Dell EMC PowerEdge R540



Spec Sheet

Built for versatility



The PowerEdge R540 delivers the ideal balance of resources and affordability to adapt to a variety of application demands.

Power your applications with the versatility of the R540

The PowerEdge R540 delivers the versatility and flexibility to power a variety of applications. With a balanced set of resources, expandability and affordability the R540 adapts to the demands of the modern data center with the ideal value optimized design. Automatically optimize performance with one button application tuning and scale for future demands with up to 14 3.5" drives.

- Scale compute resources with 2nd Generation Intel® Xeon® Scalable processors, and tailor performance based on your unique workload requirements.
- · Automatically optimize application performance with one-button tuning.
- Flexible storage with up to 14 3.5" drives.
- Free up storage with boot optimized M.2 SSDs.

Intuitive systems management with intelligent automation

Dell EMC PowerEdge servers are optimized for top efficiency and uptime, with intelligent automation that decreases time spent on the most common IT tasks. Combined with the agent-free management of the embedded iDRAC with Lifecycle Controller, the R540 is easily and effectively managed.

- Simplify data center management with OpenManage Essentials to intelligently automate the entire server life cycle management process from bare-metal deployment, through configuration and updates, to ongoing maintenance.
- Use the OpenManage Mobile app to take advantage of new wireless Quick Sync 2 capabilities to efficiently perform management procedures at-the-server, across multiple servers within the data center, or monitor server status and respond to alerts, anytime, anywhere.

Rely on PowerEdge with built-in security

Every PowerEdge server is made with a cyber-resilient architecture, building security into all parts of a server's life cycle. The R540 uses these new security features so you can reliably and securely deliver the right data to where your customers are, no matter where they are. Dell EMC considers each part of system security, from design to end of life, to ensure trust and deliver worry-free, secure systems.

- Rely on a secure supply chain that protects servers from factory to the data center.
- Maintain data safety with cryptographically signed firmware packages and Secure Boot.
- · Prevent unauthorized or malicious change with Server Lockdown.
- Wipe all data from storage media including hard drives, SSDs and system memory quickly and securely with System Erase.

PowerEdge R540

- 2U, 2 socket server
- Up to 14 3.5" drives, max 224TBs
- Internal M.2 boot drives

| PowerEdge R540 | | |
|------------------------------------|---|---|
| Features | Technical Specification | |
| Processor | Up to two 2 nd Generation Intel® Xeon® Scalable processors, up to 20 cores per processor | |
| Memory | 16 DDR4 DIMM slots, Supports RDIMM /LRDIMM, speeds up to 2666MT/s, 1TB max ¹ | |
| Storage controllers Internal Boot | Internal controllers: PERC H750, H350, H740P, H730P, H330 External controllers: HBA355e, H840, 12Gb/s Ext SAS HBA Software RAID: S140 SAS Host Bus Adapters: HBA350i, HBA330 Boot Optimized Storage Subsystem (BOSS):HWRAID 2 x M.2 SSDs 240GB or 480GB Internal Dual SD Module ² | |
| Storage | Front drive bays: Up to 12 x 3.5" SAS/SATA HDD max 192TB Rear drive bays: Up to 2 x 3.5 SAS/SATA HDD max 32TB Optional DVD-ROM, DVD+RW | |
| Power supplies Fans | Platinum 495W, 750W, 750W 240V HVDC ³ , 1100W, 1100W 380V HVDC ³ Hot plug power supplies with full redundancy option Up to six fans | |
| Sizing | Form factor: Rack (2U) | Height: 86.8mm (3.41") Width*: 434mm (17.08") Depth*: 703.76mm (27.71") Weight: 29.68kg (65.43lbs.) *Dimensions do not include bezel. |
| Bezel | Optional LCD or security bezel | |
| Embedded / At-Server | iDRAC9 iDRAC Direct | iDRAC RESTful API with Redfish Quick Sync 2 BLE/wireless module |
| Consoles & Mobile | OpenManage Enterprise | OpenManage Mobile OpenManage Power Manager |
| Integrations | OpenManage integrations: Microsoft® System Center, VMware® vCenter™, BMC Truesight, Red Hat® Ansible® Modules | |
| Connections | Nagios® Core and Nagios® XI, IBM Tivoli® Netcool/OMNIbus Micro Focus Operations Manager I | |
| Tools | Dell EMC Repository Manager Dell EMC Update Package Dell EMC System Update Dell EMC Server Update Utility | iDRAC Service Module OpenManage Server Administrator OpenManage Storage Services |
| Security | TPM 1.2/2.0, TCM 2.0 optional Cryptographically signed firmware Silicon Root of Trust | Secure Boot System Lockdown (requires OpenManage Enterprise) System Erase |
| I/O & Ports | Network options: 2 x 1GbE LOM + (optional) LOM Riser 2 x 1GbE or 2 x 10GbE SFP+ or 2 x 10GbE BaseT Front ports: 1 x Dedicated iDRAC Direct USB, 1 x USB 2.0, 1 x Video Rear ports: 1 x Dedicated iDRAC network port, 1 x Serial, 2 x USB 3.0, 1 x Video With Optional Riser: Non-rear storage config: 1xFH/FL + 1xHH/HL (2U Right riser) slots + 3 HH/HL slots Rear storage config: 1xHH/HL (1U Left Riser) + 1xHH/HL (1U Right risers) slot or 1xHH/HL (1U Left Riser) + 1x FH/HL (1U Right riser) | |
| Supported operating systems | Canonical® Ubuntu® Server LTS Citrix® Hypervisor Microsoft Windows Server® LTSC 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 | Choose 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/itlifecycleservices. | |

¹768GB max memory is recommended for performance optimized configurations

Learn more at Dell.com/PowerEdge

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²ESXi (only OS supported) ³Available in China only