DELL™ POWEREDGE™ R710 SERVER



The Dell PowerEdge R710 is designed to be the cornerstone of today's competitive enterprise. Engineered in response to input from IT professionals, it is the next-generation 2U rack server created to efficiently address a wide range of key business applications. The successor to the PowerEdge 2950 III, the R710 runs the Intel® Xeon® 5500 Series Processors and helps you lower the total cost of ownership with enhanced virtualization capabilities, improved energy efficiency, and innovative system management tools.

STRONG IT FOUNDATION

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

PURPOSEFUL DESIGN

The R710 takes advantage of 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 also provide a straightforward installation and redeployment experience.

Featuring 18 DIMM slots and 4 integrated network connections, the R710 delivers the critical components to virtualization and database performance. The Intel Xeon Processor 5500 Series adapts to your software in real time, processing more tasks simultaneously. Using Intel® Turbo Boost Technology, the R710 can increase performance during peak usage periods. You can then help reduce operating costs and energy usage with Intel® Intelligent Power Technology, which proactively puts your server into lower power states when demand decreases. Increased memory slots also save money by enabling you to use smaller, less-expensive DIMMs to meet your computing needs.

In addition, Dell's latest PowerEdge servers provide a graphical and interactive LCD for system health monitoring, alerting and control of basic management configuration right in the front of the server. Customers have an AC power meter and ambient temperature thermometer built into the server which they can monitor on this display without any software tools.

ENHANCED VIRTUALIZATION

Featuring Intel Xeon-based architecture, embedded hypervisors, large memory capacity, and integrated I/O, the next-generation Dell PowerEdge R710 delivers better overall system performance and greater virtual machine-perserver capacity. With optional factory-integrated virtualization capabilities, you get tailored solutions – built with the latest technologies from Dell and our trusted partners – which 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

Using the latest Energy Smart technologies, the R710 reduces power consumption while increasing performance capacity versus the previous generation servers. Enhancements include efficient power supply units right-sized for system requirements, improved system-level design efficiency, policy-driven power and thermal management, and highly efficient standards-based Energy Smart components. Dell's advanced thermal control delivers optimal performance at minimal system and fan power consumption resulting in our quietest 2U servers to date. These enhancements maximize energy efficiency across our latest core data center servers without compromising enterprise performance.

SIMPLIFIED SYSTEMS MANAGEMENT

The next generation 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)

The new Dell Management Console, powered by Altiris from Symantec, delivers a single view and a common data source into the entire infrastructure. Dell Management Console is built on the Symantec™ Management Platform (formerly Altiris® Notification Server), an easily extensible, modular foundation that can provide basic hardware management or more advanced functions such as asset and security management. Dell Management Console 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 GLOBAL SERVICES

Dell Global Services simplify the management of your IT environment so you get up and running quickly with lower deployment costs, fewer hassles, and less time spent on non-strategic tasks. You pay only for the services you need, gain instant access to the latest innovations without additional infrastructure investment, and take your business from maintenance to momentum.

Many IT services today are outdated, expensive, inflexible, and people-intensive. As a result, businesses can be burdened with lengthy contracts, trapped in old technology, and spending much more than is necessary just to keep the lights on. Dell is changing all of that by integrating cutting-edge technologies into our products and global service infrastructure to forever change the way services are delivered, purchased, and managed. Tapping directly into Dell's world-class capabilities, resources, and platform in this way will make it easier to reclaim valuable IT time and resources.

Many of the service investments Dell has made are available through or in conjunction with Dell's global network of PartnerDirect channel partners. For more information, please visit DELL.COM/Services or contact your local Dell PartnerDirect Registered partner.

