

# DELL™ POWEREDGE™ R610 SERVER



Inspired by customer feedback, the Dell PowerEdge R610 server is engineered to simplify data center operations, improve energy efficiency, and lower total cost of ownership. System commonality, purposeful design, and service options combine to deliver a rack server solution that can help you better manage your enterprise.



## **STRONG IT FOUNDATION**

The Dell PowerEdge R610 is a key building block for today's data center. Designed for versatility and high performance, it provides many of the virtualization, system management, and energy-efficiency features you need now and the scalability necessary to change as your business grows. This general-purpose Intel®-based 2-socket 1U server is ideal for corporate data centers and remote sites that require a dense, highly available single- or dual-processor server at an excellent value.

## **ENHANCED VIRTUALIZATION**

Featuring Intel® Xeon®-based architecture, embedded hypervisors, expanded memory footprint, and I/O, the Dell PowerEdge R610 delivers exceptional overall system performance and significant virtual machine-per-server capacity versus the previous generation. 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**

Dell's advanced thermal control helps optimize performance while minimizing system power consumption, ultimately driving energy efficiency across our latest core data center servers. These enhancements, over previous generations, 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 is designed to deliver optimal performance at minimum system and fan power consumption resulting in our quietest mainstream 1U servers to date.

## **PURPOSEFUL DESIGN**

The R610 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.

## **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.

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.

#### 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](http://DELL.COM/Services) or contact your local Dell PartnerDirect Registered partner.

FEATURES	
<b>Form Factor</b>	1U rack height
<b>Processors</b>	Up to two Quad-Core or Dual-Core Intel® Xeon® Processor 5500 Series
<b>Processor Sockets</b>	2
<b>Interconnect</b>	Intel® QuickPath Interconnect (QPI)
<b>L2/L3 Cache</b>	4MB and 8MB
<b>Chipset</b>	Intel 5520
<b>Memory</b>	Up to 96GB (12 DIMM slots/6 per-processor): 1GB/2GB/4GB/8GB DDR3 800MHz, 1066MHz or 1333MHz
<b>I/O Slots</b>	Two x8 Gen2 slots
<b>Drive Controller</b>	PERC6/i or SAS6/iR, PERC 5/E and PERC 6/E
<b>RAID Controller</b>	Optional PERC 6/i integrated SAS/SATA daughtercard controller with 256MB cache, PERC 5/e adapter, PERC 6/i and SAS 6/iR PERC 6i utilizing battery backed 256MB DDRII 667
<b>Drive Bays</b>	Internal hard drive bay and hot-plug backplane. Up to six 2.5" SAS, or SSD Drives
<b>Maximum Internal Storage</b>	
<b>Hard Drives</b>	2.5" SAS (15K RPM): 73GB, 146GB 2.5" SAS (10K RPM): 73GB, 146GB, 300GB 2.5" SSD: 25GB, 50GB
<b>Network Interface Cards</b>	Two dual port embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC with failover and load balancing. Optional 1GbE and 10GbE add-in NICs
<b>Power Supply</b>	Two hot-plug high-efficient 502W Energy Smart PSU or two hot-plug 717W High Output PSUs
<b>Availability</b>	DDR3 memory; ECC; hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; optional PERC6/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
<b>Video</b>	Integrated Matrox G200, 8MB shared video memory
<b>Remote Management</b>	iDRAC6
<b>Systems Management</b>	Dell™ OpenManage™
<b>Fans</b>	Standard redundant cooling
<b>Acoustics</b>	Typically configured* 2.5" chassis in 23 ± 2 C ambient Idle: LwA-UL** = 5.3 bels, LpAm*** = 35 dBA
<b>Rack Support</b>	Support for sliding ReadyRails™ for 4-post Racks and Static ReadyRails™ for 4-post & 2-post Racks
<b>Operating Systems</b>	Microsoft® Windows Server® 2008, with Hyper-V™ Microsoft Windows Server 2008 SP2 Microsoft Windows Storage Server Novell® Netware® Novell SUSE® Linux® Red Hat® Linux® Enterprise Sun® Solaris™
<b>(Optional) Embedded Hypervisors</b>	Citrix® XenServer® Dell Express Edition Citrix XenServer Dell Enterprise Edition VMware® ESXi 3.5

## SIMPLIFY YOUR SERVERS AT [DELL.COM/PowerEdge](http://DELL.COM/PowerEdge)

\* '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).

