Dell PowerEdge R710

The Dell™ PowerEdge™ R710 helps you operate efficiently and lower TCO with enhanced virtualization capabilities, improved energy efficiency, and innovative system management tools.

Strong IT foundation

You want a data center built for organic growth and the ability to scale based on your company's changing requirements. You need complete solutions that let you focus your time and money on managing and growing your business. Dell responds with an expanding portfolio of enterprise servers, storage technologies, and services with a single goal: to help you simplify IT.

Purposeful design

With Dell's system commonality, once your IT managers learn one system, they understand how to manage next-generation Dell servers. Logical component layout and power supply placement provide a straightforward installation and redeployment experience. The PowerEdge R710 provides an interactive LCD for system health monitoring, alerting, and control of basic management as well as checking the AC power meter and ambient temperature thermometer included with each server.

Enhanced virtualization

Featuring embedded hypervisors, large memory capacity with 18 DIMM slots, and 4 integrated network connections, the Dell PowerEdge R710 delivers better overall system performance and greater virtual machine-per-server capacity. The latest Intel® Xeon® processor technology adapts to your software in real time, processing more tasks simultaneously. With optional factory-integrated virtualization capabilities, you get tailored solutions that allow you to streamline deployment and simplify virtual infrastructures. Choose your hypervisor from market leaders such as VMware®, Citrix®, and Microsoft®, and enable virtualization with a few mouse clicks.

Energy-optimized technologies

The PowerEdge R710 reduces power consumption while increasing performance capacity versus previous generation servers using Energy Smart technologies and standards-based components along with right-sized efficient power supply units, improved system-level design efficiency, and policy-driven power and thermal management. Dell's advanced thermal control delivers optimal performance at minimal power consumption without compromising enterprise performance.

Simplified systems management

The Dell OpenManage™ suite offers enhanced operations and standards-based commands designed to integrate with existing systems for effective control.

Lifecycle Controller

Lifecycle Controller is the engine for advanced systems management integrated on the server. Lifecycle Controller simplifies administrator tasks to perform a complete set of provisioning functions such as system deployment, system updates, hardware configuration and diagnostics from a single intuitive interface called Unified Server Configurator (USC) in a pre-OS environment. This eliminates the need to use and maintain multiple pieces of disparate CD/DVD media.

Dell Management Console (DMC)

DMC, powered by Altiris™ from Symantec™, delivers a single view and a common data source into the entire infrastructure. DMC is an easily extensible, modular foundation that can provide basic hardware management or more advanced functions such as asset and security management. It helps reduce or eliminate manual processes so less time and money is spent keeping the lights on and more time can be spent on strategic uses of technology.

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.

The Dell PowerEdge R710 server with the performance of Intel Xeon processor 5500 and 5600 series offers you a 2U rack to efficiently address a wide range of key business applications.

Feature	PowerEdge R710 Technical Specification	
Form Factor	2U rack	
Processors	Quad-core or six-core Intel® Xeon® processor 5500 and 5600 series	
Processor Sockets	2	
Front Side Bus or HyperTransport	Intel QuickPath Interconnect (QPI)	
Cache	Up to 12MB	
Chipset	Intel 5520	
Memory[1]	Up to 288GB (18 DIMM slots): 1GB/2GB/4GB/8GB/16GB DDR3 up to 1333MT/s	
I/O Slots	**4 PCIe 2.0 slots + 1 storage slot:** two x8 slots, two x4 slots, one x4 storage slot	
RAID Controller	**Internal:** PERC H200 (6Gb/s) PERC H700 (6Gb/s) with 512MB battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache SAS 6/iR PERC 6/i with 256MB battery-backed cache	**External:** PERC H800 (6Gb/s) with 512MB of battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache PERC 6/E with 256MB or 512MB of battery-backed cache **External HBAs (non-RAID):** 6Gbps SAS HBA SAS 5/E HBA LSI2032 PCIe SCSI HBA
Drive Bays	Eight 2.5" hard drive option or six 3.5" hard drive option; optional flex bay expansion to support half-height TBU Up to four 3.5" drives with optional flex bay, up to six 3.5" drives without optional flex bay, or up to eight 2.5" SAS or SATA drives with optional flex bay **Peripheral bay options:** Slim optical drive bay with choice of DVD-ROM, Combo CD-RW/DVD-ROM, or DVD + RW	
Maximum Internal Storage[1]	Up to 18TB	
Hard Drives	**Hot-plug hard drive options:** 2.5" SAS SSD, SATA SSD, SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K) 3.5" SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K) **Solid state storage cards:** Fusion-io® 160GB ioDrive PCIe solid state storage card Fusion-io 640GB ioDrive Duo PCIe solid state storage card Fusion-io 320GB ioDrive Mono PCIe solid state storage card	Fusion-io 640GB ioDrive Mono PCIe solid state storage card Fusion-io 1.28TB ioDrive Mono PCIe solid state storage card
Communications	Four embedded Broadcom® NetXtreme® II 5709c Gigabit Ethernet NIC with failover and load balancing; TOE (TCPIP Offload Engine) supported on Microsoft® Windows Server® 2003 SP1 or higher with Scalable Networking Pack; Optional 1GBe and 10GBe add-in NICs Broadcom NetXtreme II 57711 Dual Port Direct Attach 10Gb Ethernet PCI-Express Network Interface Card with TOE and iSCSI Offload Intel Gigabit ET Dual Port Server Adapter and Intel	Gigabit ET Quad Port Server Adapter Dual Port 10GB Enhanced Intel Ethernet Server Adapter X520-DA2 (FcoE Ready for Future Enablement) **Optional add-in NICs:** Brocade® CNA (1020) Dual Port Server Adapter **Optional add in HBAs:** Brocade 8 GB HBAs Emulex CNA iSCSI HBA stand up adapter OCE10102-IX-D Emulex CNA iSCSI HBA stand up adapter OCE10102-FX-D
Power Supply	Energy Smart – two hot-plug high-efficient 570W PSU or high-output two hot-plug 870W PSUs	**Uninterruptible Power Supplies:** 1000W–5600W 2700W–5600W High-Efficiency Online Extended Battery Module (EBM) Network Management Card
Availability	DDR3; hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; PERC 6/i; hot-plug redundant cooling; tool-less chassis; fibre and SAS cluster support; validated for Dell/EMC SAN	
Video	Matrox® G200 with 8MB of cache	
Remote Management	iDRAC6 Enterprise (optional)	
Systems Management	Dell™ OpenManage™ Microsoft® System Center Essential (SCE) 2010 v2	
Embedded Hypervisor	Optional Embedded SD Media	
Rack Support	ReadyRails™ sliding rails with optional cable management arm for 4-post racks (optional adapter brackets required for threaded hole racks); ReadyRails static rails for 2-post and 4-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 Windows HPC Server 2008 R2 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux® Oracle® Solaris™	**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 Applications	Microsoft SQL Server® solutions (see Dell.com/SQL) Oracle database solutions (see Dell.com/Oracle)	
Thermal Operation	**Continuous Operation:** 10C to 35C, 10% to 80% relative humidity (RH). **10% of annual operating hours:** 5C to 40C, 5% to 85%RH. **1% of annual operating hours:** -5C to 45C, 5% to 90%RH. For in-depth detail, check your user manual.	

[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.

OEM Ready Models Available

OEM Ready platforms are grab-and-go products for OEM customers delivering a fast and simple path to a custom-branded solution. For more information, please visit Dell.com/OEM.

See the benefits at Dell.com/PowerEdge