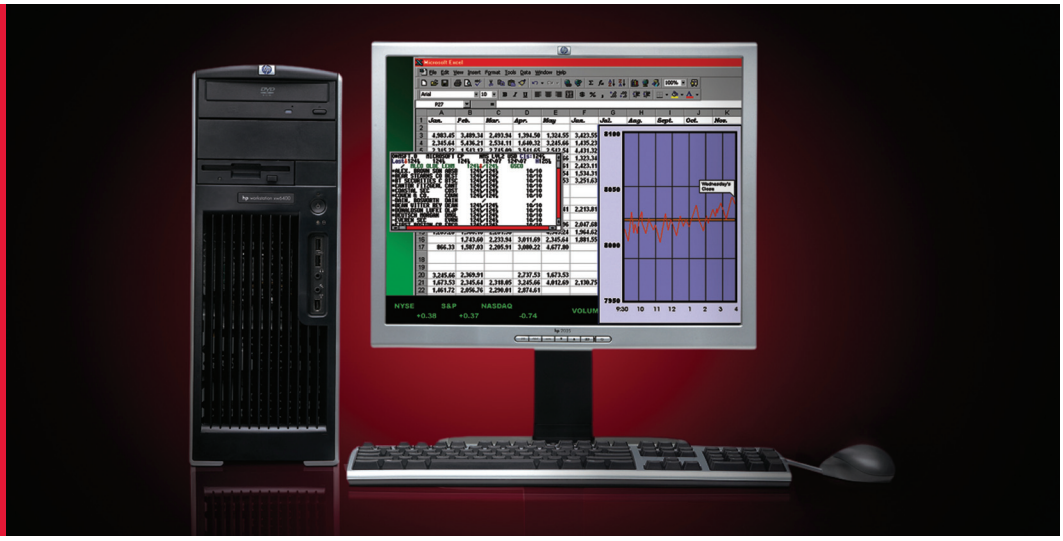
HP xw6400 Workstation

Data sheet

HP recommends genuine Windows® XP Professional.



Mid-range dual processor/dual-core workstation in a spacesaving, power-efficient package

- **Access Intel's latest technology**
- **Save space and power with small, tool-less chassis**
- **Get a low-power solution for near power capacity environments**
- **Visualize huge amounts of data with 8-monitor support**
- **Enjoy peace of mind with ISV-certified solutions**
- **Reduce complexity through HP user-relevant innovations**

The HP xw6400 is distinguished by what has been taken away-size, power demands, heat and noise--making this new mid-range workstation the ideal solution for space- and power-constrained environments. Added is Intel's new dual-processor, dual-core technology and the next-generation Intel chipset, delivering the performance you need today with the expandability and flexibility for adapting to tomorrow. Focused on specific customer requirements, the HP xw6400 Workstation's innovative, tool-less chassis was designed for small spaces. The HP xw6400 supports up to eight displays.

Meet the challenges of a 64-bit world

The HP xw6400 delivers new Dual-Core EM64T[i] Intel® Xeon® Processor 5100 Sequence for the high performance and expandability you need in a mid-range personal workstation. Intel's 5000X next-generation, high-end performance chipset for Intel Xeon™ processors supports 1,333 MHz dual system bus, and a 4 channel 667 MHz Fully Buffered DIMM (FBDIMM) memory subsystem, providing substantial improvement in throughput over previous Intel® chipset technology.

Supporting up to three internal hard disk drives, two optical disks, four PCI Express (PCIe) I/O slots, and two legacy PCI slots, the HP xw6400 delivers the capacity to handle large and complex data sets. With 4 GB DIMMs, the HP xw6400 can achieve configurations supporting applications that take advantage of up to 16 GB of memory to better accommodate our evolving 64-bit world.

Get big innovations in a small package

With one of the smallest dual-processor form factors in the industry, the HP xw6400 Workstation fits neatly into cramped workspaces. Industry-leading, tool-less chassis design eases servicing, upgrading and maintenance.

The HP xw6400 supports up to eight monitors, allowing visualization of huge amounts of data from multiple sources with less need to toggle between applications. From Professional 2D through high-end 3D graphics, the HP xw6400 delivers the visual accuracy and image clarity your job demands. Strong relationships with application providers and graphics card vendors provide reliable, industry-standard, optimal solutions.

The HP xw6400 is available with your choice of preinstalled Genuine Windows® XP Professional (32 or 64-bit) or Red Hat Enterprise Linux WS 4 (64-bit). The HP Installer Kit for Linux is available to ease installation and help create a custom operating system image. The preinstalled HP Performance Tuning Framework (PTF)[ii] and HP Cool Tools help ease implementation and increase productivity.

