



Dell PowerEdge R415

The 2-socket 1U Dell™ PowerEdge™ R415 server is ideally suited for IT infrastructure, file/print, web application, email, small virtualization deployments, and entry high-performance computing (HPC).

Business value built-in

The PowerEdge R415 is designed to deliver outstanding value. Built with AMD Opteron™ processors for remarkable price for performance, the R415 also features hot-swap hard drives and redundant power supplies to provide availability options for better business data protection. In addition, the PowerEdge R415 packs other enterprise-class features such as advanced systems management capabilities and an optional interactive LCD screen for easy system monitoring. These features help meet the needs of many small to mid-sized businesses as well as address many data center demands 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 R415 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 optional 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 ensure that everything works together right out of the box.
- A focus on product longevity provides longer, fully supported product lifecycles for better investment protection.

Efficient from the inside out

The PowerEdge R415 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 R415 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 optional interactive LCD screen 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 R415 offers enterprise-class features with a balance of processing power and value.

Feature	PowerEdge R415 Technical Specification	
Form Factor	1U 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 ¹	Up to 256GB (8 DIMM slots): 1GB/2GB/4GB/8GB/16GB/32GB up to 1600MT/s	
I/O Slots	1 PCIe G2 slot + 1 storage slot: One x16 slot One storage x4 slot	
RAID Controller	Internal controllers: PERC H200 (6Gb/s) PERC H700 (6Gb/s); non-volatile battery-backed cache: 512MB, 1G SAS 6/iR PERC S300 (software based)	External controllers: PERC H800 (6Gb/s); non-volatile battery-backed cache: 512MB, 1G External HBAs (non-RAID): 6GB/s SAS HBA
Drive Bays	4 hard drive chassis: 2.5" or 3.5" SAS, SATA or SSD drives; (cabled or hot-plug options available)	
Maximum Internal Storage ¹	Up to 12TB	
Hard Drives	Hot-plug hard drive options: 2.5" SATA SSD, SAS (10K) 3.5" SAS (15K), nearline SAS (7.2K), SATA (7.2K)	Cabled hard drive options: 3.5" SAS (15K), nearline SAS (7.2K), SATA (7.2K)
Communications	Intel® 10GBase-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 X520-T2 Dual-Port 10 Gigabit Ethernet Server Adapter Intel Ethernet X520 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 IPV6 Gigabit Copper Dual Port NIC with TOE, PCI-E x4 Broadcom BCM5709C 10/100/1000BASET Quad Port NIC Broadcom NetXtreme® II 57711 Dual-Port SFP+/Direct Attach 10Gb Ethernet PCI-Express Network Interface Card with TOE and iSCSI Offload	Optional add-in CNA or FC HBAs: Brocade® 1020 10G Converged Network Adapter (CNA)-dual port Emulex® LPe11002 FC4 HBA, Dual Port Emulex LPe1150 FC4 HBA, Single Port Emulex LPe12000 8Gbps FC HBA, Single Port Emulex LPe12002 8Gbps FC HBA, Dual Port Emulex OCE10102FXD, 10G PCI-e FCoE CNA, Dual Port QLogic® QLE220 FC4 HBA, Single Port QLogic QLE2460 FC4 HBA, Single Port QLogic QLE2462 FC4 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
Power Supply	Non-redundant, 480W (80+ BRONZE) Optional redundant, 500W (80+ SILVER)	
Availability	Hot-plug hard drives, hot-plug redundant power, ECC memory, and Quad-pack LED diagnostic or interactive LCD only with hot-swap HDD chassis	
Video	Matrox® G200eW with 8MB memory	
Remote Management	Optional: iDRAC6 Express, iDRAC6 Enterprise and vFlash media (upgrade optional)	
Systems Management	Dell™ OpenManage™ BMC, IPMI 2.0 compliant Lifecycle Controller enabled through optional: iDRAC6 Express, or iDRAC6 Enterprise and vFlash media Unified Server Configurator	
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 Small Business Server 2008 Microsoft Windows Server 2008 SP2, x86/x64 (x64 includes Hyper-V®) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V v2) Microsoft Window HPC Server 2008 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux®	Virtualization options: Citrix® XenServer® VMware® vSphere® ESX™ 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)	

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

Dell Services

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.

Learn more at Dell.com/PowerEdge

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