

# Dell Precision™ M4300 Mobile Workstation



The Dell Precision M4300 mobile workstation is designed to provide engineers, video editors, architects and other active workstation professionals with the ideal balance of performance, reliability and secure, convenient mobility.

## Exceptional Engineering Design, Analysis and Content Creation

Design and create better than ever on a tightly integrated machine that is capable and reliable on and off the road. Collaborate on site, design from remote locations or work anywhere in between. The Dell Precision M4300 mobile workstation blends the power and features of a workstation with the versatility of a notebook to enable you to run complex applications reliably.

## Workstation Technologies Deliver Great Performance

Expand your creative potential with 64-bit Intel® Core™2 Duo processors, based on the same revolutionary Intel® Core™ micro architecture available today in Dell Precision 390, 490 and 690 workstations. Intel Core micro architecture is designed to provide wider pipelines, deeper memory buffers and faster instruction processing than previous Intel mobile micro architectures. These and other features help enable Intel Core 2 Duo processors to deliver excellent processor performance. The Dell Precision M4300 helps you power through complex tasks and complete projects fast.

- Ultimate performance and realistic effects for all next-generation OpenGL and Microsoft DirectX 10 industry-leading professional applications: Expected to provide an average of up to 110% improvement in graphics intensive applications.<sup>11</sup>
- Native NVIDIA® OpenGL ICD drivers are optimized for 32- and 64-bit architectures to enable an excellent Windows and Linux experience
- 800MHz Front Side Bus: Nearly 20% improvement in bus bandwidth helps improve performance of CPU intensive applications
- Draft 802.11n: Provides up to 5x the speed and 2x the range of 802.11g networks when used with a 5GHz Wireless-N router (with Intel Wireless-N card, customer must use the Intel Wireless-N card with a 5GHz Wireless-N router; with a 2.4GHz Wireless-N router, speed will be less) .<sup>12</sup>
- Intel® Turbo Memory: Non-volatile flash memory transparently works to cache frequently used code to help speed up boot time, application loading and can also increase battery life by reducing the need to spin up the hard drive to write data.
- Enhanced LCD Brightness: Dell TrueLife™ technology offers high contrast ratios which allow for easy viewing in bright ambient environments such as outdoors, helping users work wherever they may be.

## Work with Confidence

Dell Precision mobile workstations 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 M4300 features a high degree of connectivity with your choice of integrated mobile broadband cards<sup>8</sup>, as well as Dell's Wi-Fi Catcher™ so you can get connected when you need to. Long battery life, optional dual batteries, and ironclad security help ensure you can work with peace of mind.

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 Dell Precision M4300 a viable platform for use as a primary workstation.



Image courtesy of SolidWorks®

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



[www.dell.com/workstations](http://www.dell.com/workstations)

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## SYSTEM

<b>Processors</b>	64-bit Intel® Core™2 Duo processors (dual-core) Up to 4MB L2 Cache, 800MHz Front Side Bus Up to T7700 (2.40 GHz speed)
<b>Operating Systems</b>	Dell recommends Genuine Windows Vista™ Ultimate; Genuine Windows Vista™ Business Genuine Windows® XP Professional
<b>Chipset</b>	Intel® 965PM Express chipset
<b>Memory</b>	Up to 4GB <sup>2</sup> of DDR2 dual-channel <sup>3</sup> memory DIMMs up to 2GB at 667MHz
<b>Wide Aspect Displays</b>	15.4" wide aspect ratio displays Dell UltraSharp™ WUXGA (1920x1200 resolution) Dell UltraSharp™ WSXGA+ (1680x1050 resolution) with TrueLife™ display. WXGA (1280x800 resolution)
<b>OpenGL Graphics</b>	NVIDIA Quadro® FX 360M 512MB TurboCache <sup>4</sup> (256MB dedicated, up to an additional 256MB shared)
<b>Hard Drives</b>	Primary: Serial ATA up to 160GB <sup>5</sup> at 5400 RPM or 200GB <sup>5</sup> at 7200 RPM Secondary: Parallel ATA, 80GB <sup>5</sup> at 5400 RPM
<b>Dimensions (HxWxD)</b>	1.39" x 14.2" x 10.34"; 35.3 mm x 361 mm x 262.6 mm
<b>Weight</b>	Starting weight of 6.3 lbs or 2.9 kg <sup>2</sup> with 15.4" WXGA display and 6-cell battery, CD-ROM

## POWER

<b>Power Supply</b>	90 Watt AC adapter with cord wrapping Primary: 9-cell/ 85 WHr Smart Li-Ion battery Primary: 6-cell/ 53 WHr Smart Li-Ion battery Secondary: 6-cell/48 WHr optional battery
<b>Batteries</b>	All batteries feature ExpressCharge™

