Dell PowerEdge R750

D&LLTechnologies

Spec Sheet

General purpose server optimized to address the most demanding workloads

The Dell PowerEdge R750, is a full-featured enterprise server, delivering outstanding performance for the most demanding workloads.



Innovate at scale with challenging and emerging workloads

The Dell PowerEdge R750, powered by the 3rd Generation Intel[®] Xeon[®] Scalable processors is a rack server to address application performance and acceleration. The PowerEdge R750, is a dual-socket/2U rack server that delivers outstanding performance for the most demanding workloads. It supports 8 channels of memory per CPU, and up to 32 DDR4 DIMMs @ 3200 MT/s speeds. In addition, to address substantial throughput improvements the PowerEdge R750 supports PCIe Gen 4 and up to 24 NVMe drives with improved air-cooling features and optional Direct Liquid Cooling to support increasing power and thermal requirements. This makes the PowerEdge R750 an ideal server for data center standardization on a wide range of workloads including; Database and Analytics, High-performance computing (HPC), Traditional corporate IT, Virtual Desktop Infrastructure, and Al/ML environments that require performance, extensive storage and GPU support.

Increase efficiency and accelerate operations with autonomous collaboration

The Dell EMC OpenManage systems management portfolio tames the complexity of managing and securing IT infrastructure. Using Dell Technologies' intuitive end-to-end tools, IT can deliver a secure, integrated experience by reducing process and information silos in order to focus on growing the business. The Dell EMC OpenManage portfolio is the key to your innovation engine, unlocking the tools and automation that help you scale, manage, and protect your technology environment.

- Built-in telemetry streaming, thermal management, and RESTful API with Redfish offer streamlined visibility and control for better server management
- Intelligent automation lets you enable cooperation between human actions and system capabilities for added productivity
- Integrated change management capabilities for update planning and seamless, zero-touch configuration and implementation
- · Full-stack management integration with Microsoft, VMware, ServiceNow, Ansible and many other tools

Protect your data assets and infrastructure with proactive resilience

The Dell PowerEdge R750 server is designed with a cyber-resilient architecture, integrating security deeply into every phase in the lifecycle, from design to retirement.

- Operate your workloads on a secure platform anchored by cryptographically trusted booting and silicon root of trust
- Maintain server firmware safety with digitally signed firmware packages
- Prevent unauthorized configuration or firmware change with system lockdown
- Securely and quickly wipe all data from storage media, including hard drives, SSDs and system memory with System Erase

PowerEdge R750

The Dell PowerEdge R750 offers compelling performance, highspeed memory and capacity, I/O bandwidth and storage to address data requirements – Ideal for:

- Traditional corporate IT
- Database and Analytics
- Virtual Desktop Infrastructure
- AI/ML and HPC

Feature	Technical Specifications		
Processor	Up to two 3rd Generation Intel Xeon Scalable processors, with up to 40 cores per processor		
Memory	 32 DDR4 DIMM slots, supports RDIMM 2 TB max or LRDIMM 8 TB max, speeds up to 3200 MT/s 		
	Up to 16 Intel Persistent Memory 200 series (BPS) slots, 8 TB max		
	Supports registered ECC DDR4 DIMMs only		
Storage controllers	 Internal controllers: PERC H745, HBA355I, S150, H345, H755, H755N 		
	 Boot Optimized Storage Subsystem (BOSS-S2): HW RA 	Boot Optimized Storage Subsystem (BOSS-S2): HW RAID 2 x M.2 SSDs 240 GB or 480 GB	
	Boot Optimized Storage Subsystem (BOSS-S1) HW RAID 2 x M.2 SSDs 240 GB or 480 GB		
	External PERC (RAID): PERC H840, HBA355E		
Drive Bays	Front bays:		
	Up to 12 x 3.5-inch SAS/SATA (HDD/SSD) max 192 TB		
	• Up to 8 x 2.5-inch NVMe (SSD) max 122.88 TB		
	Up to 16 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 245.76 TB		
	Up to 24 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 368.84 TB		
	Rear bays:		
	Up to 2 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 30.72 TB		
	Up to 4 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) max 61.44 TB 700 W Titanium HLAC/240 mixed mode		
Power Supplies	 700 W Hahium ALAC/240 mixed mode 800 W Platinum AC/240 mixed mode 		
	 1100 W Titanium AC/240 mixed mode 		
	 1100 W DC -4860 V 		
	 1400 W Platinum AC/240 mixed mode 		
	 1800 W Titanium HLAC/240 mixed mode 		
	 2400 W Platinum AC/240 mixed mode 		
	 2800 W Titanium HLAC/240 mixed mode 		
Cooling Options	Air cooling, optional processor liquid cooling		
Fans	Standard fan/High performance SLVR fan/High performance GOLD fan		
Up to six hot plug fans			
Dimensions	 Height – 86.8 mm (3.41 inches) 		
	• Width – 482 mm (18.97 inches)		
	Depth – 758.3 mm (29.85 inches) - without bezel		
	772.14 mm (30.39 inches) - with bezel		
Form Factor	2U rack server		
Embedded Management	• iDRAC9		
	iDRAC Service Module		
	iDRAC Direct		
	Quick Sync 2 wireless module		
Bezel	Optional LCD bezel or security bezel		
OpenManage Software	OpenManage Enterprise		
	OpenManage Power Manager plugin OpenManage Support Assist plugin		
	 OpenManage SupportAssist plugin OpenManage Update Manager plugin		
Mobility			
,	OpenManage Mobile	OpenManage Connections	
Integrations and Connections	OpenManage Integrations BMC Truesight 	OpenManage Connections IBM Tivoli Netcool/OMNIbus 	
	Microsoft System Center	IBM Tivoli Network Manager IP Edition	
	Red Hat Ansible Modules	Micro Focus Operations Manager	
	VMware vCenter and vRealize Operations Manager	Nagios Core	
		Nagios XI	
Security	Cryptographically signed firmware	1.69.00 / 1	
	Secure Boot		
	Secure Erase		
	Silicon Root of Trust		
	System Lockdown (requires iDRAC9 Enterprise or Datacenter)		
	TPM 1.2/2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ		
Embedded NIC	2 x 1 GbE LOM		
Network Options	1 x OCP 3.0 (x8 PCIe lanes)		
GPU Options	Up to two double-width 300 W, or three single-width 150 W, or six single-width 75 W accelerators		
Ports	Front Ports	Rear Ports	
	• 1 x Dedicated iDRAC Direct micro-USB	• 1 x USB 2.0	
	• 1 x USB 2.0	• 1 x Serial (optional)	
	• 1 x VGA	• 1 x USB 3.0	
		• 2 x RJ-45	
		1 x VGA (optional for liquid cooling configuration)	
	Internal Ports		
	• 1 x USB 3.0		
PCIe	Up to 8 x PCIe Gen4 slots (up to 6 x16) with support for SNAF	P I/O modules	

Feature	Technical Specifications	
Operating System and Hypervisors	Canonical Ubuntu Server LTS	
	Citrix Hypervisor	
	Microsoft Windows Server with Hyper-V	
	Red Hat Enterprise Linux	
	SUSE Linux Enterprise Server	
	VMware ESXi	
	For specifications and interoperability details, see Dell.com/OSsupport.	
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.	

Recommended support and services

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 Dell.com/ ServiceDescriptions.

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