Dell PowerEdge R515

The Dell™ PowerEdge™ R515 is a 2-socket 2U rack server well-suited for database, email, virtualization, workload consolidation and other applications requiring an immense amount of local storage.

Business value built-in

The PowerEdge R515 offers outstanding price for performance with AMD Opteron™ processors and enterprise-class features, including advanced systems management capabilities, an interactive LCD screen (8 hard drive model) as well as hot-swap hard drives and redundant power supplies for additional business data protection. The PowerEdge R515 also offers a choice of an 8 or 12 hard drive configuration delivering up to 25TB of internal storage space, making it ideally suited to meet the demands of the small- to mid-sized business or data center with superior stability, efficiency and long-term business value.

Designed to go the distance

You’ve told us you need a server manufacturer that inspires confidence through its reliability, availability, and quality of products. That is why we have designed the PowerEdge R515 for optimal reliability and ease of use, incorporating customer-inspired features that range from robust metal hard-drive carriers and industrial-quality materials to embedded diagnostics and an interactive LCD screen.

Our reliability goals are simple: Deliver quality products that stand the test of time.

• A Unified Server Configurator (USC) helps minimize downtime by offering embedded and persistent diagnostics with no media requirements.
• A “one-touch” quality-control process enables single-person responsibility for an entire server build.
• Every Dell server model is tested—and re-tested—before it leaves the factory.
• Our operating system, application and software integration testing and validation helps to ensure that everything works together right out of the box.
• A focus on product longevity provides fully supported product lifecycles for better investment protection.

Efficient from the inside out

The PowerEdge R515 was designed to provide you with a multitude of time- and energy-saving options, not only inside the server, but outside as well.

On the outside of the PowerEdge R515 we have put all of the external ports, power supplies and LED lights or LCD screens in the same location as other PowerEdge servers for a familiar server-to-server usability and commonality, as well as for easy installation and deployment.

Inside the server, we have Energy Smart technologies to help you better manage power. This includes low-wattage processors, support for low-voltage DIMMs, and efficient fans that spin in accordance with server workload demands. Internal shrouding and logical component layouts aid with airflow direction helping to cool the server. And energy-efficient power supplies use power effectively without compromising business productivity.

Easy to manage

As an IT professional you do not have a lot of time to spend managing and maintaining your systems. That is why the Dell systems-management portfolio focuses on two core principles to make your life easier: simplicity and cost-effectiveness.

• The optional Lifecycle Controller helps you perform system diagnostics, hardware configuration and system deployment in a pre-OS environment from an easy-to-use interface called the Unified Server Configurator (USC). This helps eliminate the need to use and maintain multiple pieces of CD/DVD media and helps get your server up and running fast.
• An interactive LCD screen (8 hard drive model) on the front of the server allows for easy setup, monitoring and maintenance. Plain-language diagnosis and a programmable messaging system can help you address issues quickly to simplify day-to-day monitoring.
• The Dell Management Console, which is included with every Dell server, provides you with a consolidated console view of your IT infrastructure.
• Automated update notification from Support.Dell.com provides you with the latest updates for firmware, drivers and BIOS so your systems are always running at their best.

The PowerEdge R515 offers enterprise-class features and superior price for performance.
## PowerEdge R515 Technical Specification

### Form Factor
2U rack

### Processors
AMD Opteron™ 4100, 4200, and 4300 series processors

### Processor Sockets
2

### Front Side Bus or HyperTransport
HyperTransport-3 Links

### Cache
L2: 512K/core, L3: 8MB

### Chipset
AMD (SR5670 and SP5100)

### Memory
Up to 256GB (8 DIMM slots): 1GB/ 2GB/ 4GB/ 8GB/ 16GB/32GB up to 1600MT/s

### Hot-plug hard drives, hot-plug redundant power, ECC memory, and Quad-pack LED diagnostic or interactive LCD (only AMD Opteron™ 4100, 4200, and 4300 series processors

### RAID Controller
- **Internal controllers:** PERC H200 (6Gb/s), PERC H700 (6Gb/s), non-volatile battery-backed cache: 512MB, 1G, PERC S300 (software based/8 HDD chassis only)
- **External controllers:** PERC H800 (6Gb/s), non-volatile battery-backed cache: 512MB, 1G
- **External HBAs (non-RAID):** 6Gb/s SAS HBA

