Dell EMC PowerEdge R740

Spec Sheet

Optimized for workload acceleration

The PowerEdge R740 was designed to accelerate application performance leveraging accelerator cards and storage scalability. The 2-socket, 2U platform has the optimum balance of resources to power the most demanding environments.



Expand and optimize application performance

The scalable business architecture of the R740 can scale up to three 300W or six 150W GPUs, or up to three double-width or four single-width FPGAs. With up to 16 2.5" drives or 8 3.5" drives the R740 provides the versatility to adapt to virtually any application and provides the perfect platform for VDI deployments.

- Scale your VDI deployments with 3 double-width GPUs, supporting up to 50% more users when compared to R730.
- · Free up storage space using internal M.2 SSDs optimized for boot.

Scale compute resources with 2nd Generation Intel[®] Xeon[®] Scalable processors and tailor performance based on your unique workload requirements.

Automate systems management with OpenManage

The Dell EMC OpenManage[™] portfolio helps deliver peak efficiency for PowerEdge servers, delivering intelligent, automated management of routine tasks. Combined with unique agent-free management capabilities, the R740 is simply managed, freeing up time for high profile projects.

- Simplify management with the New OpenManage Enterprise[™] console, with customized reporting and automatic discovery.
- Take advantage of QuickSync 2 capabilities and gain access to your servers easily through your phone or tablet.

Rely on PowerEdge with built-in security

Every PowerEdge server is designed as part of a cyber resilient architecture, integrating security into the full server lifecycle. The R740 leverages new security features built-into every new PowerEdge server strengthening protection so you can reliably and securely deliver accurate data to your customers no matter where they are. By considering

each aspect of system security, from design to retirement, Dell EMC ensures trust and delivers a worry-free, secure infrastructure without compromise.

- - Rely on a secure component supply chain to ensure protection from factory to the data center.
- Maintain data safety with cryptographically signed firmware packages and Secure Boot.
- Protect your server from malicious malware with iDRAC9 Server Lockdown mode (requires Enterprise or Datacenter license)
- Wipe all data from storage media including hard drives, SSDs and system memory quickly and securely with System Erase.

PowerEdge R740

Persistent Memory NVDIMM-N can increase database performance by 10x

PowerEdge R740		
Features	Technical Specification	
Processor	Up to two 2 nd Generation Intel [®] Xeon [®] Scalable processors, up to 28 cores per processor	
Memory	24 DDR4 DIMM slots, Supports RDIMM /LRDIMM, speeds up to 2933MT/s, 3TB max Up to 12 NVDIMM, 192 GB Max Up to 12 Intel® Optane™ DC persistent memory PMem, 6.14TB max (7.68TB max with PMem + LRDIMM) Supports registered ECC DDR4 DIMMs only	
Storage controllers	Internal Controllers: PERC H330, H730P, H740P, HBA330, H750, HBA350i External Controllers: H840, HBA355e, 12 Gbps SAS HBA Software RAID:S140 Boot Optimized Storage Subsystem (BOSS):HWRAID 2 x M.2 SSDs 240GB, 480GB Internal Dual SD Module ¹	
Storage	Front drive bays: Up to 16 x 2.5" SAS/SATA (HDD/SSD) max 122.88TB or up to 8 x 3.5" SAS/SATA HDD max 128TB Optional DVD-ROM, DVD+RW	
Power supplies	Titanium 750W, Platinum 495W, 750W, 750W 240VDC, ² 1100W, 1100W 380VDC ² 1600W, 2000W and 2400W, Gold 1100W -48VDC	Hot plug power supplies with full redundancy Up to 6 hot plugs fans with full redundancy
Dimensions	Form factor: Rack (2U)	Height: 86.8mm (3.4") Width ³ : 434.0mm (17.08") Depth ³ : 737.5mm (29.03") Weight: 28.6kg (63lbs.)
Embedded management	iDRAC9, iDRAC Direct, iDRAC RESTful with Redfish, Quick Sync 2 wireless module (optional)	
Bezel	Optional LCD Bezel or Security bezel	
OpenManage™ Software	OpenManage Enterprise	OpenManage Mobile OpenManage Power Manager
Integrations and connections	Integrations: Microsoft® System Center VMware® vCenter™ BMC Truesight Red Hat® Ansible® Modules	Connections: Nagios [®] Core & Nagios [®] XI Micro Focus Operations Manager I IBM Tivoli Netcool/OMNIbus
Security	TPM 1.2/2.0, TCM 2.0 optional Cryptographically signed firmware Secure Boot	System Lockdown (requires iDRAC Enterprise or Datacenter) Secure erase Silicon Root of Trust
I/O & Ports	Network daughter card options 4 x 1GbE or 2 x 10GbE + 2 x 1GbE or 4 x 10GbE or 2 x 25GbE Front ports: 1 x Dedicated iDRAC Direct Micro-USB, 2 x USB 2.0, 1 x USB 3.0 (optional), 1 x VGA Rear ports: 1 x Dedicated iDRAC network port, 1 x Serial, 2 x USB 3.0, 1 x VGA Video card: 2 x VGA Riser options with up to 8 PCIe Gen 3 slots, maximum of 4 x 16 slots	
Accelerator options	Up to three 300W or six 150W GPUs, or up to three double-width or four single-width FPGAs.	See Dell.com/GPU for latest information.
Supported operating systems	Canonical® Ubuntu® Server LTS Citrix® Hypervisor Microsoft Windows Server® LTSC with Hyper-V Oracle® Linux	Red Hat [®] Enterprise Linux SUSE [®] Linux Enterprise Server VMware [®] ESXi For specifications and interoperability details, see <u>Dell.com/OSsupport</u> .
OEM-ready version available		

ESXi (only OS supported) Only available in China and Japan Dimenisons do not include bezel

Recommended services

ProSupport Plus with SupportAssist provides proactive and predictive support for critical systems. ProSupport provides comprehensive hardware and software support.

Get more from your technology starting on day one with ProDeploy Enterprise Suite deployment offers. For more information, visit Dell.com/itlifecycleservices.

End-to-end technology solutions

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell EMC for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell EMC Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services TM has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.*

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