Dell PowerEdge R320

An enterprise-class, 1-socket server, the Intel-powered Dell™ PowerEdge™ R320 has the right computing power, scalability and value in a dense chassis.

The Dell PowerEdge R320 is an enterprise-class, 1-socket, 1U rack-mount server designed to deliver the right combination of performance, redundancy and value in a dense chassis. This rack server caters to the growing need for virtualization by offering scalable processor performance, a large memory footprint and the capacity for up to eight hard drives. The performance per cost, along with configuration flexibility, storage connectivity and straightforward systems management make the R320 highly appealing to hosting providers. Consistent worldwide support makes the R320 highly appealing to multinational businesses and organizations.

Enterprise features, scalable expandability and value in a dense chassis

The R320 features the scalable performance of the Intel® Xeon® E5-2400 processors with essential Intel memory RAS features. This server complements its processors with six DIMMs and two PCI Express® (PCIe) slots, providing a substantial memory footprint and wide I/O bandwidth to support both memory-sensitive applications and databases. These combined technology features enable the R320 to support consolidated and virtualized environments.

To protect your virtualized workloads, the R320 offers dual SD cards making your hypervisors redundant and failsafe. Other reliability and availability features include up to four 3.5-inch or eight 2.5-inch hot-plug hard drives, both hardware and software RAID options and redundant, hot-plug power supplies.

Ideal for your applications

The R320 is an excellent fit for web, file and print serving as well as smaller scale hosting and e-commerce, retail server, workgroup server and smaller scale virtualization in space-constrained, small-medium business locations and departmental and remote sites of large businesses and public organizations.

Enterprise-class network options

As a 1-socket rack server, the R320 has very aggressive advanced network options, carrying multiple third-party brands and adapter types with 10GbE NIC, 10GbE FCoE and Fiber Channel 8Gb HBA.

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 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 R320

- Enterprise computing with Intel Xeon processors E5-2400
- Up to eight 2.5-inch drive capacity
- Up to six DIMMs with RAS
- PCIe 3.0-enabled expansion slots
- Enterprise redundancy and scalable expandability

Feature	PowerEdge R320 technical specification	
Form factor	1U rack	
Processors	Intel® Xeon® processor E5-2400 product family Intel Xeon processor E5-1410 Intel Pentium® processor 1400 product family	
Processor sockets	1	
Internal interconnect	Intel DMI 2.0	
Cache	2.5MB per core; core options: 2, 4, 6, 8	
Chipset	Intel C600 series	
Memory[1]	Up to 96GB (6 DIMM slots): 2GB/4GB/8GB/16GB DDR3 up to 1600MHz	
I/O slots	**2 PCIe slots:** • One x8 PCIe slot with x4 bandwidth, half-length, half-height • One x16 PCIe slot with x16 bandwidth, half-length, full-height	
RAID controller	**Internal controllers:** PERC S110 (SW RAID) PERC H310 PERC H710	**External HBAs (RAID):** PERC H810 **External HBAs (non-RAID):** 6Gbps SAS HBA
Drive bays	Up to eight 2.5" hot-plug SAS, SATA or SSD or four 3.5" SAS, SATA	
Maximum internal storage[1]	Up to 12TB	
Hard drives	**Hot-plug hard drive options:** 2.5" SATA, nearline SAS, SAS (15K, 10K), SAS SSD, SATA SSD 3.5" SATA, nearline SAS, SAS (15K) **Cabled hard drive options:** 3.5" SATA, nearline SAS, SAS (15K) Self-encrypting drives available	
Embedded NIC	Broadcom® 5720 Dual Port 1Gb LOM	
I/O adapter options	**1Gb Ethernet:** Broadcom 5720 Dual Port 1Gb NIC Broadcom 5719 Quad Port 1Gb NIC Intel I350 Dual Port 1Gb stand-up adapter Intel I350 Quad Port 1Gb stand-up adapter **10Gb Converged Ethernet:** Brocade® BR1020 Dual Port 10Gb CNA Qlogic® QLE8262 Dual Port 10Gb DA/SFP+ Broadcom 57810S Dual Port 10Gb Base-T CNA Broadcom 57810S Dual Port 10Gb DA/SFP+ CNA	**10Gb Ethernet:** Intel X520 Dual Port 10Gb DA/SFP+ server adapter Intel X540 Dual Port 10Gb Base-T adapter **FC8/FC4 HBA:** QLogic QLE2460 4Gb Single Port FC HBA QLogic QLE2462 4Gb Dual Port FC HBA QLogic QLE2560 8Gb Single Port FC HBA OLogic QLE2562 8Gb Dual Port FC HBA Emulex® LPe-12000-E 8Gb Single Port FC HBA Emulex LPe-12002-E 8Gb Dual Port FC HBA Brocade 815 8Gb Single Port FC HBA Brocade 825 8Gb Dual Port FC HBA
Availability	High-efficiency, hot-plug, redundant power supplies; hot-plug hard drives; TPM; dual internal SD support; fan fault tolerance; optional bezel; luggage tag; ECC memory, interactive LCD screen; ENERGY STAR® compliant	
Remote management	Basic management (default), iDRAC7 with Lifecycle Controller, iDRAC7 Express (upgrade option), iDRAC7 Enterprise (upgrade option), 8GB or 16GB vFlash media (upgrade options)	
Systems management	IPMI 2.0 compliant Dell OpenManage™ Essentials and Dell Management Console Dell OpenManage Power Center Dell OpenManage Connections: • OpenManage Integration Suite for Microsoft® System Center • Dell plug-in for VMware® vCenter™ • HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management	
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 tool-less 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® 2008 R2 SP1, x64 (includes Hyper-V™ v2) Microsoft Windows® Small Business Server 2011 SUSE® Linux®Enterprise Server Red Hat® Enterprise Linux® **Optional embedded hypervisors:** Citrix® XenServer™ VMware vSphere™ For more information on the specific versions and additions, visit Dell.com/OSsupport.	

[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 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.

Learn more at Dell.com/PowerEdge