DELL Technologies

Specification Sheet

PowerEdge R960

Powerful scale-up foundation for databases and business-critical applications

Accelerate compute-intensive, high-performance core workloads

The R960 boosts business-critical operations with unprecedented scale-up capabilities in a 4U air-cooled form factor with four (4) Intel Xeon® Scalable Processors to empower business and drive data-driven initiatives.

- With a maximum CPU core count of 60 cores and the ability to support 64 DDR5 DIMMs for a total of 16 TB of memory, the R960 is positioned for the largest in-memory databases without the need for slower I/O database access.
- Scale up business needs with support for up to 24 NVMe drives, DDR5 DIMMs,12 PCIe Gen5 slots for I/O expansion, LOM, and industry standard OCP to enable customers flexible network connectivity.
- Enable fast 1:1 CPU-I/O communications with PCIe Gen5 adaptor support.

Business-critical performance, business-wide

- Harness latest generation technologies to maximize data transformation, support large in-memory databases, and generate faster insights to drive the business forward.
- Leverage new workload accelerators built into each Intel Xeon processor that are purpose-designed for peak performance in traditional and emerging business applications.
- Install up to 4 GPU accelerators to boost AI-based business applications and rapidly transform real-time data and analytics into decision-based outcomes.
- Increase power user and worker productivity with up to 4 VDI accelerators.

Cyber Resilient Architecture for Zero Trust IT environment & operations

Security is integrated into every phase of the PowerEdge lifecycle, including protected supply chain and factory-to-site integrity assurance. Silicon-based root of trust anchors end-to-end boot resilience while Multi-Factor Authentication (MFA) and role-based access controls ensure trusted operations.

Increase efficiency and accelerate operations with autonomous collaboration

The Dell OpenManage™ systems management portfolio delivers a secure, efficient, and comprehensive solution for PowerEdge servers. Simplify, automate and centralize one-to-many management with the OpenManage Enterprise console and iDRAC.

Sustainability

From recycled materials in our products and packaging, to thoughtful, innovative options for energy efficiency, the PowerEdge portfolio is designed to make, deliver, and recycle products to help reduce the carbon footprint and lower your operation costs. We even make it easy to retire legacy systems responsibly with Dell Technologies Services.

Rest easier with Dell Technologies Services

Maximize your PowerEdge Servers with comprehensive services ranging from Consulting, to ProDeploy and ProSupport suites, Data Migration and more – available across 170 locations and backed by our 60K+ employees and partners.

PowerEdge R960

The Dell PowerEdge R960 is a high-performance server designed to boost outcomes for core applications such as:

- Large in-memory databases including SAP HANA, SQL, Oracle
- Data analytics
- AI and virtualization, VDI

Feature	Technical Specifications
Processor	Up to four 4th Generation Intel Xeon Scalable processor with up to 60 cores per processor and with optional Intel® QuickAssist Technology
Memory	• 64 DDR5 DIMM slots, supports RDIMM 16 TB max, speeds up to 4800 MT/s • Supports registered ECC DDR5 DIMMs only
Storage controllers	• Internal Controllers: PERC H965i, PERC H755, PERC H355, HBA355i, HBA465ii • Internal Boot: Boot Optimized Storage Subsystem (BOSS-N1): HWRAID 2 x M.2 NVMe SSDs or USB • External HBA (non-RAID): HBA355e, HBA465e • Software RAID: S160
Drive Bays	Front bays: • Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) max 122.88 TB • Up to 16 x 2.5-inch SAS/SATA (HDD/SSD) max 245.76 TB • Up to 24 x 2.5-inch NVMe (SSD) max 368.64 TB • Up to 16 x 2.5-inch SAS/SATA (HDD/SSD) + 8 x 2.5-inch NVMe (SSD) max 368.64 TB • Up to 32 x 2.5-inch SAS/SATA (HDD/SSD) max 491.52 TB
Power Supplies	• 1100 W Titanium 100—240 VAC or 240 HVDC, hot swap redundant • 1400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant • 1800 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant • 2400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant • 2800 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant • 1100W LVDC –48 — –60 VDC, hot swap redundant
Cooling Options	• Air cooling • Optional Direct Liquid Cooling (DLC)* Note: DLC is a rack solution and requires rack manifolds and a cooling distribution unit (CDU) to operate.
Fans	• Standard (STD) fans • Up to 6 sets (dual fan module) hot plug fans
Dimensions	• Height – 174.3 mm (6.86 inches) • Width – 482 mm (18.97 inches) • Depth – 883.195 mm (34.77 inches) with bezel 869.195 mm (34.22 inches) without bezel
Form Factor	4U rack server
Embedded Management	• iDRAC9 • iDRAC Direct • iDRAC RESTful API with Redfish • iDRAC Service Module • Quick Sync 2 wireless module
Bezel	Optional LCD bezel or security bezel
OpenManage Software*	• CloudIQ for PowerEdge plug in • OpenManage Enterprise • OpenManage Enterprise Integration for VMware vCenter • OpenManage Integration for Microsoft System Center • OpenManage Integration with Windows Admin Center • OpenManage Power Manager plugin • OpenManage Service plugin • OpenManage Update Manager plugin
Mobility*	OpenManage Mobile
OpenManage Integrations*	• BMC Truesight • Microsoft System Center • OpenManage Integration with ServiceNow • Red Hat Ansible Modules • Terraform Providers • VMware vCenter and vRealize Operations Manager
Security	• Cryptographically signed firmware • Data at Rest Encryption (SEDs with local or external key mgmt) • Secure Boot • Secure Erase • Secured Component Verification (Hardware integrity check) • Silicon Root of Trust • System Lockdown (requires iDRAC9 Enterprise or Datacenter) • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ
Embedded NIC	2 x 1 GbE LOM card (optional)
Network options	1 x OCP card 3.0 (optional) Note: The system allows either LOM card or an OCP card or both to be installed in the system.
GPU Options	Up to 4 x 400 W DW
Ports	Front Ports • 1 x iDRAC Direct (Micro-AB USB) port • 1 x USB 2.0 • 1 x VGA Rear Ports • 1 x Dedicated iDRAC Ethernet port • 1 x USB 2.0 • 1 x USB 3.0 • 1 x Serial (optional) • 1 x VGA (optional for Direct Liquid Cooling configuration) Internal Ports • 1 x USB 3.0 (optional)

Feature	Technical Specifications
PCIe	Up to twelve PCIe slots: • Slot 1: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length • Slot 2: 1 x16 Gen5 Full height, Half length • Slot 3: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length (double width) • Slot 4: 1 x16 Gen5 Low profile, Half length • Slot 5: 1 x16 Gen5 Low profile, Half length • Slot 6: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length (double width) • Slot 7: 1 x16 Gen5 Full height, Half length • Slot 8: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length (double width) • Slot 9: 1 x16 Gen5 Low profile, Half length • Slot 10: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length • Slot 11: 1 x16 Gen5 Full height, Half length or 1 x16 Gen5 Full height, Full length (double width) • Slot 12: 1 x16 Gen5 Full height, Half length
Operating System and Hypervisors	• Canonical Ubuntu Server LTS • Microsoft Windows Server with Hyper-V • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • VMware ESXi
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.

*Future releases will include additional features.

Discover more about PowerEdge servers

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