

HP xw4300 Workstation



HP recommends Microsoft® Windows® XP Professional

It's all about choice. Single or dual coreⁱ processor. Microsoft® Windows® or Red Hat Linux®. 32- or 64-bits. Professional 2D to High-end 3D graphics. The HP xw4300 Workstation delivers the performance that you need at the price you want.

An elegant combination of form and function, the HP xw4300 brings you ground-breaking technology in an award winning tool-less package. Offering great flexibility, with a single or dual core processor and a range of graphics, memory and storage choices, the HP xw4300 meets the computing demands of engineers, designers, scientists, and power users. ISV collaboration and application certification coupled with the future-proofing of 64-bit computing helps ensure a reliable, compatible, high performing workstation that can evolve with you and your business demands.

- **Get cutting-edge technology at a PC-like price:**

The Intel® 955X Express chipset enables fast, dual channel DDR2 667 MHz memory, PCI Express (PCIe) x16 graphics and includes an integrated 4-channel SATA 3 Gb/s controller with Native Command Queuing (NCQ) and RAID 0/1/5/10 capability. Choose to add a dual core Intel Pentium® D processor for multiprocessor capability or up to a 3.8 GHz single core Intel Pentium 4 processor with a 2 MB L2 cache.

- **Future-proof your business:** The HP xw4300 supports Extended Memory 64-bit Technology (EM64T), extending the address space to a maximum of 16 TB virtual memory, allowing the design and manipulation of huge data sets or models. An EM64T enabled workstation should provide leading performance for many 32-bit applications. Although not all 32-bit applications may run as normal when you decide to

change to a 64-bit operating system, many will, providing excellent flexibility. It is advised to pre-test your applications by visiting Microsoft's 64-bit 120 day free trial before you order EM64T (www.microsoft.com/windowsxp/64bit/evaluation/trial.mspx).

- **Significantly increase bandwidth with PCIe:** The next generation of I/O interface increases bandwidth to 1 GB/s (unidirectional peak) and 2 GB/s (full duplex peak) with the PCIe x4 slot or 250 MB/s (unidirectional peak) and 500 MB/s (full duplex peak) with the PCIe x1 slot. The PCIe x16 graphics card has 4x the bandwidth of its AGP predecessor. With a dedicated point-to-point interface, cards plugging into the interface are not sharing data bandwidth with other cards.
- **Expand your system with your needs:** Integrate numerous expansion options with the HP xw4300's 2 internal hard drives (up to 4 drives using the optical bays), up to 3 optical disks, optional floppy, 1 PCIe x16 graphics slot, 1 PCIe x1 slot, 1 PCIe x4 (x8 connector) slot, and 3 PCI slots.
- **Easily convert, access, and service your workstation:** The HP xw4300's versatile chassis allows a minitower or desktop configuration, and the award-winning, tool-less design makes it easy to upgrade and maintain.
- **Custom configure your workstation to your technical requirements:** HP Performance Tuning Framework, available on HP Workstations with Microsoft Windows, will guide your system setup, allowing a "custom" configuration that tightly matches the workstation-to-user requirements. This customization facilitates configuring and optimizing the latest graphics cards and drivers and removes some memory restraints. For more information, go to: ww.hp.com/go/framework

