DELL Technologies

Specification Sheet

PowerEdge R470

Unprecedented Single-Socket Server with Optimized Power and Balanced Performance

Boost Datacenter Efficiencies and Performance

The Dell PowerEdge R470 is a 1U, single-socket rack server engineered for high-performance computing with optimal power efficiency and balanced performance, driving cost savings and boosting data center productivity. Its advanced design maximizes rack utilization by offering more cores in a single socket enabling better performance in a smaller footprint while minimizing energy consumption. This makes it ideal for workloads like cloud scale web and app microservices, data services, virtualization, and scale-out database.

Purpose-built for enterprise and scalable infrastructures, the PowerEdge R470 seamlessly integrates into existing environments. Equipped with an Intel® Xeon® processor with E-cores that are tailored for energy efficiency and performance-per-watt, offering both improved power efficiency and higher rack density. With GPU support, it further enhances computational power while reducing overall operational costs, especially on energy consumption impact.

The server is available in rear I/O hot aisle and front I/O cold aisle configurations, with the front I/O cold aisle improving serviceability, reducing maintenance time, and enhancing overall efficiency, reliability, and uptime. Dell's Smart Power and Cooling Technology, optimized for air cooling, significantly reduces energy consumption, delivering long-term operational savings and supporting sustainability goals.

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. The Silicon-based root of trust anchors end-to-end boot resilience while Multi-Factor Authentication (MFA) and role-based access controls safeguard trusted operations.

Increase efficiency and accelerate operations with autonomous collaboration

The Dell 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 OpenManage portfolio is the key to your innovation engine, unlocking the tools and automation that help you scale, manage, and protect your technology environment.

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.

Rest easier with Dell Technologies Services

Maximize your PowerEdge Servers with comprehensive services designed to meet you wherever you are. Accelerate time to value in achieving high AI use cases with **Professional Services for AI**, choose from tailored deployment options with the **ProDeploy Suite**, receive proactive and predictive support with our **ProSupport Suite**, and so much more with our services available across 170 locations and backed by our 60K+ employees and partners.

PowerEdge R470

The Dell PowerEdge R470 is powered by Intel Xeon 6 Processors, DDR5 Memory, NVMe BOSS, Energy Star compliant and advanced cooling.

Ideal for:

- Cloud scale web and app microservices
- Data services
- Virtualization
- Scale-out database

Feature	Technical Specifications
Processor	One Intel® Xeon 6 E-core processor with up to 144 cores per processor or One Intel® Xeon 6 P-core processor with up to 86 Cores with R1S option
Memory	• 16 DDR5 DIMM slot, supports RDIMM 4TB max, speeds up to 6400 MT/s • Intel® Xeon® 6 E-core processor - supports 1 TB max • Intel® Xeon® 6 P-core processor with up to 86 cores with R1S option - supports 4 TB max • Supports registered ECC DDR5 DIMMs only Note: The installed processor may reduce the operating speed of the DIMM
Storage controllers	• Internal Controllers (RAID): PERC H365i DC-MHS, front PERC H965i DC-MHS, PERC H365i adapter, PERC H965i adapter • External Controllers: HBA465e, H965e(RAID) • Internal Boot: Boot Optimized Storage Subsystem (BOSS-N1 DC-MHS): HWRAID 1, 2 xM.2 NVMe SSDs, M.2 interposer with upto 2 x M.2 NVMe SSDs or USB
Drive Bays	Front bays: • Up to 8 x EDSFF E3.S Gen5 NVMe max 491.52 TB • Up to 16 x EDSFF E3.S Gen5 NVMe max 983.04 TB • Up to 8 x 2.5-inch SATA/NVMe max 491.52 TB • Up to 10 x 2.5 - inch SATA/NVMe (with 4 x 2.5 -inch universal) max 614.4 TB • Up to 4 x 3.5 - inch SATA max 128 TB (only supported with rear 2 x E3.S drives; not supported as standalone front-only configuration) Rear bays: • Up to 2 x EDSFF E3.S Gen5 NVMe max 122.88 TB
Power Supplies	• 800W Platinum/Titanium 100-240 VAC or 240 HVDC, hot swap redundant • 1100 W Platinum/Titanium 100-240 VAC or 240 HVDC, hot swap redundant • 1500 W Titanium 100-240 VAC or 240 HVDC, hot swap redundant • 1500 W 277 Vac and HVDC Titanium, hot swap redundant • 1400W -48v DC Titanium, hot swap redundant
Cooling Options	Air cooling
Fans	• Up to 4 sets (dual fan module) hot swappable fans
Dimensions	• Height – 42.8 mm (1.69 inches) • Width – 482 mm (19.0 inches) • Depth – 816.92 mm (32.16 inches) with bezel • Depth – 815.14 mm (32.09 inches) without bezel • Depth (Front I/O Configuration) — 829.44 mm (32.09 inches) without bezel Note: Front I/O configuration will not have a bezel.
Form Factor	1U rack server
Embedded Management	• iDRAC • iDRAC Direct • iDRAC RESTfull API with redfish • RACADM CLI • iDRAC Service Module
Bezel	Optional security bezel
Security	• Cryptographically signed firmware • Data at Rest Encryption (SEDs with local or external key mgmt) • Secure Boot • Secured Component Verification (Hardware integrity check) • Secure Erase • Silicon Root of Trust • System Lockdown (requires iDRAC10 Enterprise or Datacenter) • TPM 2.0 FIPS, CC-TCG certified • Chassis Intrusion Detection
OCP network options	• Up to two OCP NIC card 3.0: Two slots on the front or two slots on the rear (optional) Slot Numbers: 2,5,31,32
Embedded NIC	• 1 Gb dedicated BMC Ethernet port
GPU Options	Up to 4 x 75 W SW
DPU Options	NVIDIA BlueField-3 2 x 200 GbE B3220
Ports	Front Ports • 1 x USB 2.0 Type - C port • 1 x USB 2.0 Type A port (optional) • 1 x Mini-DisplayPort (optional) • 1 x DB9 Serial (with front I/O configuration) • 1 x Dedicated BMC Ethernet port (with front I/O configuration) Rear Ports • 1 x Dedicated BMC Ethernet port • 2 x USB 3.1 Type A ports • 1 x VGA Internal Ports • 1 x USB 3.1 Type A port
PCIe	Up to 4 Gen5 PCIe slots (x16 connectors) • Slot 1 -1 x8 Gen5 Low Profile • Slot 1 -1 x16 Gen5 (x16 connector) full height, half length on rear riser • Slot 4 -1 x16 Gen5 (x16 connector) full height, half length on rear riser • Slot 31 -1 x16 Gen5 (x16 connector) full height, half length on rear riser • Slot 32 -1 x16 Gen5 (x16 connector) full height, half length on rear riser

Feature	Technical Specifications
Operating System and Hypervisors	• Canonical Ubuntu Server LTS • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • VMware ESXi • Windows Server • Windows Server Datacenter 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**.

NOTE: From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you with our OEMR platforms, while XL platforms provide extended transitions and stability for OEM Solutions customers. For more information, visit Dell.com -> Solutions -> OEM Solutions.

APEX on Demand

APEX Flex on Demand Acquire the technology you need to support your changing business with payments that scale to match actual usage. For more information, visit **www.delltechnologies.com/en-us/payment-solutions/flexible-consumption/flex-on-demand.htm**.

NOTE: This document provides a comprehensive list of product features. However, features marked with an asterisk (*) may not be available at launch but introduced in future updates. Please note that this document does not confirm the availability or release timeline of any feature. For the most accurate and up-to-date information on feature availability, please refer to the product configurator page on dell.com.

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