



# Dell PowerEdge R620

A hyper-dense 2-socket, 1U rack server, the Dell™ PowerEdge™ R620 has a large memory footprint and impressive I/O options that make it an exceptional platform for space-sensitive environments.

Designed for exceptional performance on a wide range of applications, the Dell PowerEdge R620 rack server is an impressive general purpose platform that is perfect for data centers with space constraints. With its hyper-dense memory (up to 768GB in a 1U form factor) and powered by Intel® Xeon® E5-2600 processors, the R620 really shines when handling virtualization, high performance computing (HPC), and workgroup collaboration applications.

## Accomplish more

Pack more computing power into a space-challenged data center with the PowerEdge R620, which offers an exceptionally large memory footprint along with balanced, scalable I/O capabilities, including integrated PCI Express® 3.0-capable expansion slots. With reliability, availability and serviceability (RAS) features like hot-pluggable fans, disks, power-supply units (PSUs) and even redundant failsafe hypervisors, the R620 keeps your data center running with rock-steady reliability.

## Dense design for demanding workloads

Virtualization environments demand high memory capacity to maximize the number of virtual machines per server, and the PowerEdge R620 was designed specifically with these environments in mind. It also offers outstanding computational density for HPC application clusters by providing powerful processing capabilities in a compact form factor.

## Tailor your network fabric

The R620's network features allow you to tailor your network throughput to match your application needs, enabling added I/O performance. Dell Select Network Adapters, our flexible NIC technology, let you choose the right network fabric without using up a valuable PCI slot. You can pick speed, technology,

vendor and other options, like switch independent partitioning, which lets you share and manage bandwidth on 10GbE connections.

## 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 the 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 integrates and connects to third-party systems management solutions 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 R620

- Compute density in a 1U form factor
- Optional hot-plug, front-access PCIe SSDs
- Choice of network fabric technologies
- PCIe 3.0-enabled expansion slots

| Feature                               | PowerEdge R620 technical specification  |   |
|---------------------------------------|---|---|
| Form factor                           | 1U rack   |   |
| Processors                            | Intel® Xeon® processor E5-2600 product family   |   |
| Processor sockets                     | 2   |   |
| Internal interconnect                 | 2 x Intel QuickPath Interconnect (QPI) links: 6.4 GT/s, 7.2 GT/s, 8.0 GT/s  |   |
| Cache                                 | 2.5MB per core; core options: 2, 4, 6, 8  |   |
| Chipset                               | Intel C600  |   |
| Memory <sup>1</sup>                   | Up to 768GB (24 DIMM slots): 2GB/4GB/8GB/16GB/32GB DDR3 up to 1600MT/s  |   |
| I/O slots                             | <b>3 PCIe slots:</b> (10-drive-bay configuration is available only with the 3 PCIe slot option)<br>Two x16 slots with x16 bandwidth, half-height, half-length<br>One x16 slot with x8 bandwidth, half-height, half-length<br><b>or</b><br><b>2 PCIe slots:</b><br>One x16 slot with x16 bandwidth, full-height, 3/4 length<br>One x16 slot with x16 bandwidth (or x8 with one processor only), half-height, half-length                                 |   |
| RAID controller                       | <b>Internal controllers:</b><br>PERC S110 (SW RAID)<br>PERC H310<br>PERC H710<br>PERC H710P   | <b>External HBAs (RAID):</b><br>PERC H810<br><b>External HBAs (non-RAID):</b><br>6Gbps SAS HBA  |
| Drive bays                            | Up to ten 2.5" hot-plug SAS, SATA, or SSD or up to four hot-plug 2.5" SAS, SATA, or SSD + two PCIe SSD  |   |
| Maximum internal storage <sup>1</sup> | Up to 10TB  |   |
| Hard drives                           | <b>Hot-plug hard drive options:</b><br>2.5" PCIe SSD, SAS SSD, SATA SSD, SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K)<br>Self-encrypting drives available   |   |
| Embedded NIC                          | Broadcom® 5720 Quad Port 1GbE BASE-T (no TOE or iSCSI offload)<br>Intel I350 Quad Port 1GbE BASE-T (no TOE or iSCSI offload)<br>Intel X540 Dual Port 10GbE BASE-T with 2 x 1GbE (FCoE capability enabled on the 10GbE ports)<br>Broadcom 57800S Dual Port 10GbE Base-T with 2 x 1GbE (TOE and iSCSI offload available on 10GbE ports)<br>Broadcom 57800S Dual Port 10GbE SFP+ with 2 x 1GbE (TOE and iSCSI offload available on 10GbE ports)            |   |
| Power supply                          | Auto-ranging Titanium efficiency, hot-plug redundant 750W AC power supply; Auto-ranging Platinum efficiency, hot-plug redundant 495W, 750W or 1100W AC power supply; 1100W DC power supply  |   |
| Availability                          | High-efficiency, hot-plug, redundant power supplies; hot-plug hard drives; TPM; dual internal SD support; hot-plug, redundant fans; optional bezel; information tag; ECC memory; interactive LCD screen; extended thermal support; ENERGY STAR® compliant; switch independent partitioning  |   |
| Remote management                     | iDRAC7 with Lifecycle Controller<br>iDRAC7 Express (default), iDRAC7 Enterprise (upgrade option),<br>8GB vFlash media (upgrade option), 16GB vFlash media (upgrade option)  |   |
| Systems management                    | IPMI 2.0 compliant<br>Dell OpenManage™ Essentials and Dell Management Console<br>Dell OpenManage Power Center<br>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</li> </ul>  |   |
| Rack support                          | <ul style="list-style-type: none"> <li>• ReadyRails™ II sliding rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded hole racks, with support for optional tool-less cable management arm</li> <li>• ReadyRails static rails for tool-less mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded and 2-post (Telco) racks</li> </ul> |   |
| Operating systems                     | Microsoft® Windows Server® 2012<br>Microsoft Windows Server 2012 Essentials<br>Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V® v2)<br>Microsoft Windows® Small Business Server 2011<br>Novell® SUSE® Linux Enterprise Server<br>Red Hat® Enterprise Linux®   | <b>Virtualization options:</b><br>Citrix® XenServer®<br>VMware vSphere® including ESX™ and ESXi™<br>Red Hat Enterprise Virtualization®<br>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)

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