

Dell Precision™ M90 Mobile Workstation



The Dell Precision M90 mobile workstation can help graphic artists, animators and high-end CAD users maximize productivity through new levels of workstation performance.

Exceptional Engineering Design, Analysis and Content Creation

Develop richly textured, realistic CAD models, view large designs and multi-part assemblies or create stunning 3D animations on a tightly integrated machine that boasts ultra-high performance graphics, a bright 17" display and high speed DDR2 memory. From the design lab to the studio or shop floor, or anywhere in between, the Dell Precision M90 provides superior workstation performance in a true mobile platform to enable you to run complex applications reliably.

New Workstation Technologies Deliver Great Performance

Expand your creative potential with new 64-bit Intel® Core™2 Duo processors, based on the same revolutionary Intel® Core™ microarchitecture available today in Dell Precision 390, 490 and 690 workstations. Intel Core microarchitecture provides wider pipelines, deeper memory buffers and faster instruction processing than previous Intel mobile microarchitectures. These and other features help enable Intel Core 2 Duo processors to deliver increased processor performance – up to 30% performance gain in compute performance¹ — at the same price points as Intel Core Duo processors.

A key advantage of 64-bit computing through a 64-bit capable processor and operating system for the mobile workstation user is access to more memory. While Dell Precision mobile workstations support up to a maximum of 4GB of physical memory, 64-bit computing permits you to work with large models and data sets in virtual memory today, and prepares you to run 64-bit software applications as they become available.

The M90 also features blazing NVIDIA Quadro® FX OpenGL graphics including the new Quadro FX 3500M, engineered to deliver unprecedented performance for accelerated workflow and shortened design cycles for CAD, digital content creation, and scientific visualization. Plus, you'll gain secure notebook mobility and reassurance from a comprehensive suite of certifications.

Dell Precision mobile workstations, like all Dell portables, are built tough – with features like Mag-Alloy casings and a high degree of durability that you can rely on, day in and day out. In addition, the Dell Precision M90 features a high degree of connectivity through Wi-Fi® and Bluetooth® options and broadband capability² to help ensure that you can get connected when you need to. Ironclad security features help ensure you can work with peace-of-mind.

Work with Confidence

Dell partners with leading Independent Software Vendors (ISVs) to certify system and application compatibility so that your applications can run gracefully on Dell Precision workstations. Through rigorous testing, Dell also targets flawless compatibility and optimized performance in demanding work environments such as computer aided design and engineering, digital content creation and urban planning, which helps make the M90 a viable platform for use as a primary workstation.



Dell Precision™ M90 Mobile Workstation Image courtesy of Softimage Co. and Avid Technology Inc., model provided by Acony Games.

GET MORE PERFORMANCE AND FLEXIBILITY. GET MORE OUT OF NOW.

www.dell.com/workstations



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FEATURES Dell Precision™ M90 Mobile Workstation

SYSTEM

Processors	64-bit Intel® Core™2 Duo processors (dual-core) Up to 4MB L2 Cache, 667MHz Front Side Bus Up to T7600 (2.33GHz speed)
Operating Systems	Genuine Windows® XP Pro SP2 Genuine Windows® XP Professional x64 Edition Windows Vista™ capable ³
Chipset	Intel® 945PM Express chipset
Memory	Up to 4GB ⁴ of 533MHz or 667MHz DDR2 dual-channel ⁵ memory
Wide Aspect Displays	17" wide aspect ratio displays (anti-glare) - Dell UltraSharp™ WUXGA (1920 X 1200 resolution) - WXGA+ (1440 X 900 resolution)
OpenGL Graphics	New NVIDIA Quadro® FX 3500M with 512MB dedicated graphics memory NVIDIA Quadro® FX 2500M with 512MB dedicated graphics memory NVIDIA Quadro® FX 1500M with 256MB dedicated graphics memory
Hard Drives	Serial ATA up to 120GB ⁶ at 5400 RPM or 100GB ⁶ at 7200 RPM
Dimensions (HxWxD)	1.6" x 15.5" x 11.3" or 41 mm x 394 mm x 288 mm
Weight	8.6 lbs (3.9 kg) starting weight ⁷ with 9-cell battery, 17" WXGA+ display and CD-Rom drive

POWER

Power Supply	130 Watt AC adapter with cord wrapping
Batteries	9-cell/85 WHr Smart Li-Ion battery featuring ExpressCharge™

