 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
- Redundant fans to reduce downtime due to fan failures
- Memory scrubbing reduces soft errors that cause system crashes
- Built-in Automatic Server Restart (ASR), temperature, and voltage monitoring
- Hot-swap storage subsystem with dual SCSI backplane for internal disk duplexing
- Modular hot-swap redundant power supply reduces system downtime due to power supply failures (LX Pro—Standard, LXe Pro— Optional)

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

Features

Processor	166MHz or 200MHz Pentium Pro processors: up to four-way SMP		
Processor Upgrade	Modular upgrades to dual and quad symmetric multiprocessing		
External Cache	512KB write-back cache per processor		
ECC Memory	Up to 2GB		
Expansion Slots	Ten I/O expansion slots: Six PCI bus master, Four EISA non-bus-master		
HP Disk Array (With Model 1 Array)	PCI Disk Array Controller with dual Fast and Wide SCSI-2 channels (takes one PCI slot) ♦ Hot-swap and hot-spare capabilities ♦ Support for RAID 0, 1, 5, 6 (logical combination of RAID 0 and 1)		
SCSI Controller	Two PCI Fast and Wide SCSI-2 controllers integrated on system board		
Mass Storage Subsystem	Front-accessible, half-height shelves (17— LX Pro, 11— 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 12 hot-swap (LXe Pro) ◆ Dual SCSI backplanes for internal disk duplexing		
Flexible Disk Drive	One 1.44MB flexible disk drive included		
CD-ROM	One quad-speed CD-ROM drive included		
Built-In I/O Ports	PCI Fast and Wide external SCSI-2 port ♦ One 25-pin parallel port ♦ Two serial 9-pin RS-232 ports ♦ One IDE po		
Video	Integrated 1024x768, 16-color, noninterlaced ◆ 512KB standard video memory (upgradable to 1MB, 1280x1024) ◆ Super VGA drivers available with operating system or from HP electronic support services		
Keyboard and Mouse	Localized keyboard and two-button mouse		
Installation and Configuration Management	HP NetServer Navigator bootable CD-ROM includes: • 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 • Server management software that provides monitoring, proactive alerting, and problem identification for subsystems such as SCSI controllers, hard disk drives, ECC memory, and uninterruptible power supplies • HP OpenView for Windows, the industry-leading network management platform • Intelligent information retrieval system for quick access to information on HP NetServers and accessories, network operating system installation and tuning, and product service and support • Easy-to-use diagnostic tool for system verification and rapid troubleshooting of hardware issues, such as incorrect SCSI cabling and termination		
Supported Operating Systems	IBM [®] OS/2 [®] Warp and LAN Server, Microsoft [®] MS-DOS [®] , Microsoft Windows [®] NT [™] Server, Novell [®] NetWare [®] , Novell NetWare SFT [™] III, SCO [®] OpenServer [™] , and SCO MPX [™]		
Supported SMP Operating Systems	IBM OS/2 SMP and LAN Server, Microsoft Windows NT Server, Novell NetWare SMP, and SCO MPX		
Power	LXe Pro: One 410W power module standard. Modular upgrade to redundant power supply. LX Pro: Redundant, hot-swap power supply standard. Three 410W power modules standard.		
HP Advanced Cooling System	Redundant fans provide fault-tolerant cooling for internal components; superior airflow design		
Rackmounting	Rackmountable in standard 19-inch rack		
Security	ty Startup password ♦ Keyboard lock button with optional screen blanking ♦ Locks on server case, front doors, subsystem, and power supply modules ♦ EISA configuration protection password ♦ Enable or disable serial particles disk drives, and write operations to flexible disk drives		



Features

Serviceability	Casters for mobility, removable for rackmounting ◆ FLASH BIOS support for quick system BIOS updates ◆ Removable side and top covers for easy system maintenance
Service and Support	Three-year, next-business-day, on-site limited warranty from HP or authorized resellers (standard business hours) worldwide Φ Optional 4-hour response during standard business hours, or 7 days a week, 24 hours a day available as HP SupportPack from resellers Φ Free telephone support for basic setup, installation, and troubleshooting in U.S., Canada, and Europe during warranty Φ Network phone-in support (advanced NOS and network support) available in U.S., Canada, Europe, and Australia as optional 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	 CISPR 22 Class B (International) EN 55022 Class B (EU Countries) EN50082-1, Generic Immunity (EU Countries), includes: IEC 801-2, ESD; IEC 801-3, RI; IEC 801-4, FT FCC Class B Verified (USA)* M of C Class A (Korea) VCCI Class 2 (Japan)
Safety Compliance	 CSA Certified (Canada, File LR106647) EN 60950 Compliance (International) TÜV Certified (Germany) UL Listed (USA, File E139742) *FCC ID B94HPLS106