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HP xw6400 Workstation

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Form factor	Rackable minitower
Operating systems	Preinstalled 32-bit: Microsoft® Windows® XP Professional Preinstalled 64-bit: Microsoft Windows XP Professional x64 Edition (expected availability in July 2006) Preinstalled 64-bit: Red Hat Enterprise Linux® WS 4 (expected availability in July 2006) Optional 32-bit or 64-bit: Red Hat Enterprise Linux WS 3 or WS 4 and HP Linux Installer Kit (expected availability in July 2006)[i]
Available processors	One or two Dual Core Intel Xeon Processor 5100 Sequence: 1.60 GHz/1066 MHz FSB, 1.86 GHz/1066 MHz FSB, 2.00 GHz/1333 MHz FSB, 2.33 GHz/1333 MHz FSB, 2.66 GHz/1333 MHz FSB, 3.00 GHz/1333 MHz FSB with EM64T[i] (4 MB shared L2 cache per processor)
Chipset	Intel 5000X
Memory	Up to 8 GB of ECC registered 4 channel DDR 667 MHz Fully Buffered DIMMS via 2 GB DIMMs in 4 DIMMs slots; up to 16 GB of memory via 4 GB DIMMs (expected availability in September, 2006)
Drive controllers	Integrated quad channel SATA 3 Gb/s controller with RAID 0 or 1[ii] capability
Hard drive(s)	Up to 3 SATA drives*, 1.5 TB max.; 80 GB (7200 rpm) SATA 3 Gb/s, or 160, 250, 500 GB (7200 rpm) SATA 3 Gb/s NCQ; 80, 160 (10K rpm) SATA 1.5 Gb/s NCQ Up to 3* Serial Attached SCSI (SAS) drives**, 483 GB max.; 146 GB (10K rpm) or 73, 146 GB (15K rpm)* * 2 3.5" drive bays standard, 3rd drive requires one external 5.25 inch drive bay. **Optional SAS controller required
Optical drives	48X CD-ROM, 16X DVD-ROM, 48X CD-RW/DVD combo, 16X DVD+/-RW DL with LightScribe Direct Disc Labeling (Microsoft Windows XP Professional only, requires LightScribe media for labeling)
Drive bays	2 external 5.25 inch bays, 2 internal 3.5 inch bays, 1 external 3.5 inch bay with optional floppy
Slots	6 slots: 1 PCIe x16 graphics slot, 1 PCIe x16 mechanically (x4 electrically), 2 PCIe x8 mechanically (x4 electrically), and 2 legacy PCI slots
Graphics	Professional 2D: NVIDIA Quadro NVS 285 (128 MB with NVIDIA TurboCache technology, dual display), NVIDIA Quadro NVS 440 (256 MB quad display & up to 2 cards supported) Entry 3D: NVIDIA Quadro FX 560 (128 MB), ATI FireGL V3300 (128 MB) Mid-range 3D: NVIDIA Quadro FX 1500 (256 MB), ATI FireGL V7200 (256 MB) High-end 3D: NVIDIA Quadro FX 3500 (256 MB), NVIDIA Quadro FX 4500 (512 MB) with opt. Quadro G-Sync card
Audio	Integrated High Definition audio with Jack Retasking technology, opt. PCI Sound Blaster X-Fi XtremeMusic
Network	Integrated Broadcom 5752 Gigabit PCIe LAN on Motherboard, opt. Broadcom 5751 Gigabit PCIe NIC
Ports	Front: 2 USB 2.0, 1 audio line out, 1 microphone line in, 1 IEEE 1394 (requires PCI card to enable functionality) Rear: 5 USB 2.0, 1 standard serial port, 1 parallel port, PS/2 keyboard and mouse, 1 RJ-45, audio line in, audio line out, 1 microphone line in Internal: 1 USB 2.0
Input devices	USB or PS/2 keyboard; choice of 2-button scroll mouse (USB optical or PS/2 mechanical); 3-button mouse (USB optical); USB SpaceMouse; USB SpaceBall, USB SpacePilot
Dimensions (H × W × D)	17.3 inches (44.1 cm) × 6.5 inches (16.5 cm) × 17.3 inches (44.1 cm)
Power	575 watts
Monitors	HP L1955 19 inch flat panel, HP LP2065 20.1 inch flat panel, HP LP2465 24 inch flat panel
Warranty	Basic 3 years next business day, parts, labor, and 8x5 phone support; terms and conditions may vary, certain restrictions apply

i EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel 64-bit processor will not operate (including 32-bit operation) without a 64-bit enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information including details on which processors support Intel EM64T or consult with your system vendor for more information.

ii PTF preinstalled on HP xw6400 with Microsoft Windows XP Professional.

iii Hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux.

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For more information, visit www.hp.com/go/workstations

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