



HP xw6400 WORKSTATION

Mid-range dual processor/quad-core¹ and dual-core¹ workstation in a spacesaving, power-efficient package



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, quad-core¹ 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.

A choice of operating environment

The HP xw6400 is available with preinstalled genuine Windows® XP Professional (32- or 64-bit), as well as Windows Vista® Business (32- or 64-bit).

It also supports 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)² and HP Cool Tools help ease implementation and increase productivity.

We also offer 32-bit or 64-bit Red Hat Linux, either pre-installed or through our HP Installer Kit for Linux, which ensures you have all the tested drivers you need for the install.

Meet the challenges of a 64-bit world

The HP xw6400 delivers the new Quad-Core¹ Intel® Xeon® Processor 5300³ Sequence and Dual-Core¹ Intel Xeon Processor 5100³ Sequence for the high

performance and expandability you need in a midrange personal workstation. Intel's 5000X next-generation, high-end performance chipset for Intel Xeon processors supports 1,333 MHz dual system bus⁴, 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.

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.

HP xw6400 WORKSTATION

HP recommends Windows Vista® Business

Form factor	Rackable minitower	
Operating systems	Genuine Windows® XP Professional 32-bit Genuine Windows® XP Professional x64 Genuine Windows Vista® Business 32-bit Genuine Windows Vista® Business 64-bit Genuine Windows Vista® 32-bit downgrade to Genuine Microsoft® Windows® XP Professional 32-bit ⁵ Genuine Windows Vista® 64-bit downgrade to Genuine Microsoft® Windows® XP Professional x64 ⁵ Enterprise Linux™ WS 4 64-bit HP Installer Kit for Linux (includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux 3 and 4)	
Available processors	One or two Quad-Core ¹ Intel® Xeon® Processor 5300 ³ Sequence (8 MB total L2 cache) per processor (2 x 4 MB shared): 1.60 GHz ⁶ /1066 MHz FSB ⁴ , 1.86 GHz ⁶ /1066 MHz FSB ⁴ , 2.00 GHz ⁶ /1333 MHz FSB ⁴ , 2.33 GHz ⁶ /1333 MHz FSB ⁴	One or two Dual-Core ¹ Intel Xeon Processor 5100 ³ Sequence (4 MB shared L2 cache per processor): 1.60 GHz ⁶ /1066 MHz FSB ⁴ , 1.86 GHz ⁶ /1066 MHz FSB ⁴ , 2.00 GHz ⁶ /1333 MHz FSB ⁴ , 2.33 GHz ⁶ /1333 MHz FSB ⁴ , 2.66 GHz ⁶ /1333 MHz FSB ⁴ , 3.00 GHz ⁶ /1333 MHz FSB ⁴
Chipset	Intel 5000X	
Memory	Up to 16 GB of ECC registered 4-channel DDR2 667 MHz fully buffered DIMMs via 4 GB DIMMs in 4 DIMMs slots	
Drive controllers	Integrated quad channel SATA 3 Gb/s controller with RAID 0 or 1 ⁷ capability	
Hard drive(s)	Up to 3 SATA drives*, 2.25 TB max.; 80 GB ⁸ (7200 rpm) SATA 3 Gb/s, or 160, 250, 500, 750 GB ⁸ (7200 rpm) SATA 3 Gb/s NCQ; 80, 160 GB ⁸ (10K rpm) SATA 1.5 Gb/s NCQ; Up to 3* Serial Attached SCSI (SAS) drives**, 900 GB ⁸ max.; 146, 300 GB ⁸ (10K rpm) or 73, 146, 300 GB ⁸ (15K rpm)** *Two 3.5-inch drive bays standard, third drive requires one external 5.25-inch drive bay. **Optional SAS controller required.	
Optical drives	CD-ROM, DVD-ROM, SATA CD-RW/DVD combo, Dual-layer DVD+/-RW with LightScribe Direct Disc Labeling (Microsoft Windows only, requires LightScribe media for labeling) ⁹ , SATA DVD+/-RW SuperMulti with LightScribe Direct Disc Labeling (Microsoft Windows only, requires LightScribe media for labeling) ⁹	
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, dual display & up to 2 cards supported) NVIDIA Quadro NVS 440 (256 MB, quad display & up to 2 cards supported) Entry 3D: NVIDIA Quadro FX 560 (128 MB), ATI FireGL V3350 (256 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 4600 (768 MB)	
Audio	Integrated High Definition audio with Jack Retasking technology, opt. PCI Sound Blaster X-Fi XtremeMusic	
Network	Integrated Broadcom 5752 Gigabit ¹⁰ PCIe LAN on Motherboard, opt. Broadcom 5751 Gigabit ¹⁰ PCIe NIC	
Ports	Front: 2 USB 2.0, 1 IEEE 1394 (requires PCI card to enable functionality), 1 audio line out, 1 microphone line in 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 (requires optional "Internal USB Kit" for connecting USB device)	
Input devices	PS/2 Scroll Mouse; USB Optical Scroll Mouse; USB 3-Button Optical Mouse; USB SpaceMouse; USB SpaceBall; USB Space Pilot	
Dimensions (H x W x D)	17.3 in (44.1 cm) x 6.5 in (16.5 cm) x 17.3 in (44.1 cm)	
Power	575 watts, active Power Factor Correction, optional 80 PLUS power supply	
Monitors (diagonally measured)	HP LP1965 19-inch LCD Monitor, HP LP2065 20-inch LCD Monitor, HP LP2465 24-inch Widescreen LCD Monitor, HP LP3065 30-inch Widescreen LCD Monitor	
Warranty	Basic three years next business day, parts, labor, and 8x5 phone support; terms and conditions may vary, certain restrictions apply. Service levels and response times for HP Care Packs may vary depending on your geographic location. Restrictions and limitations apply. For details, visit www.hp.com/go/carepack .	

Certain Windows Vista product features require advanced or additional hardware. See <http://www.microsoft.com/windowsvista/getready/hardwarereqs.mspx> and <http://www.microsoft.com/windowsvista/getready/capable.mspx> for details. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit <http://www.windowsvista.com/upgradeadvisor>. All HP Personal Workstations are capable of running Genuine Windows Vista Business.

¹ Quad-Core and Dual-Core are new technologies designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; check with software provider to determine suitability; Not all customers or software applications will necessarily benefit from use of these technologies.

² PTF preinstalled on HP xw6400 with Microsoft Windows XP Professional.

³ Intel's numbering is not a measurement of higher performance.

⁴ Actual bus speed is less. Listed bus speed represents the equivalent effective throughput for data.

⁵ Available for end user customers that are a business (including governmental or educational institutions) who are expected to annually order at least 25 Customer Systems with the same Custom Image.

⁶ GHz refers to internal clock speed of the processor. Other factors besides clock speed may impact system and application performance.

⁷ 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.

⁸ 1 GB = 1 billion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software (XP and XP Pro). Up to 12 GB of system disk is reserved for system recovery software. (Vista).

⁹ Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copy-right protected materials. Intended for creation and storage of your original material and other lawful uses. Double Layer discs can store more data than single layer discs. However, double-layer discs burned with this drive may not be compatible with many existing single-layer DVD drives and players. LightScribe creates a monochrome image. LightScribe media required and sold separately.

¹⁰ The term 10/100/1000 or Gigabit Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

© Copyright 2007 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice and is provided "as is" without warranty of any kind. The warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Intel and Xeon are registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Linux is a U.S. registered trademark of Linus Torvalds. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. Windows Vista is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

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

4AA0-9121ENW, October 2007

