



# Dell Precision R5500

## Dell Precision Workstations

Precision is the key element that separates greatness from everything else. Dell Precision is your key tool whether your job requires you to design digital content, work with CAD models, analyze manufacturing processes or any other performance intensive application. Our workstation-class products offer voracious productivity, ISV certification, rock solid dependability, and harmonious manageability to maximize your productivity and reliability.

## Why a rack? Because your work demands it.

When the job calls for more security and flexibility than a standard tower or mobile workstation can provide, the Dell Precision R5500 rack workstation delivers.

- For organizations where security is top priority, you need more than a lock and key. The Dell Precision R5500 can help safely house your intellectual property by keeping it contained in the data center.
- Does your work involve inhospitable, hazardous or extremely remote environments? The Dell Precision R5500 can provide workstation-class performance remotely while your employees stay productive and comfortable at their own workspaces using the Dell FX100 Remote Access Device.
- For end users who work in space-constrained areas or temperature- or noise-sensitive environments, the FX100 Remote Access Device is small, cool and quiet.
- By providing remote 1:1 access to your Dell Precision R5500 from virtually anywhere, the FX100 Remote Access Device can also help to boost productivity among offsite contractors, rotating workforces and geographically diverse employees.<sup>1</sup>

## Work powerfully from virtually anywhere.

The Dell FX100 Remote Access Device is designed to give your workforce seamless remote access to the Dell Precision R5500 rack workstation. Using PC-over-IP® hardware-based compression technology, from Teradici™, this compact, quiet device can deliver the responsiveness of a traditional desktop workstation solution, but can be accessed from almost anywhere.

- PC-over-IP hardware-based compression transfers only the rendered graphics pixel data over the network, ensuring a fast and responsive user experience.
- A dedicated half-height PCIe slot for a PC-over-IP remote host card enables you to save precious PCIe slots for other needs.
- Coming soon quad monitor support via dual FX100 devices allows you to vastly expand your visual real estate (quad monitor support only available on select configurations).
- For situations when you need access via a soft client, the Dell Precision R5500 also offers VMware® View™ support.

## Get true workstation performance, minus the workstation.

Never compromise your productivity. Dell Precision R5500 offers true workstation-class components, giving you the tireless performance you need to get the job done. Technology features include:

- Powerful Intel® Xeon® processor options with up to six cores to help boost your work output
- Top-level performance with optional dual graphics cards or, coming soon dual GPGPU cards and up to 450W of available graphics power
- Superb flexibility with options for up to five standard, full-length, full-height PCIe x16 cards
- Up to 192GB<sup>2</sup> of system memory, enabling high productivity on even the largest data sets
- Up to five SATA drives and up to six SAS drives to provide ample storage capacity for your large projects
- ISV (independent software vendor) certification<sup>3</sup> on the applications that matter most to you, helping to ensure that you can deliver mission-critical projects without delay
- Optional dual redundant power supplies to help keep you up and running
- The Dell Precision R5500 is a robust and flexible platform for High Performance Compute Clusters (HPCC)

## Get service and support beyond your expectations.

Exceptional work requires exceptional hardware. While your Dell Precision R5500 is designed for peak performance from day one, Dell's advanced service and support options can help you get up and running quickly and reduce downtime in the event of an unexpected issue.

- Optional Custom Factory Integration (CFI) incorporates hardware, images, applications, peripherals and documents with your system as it's being built to help simplify and accelerate deployment while improving hardware consistency and compatibility.
- Choose Dell's premium support service, ProSupport<sup>4</sup>, for 24/7 direct telephone access to advanced-level technicians based in your region.
- ProSupport's Collaborative Support feature provides assistance even if you have a problem with non-Dell hardware or software. We will leverage our relationships with over 75 top third-party vendors to act as your single point of contact to help resolve your issue.

