# Dell EMC PowerEdge R740xd

#### **Spec Sheet**

# Maximize storage performance and scalability

The PowerEdge R740xd delivers a perfect balance between storage scalability and performance. The 2U two-socket platform is ideal for software defined storage, service providers or as virtual desktop infrastructure.



### Maximize performance and capacity

The scalable system architecture behind the R740xd with up to 24 NVMe drives creates the ideal balance between scalability and performance. The R740xd versatility is highlighted with the ability to mix any drive type to create the optimum configuration of NVMe, SSD and HDD for either performance, capacity or both. The R740xd is the platform of choice for software defined storage and is the foundation for VSAN or the PowerEdge XC.

- Maximize storage performance with up to 24 NVMe drives and ensure application performance scales to meet demands.
- Free up storage space using internal M.2 SSDs optimized for boot.
- Simplify and accelerate ScaleIO or VMware vSAN™ deployments with validated, pre-bundled and tailored Ready Nodes.

Accelerate workloads with up to three double-width 300W GPUs, or up to six single-width 150W GPUs, or up to three double-width or up to four single-width FPGAs.

### Automate systems management with OpenManage

Dell EMC PowerEdge servers with OpenManage<sup>™</sup> technology work at peak efficiency for PowerEdge servers, delivering intelligent, automated management of routine tasks. Combined with unique agent-free management capabilities, the R740xd is simply managed, freeing up time for high profile projects.

- Simplify management with the OpenManage Enterprise<sup>™</sup> 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...

### Ensure server security from factory to you

Every PowerEdge server is designed as part of a cyber resilient architecture, integrating security into the full server life cycle. The R740xd 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

#### PowerEdge R740xd

Choose the right resources to power your workloads with NVMe, GPU or FPGA options

PowerEdge R740xd		
Features	Technical Specification	
Processor	Up to two 2 <sup>nd</sup> 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 <sup>®</sup> Optane™ DC persistent memory PMem, 6.14TB max, (7.68TB max with DPCMM + 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 <sup>1</sup>	
Drive bays	Front bays: Up to 24 x 2.5" SAS/SATA (HDD/SSD), NVMe SSD max 184.32TB or up to 12 x 3.5" SAS/SATA HDD max 216TB Mid bay: Up to 4 x 2.5", max 30.72TB SAS/SATA (HDD/SSD), or up to 4 x 3.5" SAS/SATA HDD, max 64TB Rear bays: Up to 4 x 2.5", max 30.72TB SAS/SATA (HDD/SSD), or up to 2 x 3.5" SAS/SATA HDD max 32TB	
Power supplies	Titanium 750W, Platinum 495W, 750W, 750W 240VDC,* 1100W, 1100W 380VDC* 1600W, 2000W and 2400W, Gold 1100W -48VDC	Hot plug power supplies with full redundancy Up to 6 hot plugs fans with full redundancy *Only available in China and Japan
Dimensions	Form factor: Rack (2U)	Height: 86.8m (3.42") Width*: 434mm (17.08") Depth*: 737.5mm (29.03") Weight: 33.1kg (73lbs.) *Dimensions do not include bezel
Embedded management	iDRAC9, iDRAC Direct, iDRAC RESTful API with Redfish Quick Sync 2 wireless module (optional)	
Bezel	Optional LCD Bezel or Security bezel	
OpenManage™ Software	OpenManage Enterprise	OpenManage Mobile OpenManage Power Center
Integrations and connections	Integrations: Microsoft® System Center VMware® vCenter™ BMC Truesight Red Hat® Ansible Modules	Connections: Nagios <sup>®</sup> Core & Nagios <sup>®</sup> XI Micro Focus Operations Manager 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) Silicon Root of Trust Secure erase
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. GPU and FPGA options are available only on 24 x 2.5" drive chassis.	See <u>Dell.com/GPU</u> for latest information. Some configurations support up to 2 GPUs with NVMes.
Supported operating systems	Canonical® Ubuntu® Server LTS Citrix® Hypervisor Microsoft Windows Server® LTSC with Hyper-V Oracle® Linux	Red Hat <sup>®</sup> Enterprise Linux SUSE <sup>®</sup> Linux Enterprise Server VMware <sup>®</sup> ESXi For specifications and interoperability details, see <u>Dell.com/OSsupport</u> .
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 <u>Dell.</u> com/OEM.	

ESXi (only OS supported)

## **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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