FEATURES	R710	
Form Factor	2U rack height	
Processors	Latest Dual-Core or Quad-Core Intel® Xeon® 5500 Processor Series	
Processor Sockets	2	
Interconnect	Intel® QuickPath Interconnect (QPI)	
L2/L3 Cache	4MB and 8MB	
Chipset	Intel® 5520	
Memory	Up to 144GB (18 DIMM slots*): 1GB/2GB/4GB/8GB DDR3, 800MHz, 1066MHz or 1333MHz	
I/O Slots	2 PCIe x8 + 2 PCIe x4 G2 Or 1 x16 + 2 x4 G2	
Drive Controller	PERC6/i or SAS6/iR, PERC 5/E and PERC 6/E	
RAID Controller	Optional PERC 5/i integrated SAS/SATA II daughtercard controller with 256MB cache, PERC 5/e adapter, PERC 6/I, and SAS 6/iR	
Drive Bays	8 x 2.5" Hard Drive Option or 6 x 3.5" Hard Drive Option; Optional flex bay expansion to support half-height TBU Up to four 3.5" drives with optional flex bay OR Up to eight 2.5" SAS or SATA drives with optional flex bay	
Maximum Internal Storage	6TB SATA or Near Line SAS	
Hard Drives	2.5" SAS (10K RPM): 36GB, 73GB, 146GB, 147GB, 300GB 2.5" SAS (15K RPM) 36GB, 73GB 2.5" SATA II (5.4K RPM): 80GB, 160GB, 250GB 2.5"SATA II (7.2K RPM): 80GB, 120GB, 160GB, 250GB	3.5" SATA (7.2K): 80 GB,160GB, 250GB, 500GB, 750GB, 1TB 3.5" SAS (10K): 400GB 3.5" SAS (15K): 73GB, 146GB, 300GB, 450GB 3.5" Near-Line SAS (7.2K): 500GB, 750GB, 1TB
Network Interface Cards	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	
Power Supply	Energy Smart – Two hot-plug high-efficient 570W PSU OR High Output Two hot-plug 870W PSUs	
Availability	DDR3; hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; PERC 6/i; optional PERC5/i integrated daughtercard controller with battery-backed cache; 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	
Systems Management	Dell™ OpenManage™	
Rack Support	4-post (Dell rack), 3rd party Versa rails, sliding rails and Cable Management Arm	
Fans	Standard redundant cooling	
Acoustics	Typically configured** 2.5" chassis in 23 +/- 2 C ambient Idle: LwA-UL*** = 5.5 bels, LpAm**** = 39 dBA	
Operating Systems	Factory Installed OS: Microsoft® Windows® Small Business Server 2008, Standard Edition and Premium Edition Microsoft® Windows® Essential Business Server 2008, Standard Edition and Premium Edition Microsoft® Windows Server® 2008, Standard Edition, (x64 includes Hyper-V™) Microsoft® Windows Server® 2008, Enterprise Edition, (x64 includes Hyper-V™) Microsoft® Windows Server® 2008, Datacenter Edition, (x64 with Hyper-V™) Microsoft® Windows® Web Server 2008 Microsoft® Windows® HPC Server 2008 Microsoft Windows Server 2008 SP2 Novell® SUSE® Linux Enterprise Server 10 SP2NIX Red Hat® Enterprise Linux 5.2 Supported OS: Microsoft® Windows® Server 2003 Novell® SUSE® Linux Enterprise Server 11 Red Hat® Enterprise Linux 4.7 Red Hat® Enterprise Linux 5.3	
(Optional) Embedded Hypervisors	Citrix® XenServer® VMware® ESXi v3.5	

SIMPLIFY YOUR SERVERS AT DELL.COM/PowerEdge

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** 'Typical configuration' means the system is populated with projected average quantity, type, capacity, speed, etc., of components

*** LwA – UL is the upper limit sound power levels (LwA) calculated per section 4.4.1 of ISO 9296 (1988) and measured in accordance to ISO 7779 (1999)

**** LpAm is the average bystander position A-Weighted sound pressure level calculated per section 4.4.4 of ISO 9296 (1988) and measured in accordance to ISO 7779 (1999)