### Drive Bays
- 8 hard drive chassis: 2.5" or 3.5" SAS, SATA or SSD drives
- 12 hard drive chassis: 2.5" or 3.5" SAS, SATA or SSD drives + 2x 2.5" internal cabled hard drives

### Maximum Internal Storage
24TB-37.8TB (depending on chassis)

### Hard Drives
1. **Hot-plug hard drive options:**
   - 2.5" SAS SSD, SATA SSD, SAS (10K)
   - 3.5" SAS (15K), nearline SAS (7.2K), SATA (7.2K)
   - Optional add-in CNA or FC HBAs:
     - Brocade® 1020 10G Converged Network Adapter (CNA)–dual port
     - Emulex® LPe1150 FC HBA, Single Port
     - Emulex LPe1150 FC HBA, Single Port
     - Emulex LPe21000 8Gbps FC HBA, Single Port
     - Emulex LPe21002 8Gbps FC HBA, Dual Port
     - Emulex OCE31002FDX, 10G PCI-e FC CNA, Dual Port
     - QLogic® QLE2250 FC HBA, Single Port
     - QLogic® QLE2460 FC HBA, Single Port
     - QLogic® QLE2462 FC HBA, Dual Port
     - QLogic® QLE2560 8Gbps FC HBA, Single Port
     - QLogic® QLE2562 8Gbps FC HBA, Dual Port
     - QLogic® QLE8152 8Gbps FC HBA, Dual Port
     - Brocade FC HBA BR815
     - Brocade FC HBA BR825

### Communications
- **Internal controllers:**
  - Intel® 10GbBase-T Copper Single Port NIC, PCI-E x8
  - Intel PRO 1000 PT Single Port Adapter, Gigabit Ethernet NIC, PCI-E x1
  - Intel Gigabit ET Dual Port Server Adapter, PCI-E x4
  - Intel Gigabit ET Quad Port Server Adapter, PCI-E x4
  - Intel Ethernet X550 DA2 Dual-Port 10 Gigabit Server Adapter
- **Broadcom® BCM5709C IPv6 Gigabit Copper Dual Port NIC with TOE and iSCSI Offload, PCI-E x4**
- **Broadcom BCM5709C IPI6 Gigabit Copper Dual Port NIC with TOE, PCI-E x4**
- **Broadcom BCM5709C 10/100/1000BASE-T Dual Port NIC**
- **Broadcom NetXtreme® III 57711 Dual-Port SFP+/Direct Attach 10Gb Ethernet PCI-Express Network Interface Card with TOE and iSCSI Offload**

### Power Supply
Redundant 750W hot-plug power supplies

### Availability
Hot-plug hard drives, hot-plug redundant power, ECC memory, and Quad-pack LED diagnostic or interactive LCD (only with 8 hard drive chassis)

### Video
Matrox® G200eW with 8MB memory

### Remote Management
- **Optional:** iDRAC6 Express, iDRAC6 Enterprise and vFlash media (upgrade optional)
- **Dell OpenManage™**
  - BMC, IPMI 2.0 compliant
  - Lifecycle Controller enabled through optional: iDRAC6 Express, or iDRAC6 Enterprise and vFlash media
  - Unified Server Configurator

### Systems Management
Dell OpenManage™

### Rack Support
ReadyRails™ sliding rails for 4-post racks with support for optional cable management arm or ReadyRails static rails for 4-post and 2-post racks

### Operating Systems
- Microsoft® Windows Server® 2012
- Microsoft Windows Server 2012 Essentials
- Microsoft Windows® Small Business Server 2011
- Microsoft Windows Server 2008 SP2, x64/x64 (x64 includes Hyper-V™)
- Microsoft Windows® Small Business Server 2008
- Microsoft Windows Server 2008 R2 SP1, x64 (Includes Hyper-V v2)
- Microsoft Windows® HPC Server 2008 R2
- Novell® SUSE® Linux Enterprise Server
- Red Hat® Enterprise Linux®

### Virtualization options:
- Citrix® XenServer®
- VMware® vSphere® ESXi™ and ESXi™
- Red Hat Enterprise Virtualization®

### For more information on the specific versions and additions, visit Dell.com/OSSupport

### Featured Database Application
Microsoft SQL Server® solutions (see Dell.com/SQl)

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Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent, and in-depth domain knowledge for the lowest TCO.

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