

# PowerEdge R860

Power business-critical, core workloads with high-density compute



## Maximize your core operations with powerful, dense compute foundation

The R860 with a 2U air-cooled form factor and four (4) Intel Xeon® Scalable Processors enables businesses to accelerate a wide variety of core and business-critical applications including databases, analytics, and other data-driven applications.

- With a maximum CPU core count of 60 cores and the ability to support 64 DDR5 DIMMs for a total of 16TB of memory, the R860 is large enough to run in-memory databases and multiple applications.
- Scale up business needs with support for up to 24 NVMe drives, DIMMs, 8 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.

## Purpose-built operations and workload performance

- Harness the latest generation technologies including DDR5 memory, PCIe Gen 5.0, and NVMe SSDs 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.
- Deploy quickly with slim 2U form factor, enabling IT organizations to consolidate more operations into fewer, more powerful servers, and high density in air-cooled environments.

## 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 an autonomous infrastructure

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 R860

The Dell 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	<ul style="list-style-type: none"> <li>64 DDR5 DIMM slots, supports RDIMM 16 TB max, speeds up to 4800 MT/s</li> <li>Supports registered ECC DDR5 DIMMs only</li> </ul>
Storage controllers	<ul style="list-style-type: none"> <li>Internal Controllers: PERC H965i, PERC H755, PERC H355, HBA355i, HBA465i</li> <li>External Controller: PERC H965e</li> <li>Internal Boot: Boot Optimized Storage Subsystem (BOSS-N1): HWRAID 2 x M.2 NVMe SSDs or USB</li> <li>External HBA (non-RAID): HBA355e, HBA465e</li> <li>Software Raid: S160</li> </ul>
Drive Bays	<p>Front bays:</p> <ul style="list-style-type: none"> <li>Up to 8 x 2.5-inch SAS/SATA (HDD/SSD) drives max 122.88 TB</li> <li>Up to 8 x EDSFF E3.S Gen5 NVMe (SSD) drives max 61.44 TB</li> <li>Up to 16 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) drives max 245.76 TB</li> <li>Up to 24 x 2.5-inch SAS/SATA/NVMe (HDD/SSD) drives max 368.34 TB</li> <li>Up to 16 x 2.5-inch SAS/SATA (HDD/SSD) drives + 8 x 2.5-inch NVMe (SSD) drives max 368.34 TB</li> </ul> <p>Rear bays:</p> <ul style="list-style-type: none"> <li>Up to 2 x 2.5-inch SAS/SATA (HDD/SSD) drives max 30.72 TB</li> <li>Up to 4 x EDSFF E3.S Gen5 NVMe (SSD) drives max 30.72 TB</li> </ul>
Power Supplies	<ul style="list-style-type: none"> <li>1100 W Titanium 100—240 VAC or 240 HVDC, hot swap redundant</li> <li>1400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant</li> <li>1800 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant</li> <li>2400 W Platinum 100—240 VAC or 240 HVDC, hot swap redundant</li> <li>2800 W Titanium 200—240 VAC or 240 HVDC, hot swap redundant</li> </ul>
Cooling Options	<ul style="list-style-type: none"> <li>Air cooling</li> <li>Optional Direct Liquid Cooling (DLC)</li> </ul> <p>Note: DLC is a rack solution and requires rack manifolds and a cooling distribution unit (CDU) to operate.</p>
Fans	<ul style="list-style-type: none"> <li>Standard (STD) fans</li> <li>Up to 6 sets hot plug fans</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Height – 86.8 mm (3.41 inches)</li> <li>Width – 482 mm (18.97 inches)</li> <li>Depth – 883.2 mm (34.77 inches) with bezel 869.2 mm (34.22 inches) without bezel</li> </ul>
Form Factor	2U rack server
Embedded Management	<ul style="list-style-type: none"> <li>iDRAC9</li> <li>iDRAC Direct</li> <li>iDRAC RESTful API with Redfish</li> <li>iDRAC Service Module</li> <li>Quick Sync 2 wireless module</li> </ul>
Bezel	Optional LCD bezel or security bezel
OpenManage Software	<ul style="list-style-type: none"> <li>CloudIQ for PowerEdge plug in</li> <li>OpenManage Enterprise</li> <li>OpenManage Enterprise Integration for VMware vCenter</li> <li>OpenManage Integration for Microsoft System Center</li> <li>OpenManage Integration with Windows Admin Center</li> <li>OpenManage Power Manager plugin</li> <li>OpenManage Service plugin</li> <li>OpenManage Update Manager plugin</li> </ul>
Mobility	OpenManage Mobile
OpenManage Integrations	<ul style="list-style-type: none"> <li>BMC Truesight</li> <li>Microsoft System Center</li> <li>OpenManage Integration with ServiceNow</li> <li>Red Hat Ansible Modules</li> <li>Terraform Providers</li> <li>VMware vCenter and vRealize Operations Manager</li> </ul>
Security	<ul style="list-style-type: none"> <li>Cryptographically signed firmware</li> <li>Data at Rest Encryption (SEDs with local or external key mgmt)</li> <li>Secure Boot</li> <li>Secured Component Verification (Hardware integrity check)</li> <li>Secure Erase</li> <li>Silicon Root of Trust</li> <li>System Lockdown (requires iDRAC9 Enterprise or Datacenter)</li> <li>TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ</li> </ul>
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	N/A

Feature	Technical Specifications	
Ports	<b>Front Ports</b> <ul style="list-style-type: none"> <li>• 1 x iDRAC Direct (Micro-AB USB) port</li> <li>• 1 x USB 2.0</li> <li>• 1 x VGA</li> </ul>	<b>Rear Ports</b> <ul style="list-style-type: none"> <li>• 1 x Dedicated iDRAC ethernet port</li> <li>• 1 x USB 3.0</li> <li>• 1 x USB 2.0</li> <li>• 1 x Serial (optional)</li> <li>• 1 x VGA (optional for Direct Liquid Cooling configuration)</li> </ul>
	<b>Internal Ports</b> <ul style="list-style-type: none"> <li>• 1 x USB 3.0 (optional)</li> </ul>	
PCIe	Up to eight PCIe slots: <ul style="list-style-type: none"> <li>• Slot 1: 1 x16 Gen5 or 1 x8 Gen4 Full height, Half length</li> <li>• Slot 2: 1 x16 Gen5 or 1 x8 Gen4 Full height, Half length</li> <li>• Slot 3: 1 x16 Gen5 Low profile, Half length</li> <li>• Slot 4: 1 x16 Gen5 Full height, Half length</li> <li>• Slot 5: 1 x16 Gen5 Full height, Half length</li> <li>• Slot 6: 1 x16 Gen5 Low profile, Half length</li> <li>• Slot 7: 1 x16 Gen5 or 1 x8 Gen4 Full height, Half length</li> <li>• Slot 8: 1 x16 Gen5 or 1 x8 Gen4 Full height, Half length</li> </ul>	
Operating System and Hypervisors	<ul style="list-style-type: none"> <li>• Canonical Ubuntu Server LTS</li> <li>• Microsoft Windows Server with Hyper-V</li> <li>• Red Hat Enterprise Linux</li> <li>• SUSE Linux Enterprise Server</li> <li>• VMware ESXi</li> </ul> For specifications and interoperability details, see <a href="https://Dell.com/OSsupport">Dell.com/OSsupport</a> .	
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 <a href="https://Dell.com">Dell.com</a> > Solutions > OEM Solutions.	

## APEX Flex on Demand

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