



Dell PowerEdge R310

The Dell™ PowerEdge™ R310 is a high-performance, 1-socket 1U rack server with flexible computing power, business scalability, simplified management, data protection, and security options.

Dell PowerEdge 11th generation servers are designed to meet customer needs by combining purposeful design with excellent reliability, security, and commonality. The PowerEdge R310 embodies the Dell 11G design principles by delivering core features including energy efficiency and simplified systems management. The result is a compact, efficient server that helps customers of all sizes lower IT-related costs, reduce complexity, and free up resources.

The Dell PowerEdge R310 is a high-performance, 1-socket 1U rack server with the flexible computing power, business scalability, simplified management, data protection, and security options to make it an ideal choice for small to midsize businesses, remote offices, and enterprises.

The Dell PowerEdge R310 offers:

- **Business Value:** The performance, security options, and availability scale to meet a variety of business needs.
- **Simplified Management:** With optional Dell Lifecycle Controller and optional full OpenManage™ suite designed for improved diagnostics and reduced operational costs.
- **Flexible Technology:** Energy-efficient, compact server for ease of deployment.

Business Value

The PowerEdge R310 rack server offers the right balance of performance, enterprise-class options, and business value to meet the needs of small to midsize businesses, branch offices and enterprises alike with:

- Price for performance that includes options for full redundancy in power supplies and hot-swap hard drives.
- Processor options and memory configurations that are balanced to run typical business applications such as Microsoft® Windows® Small Business Server, Business Center Essentials, SQL Server® Workgroup/Standard, Active Directory®, and SharePoint® as well as Oracle® 11g Standard, VMware®, and file/print.
- Multiple RAID options and up to four 2.5 or 3.5 inch hard drives to help keep your data safe.

Easy to Manage

The PowerEdge R310 lets you devote more focus to running your business. The optional advanced embedded management engine, Lifecycle Controller, automates common management tasks and enables zero-media, low-touch deployment that is efficient, secure, and user-friendly.

Dell Lifecycle Controller simplifies administrator tasks by performing 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 in a pre-OS environment. This eliminates the need to use and maintain multiple pieces of disparate CD/DVD media.

With Dell Lifecycle Controller server deployment automation, the R310 can be up and running fast.

Also part of the Dell OpenManage portfolio is the Dell Management Console, which is included with every Dell server and provides IT administrators with a consolidated console view of their IT infrastructure.

Easy to Set Up

The PowerEdge R310 features a compact chassis that allows flexibility for rack-oriented deployments. The optional advanced systems management capabilities of Dell Lifecycle Controller along with an interactive LCD help simplify server set-up and maintenance. It is an ideal rack for small businesses and larger offices needing manageability.

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 PowerEdge R310 is an enterprise-class server with the right balance of performance and value.

Feature	Technical Specifications		
Form Factor	1U rack		
Processors	Quad-core Intel® Xeon® processors 3400 series Dual-core Intel® Celeron® G1101 Intel® Pentium® G6950 Dual-core Intel® Core® i3 processor 500 series		
Processor Sockets	1		
Cache	2MB, 3MB, 4MB, and 8MB		
Chipset	Intel® 3420		
Memory¹	Up to 32GB (6 DIMM slots): 1GB/2GB/4GB/8GB up to 1333MHz		
I/O Slots	2 PCIe G2 slots: One x16 One x8		
RAID Controller	<table border="0"> <tr> <td style="vertical-align: top;"> Internal Controllers: 6Gb/s SAS HBA PERC H200 (6Gb/s) PERC H700 (6Gb/s) with 512MB battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache SAS 6/iR PERC S100 (software based) PERC S300 (software based) </td> <td style="vertical-align: top;"> External Controllers: PERC H800 (6Gb/s) with 512MB of battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache 6Gbs SAS HBA X8 External HBAs (non-RAID): 6Gbps SAS HBA Brocade® FC4 and 8 GB HBAs LSI2032 </td> </tr> </table>	Internal Controllers: 6Gb/s SAS HBA PERC H200 (6Gb/s) PERC H700 (6Gb/s) with 512MB battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache SAS 6/iR PERC S100 (software based) PERC S300 (software based)	External Controllers: PERC H800 (6Gb/s) with 512MB of battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache 6Gbs SAS HBA X8 External HBAs (non-RAID): 6Gbps SAS HBA Brocade® FC4 and 8 GB HBAs LSI2032
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Drive Bays	Cabled or hot-swap options available: 4 hard drive chassis: 3.5" SAS and SATA or 2.5" SAS and SSD drives		
Maximum Internal Storage	Up to 12TB		
Hard Drives¹	Hot-plug Hard Drive Options: 2.5" SATA SSD, SAS (10K) 3.5" SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K) Cabled Hard Drive Options: 3.5" SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K)		
Communications	Intel® Gigabit ET Quad Port Server Adapter Intel® Gigabit ET Dual Port Server Adapter Broadcom® NetExtreme® II 5709 Dual-Port Gb Ethernet TOE Server Adapter Broadcom® NetExtreme® II 5709 Dual-Port Gb Ethernet TOE/iSCSI Offload Server Adapter Intel® PRO/1000 PT Server Adapter Brocade® CNA Dual-port adapter Optional Add-In HBAs: Brocade® FC4 and 8 GB HBAs		
Power Supply	One non-redundant 350W power supply Two hot-pluggable redundant 400W hot-plug power supplies		
Availability	Hot-plug hard drives, hot-plug redundant power supplies, DDR3 ECC memory, and quad-pack LED or an interactive LCD display screen		
Video	Matrox® G200eW w/ 8MB		
Remote Management	Optional iDRAC Express, iDRAC 6 Enterprise		
Systems Management	Dell OpenManage™ BMC, IPMI 2.0 compliant Lifecycle Controller enabled through optional iDRAC6 Express, iDRAC6 Enterprise, and vFlash		
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® 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 Novell® SUSE® Linux® Enterprise Server Red Hat® Enterprise Linux® Oracle® Solaris™ 10 05/10 (update 10) x86-64 Virtualization Options: Citrix® XenServer™ Enterprise 5.6 x86-64 VMware® vSphere™ 4.1 (including VMware ESX® 4.1 or VMware ESXi™ 4.1, or ESXi 5.0)		
Featured Database Application	For more information on the specific versions and additions, visit Dell.com/OSsupport . Microsoft® SQL Server® solutions (see Dell.com/SQL)		

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.

Explore the possibilities at Dell.com/PowerEdge

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