Dell Precision R5500 Rack Workstation Technical Specifications																												
Processors	Up to 130W, quad-core or six-core, one or two Intel® Xeon® 5600 series processors																											
Operating System	<ul style="list-style-type: none"> <li>• Genuine Windows® 7 Ultimate (32-Bit or 64-Bit)</li> <li>• Genuine Windows® 7 Professional (32-Bit or 64-Bit)</li> <li>• Genuine Windows Vista® Ultimate (32-Bit or 64-bit)</li> <li>• Genuine Windows Vista® Business (32-Bit or 64-bit)</li> <li>• Red Hat® Enterprise Linux® version 6</li> </ul>																											
Chipset	Intel 5520																											
Memory <sup>5</sup>	Up to 192GB <sup>2</sup> of 1066MHz or 96GB <sup>2</sup> of 1333MHz ECC Registered DIMM memory (maximum memory requires dual processors installed and Red Hat Enterprise Linux or Windows 7 64-bit). Three-channel memory architecture. 6 DIMM slots available per processor for a maximum of 12 DIMM slots for dual processor configurations. The 2nd processor has an integrated memory controller, which provides an additional 3 channels of memory bandwidth																											
Graphics <sup>6</sup>	One or two PCI Express® x16 Gen 2 discrete graphics cards supporting 450W maximum combined power. <table border="0"> <tr> <td><b>High End 3D</b></td> <td><b>Mid-range 3D</b></td> <td><b>Entry 3D</b></td> <td><b>Professional 2D</b> (not certified)</td> </tr> <tr> <td>NVIDIA® Quadro® 6000</td> <td>NVIDIA Quadro 4000</td> <td>NVIDIA Quadro 600</td> <td>NVIDIA Quadro NVS 300</td> </tr> <tr> <td>NVIDIA Quadro 5000</td> <td>NVIDIA Quadro 2000</td> <td></td> <td>NVIDIA Quadro NVS 295</td> </tr> </table>	<b>High End 3D</b>	<b>Mid-range 3D</b>	<b>Entry 3D</b>	<b>Professional 2D</b> (not certified)	NVIDIA® Quadro® 6000	NVIDIA Quadro 4000	NVIDIA Quadro 600	NVIDIA Quadro NVS 300	NVIDIA Quadro 5000	NVIDIA Quadro 2000		NVIDIA Quadro NVS 295															
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GPU	NVIDIA Tesla C2050; Coming soon: up to two NVIDIA Tesla C2075 (Computing Processor for High-Performance Computing)																											
Hard Drives <sup>7</sup>	Up to five 2.5" SATA hard drives: <ul style="list-style-type: none"> <li>• 250GB, 500GB or 1TB SATA 3.0Gbit/s 7200 RPM</li> </ul> Up to six 2.5" SAS hard drives: <ul style="list-style-type: none"> <li>• 600GB or 900GB SAS 10k RPM</li> <li>• 146GB SAS 15k RPM</li> </ul>																											
Hard Drive Controller	Integrated SATA 3Gb/s controller that supports host-based (software) RAID 0, 1, 5, 10 (Windows only) Optional SAS 6ir PCIe controller card that supports host-based (software) RAID 0, 1 Optional SATA / SAS Perc 6i PCIe controller card that supports hardware RAID 0, 1, 5, 10																											
Communications	Integrated dual Broadcom® BCM5761 10/100/1000 Gigabit Ethernet controllers Optional PCoIP remote access host card to connect to Dell FX100 remote access device or VMware View client Optional Mellanox ConnectX-2 adapter with Virtual Protocol Interconnect (VPI) supporting InfiniBand™ & 10GbE Ethernet <sup>8</sup>																											
Audio	Integrated Analog Devices ADI1984A																											
Standard Ports	<table border="0"> <thead> <tr> <th>Rear</th> <th>Front</th> <th>Internal</th> </tr> </thead> <tbody> <tr> <td>4 - USB 2.0</td> <td>2 - USB 2.0</td> <td>1 - USB 2.0</td> </tr> <tr> <td>1 - Serial</td> <td>1 - System ID Button</td> <td></td> </tr> <tr> <td>1 - Audio in</td> <td>1 - System ID LED</td> <td></td> </tr> <tr> <td>1 - Audio out</td> <td>1 - HDD LED</td> <td></td> </tr> <tr> <td>2 - RJ-45</td> <td>1 - LAN LED</td> <td></td> </tr> <tr> <td>1 - System ID Button</td> <td>4 - Diagnostic LED</td> <td></td> </tr> <tr> <td>1 - System ID LED</td> <td></td> <td></td> </tr> <tr> <td>1 - CMA remote LED connector</td> <td></td> <td></td> </tr> </tbody> </table>	Rear	Front	Internal	4 - USB 2.0	2 - USB 2.0	1 - USB 2.0	1 - Serial	1 - System ID Button		1 - Audio in	1 - System ID LED		1 - Audio out	1 - HDD LED		2 - RJ-45	1 - LAN LED		1 - System ID Button	4 - Diagnostic LED		1 - System ID LED			1 - CMA remote LED connector		
