

HP xw9300 Workstation

HP recommends genuine Windows® XP Professional.



Ultimate performance and expandability with AMD64.
Meet your extreme computational, visualization, and performance needs while lowering TCO.

Engineered in close collaboration with hardware and software partners the HP xw9300 Workstation delivers the ultimate 64-bit personal workstation performance and visualization for compute-intensive environments. Supporting dual PCI Express x16 graphics and up to 2 single or dual-coreⁱ AMD Opteron™ processors, the HP xw9300 meets the combined needs for computational and visualization power and I/O performance while helping to lower total cost of ownership. The HP xw9300 is ideal for scientists, engineers, designers and digital artists who have extremely complex analyses and/or advanced visualization requirements.

Implement a high-performance, power efficient architecture with complete software compatibility

The HP xw9300 Workstation is based on AMD Opteron 200 series processors delivering high-performance dual processing, with up to 4 processor cores of performance and complete Intel compatibility. AMD64ⁱⁱ extends the address space to a maximum of 16 TB virtual memory and allows the design and manipulation of huge data sets or models.

Get superior computing performance through Direct Connect Architecture

With the AMD Direct Connect Architecture, the HP xw9300's memory and I/O are connected directly to the CPU optimizing performance, helping to balance

throughput and enable expandable I/O.

Receive unmatched workstation visualization capability

The HP xw9300 has two x16 PCI Express (PCIe) ports supporting dual, high-end graphics and SLI for NVIDIA Quadro enablement. Enabling up to 4 full-performance, 3D displays, the HP xw9300 provides cost-effective, scalable visualization capability for demanding high-performance graphics solutions such as parallel rendering or compositing.

Handle very large and complex data sets

The HP xw9300 Workstation supports up to 32 GB of system memory. That, combined with the highest levels of expandability available in a workstation, allows users to solve the toughest of problems.

Access the latest technology

The HP xw9300 is first workstation available based on NVIDIA's nForce Professional chipset supporting dual PCIe x16 graphics and 4 Serial ATA 3 Gb/s disk interface channels facilitating exceptional performance and excellent expandability.



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Specifications

Form factor	Rackable minitower
Operating systems	Preinstalled Microsoft® Windows® XP Professional x64 Edition (64-bit) - workstation is WHQL certified, or preinstalled Microsoft Windows XP Professional (32-bit) - workstation is WHQL certified, or Red Hat Enterprise Linux® WS 3 Update 5 (64-bit only), or HP Installer Kit for Linux (includes drivers for the 64-bit OS version)
Available processors	Single or dual AMD Opteron™ 200 series processors 246 (2.00 GHz), 248 (2.20 GHz), 250 (2.40 GHz), 252 (2.60 GHz), 254 (2.80 GHz), 256 (3.00 GHz); dual-core ⁱ processors 270 (2.00 GHz), 275 (2.20 GHz), 280 (2.40 GHz), 285 (2.60 GHz) with AMD64 Technology ⁱⁱ & 1.00 GHz AMD HyperTransport™ technology
Chipset	NVIDIA nForce Professional with AMD-8131 HyperTransport PCI-X tunnel
Memory	Up to 32 GB of ECC registered DDR1 400 MHz SDRAM in 8 DIMM slots, up to 12.8 GB/sec throughput
Drive controllers	Integrated SATA 3 Gb/s controller (4 channels) with RAID 0, 1, 0+1 capability ⁱⁱⁱ ; Integrated dual channel Ultra320 SCSI controller with opt. external connector; Opt. Ultra 320 SCSI controller – basic; Opt. Ultra 320 SCSI controller – advanced with RAID 0, 1, 10, 5, 50, JBOD capability ⁱⁱⁱ
Hard drive(s)	Up to 4 SATA drives, 2 TB max.; 74 GB (10K rpm) SATA 1.5 Gb/s or 80, 250 GB (7200 rpm) SATA 3 Gb/s, 500 GB SATA 3 Gb/s NCQ; or 73, 146, 300 GB (10K rpm) Ultra320 SCSI or 36, 73 or 146 GB (15K rpm) Ultra320 SCSI
Optical drives	48X CD-ROM, 48X CD-RW, 16X DVD-ROM, 48X CD-RW/DVD combo, 16X DVD+/- RW DL with LightScribe Direct Disc Labeling (Microsoft Windows 2000 & XP only, requires LightScribe media for labeling)
Drive bays	3 external 5.25 inch bays (opt. StorCase enclosure enables 3.5 inch SATA drive to be added to 5.25 inch bay), 5 internal 3.5 inch bays
Slots	6 slots: 2 PCI Express (PCIe) x16 graphics and I/O; 3 full-height PCI-X slots (one 133 MHz, two 100 MHz slots); 1 full-length PCI slot
Graphics	Professional 2D: NVIDIA Quadro NVS 285 with NVIDIA TurboCache Technology (PCIe) Entry 3D: NVIDIA Quadro FX 540 Mid-range 3D: NVIDIA Quadro FX 1400; NVIDIA SLI Technology capable High-end 3D: NVIDIA Quadro FX 3450, NVIDIA Quadro FX 4500 with opt. Quadro G-Sync card; NVIDIA SLI Technology capable
Audio	Integrated AC'97/16-bit stereo full-duplex, opt. SoundBlaster X-Fi XtremeMusic (PCI), opt. Sound Blaster Audigy 2 ZS (PCI)
Network	Integrated NVIDIA Gigabit LAN-On-Motherboard, opt. Broadcom 5751 Gigabit PCIe NIC, opt. Intel Pro GT/1000 NIC (PCI)
Ports	Front: 2 USB 2.0, Headphone, Microphone, IEEE 1394 Back: 4 USB 2.0, 1 standard serial port, IEEE 1394, PS/2 keyboard and mouse, 1 RJ-45 to integrated Gigabit LAN, Audio In, Audio Out, Mic In
Input devices	USB or PS/2 keyboard; choice of 2-button scroll mouse (optical or mechanical); USB 3-button mouse (optical); USB SpaceBall, USB SpacePilot
Dimensions (H x W x D)	17.9 inch (45.5 cm) x 8.3 inch (21.0 cm) x 20.7 inch (52.5 cm)
Power	700 watts
Monitors	HP L1755 17 inch flat panel, HP L1955 19 inch flat panel, HP L2065 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 An AMD64-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 switch to a 64-bit processor with a 64-bit operating system. (www.microsoft.com/windowsxp/64bit/evaluation/trial.mspx). AMD64 requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for a 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. It is advised you pre-test your applications with Microsoft's 64-bit 120 day free trial before you order AMD64 (www.microsoft.com/windowsxp/64bit/evaluation/trial.mspx).

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/workstations

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