



# Dell PowerEdge R520

A powerful, 2-socket rack server, the Dell™ PowerEdge™ R520 delivers balanced performance and storage expandability for data-intensive applications.

The Dell PowerEdge R520 is a 2-socket, 2U rack-mount server offering an excellent balance of processing power, storage capacity, and redundancy. The R520's price per performance, configuration flexibility, and headroom for growth make it highly appealing for consolidation and virtualization, web hosting, for use as a medium-size mail server, or as a general-purpose server. The R520 is optimized for running a wide range of core applications, such as small-medium mail server, web server, small-scale hosting, and database server. Consistent worldwide support makes it highly appealing to larger businesses and organizations with distributed offices.

## Designed for demanding workloads

The extensive memory, storage, and I/O capacities of the R520 make it ideal for consolidation and virtualization. Delivering the performance of two Intel® Xeon® E5-2400 processors and complemented by up to twelve DIMMs, up to four PCIe Gen3-enabled slots and up to eight internal hard drives, the R520 delivers balanced performance. With built-in redundancy, the R520 is a trustworthy platform for your business-critical databases and applications. The dense form factor and innovative systems management of the R520 allow you to save space and to use your IT administrator's time efficiently.

## Manage and secure your data

Features that protect your business data and keep the server running are essential. The extensive storage capacity of the R520 can be protected with both hardware RAID controllers and software solutions to protect your data and ensure that it is readily available. Built-in reliability, availability, and serviceability (RAS) features such as hot-pluggable hard drives and power supplies minimize the need to disrupt production work to take a server offline in the event of a component failure. Redundant, failsafe hypervisors also add an additional layer of protection for virtualized environments.

## The PowerEdge server line

The PowerEdge family is engineered with the right combination of features and performance scalability to handle tough workloads for both large and small data center environments.

The Dell OpenManage™ systems management portfolio includes integrated Dell Remote Access Controller (iDRAC) 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. OpenManage also integrates and connects to leading third-party systems management solutions you may already own, so you can maintain your single point of control and capitalize on your existing investment. OpenManage simplifies the lifecycle of deploying, updating, monitoring, and maintaining your Dell PowerEdge servers.

## PowerEdge R520

- Up to 12 DIMMs with RAS
- PCIe Gen3-enabled expansion slots
- 8 x 3.5-inch drive bays with LCD diagnostic
- Powered by Intel Xeon E5-2400 processors

Feature	PowerEdge R520 technical specification
Form factor	2U rack
Processors	Intel® Xeon® processor E5-2400 product family
Processor sockets	2
Internal interconnect	Intel QuickPath Interconnect (QPI) link: 6.4GT/s; 7.2GT/s; 8.0 GT/s
Cache	2.5MB per core; core options: 4, 6, 8
Chipset	Intel C600 series
Memory <sup>1</sup>	Up to 192GB (12 DIMM slots): 2GB/4GB/8GB/16GB DDR3 up to 1600MHz
I/O slots	<b>4 PCIe slots:</b> With two processors: <ul style="list-style-type: none"> <li>• One x16 PCIe slot with x16 bandwidth, half-length, half-height</li> <li>• One x16 PCIe slot with x8 bandwidth, full-length, full-height</li> <li>• Two x16 PCIe slots with x8 bandwidth, half-length, full-height</li> </ul> With one processor: <ul style="list-style-type: none"> <li>• One x8 PCIe slot with x4 bandwidth, half-length, half-height</li> <li>• One x16 PCIe slot with x8 bandwidth, full-length, full-height</li> <li>• Two x8 PCIe slots with x4 bandwidth, half-length, full-height</li> </ul>
RAID controller	<b>Internal controllers:</b> PERC S110 (SW RAID) PERC H310 PERC H710 PERC H710P <b>External HBAs (RAID):</b> PERC H810 <b>External HBAs (non-RAID):</b> 6Gbps SAS HBA
Drive bays	Up to eight 3.5" hot-plug SAS, SATA or SSD
Maximum internal storage <sup>1</sup>	Up to 24TB
Hard drives	<b>Hot-plug hard drive options:</b> 2.5" SAS SSD, SATA SSD, SAS (15K, 10K) 3.5" SAS (15K), nearline SAS (7.2K), SATA (15K) Self-encrypting drives available
Embedded NIC	Broadcom® 5720 GbE Dual Port
Power supply	Platinum efficiency, hot-plug redundant 495W or 750W power supplies Silver efficiency, cabled 550W power supply Gold efficiency, 1100W DC power supply Auto-ranging power supplies
Availability	High-efficiency, hot-plug, redundant power supplies; DC power supply; hot-plug hard drives; TPM; dual internal SD support; fan fault tolerance; optional bezel; luggage tag; ECC memory, interactive LCD screen; ENERGY STAR® compliant; extended power range; switch independent partitioning
Remote management	Basic management (default) iDRAC7 with Lifecycle Controller iDRAC7 Express (upgrade), iDRAC7 Enterprise (upgrade) 8GB vFlash (upgrade), 16GB vFlash (upgrade)
Systems management	IPMI 2.0 compliant OpenManage™ Essentials and Dell Management Console OpenManage Power Center Dell OpenManage Connections: <ul style="list-style-type: none"> <li>• OpenManage Integration Suite for Microsoft® System Center</li> <li>• Dell plug-in for VMware® vCenter®</li> <li>• HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management (NSM)</li> </ul>
Rack support	ReadyRails™ sliding rails with optional cable management arm for 4-post racks (optional adapter brackets required for threaded hole racks)
Operating systems	Microsoft Windows Server® 2008 R2 SP1, x64 (includes Hyper-V™ v2) Microsoft Windows® Small Business Server 2011 SUSE® Linux® Enterprise Server Red Hat® Enterprise Linux <b>Optional embedded hypervisors:</b> Citrix® XenServer™ VMware vSphere™ For more information on the specific versions and additions, visit <a href="http://Dell.com/OSsupport">Dell.com/OSsupport</a> .

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

## Global services and support

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 total cost of ownership.

## OEM-ready version available

From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you. For more information, visit [Dell.com/OEM](http://Dell.com/OEM).

## Learn more at [Dell.com/PowerEdge](http://Dell.com/PowerEdge)

© 2012 Dell Inc. All rights reserved. Dell, the DELL logo, the DELL badge, PowerEdge, and OpenManage are trademarks of Dell Inc. Intel and Xeon are registered trademarks of Intel Corporation in the U.S. and other countries. Microsoft, Windows, Windows Server, and Hyper-V are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. This document is for informational purposes only. Dell reserves the right to make changes without further notice to any products herein. The content provided is as is and without express or implied warranties of any kind.