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2U Rack Chassis	<b>Dimensions (HxWxD):</b> 3.40" x 17.35" x 29.67" (31.21" w/ bezel); 86.3mm x 440.6mm x 753.6mm (792.7mm w/ bezel) <b>Bays:</b> Six external 2.5" bays; one external 5.25" slimline optical drive bay <b>Slots:</b> Five full-length, full-height slots; one PCIe x8 (wired x4) half-height, half-length slot <ul style="list-style-type: none"> <li>• Outer riser: two PCIe x16 (one double wide), one PCIe x16 (wired x8)</li> <li>• Center riser: choose one of the following options:  — one PCIe x16, one PCIe x16 (wired x8), (default riser option)  — one PCIe x16, one legacy 32-bit PCI</li> </ul> <b>Power Supply:</b> One or two, redundant, hot-pluggable, 1100W, 90% efficient																											
Monitors	Performance flat-panel displays, Dell UltraSharp™ widescreen and standard flat-panel displays from 17" viewable to 30" viewable																											
Keyboard	Dell Enhanced Quietkey™ USB; Enhanced Multimedia USB; Smart Card keyboard USB																											
Mouse	Dell USB two-button mouse and Dell USB optical two-button scroll mouse																											
Optional Speakers	Dell two- and three-piece stereo system; Dell sound bar for select flat-panel displays																											
Optical Drive Options	Tray load: DVD-ROM; DVD+/-RW; Blu-ray																											
Security	Trusted Platform Module 1.2 (TPM 1.2); Chassis intrusion switch, Setup/BIOS Password; I/O Interface Security; Front bezel key lock																											
Environmental and Regulatory	<b>Environmental standards (eco-labels) include:</b> China - RoHS, CEC; EU - RoHS, WEEE; Germany - GS Mark; South Korea - RoHS; Japan - RoHS, Energy Law, Green PC <b>Other environmental options:</b> Dell Energy Smart settings (select configurations); Dell Asset Recovery Service																											
Warranty, Service and Support	<b>Base:</b> 3-Year Limited Hardware Warranty <sup>9</sup> with 3-year standard Next Business Day Service after Remote Diagnosis <sup>10</sup> <b>Recommended:</b> Dell ProSupport <sup>4</sup> is designed to rapidly respond to your business's needs, help protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT environment																											

## Learn more at [dell.com/Precision](http://dell.com/Precision)

OEM ready models available: Learn more about custom-branded solutions at [Dell.com/OEM](http://Dell.com/OEM).

1. Microsoft may require a Remote Desktop license for the Dell FX100 under certain serial usage models. Please consult with Microsoft for details.

2. A 64-bit operating system is required to support 4GB or more of system memory. 192GB requires RHEL 5, RHEL 6 or Windows 7 64Bit

3. ISV certification applies to select configurations

4. Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicesdescriptions](http://www.dell.com/servicesdescriptions)

5. Configurations with 16GB 1066MHz RDIMMs will run at 800MHz

6. GB means 1 billion bytes and TB equals 1 trillion bytes; significant system memory may be used to support graphics, depending on system memory size and other factors

7. GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

8. Sold separately through Dell Software and Peripheral store. Not factory installed. Qualified and supported by Mellanox®

9. For copy of Ltd Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see [www.dell.com/warranty](http://www.dell.com/warranty)

10. Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty [www.dell.com/warranty](http://www.dell.com/warranty) and not resolved remotely, technician and/or part will be dispatched, usually within one business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.

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