Single or dual core entry workstation



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Form factor	Convertible (deskside or desktop), rackable minitower
Preinstalled operating systems	Preinstalled Microsoft® Windows® XP Professional x64 Edition (64-bit) – workstation is WHQL certified, or preinstalled Microsoft Windows XP Professional SP2 (32-bit) – workstation is WHQL certified, or preinstalled Red Hat Enterprise Linux® (64-bit) or HP Installer Kit for Linux (includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux 3 & 4)
Processor	Intel® Pentium® 4 processor 521 ⁱⁱⁱ / 2.80 GHz, 1 MB, 800 MHz Front Side Bus (FSB), EM64T ⁱⁱ Intel Pentium 4 processor 630 ⁱⁱⁱ / 3.00 GHz, 2 MB, 800 MHz FSB, EM64T ⁱⁱ Intel Pentium 4 processor 640 ⁱⁱⁱ / 3.20 GHz, 2 MB, 800 MHz FSB, EM64T ⁱⁱ Intel Pentium 4 processor 650 ⁱⁱⁱ / 3.40 GHz, 2 MB, 800 MHz FSB, EM64T ⁱⁱ Intel Pentium 4 processor 660 ⁱⁱⁱ / 3.60 GHz, 2 MB, 800 MHz FSB, EM64T ⁱⁱ Intel Pentium 4 processor 670 ⁱⁱⁱ / 3.80 GHz, 2 MB, 800 MHz FSB, EM64T ⁱⁱ Dual core ⁱ Intel Pentium D processor 840 ⁱⁱⁱ / 3.2 GHz, 2 MB cache (1 MB per core), 800 MHz FSB, EM64T ⁱⁱ Only the single core Intel Pentium 4 processors in the above list support Hyper-Threading Technology ^{iv}
Chipset	Intel 955X Express (supports up to 1066 MHz FSB)
Memory	Up to 8 GB of DDR2 533 MHz ECC with 2 GB DIMM or DDR2 667 MHz ECC (4 GB max.) or DDR2 533 MHz non-ECC (1 GB max.)
Expansion bays	3 external 5.25 inch bays*, 1 external 3.5 inch bay, 2 internal 3.5 inch bays * Third external 5.25 inch bay is not full-depth
Drive controllers	Integrated 4 channel SATA 3 Gb/s controller with RAID ^v 0, 1, 5, 10 capability, optional Ultra320 SCSI controller/drives, opt. Ultra320 RAID controller
Hard drive(s)	Up to 4 SATA* drives, 2 TB max.**; 40 GB (7200 rpm) SATA 1.5 Gb/s or 80, 160, 250 GB (7200 rpm) SATA 3 Gb/s or 74 GB (10K rpm) SATA 1.5 Gb/s or 160, 500 GB (7200 rpm) SATA 3 Gb/s NCQ Up to 3 Ultra320* SCSI drives, 900 GB max.; 73, 146, 300 GB (10K rpm) or 36, 73 GB (15K rpm) * Using 2 external 5.25 inch drive bays for 4 SATA, one 5.25 inch drive bay for 3 SCSI **Conversion kit to enable 4th drive
Removable media	48X CD-ROM, 48X CD-RW, 16X DVD-ROM, 48X CD-RW/DVD combo, 16X DVD+/-RW with LightScribe Direct Disc Labeling (requires LightScribe media for labeling)
Expansion slots	6 slots; 1 PCIe x16 graphics slot, 1 PCIe x4 (x8 connector) slot, 1 PCIe x1 slot and 3 PCI slots
Graphics	Professional 2D: NVIDIA Quadro NVS 280 (PCI or PCIe), Quadro NVS 285 with NVIDIA TurboCache technology (PCIe) Entry 3D: ATI FireGL V3100 (PCIe), NVIDIA Quadro FX 540 (PCIe) Mid-range 3D: ATI FireGL V5100 (PCIe), NVIDIA Quadro FX 1400 (PCIe) High-end 3D: NVIDIA Quadro FX 3450 (PCIe), Quadro FX 4500 (PCIe) with opt. Quadro G-Sync card
Audio	Integrated Intel/Realtek HD audio, opt. SoundBlaster X-Fi XtremeMusic (PCI)
I/O ports and connectors	Front: Headphone, microphone, and 2 USB 2.0, 1 optional IEEE 1394A Rear: 6 USB, 1 standard serial port, 1 opt. serial port, 1 parallel port, PS/2 keyboard and mouse, 1 RJ-45, 3 audio ports - any port can act as an audio in or audio out/headphone or stereo microphone, 2 opt. IEEE 1394A
Communications	Integrated Broadcom Gigabit LoM (PCIe), opt. Intel Pro MT or Broadcom Gigabit NIC (PCI)
Power supply	460 watts
Software	HP Cool Tools provides easy access to a full set of manageability, security, and support features
Input devices	Easy access PS/2 or USB keyboard; choice of 2-button scroll mouse (optical or mechanical); or 3-button optical mouse; USB SpaceBall, USB SpacePilot
Dimensions (h x w x d)	17.7 inch (44.9 cm) x 6.7 inch (17.0 cm) x 18 inch (45.7 cm)
Weight	Minimum configuration: 15 kg (33 lbs); Maximum configuration: 18 kg (40 lbs)
Monitors	HP L1755 17 inch flat panel, HP L1955 19 inch flat panel, HP L2035 20.1 inch flat panel, HP L2335 23 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 Not all customers or software applications will benefit from the use of a dual core processor. Compatible software including compatible operating system software, may be required to obtain the full benefit of this technology

ii Intel EM64T requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-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.

iii Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See www.intel.com/products/processor_number/ for details.

iv Hyper-Threading (HT) Technology requires a computer system with an Intel Pentium processor supporting HT Technology and an HT Technology enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading/> for more information including details on which processors support HT Technology

v 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.

Screen image courtesy of UGS.

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