



# PowerEdge R920

Designed to run mission-critical applications for midsized and large enterprises, the Dell PowerEdge R920 is a compute-intensive rack server with highly scalable memory and impressive I/O capabilities to match.

With up to four Intel® Xeon® E7 v2 multi-core processors, the ability to support dual RAID controllers and up to 6TB of memory, the PowerEdge R920 can readily handle your most demanding workloads. Ideal for large databases, Enterprise Resource Planning, e-commerce, business decision applications and high-performance computing, the R920 is also an excellent choice if you're looking to migrate from an outdated RISC architecture.

## Scale to match the challenge

React at the speed of business with the R920's highly scalable memory, I/O options and storage components. With four Intel Xeon E7 v2 processors, 96 DIMMs, 10 integrated PCI Express® (PCIe) expansion slots and 24 internal storage drives, the R920 gives you processing power, flexibility and capacity for growth. Build out your SAN capacity as your business grows. Keep pace with the increasing data demands of large enterprise applications with H730P PERC, dual PERC capability and up to eight NVMe Express Flash PCIe SSDs.

## Get results faster

Accelerate the time it takes enterprise applications to deliver services by eliminating the chokepoint — the speed of access to data. Use the R920's 24 internal storage drives, or take advantage of its 10 PCIe expansion slots to drive large scale SAN storage. With options like high-performance 12Gbps SAS drives, dual RAID controller capabilities and Express Flash NVMe devices, you can reduce storage access times and improve overall application efficiency.

## Run without disruption 24/7

Keep your business operations running and minimize unnecessary downtime with the advanced reliability, availability and serviceability (RAS) features that Intel Xeon E7 v2 processors add to the rock-solid reliability of PowerEdge servers — already RAS feature-rich with embedded redundant hypervisors, ECC memory correction, abundant RAID options

and Dell's exclusive Fault Resilient Memory, which provides a protected memory zone that safeguards your virtual machines from memory faults that may take them out of service.

## 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 in-band with a systems management software agent installed. **iDRAC7 Enterprise** features include a multi-administrator virtual console, virtual media and remote file share that 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.

## PowerEdge R920

- Up to 15 cores per processor
- Up to 96 DIMMs
- 10 PCIe expansion slots and 24 internal drives
- High-speed PERC and dual PERC capability

| Feature               | PowerEdge R920 technical specification  |
|-----------------------|---|
| Form factor           | 4U rack   |
| Processors            | Intel® Xeon® processor E7-4800 v2 and E7-8800 v2 product families (up to 4); Intel Xeon processor E7-2800 v2 product family (up to 2)   |
| Internal interconnect | Intel QuickPath Interconnect (QPI)  |
| Chipset               | Intel C602J   |
| Memory                | Up to 6TB (96 DIMM slots):4GB/8GB/16GB/32GB/64GB DDR3L, RDIMM, LR-DIMM up to 1600MT/s   |
| I/O slots             | Up to 10 PCIe slots; 8 PCIe 3.0, + 1 RAID slot, + 1 NDC slot + 2 optional PCIe slots  |
| RAID controller       | <b>Internal controllers:</b><br>PERC H730P <b>External controllers:</b><br>PERC H810<br>6Gbps SAS HBA   |
| Drive bays            | <ul style="list-style-type: none"> <li>Up to 24 2.5" hot-plug 12Gb/6Gb SAS HDD or SAS/SATA SSD</li> <li>Up to 8 front-accessible Express Flash NVMe PCIe SSD (PCIe 3.0)</li> </ul>  |
| Supported drives      | <b>Hot-plug hard drive options:</b><br>2.5" SATA/SAS SSD, SAS HDD (15K, 10K), nearline SAS HDD (7.2K)<br>2.5" PCIe SSDs: Dell PowerEdge NVMe Express Flash PCIe SSD   |
| Embedded NIC          | <b>Embedded NICs:</b><br>Broadcom® 5720 QP 1Gb Network Daughter Card<br>Broadcom 57800 2x10Gb DA/SFP+ + 2x1Gb BT Network Daughter Card<br>Broadcom 57800 2x10Gb BT + 2x1Gb BT Network Daughter Card<br>Broadcom 57840S Quad Port 10Gb SFP+ Direct Attach Rack Network Daughter Card<br>Intel Ethernet I350 QP 1Gb Network Daughter Card<br>Intel X520 DP 10Gb DA/SFP+, + I350 DP 1Gb Ethernet, Network Daughter Card<br>Intel Ethernet X540 10Gb BT DP + I350 1Gb BT DP Network Daughter Card   |
| Power supplies        | Hot-plug redundant PSUs: 750W AC, 1100W AC and DC   |
| Availability          | Hot-plug hard drives, hot-plug redundant power, hot-plug redundant fans, ECC memory, internal dual SD module  |
| Video                 | Matrox® G200 with 8MB memory  |
| Remote management     | iDRAC7 with Lifecycle Controller <ul style="list-style-type: none"> <li>iDRAC7 Express (default)</li> <li>iDRAC7 Enterprise (upgrade option)</li> <li>8GB or 16GB vFlash media (upgrade options)</li> </ul>   |
| Systems management    | IPMI 2.0 compliant<br>Dell OpenManage Essentials<br>Dell OpenManage Mobile<br>Dell OpenManage Power Center<br>Dell OpenManage Integrations: <ul style="list-style-type: none"> <li>Dell OpenManage Integration Suite for Microsoft System Center</li> <li>Dell OpenManage Integration for VMware® vCenter</li> </ul> Dell OpenManage Connections: <ul style="list-style-type: none"> <li>HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management</li> <li>Dell OpenManage Plug-in for Oracle Database Manager</li> </ul> |
| Operating systems     | Microsoft® Windows Server® 2012 R2 (includes Hyper-V®)<br>Microsoft Windows Server 2012 (includes Hyper-V)<br>Novell® SUSE® Linux Enterprise Server<br>Red Hat® Enterprise Linux®<br>VMware vSphere® ESXi™<br>For more information on specific versions and additions, visit <a href="http://Dell.com/OSsupport">Dell.com/OSsupport</a> .   |
| Recommended support   | Dell ProSupport Plus for critical systems or Dell ProSupport for premium hardware and software support for your PowerEdge solution. Consulting and deployment offerings are also available. Contact your Dell representative today for more information. Availability and terms of Dell Services vary by region. For more information, visit <a href="http://Dell.com/ServiceDescriptions">Dell.com/ServiceDescriptions</a> .   |

## Global services and support

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