



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-plug 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 singleperson 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, on the inside and outside. Outside the PowerEdge R415 are the external ports, power supplies, and LED lights or LCD screens in the same location as on other PowerEdge servers for a familiar server-to-server usability and commonality, as well as for easy installation and

deployment. Inside the server are Dell 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.

Simplified systems management, without compromise

The Dell OpenManage™ systems management portfolio includes Integrated Dell Remote Access Controller 6 (iDRAC6) with Lifecycle Controller. This embedded feature helps IT administrators manage Dell servers in physical, virtual, local and remote environments, operating in-band or out-of-band, with or without a systems management software agent installed.

OpenManage iDRAC with Lifecycle Controller integrates and connects to leading third-party systems management solutions (such as those from Microsoft, VMware, and BMC Software), so users can maintain a single point of control and capitalize on an existing systems management investment. OpenManage simplifies the lifecycle of deploying, updating, monitoring, and maintaining Dell PowerEdge servers.

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	Four 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 FC0E CNA, Dual Port QLogic® QLE220 FC4 HBA, Single Port QLogic QLE2460 FC4 HBA, Single Port QLogic QLE2462 FC4 HBA, Dual Port QLogic QLE2462 FC4 HBA, Dual Port QLogic QLE2560 8Gbps FC HBA, Single Port QLogic QLE2562 8Gbps FC HBA, Dual Port QLogic QLE2562 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® Small Business Server 2011 Microsoft Windows Server 2008 SP2, x86/x64 (x64 includes Hyper-V®) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V) Microsoft Window HPC Server 2008 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux®	Virtualization options: Citrix® XenServer® Microsoft Hyper-V, a server role in Microsoft Windows Server operating systems VMware® vSphere® 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.

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