



PowerEdge XE9640

Accelerate AI insights with optimized performance

Density optimized AI acceleration

Deliver real-time insights with Dell’s first liquid-cooled 4-way GPU platform in the XE9640 2U server, designed to drive the latest cutting-edge AI, Machine Learning and Deep Learning Neural Network applications.

- Combined with **high core count of up to 64 cores** in the new generation of Intel® Xeon® processors and the **most GPU memory and bandwidth** available today to break through the bounds of today’s and tomorrow’s AI computing.
- The offer is either **four NVIDIA H100 700W SXM GPUs fully interconnected with NVlink**, or **four Intel Data Center Max GPU series 1550 600W OAM GPUs, fully interconnected with XeLink**.
- Ideal 2U form factor building block for dense Supercomputer and HPC acceleration workloads and applications
- Supports Rack Liquid Cooling Infrastructure: Cool IT with 42U XE9640 rack manifold and 48U XE9640 rack manifold

Accelerated I/O throughput

- Deploy latest generation technologies including DDR5, XeLink, NVLink, PCIe Gen 5.0, and NVMe SSDs to push the boundaries of data flow and computing possibilities.
- Up to four PCIe Gen 5 slots and up to 8 drives enable optimal expansion for high-performance real-time AI operations.
- Direct liquid-cooled Processors and GPUs enable efficient cooling for highest performance, efficient power-utilization and lower TCO
- Dell Multi-vector cooling manages components to operate optimally

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 - backed by our 60K+ employees and partners

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The Dell PowerEdge XE9640 is a high-performance server designed and optimized for AI training & HPC use cases like

- DL Training
- Scientific Research
- Data Analytics

Feature	Technical Specifications**	
Processor	Two 5th Generation Intel Xeon Scalable processors with up to 64 cores per processor or Two 4th Generation Intel Xeon Scalable processors with up to 56 cores per processor	
Memory	<ul style="list-style-type: none"> Only 16 DIMM slots are supported out of 32 DIMMs (with 8 DIMMs per processor) for XE9640 Intel GPU supported systems. RDIMM max 1 TB with max speeds up to 5600 MT/s 8 DIMMs, 16 DIMMs and 32 DIMMs for XE9640 NVIDIA GPU supported systems. RDIMM max 2 TB with max speeds up to 5600 MT/s. Supports DDR5 RDIMM (registered DIMM) only. 	
GPU	<ul style="list-style-type: none"> NVIDIA H100 SXM 700W NVLINK GPUs Intel Data Center Max GPU Series 1550 OAM 600W Xelink GPUs 	
Storage controllers	<ul style="list-style-type: none"> Internal boot: Boot Optimized Storage Subsystem (NVMe BOSS-N1): HWRAID 1, 2 x M.2 SSDs Software RAID: S160 	
Drive bays	Front bays: Up to 4 x 2.5-inch NVMe SSD drives, 61.44 TB max	
Power Supplies	2800W Titanium 200-240 VAC or 240 VDC, hot swap redundant. Note: Mixed vendor PSUs in the same chassis is not recommended.	
Cooling Options	<ul style="list-style-type: none"> Liquid Cooling with internal Manifold for GPUs and processors Four sets (dual fan module) High performance (HPR) gold grade fans for Processors. All are hot swap fans. 	
Chipset	Intel® C741 chipset	
PCIe	2 CPU configuration: Up to 4 PCIe slots (4 x16 Gen5)	
Embedded NIC	2 x 1 GbE (optional)	
Network Options	1 x OCP 3.0 (x8 PCIe lanes)	
Dimensions and weight	<ul style="list-style-type: none"> Height — 86.8 mm (3.41 inches) Width — 482 mm (18.97 inches) Depth — 926.5 mm (36.47 inches) with bezel — 912.8 mm (35.93 inches) without bezel Weight — 43.2 kg (95.23 pounds) for XE9640 Intel GPU supported systems — 46.3 kg (102.07 pounds) for XE9640 NVIDIA GPU supported systems 	
Form Factor	2U rack server	
Embedded Management	<ul style="list-style-type: none"> iDRAC9 iDRAC Direct iDRAC RESTful API with Redfish iDRAC Service Module 	
Bezel	Optional LCD bezel or security bezel	
OpenManage Software	<ul style="list-style-type: none"> CloudIQ for PowerEdge plug in OpenManage Enterprise OpenManage Enterprise Integration for VMware vCenter OpenManage Integration for Microsoft System Center 	<ul style="list-style-type: none"> OpenManage Integration with Windows Admin Center OpenManage Power Manager plugin OpenManage Service plugin OpenManage Update Manager plugin
OpenManage Integrations	<ul style="list-style-type: none"> BMC Truesight Microsoft System Center OpenManage Integration with ServiceNow 	<ul style="list-style-type: none"> Red Hat Ansible Modules Terraform Providers VMware vCenter and vRealize Operations Manager
Security	<ul style="list-style-type: none"> Cryptographically signed firmware Data at Rest Encryption (SEDs with local or external key management) Secure Boot Secured Component Verification (Hardware integrity check) 	<ul style="list-style-type: none"> Secure Erase Silicon Root of Trust System Lockdown (requires iDRAC9 Enterprise or Datacenter) TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ
Ports	Front ports <ul style="list-style-type: none"> 1 x iDRAC Direct (Micro-AB USB) port 1 x USB 2.0 1 x VGA 	Rear ports <ul style="list-style-type: none"> 1 x USB 2.0 1 x USB 3.0 1 x RJ-45 iDRAC9 Ethernet port
Operating Systems and Hypervisors	<ul style="list-style-type: none"> Canonical Ubuntu Server LTS Red Hat Enterprise Linux <p>For specifications and interoperability details, see Dell.com/OSsupport.</p>	

NOTE: ** indicates Additional features Coming Soon.

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