



# PowerEdge R760xa

High performance, scalable server for intensive GPU applications

The Dell PowerEdge R760xa, is a purpose-built server designed to boost acceleration performance across the widest range of customer needs.

## Innovate at scale with challenging and emerging workloads

Maximize your workload performance and boost outcomes with scale as you grow compute, flexibly supporting a wide range of GPUs in a dual-socket/2U air-cooled server, accelerating applications from AI training and inferencing to Digital Twins to performance graphics and dense power-user collaboration environments.

- Leverage a powerful architecture and the power of two 4th or 5th Generation Intel® Xeon® processors with **high core count of up to 64 cores** and the latest on-chip innovations to boost AI and ML operations
- Up to four double-width PCIe Gen5 accelerators or up to 12 single-width\* PCIe accelerators to break through the density boundaries of today's and tomorrow's computing
- Support for PCIe GPU adapters from NVIDIA, AMD, and Intel, delivering superior outcomes with one platform

## Accelerated I/O throughput

- Deploy latest generation technologies including DDR5, Gen4 NVLink, PCIe Gen 5, and E3.S NVMe SSDs to push the boundaries of data flow and computing possibilities.
- Scale up your needs supporting up to 32 DDR5 memory DIMM slots, up to eight drives, and PCIe Gen 5 expansion slots
- Air-cooled design with front-facing accelerators enables better cooling and supports higher TDP accelerators (up to 400 W)

## 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 countries and backed by our 60K+ employees and partners.

\* Indicates up to 12 Single-width (PCIe x8), and up to 8 Single-width (PCIe x16).

### PowerEdge R760xa

The Dell PowerEdge R760xa is a high-performance scale -as you grow server designed for use cases like

- AI/ML/DL Training and Inferencing
- Digital Twins, render graphics
- Virtualization and VDI graphics

| Feature  | Technical Specifications   |             |            |  |  |                |  |  |  |
|--|--|-------------|------------|--|--|----------------|--|--|--|
| Processor  | Up to two 4th Generation Intel Xeon Scalable processor with up to 56 cores per processor and optional Intel® QuickAssist Technology<br>Up to two 5th Generation Intel Xeon Scalable processor with up to 64 cores per processor and optional Intel® QuickAssist Technology   |             |            |  |  |                |  |  |  |
| Memory   | <ul style="list-style-type: none"> <li>32 DDR5 DIMM slot, supports RDIMM 8 TB max</li> <li>Speeds up to 4800 MT/s on the 4th Generation Intel® Xeon Scalable processor</li> <li>Speeds up to 5600 MT/s on the 5th Generation Intel® Xeon Scalable processor</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 H755N, PERC H355, HBA355i, HBA465i</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, H965e</li> <li>Software RAID: S160</li> </ul>   |             |            |  |  |                |  |  |  |
| Drive Bays   | Front bays: <ul style="list-style-type: none"> <li>Up to 6 x E3.S Gen5 NVMe, max 46.08 TB</li> <li>Up to 6 x 2.5-inch NVMe, max 92.16 TB</li> <li>Up to 8 x 2.5-inch SAS/SATA/NVMe, max 122.88 TB</li> </ul>   |             |            |  |  |                |  |  |  |
| Power Supplies   | <ul style="list-style-type: none"> <li>3200 W Titanium 277–305 VAC or 336 HVDC, hot swap redundant</li> <li>2800 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> </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) fan</li> <li>Up to six 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 – 946.73 mm (37.27 inches) - without bezel<br/>932.89 mm (36.73 inches) - with 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> </ul> <ul style="list-style-type: none"> <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>OpenManage Enterprise</li> <li>OpenManage Power Manager plugin</li> <li>OpenManage Service plugin</li> <li>OpenManage Update Manager plugin</li> </ul> <ul style="list-style-type: none"> <li>CloudIQ for PowerEdge plug in</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> </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> </ul> <ul style="list-style-type: none"> <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> </ul> <ul style="list-style-type: none"> <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 1GbE LOM card (optional)   |             |            |  |  |                |  |  |  |
| Network Options  | 1 x OCP card 3.0 (optional)<br>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 PCIe x16 GPU cards<br>Up to 12 x 75 W SW PCIe x8 GPU cards  |             |            |  |  |                |  |  |  |
| Ports  | <table border="0"> <tr> <td>Front Ports</td> <td>Rear Ports</td> </tr> <tr> <td> <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> </td> <td> <ul style="list-style-type: none"> <li>1 x Dedicated iDRAC Ethernet port</li> <li>1 x USB 2.0</li> <li>1 x USB 3.0</li> <li>1 x Serial (optional)</li> <li>1 x VGA (optional for Direct Liquid Cooling configuration)</li> </ul> </td> </tr> <tr> <td>Internal Ports</td> <td></td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>1 x USB 3.0 (optional)</li> </ul> </td> <td></td> </tr> </table> | Front Ports | Rear Ports | <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> | <ul style="list-style-type: none"> <li>1 x Dedicated iDRAC Ethernet port</li> <li>1 x USB 2.0</li> <li>1 x USB 3.0</li> <li>1 x Serial (optional)</li> <li>1 x VGA (optional for Direct Liquid Cooling configuration)</li> </ul> | Internal Ports |  | <ul style="list-style-type: none"> <li>1 x USB 3.0 (optional)</li> </ul> |  |
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| Internal Ports   |  |             |            |  |  |                |  |  |  |
| <ul style="list-style-type: none"> <li>1 x USB 3.0 (optional)</li> </ul>   |  |             |            |  |  |                |  |  |  |
| PCIe   | Up to twelve PCIe slots (x16 connector) <ul style="list-style-type: none"> <li>4 x16 Rear Full height, Half length + 4 x16 Front Full height, Full length DW</li> <li>4 x16 Rear Full height, Half length + 8 x 8 Front Full height, Full length SW</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> <p>For specifications and interoperability details, see <a href="https://www.dell.com/osupport">Dell.com/OSsupport</a>.</p>  |             |            |  |  |                |  |  |  |
| 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://www.dell.com">Dell.com</a> -> Solutions -> OEM Solutions..   |             |            |  |  |                |  |  |  |

## APEX on Demand

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