## CONNECTIVITY

<b>Wired</b>	56K <sup>6</sup> v.92 Internal Modem; 10/100/1000 Gigabit <sup>7</sup> Ethernet network interface adaptor
<b>Wireless Broadband</b>	Dell Wireless 5520 HSDPA Mini-Card (AT&T US) <sup>8</sup> Dell Wireless 5720 EVDO Rev A (Verizon US) <sup>8</sup> Dell Wireless 5720 EVDO Rev A (Sprint US) <sup>8</sup> Dell Wireless 5720 EVDO Rev A (Telus Canada) <sup>8</sup>
<b>Wireless LAN</b>	Via internal mini-card or Express Card Dell Wireless 1390 802.11g Mini-card Dell Wireless 1490 802.11a/g Dual band Mini-card Dell Wireless 1505 802.11 a/g/Draft-n Intel® Pro/Wireless 4965 WiFi 802.11 a/g/Draft-n Intel® Pro/Wireless 3945 WiFi 802.11 a/g
<b>Bluetooth</b>	Dell Wireless 360 Bluetooth® 2.0 (upgradeable to Bluetooth 2.1+EDR)

## EXPANDABILITY

<b>ExpressCard</b>	54mm Express Card Slot; supports both 54mm and 34mm Express Cards
<b>PC Card</b>	One Type I or Type II
<b>I/O Ports</b>	S-video, Serial, 1394, docking connector, 3 USB, powered USB (D/Bay), VGA, headphone/speaker out, infrared port, RJ-11, RJ-45, AC power
<b>Docking</b>	D/Port, D/Dock, D/View Notebook Stand, D/Monitor Stand
<b>Modular Options</b>	24X CD-ROM, 24X CD-RW/DVD, 8X DVD+/-RW <sup>9</sup> , 8X DVD-ROM <sup>10</sup> , Floppy Disk Drive, Secondary 6-cell/48 WHr smart Li-Polymer battery, 2nd 80GB <sup>7</sup> hard drive, or TravelLite module (No Optical)

## SECURITY

<b>Physical Security</b>	Steel-reinforced Cable Lock Slot, Media Module and Hard Drive locks
<b>User &amp; System Security</b>	Integrated Smart Card Reader, Trusted Platform Module 1.2 and optional UPEK® finger print reader. Dell Wave® Embassy® Trust security software.
<b>Network Security</b>	802.11 WiFi Protected Access (WPA), 802.11i (WPA2), Virtual Private Networks (VPN) and 802.1x with EAP modes, CCX V4.0

## MANAGEABILITY

<b>Dell OpenManage™</b>	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: <a href="http://www.dell.com/openmanage">www.dell.com/openmanage</a>
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## SERVICE & SUPPORT

<b>Service &amp; Support</b>	3-year Limited Warranty <sup>13</sup> with Next Business Day On-Site Service <sup>14</sup> . Service options vary by location.
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\*Windows Vista has not been tested on all user configurations, and drivers may not be available for some hardware devices and software applications. Check [www.support.dell.com](http://www.support.dell.com) for latest driver availability. Some OS features - like the Aero interface - are only available in premium editions of Windows Vista and may require advanced hardware. Check [www.windowsvista.com](http://www.windowsvista.com) for details.

1 Starting weight of 6.3 lbs (2.9 kg) for the M4300 includes 15.4" WXGA display, 6-cell battery and CD-ROM. Weights vary depending on configurations and manufacturing variability. 2 The total amount of available memory will be less than 4GB. The amount less depends on the actual system configuration. 3 Dual-channel memory requires 2 each of the same capacity memory DIMMs. 4 NVIDIA Quadro FX 360M 512MB TurboCache: The total of local and shared system memory used by this graphics card is up to 512MB. Local on-board memory is 256MB. Up to 256MB of system memory may be allocated to support graphics, depending on system memory size and other factors. The total of local and shared system memory used by this graphics card is up to 512MB. 5 For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less. With Dell Factory Image Restore installed, Windows Vista users will have 10GB of their hard drive capacity set aside for a recovery image. 6 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. 7 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. 8 You must be a Verizon Wireless, Sprint, or 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. 9 Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility. 10 DVD-ROM drives may have write-capable hardware that has been disabled via firmware modifications. 11 Based on the Viewperf 9.0 benchmark test performed by Dell Labs March 2007 on a M4300 configured with a 2.4GHz Intel Core 2 Duo T7700, 2GB 667MHz DDR, 120GB SATA 5400RPM, and NVIDIA Quadro FX360M compared to a similarly configured M65 with a 2.33GHz Intel Core 2 Duo T7600. Actual performance will vary based on configuration, usage and manufacturing variability. 12 Speed claim for comparative purposes only. Actual speed varies with environment, equipment and other factors and will be less, while range may vary due to number of users, interference, transmission barriers (such as walls and building material), and other factors. Intel Wireless-N card: To achieve up to 5x the speed and twice the range of 802.11g, customer must use the Intel Wireless-N card with a 5GHz Wireless-N router, with a 2.4GHz Wireless-N router, speed will be less. Based on Intel testing using Chariot network testing tools in November 2006 on a notebook with an Intel 4965 Wireless-N card. Dell Wireless-N card: Tests were conducted by a third party testing company commissioned by Dell in June 2006 comparing the Dell Wireless 1500 Draft 802.11n and the Intel 3945 802.11a/g internal wireless cards in a Dell XPS M1210 notebook. 13 Dell Limited Warranties: For a copy of our guarantees or limited warranties, please write Dell USA L.P., Attn: "Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit [www.dell.com/warranty](http://www.dell.com/warranty). 14 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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