PowerEdge R520

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

The Dell PowerEdge R520 is a two-socket, 2U rack-mount server with 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, use as a medium-sized mail server or general-purpose server. Optimized for running a wide range of core applications, the R520's consistent worldwide support likewise make it a perfect fit for 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 the Intel® Xeon® processor E5-2400 and E5-2400 v2 product families and complemented by up to twelve DIMMs, up to four PCIe 3.0-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 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.

Enterprise-wide systems management

PowerEdge embedded management technology, Integrated Dell Remote Access Controller 7 (iDRAC7) with Lifecycle Controller, helps IT administrators manage Dell servers in physical, virtual, local and remote environments — agent-free or with a systems management software agent installed. **iDRAC7 Enterprise** features include a multi-administrator virtual console, virtual media and remote file share which enable IT admins to operate servers "as if they were there," ensuring secure access to servers from anywhere in the world.

OpenManage™ Essentials, a comprehensive monitoring and management console available as a no-charge software download, simplifies and automates basic hardware management tasks while Dell SupportAssist helps you maintain a healthy and productive environment.

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- Up to 12 DIMMs with RAS
- PCIe 3.0-enabled expansion slots
- 8 x 3.5-inch drive bays with LCD diagnostic
- Intel Xeon E5-2400 and E5-2400 v2 processors

Feature	PowerEdge R520 technical specification	
Form factor	2U rack	
Processors	Intel® Xeon® processor E5-2400 and E5-2400 v2 product families	
Processor sockets	2	
Internal interconnect	Intel QuickPath Interconnect (QPI) link: 6.4GT/s; 7.2GT/s; 8.0GT/s	
Cache	2.5MB per core; core options: 4, 6, 8. 10	
Chipset	Intel C602	
Memory[1]	Up to 384GB (12 DIMM slots): 2GB/4GB/8GB/16GB/32GB DDR3 up to 1600MT/s	
I/O slots	**4 PCIe slots:** With 2 processors: • 1 x16 PCIe slot with x16 bandwidth, 3.0, half-length, half-height • 1 x16 PCIe slot with x8 bandwidth, 3.0, full-length, full-height • 2 x16 PCIe slots with x8 bandwidth, 3.0, half-length, full-height	With 1 processor: • 1 x8 PCIe slot with x4 bandwidth, 2.0, half-length, half-height • 1 x16 PCIe slot with x8 bandwidth, 3.0, full-length, full-height • 2 x8 PCIe slots with x4 bandwidth, 3.0, half-length, full-height
RAID controller	**Internal controllers:** PERC S110 (SW RAID), PERC H310, PERC H710, PERC H710P **External HBAs (RAID):** PERC H810 **External HBAs (non-RAID):** 6Gbps SAS HBA	
Drive bays	Up to eight 3.5" or 2.5" hot-plug SAS, SATA or SSD	
Hard drives	Hard drive options: 2.5" SSD, SAS HDD 3.5" SAS HDD, Nearline SAS HDD, SATA HDD Self-encrypting drives available	
Embedded NIC	Broadcom® 5720 dual-port 1Gb LOM	
I/O adapter options	1Gb Ethernet adapters 10Gb converged Ethernet adapters 10Gb Ethernet adapters FC16/FC8/FC4 HBAs	
Power	Titanium efficiency, hot-plug redundant 750W AC power supply; Auto-ranging Platinum efficiency, hot-plug redundant 750W or 495W AC power supply; Auto-ranging Silver efficiency, cabled 550W power supply; 1100W DC power supply	
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; information 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 Dell OpenManage Essentials Dell OpenManage Mobile Dell OpenManage Power Center	Dell OpenManage Integrations: • Dell OpenManage Integration Suite for Microsoft System Center • Dell OpenManage Integration for VMware® vCenter Dell OpenManage Connections: • HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management • Dell OpenManage Plug-in for Oracle® Database Manager
Rack support	ReadyRails™ II sliding rails for toolless mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded hole racks, with support for optional toolless cable management arm. ReadyRails static rails for toolless mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded and 2-post (Telco) racks	
Operating systems	Microsoft Windows® Server® 2012 R2 (includes Hyper-V®) Microsoft Windows Server 2012 (includes Hyper-V) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V) Microsoft Windows Small Business Server 2011 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux	**Virtualization options:** Citrix® XenServer® VMware vSphere® ESXi™ Red Hat Enterprise Virtualization® For more information on the specific versions and additions, visit Dell.com/OSsupport.
OEM-ready version	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.	

[1] GB equals 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

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales

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