CONNECTIVITY

Wired	56K ⁸ v.92 Internal Modem; 10/100/1000 ⁹ Gigabit Ethernet network interface adaptor
Wireless Broadband	Dell Wireless 5700 Mobile Broadband CDMA (Verizon) via Express Card slot
Wireless LAN	Dell Wireless 1390 802.11g Mini-card Dell Wireless 1490 802.11a/g Dual band Mini-card Intel® 3945 802.11a/g Dual band Mini-card
Bluetooth	Dell Wireless 350 Bluetooth®

EXPANDABILITY

ExpressCard	54mm Express Card Slot; supports both 54mm and 34mm Express Cards
Card Reader	5-in-1 media memory card reader
I/O Ports	S-video, 1394, docking connector, 6 USB 2.0, DVI, VGA, headphone/speaker out, Mic in, RJ-11, RJ-45, AC power
Docking	D/Port, D/Dock, D/Monitor Stand
Modular Options	24X CD-ROM, 24X CD-RW/DVD, 8X DVD+/-RW ¹⁰
USB Memory Keys	Up to 2GB USB Memory Keys ¹¹ (optional)

SECURITY

Physical Security	Cable Lock Slots, Media Module and Hard Drive locks
User & System Security	Integrated Smart Card Reader, Trusted Platform Module 1.2 and optional external finger print reader. Dell Embassy® Trust Suite by Wave Systems security software.
Network Security	802.11 WiFi Protected Access (WPA), 802.11i (WPA2), Virtual Private Networks (VPN) and 802.1x with EAP modes, CCX V4.0

MANAGEABILITY

Dell OpenManage™	Helps reduce the total cost of ownership by enabling IT departments to manage and support networked systems. OpenManage enables software deployment and migration, hardware configuration and system health, asset management and remote support. For more information visit: www.dell.com/openmanage
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SERVICE & SUPPORT

Service & Support	3-year Limited Warranty ¹² with Next Business Day On-Site Service ¹³ Service options vary by location.
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1 Up to 30% performance gain in compute performance based on Spec2000 Integer Base benchmark tests performed by Dell Labs in August 2006 on the Dell Precision M90 with Intel® Core™2 Duo T7400 and T7600 processors as compared to the Dell Precision M90 with Intel Core Duo T2600 and T2700 processors. All systems had 2GB DDR2 memory, NVIDIA Quadro FX 2500M OpenGL graphics, 100GB SATA 5400 RPM hard drive and Microsoft Windows XP Pro SP2. Actual performance will vary based on configuration, usage and manufacturing variability. 2 You must be a Cingular subscriber. Actual connectivity is subject to wireless service provider's coverage area and may be affected by equipment, topography, signal strength, environmental considerations, and other factors. Service may vary significantly within buildings. Dell does not guarantee coverage. 3 Based on currently available information from Microsoft. Requirements subject to change. Windows Vista has not been tested on all user configurations, and may not be compatible with some hardware devices and other software. Dell systems must be configured with a minimum of 512MB system memory (RAM) for "Windows Vista Capable" designation. Systems which meet only minimum requirements for the "Windows Vista Capable" designation will not provide the full benefits of "Premium Ready," including the Aero interface. Some Dell systems may not meet the requirements for "Premium Ready," no matter the configuration. Aero and other premium benefits not available with Windows Vista Home Basic. Please visit www.windowsvista.com/getready for more information. 4 The total amount of available memory will be less than 4GB. The amount less depends on the actual system configuration. To fully utilize 4GB or more of memory requires a 64-bit enabled processor and 64-bit OS. 5 Dual-channel memory requires 2 each of the same capacity memory DIMMs. 6 For hard drives, 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less. 7 Starting weight of 8.6 lbs (3.9 kg) includes 17" WXGA+ display, 9-cell battery and CD-Rom drive. Weights vary depending on configurations and manufacturing variability. 8 Modem download speeds are limited to 53Kbps. Upload speeds are less (about 30Kbps). Speeds can vary by line condition and modem manufacturer. Analog phone line and service required. 9 This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required. 10 Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility. 11 For writeable storage devices, MB means 1 million bytes; total accessible capacity varies depending on operating environment. 12 Dell Limited Warranties: For a complete copy of our guarantees and limited warranties, please write Dell U.S.A. L.P., Attention: Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit www.dell.com/warranty 13 Service may be provided by third-party. Technician will be dispatched if necessary following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.

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