



hp
p-class
workstation



data sheet

designed for work with large models

The HP p-class workstation for Windows NT® and Windows 2000 Professional® is ideal for maximizing the talents of designers, creative artists, engineers, scientists and others who require superior performance at an affordable price. These workstations are designed for users who interact with large models in complex work-flow environments, yet they offer great performance at a reasonable price.

The HP workstation family has it all: powerful processors, fast graphics accelerators, increased disk, RAM and I/O capabilities, and UNIX®-Windows NT interoperability.* The HP p-class workstation – helping you to invent the future.

hp p-class workstation	feature	benefit	advantage
	single or dual Intel® Pentium® III 1GHz Processor(s)	advanced transfer cache boosts power and efficiency behind demanding applications	provides superior computing performance with Intel's on-die 256K level 2 cache
	hp memory architecture	provides up to 20% performance gain over RDRAM based systems	utilizes affordable 133MHz SDRAM for more cost-effective large memory implementations
	mass storage expandability: up to 72GB internal disk	delivers hard disk space and performance needed to work on large models and multiple designs	Ultra Wide SCSI 3's high data throughput and up to 72GB of storage mean greater productivity
	WRQ NFS connection and Reflection X (local): full version MKS commands, utilities and shell	supports integration and interoperability between UNIX and Windows NT systems.	optimizes cross-platform collaboration and use of tools on both operating systems; allows critical UNIX scripting in a Windows NT environment
	up to 2GB capacity SDRAM	larger capacity for more demanding applications and complex designs.	high memory capacity at low density memory prices
	hp toptools/hp maxilife II	provides industry-leading remote and local net-based management and diagnostics; remote administration and monitoring	advanced administration and management of system components and settings; increases reliability and provides hardware self-diagnosis
leadership graphics	hp leadership graphics program	a wider range of graphics choices for applications that are fully supported on the platform	fast access to the industry's best graphics at varying performance & price points backed by more than 20 years of HP graphics expertise; for more information about the HP leadership graphics program: www.hp.com/workstations/programs/leadership_graphics/index.html
extreme 3D	hp fx ¹⁰	provides superior application performance for the largest, most complex visualization tasks	hp fx ¹⁰ delivers fast graphics performance with 6 PA-RISC geometry engines
high-end 3D	hp fx ⁶	provides excellent application performance for large models and complex visualization tasks	hp fx ⁶ delivers fast graphics performance with 3 PA-RISC geometry engines
	ATI™ Fire GL™2	full featured industry leading geometry and rendering engines	provides the ability to create complex and visually realistic objects at interactive speeds
mid-range 3D	NVIDIA® Quadro2 Pro™	second generation NVIDIA geometry engine with 200 MHz DDR memory for excellent 2D & 3D graphics performance	provides excellent application performance and allows for interactive display of medium-sized to large-sized models
entry 3D	NVIDIA® Quadro2 MXR™	dedicated hardware geometry engine and dual-display capability from a single card	provides increased performance, greater visual realism, and allows users to add a digital display in addition to an analog display to double their display area

hp p-class technical specifications

central processor	
type	Pentium III
clock frequency	1GHz
number of processors	1-2
cache (on-chip)	
	256K L2
performance	
hp workstation performance results can be found at: http://www.hp.com/workstations/products/winnt/performance.html	
main memory	
bus bandwidth	2.0GB/sec
RAM type	SDRAM PC 133
capacity	2GB
memory slots	4 DIMMs
operating system	
	Windows NT® or Windows 2000 Professional®
HP supports the latest Windows NT® and Windows 2000 Professional® service packs.	
internal storage devices	
up to 2 devices, 72GB maximum:	
Ultra 3/160 SCSI	9GB (10K rpm) 18GB (10K rpm) 36GB (10K rpm)
PCI slots (4 total)	
PCI 1X	3 - 32b 33MHz 5V
PCI 4X	2 - 64b 66MHz 3.3V
SCSI device connectivity	
the integrated Ultra 160/m SCSI cards has 4 connectors:	
connector 1	68-pin external connector for LVD SCSI devices
connector 2	68-pin internal connector for LVD SCSI devices
connector 3	68-pin internal connector for wide SE SCSI devices
connector 4	50-pin internal connector for narrow SE SCSI devices
removable media	
floppy drive	integrated 3.5" floppy drive
cd drive(s) / up to 2 CD devices	48X CD-ROM, 8X DVD, CD-RW
networking	
	RJ45
LAN data rate	10/100Mbps
other I/O	
serial interface 9-pin DIN	2 ports
parallel interface 25-pin DIN	1 port
USB (Universal Serial Bus) Series A	2 ports
audio	
type	18-bit stereo full-duplex
monitors	
	18.1" Flat Panel LCD 19" Flat Screen 21" Flat Screen

environmental specifications	
altitude	
operating	3100m (10000 ft.) max
storage	3100m (10000 ft.) max
temperature	
operating	
	+5°C to +35°C (+41°F to +95°F)
non-operating	
	+5°C to +35°C (+41°F to +95°F)
humidity	
operating	15% to 80% (relative)
physical dimensions	
height	
	48.30cm (19.02 in)
width	
	20.87cm (8.22 in)
depth	
	47.30cm (18.62 in)
net weight	
minimum configuration	15.93 kilograms (35.11 lbs)
power requirements	
input current	
	9.0 A @ 100-127Vac 4.5 CR/Lf A @ 200-250Vac
line frequency	
	50Hz to 60Hz
maximum power input	
	100-127 or 200-250Vac
professional 3D graphics	
extreme 3D	
hp fx ¹⁰	6 PA-RISC geometry engines 64MB unified graphics memory
high-end 3D	
hp fx ⁶	3 PA-RISC geometry engines 64MB unified graphics memory
ATI Fire GL2	
	IBM® GT1000 geometry engine 64MB unified graphics memory
mid-range 3D	
NVIDIA Quadro2 Pro	single, integrated geometry engine 64MB unified graphics memory
entry 3D	
NVIDIA Quadro2 MXR	single, integrated geometry engine 32 MB unified graphics memory

For more information about the HP leadership graphics program and a complete listing of all graphics cards available for the HP p-class workstation:
www.hp.com/workstations/programs/leadership_graphics/index.html

Invent the future with HP workstations.

For the latest information about HP workstations, including Windows, Linux® and UNIX systems:
<http://www.hp.com/workstations>

**HP PCs use genuine Windows®
Operating Systems**
www.Microsoft.com/piracy/howtotell

Cover screen image courtesy of SDRC.
UNIX is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited. Windows, Windows NT and Windows 2000 Professional are U.S. registered trademarks of Microsoft Corporation. Intel and Pentium are registered trademarks of Intel Corporation. RDRAM is a registered trademark of Rambus, Inc. ATI and Fire GL are trademarks of ATI. NVIDIA, Quadro2 MXR and Quadro2 Pro are trademarks or registered trademarks of NVIDIA Corporation. IBM is a registered trademark of International Business Machines Corporation.

Information in this document is subject to change without notice.
Copyright 2001 Hewlett-Packard Company
Printed in the USA
May, 2001
5980-1444E