Accessories

	Product Accessory ¹	Product No.	
Memory	• 16MB SIMM (60ns)	D4891A	
	• 32MB SIMM (60ns)	D4892A	
	• 64MB SIMM (60ns)	D4290A	
	• 128MB SIMM (60ns)	D4893A	
Processor, Processor Board Upgrades	NetServer LX Pro 6/166 processor upgrade (6/166 CPU chip)	D4288A	
	NetServer LX Pro 6/166 processor board	D4286A	
	NetServer LX Pro 6/200 processor upgrade (6/200 CPU chip)	D4867A	
	NetServer LX Pro 6/200 processor board	D4866A	
NetServer LXe Upgrades	LXe power supply module	D4292A	
	NetServer LXe hot-swap storage upgrade	D4927A	
Storage Devices	• 2.1GB Fast SCSI-2 disk drive (common tray) ^c	D2077A	
	• 4.2GB Fast SCSI-2 disk drive (common tray) ²	D3341A	
	2.1GB hot-swap Fast & Wide SCSI-2 disk module	D3582B	
	4.2GB hot-swap Fast & Wide SCSI-2 disk module	D3583B	
	• 9.1GB hot-swap Fast & Wide SCSI-2 disk module ³	D4289A	
	• 1.2MB, 5.25-inch flexible disk drive ²	D2036A	
	• CD-ROM, 3.5-inch SCSI-2 ^{2,4}	D2992B	
	• HP NetServer hot-swap tray ⁵	D3349B	
	NetServer LXe/LX Pro SCSI internal cable kit	D4282A	
	• 3.5-inch hard disk drive mounting trays (3-pack-non-hot-swap) ²	D2198A	
	Tape/DAT/CD-ROM mounting trays (3-pack-no front panel) ²	D2199A	
External Storage Cabinet	HP NetServer Storage System/6	D3604B	
Disk Array Controller	Dual-channel Fast & Wide SCSI-2 PCI disk array controller card	C3610A	
Tape Drives	HP SureStore Tape 5000i Internal DAT drives (4GB)	C1526G	
	HP SureStore Tape 6000i Internal DAT drives (8GB)	C1528F	
Network Interface Cards	HP DeskDirect 10/100VG Selectable PCI adapter	J2585B	
	HP DeskDirect 10/100TX Selectable PCI adapter	J3171A	
	HP Server Performance Pack 100 (for 100TX)	J3221A	
	HP Server Performance Pack 200 (for 100VG)	J3220A	
Remote Management	HP Remote Assistant Card	D2968B/D2967B	
Monitor	Super VGA Display, 14 inch	D2803A	
Uninterruptible Power Supplies	HP PowerWise UPS 2100VA	C4276B	
HP NetServer Racks and Accessories	HP NetServer LX Pro Rackmount kit	J1455A	
	2-meter rack with side panels and doors	J1487A	
	2-meter rack only	J1487A AXH	
	Console Director 8-port switchbox	J1495A	
	Console Director 4-port switchbox	J1494A	
	HP Ballast Weight kit	C2790A	

¹ Please see the HP NetServer Configuration Guide for important technical information when choosing your accessories.

 $^{^{\}rm 2}$ For use in standard half-height shelf only. Three shelves available.

³ Available Q4 -'96.

⁴ Standard on all models.

⁵ For selected non-HP drives only. ⁶ Standard on array models. For use with internal storage in Model 1, must order D4282A cable kit.



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Cor	ıfiaı	ıration	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	D4878A
	Model 1 Array ¹	Pentium Pro 166MHz	512KB	64MB	6	Optional	D4924A
HP NetServer LXe Pro 6/200	Model 1	Pentium Pro 200MHz	512KB	64MB	6	Optional	D4920A
	Model 1 Array ¹	Pentium Pro 200MHz	512KB	64MB	6	Optional	D4925A
HP NetServer LX Pro 6/166	Model 1	Pentium Pro 166MHz	512KB	64MB	12	Standard	D4262A
	Model 1 Array ¹	Pentium Pro 166MHz	512KB	64MB	12	Standard	D4263A
HP NetServer LX Pro 6/166 SMP	Model 1	Dual Pentium Pro 166MHz	512KB	128MB	12	Standard	D4268A
	Model 1 Array ¹	Dual Pentium Pro 166MHz	512KB	128MB	12	Standard	D4269A
	Model 1 Array ¹	Dual Pentium Pro 166MHz	512KB	256MB	12	Standard	D4894A
HP NetServer LX Pro 6/200	Model 1	Pentium Pro 200MHz	512KB	64MB	12	Standard	D4311A
	Model 1 Array ¹	Pentium Pro 200MHz	512KB	64MB	12	Standard	D4312A
HP NetServer LX Pro 6/200 SMP	Model 1	Dual Pentium Pro 200MHz	512KB	128MB	12	Standard	D4314A
	Model 1 Array ¹	Dual Pentium Pro 200MHz	512KB	128MB	12	Standard	D4315A
	Model 1 Array ¹	Dual Pentium Pro 200MHz	512KB	256MB	12	Standard	D4895A
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	_	_	_	_	6	_	D4927A

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

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For Additional Information

HP WWWeb server	http://www.hp.com/go /netserver
HP NetServer FTP serve	r ftp://ftp.netserver.hp.com
HP NetServer BBS	1-408-553-3500
HP FAX Response syste	m 1-800-333-1917 (U.S.) 1-208-344-4809 (worldwide from fax only)
HP NetServer Literature	1-800-322-4772

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Printed in USA M0896 P/N 5965-3226EUS

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