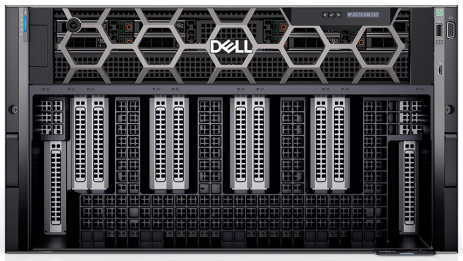
DELL Technologies

Spec Sheet



PowerEdge XE9680

Purpose Built

- The leader in AI infrastructure
  As noted in the Forrester® AI Infrastructure Wave
- 7:1 Consolidation capable*
- Up to 73% Boost in power efficiency*

Intelligent

- Up to $50k Savings through power and management optimization*[1]
- 80% of PowerEdge servers achieve EPEAT Climate+ designation*[1]
- Up to 150min Less time to manage per 100 servers*[1]
- Industry leading intelligent management
  - iDRAC 10 integrated controller and
  - OpenManage Enterprise

Cyber Resilient

- **3.5x** More security features than competitor*[1]
- **Zero Trust** Adoption Capable
- Factory-to-Site Assurance with Secured Component Verification

Sustainability

- **Engineered for Efficiency** PowerEdge servers have reduced Energy Intensity (EI) by 83% over the past 8 years
- **Efficient** Up to 73% boost in power efficiency

PowerEdge XE series

Unlock the power of AI and high-performance computing with the Dell PowerEdge XE portfolio.

A comprehensive lineup of servers designed to meet the rigorous demands of modern AI workloads.

Next-Level Performance

Designed for those requiring unmatched reliability and disruptive computational power, the PowerEdge XE Servers are engineered with cutting-edge hardware and optimized for intensive workloads. These servers incorporate advanced processor and GPU architectures, expansive memory configurations, and high-bandwidth I/O capabilities to ensure exceptional performance in computationally demanding scenarios.

PowerEdge XE9680L/XE9685L

- Tailored for AI model training
- High-performance computing (HPC)
- Available as standalone units or as part of the latest Integrated Rack Scalable Systems program

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.

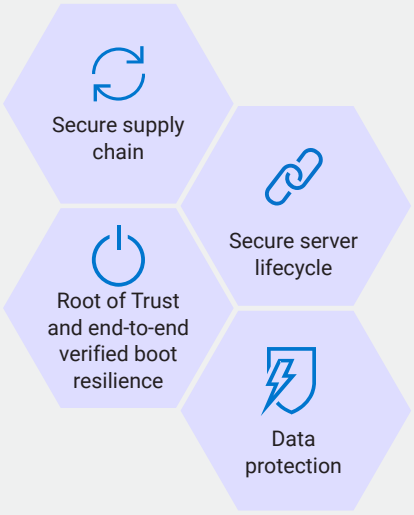
Learn more

Boost Productivity with Dell system management solutions

Simplify infrastructure management with iDRAC for secure, remote server administration, OpenManage Enterprise to streamline lifecycle management, and AI-enabled AIOps to optimize infrastructure and applications. Automate tasks, get real-time alerts, and scale effortlessly to boost productivity, performance, and uptime.

Security

Integrated into every phase of the life cycle



Maximize performance without thermal limitations

Address growing data center challenges caused by AI and dense computing workloads using a range of solutions that enhance data center cooling strategies, optimize system performance, and empower organizations to balance efficiency, performance, and sustainability. Learn more


IR5000

XE Servers, Scalable Architecture for Future Growth.

- Dell Technologies' Integrated Rack Systems are purpose-built to support scalable architectures for businesses anticipating future growth.
- Dell rack scale integration streamlines deployment with pre-validated configurations to reduce setup and integration complexity.
  Learn more

Expert assistance from Dell Technologies Services

ProSupport Plus for Infrastructure.

- Maximize server uptime with proactive and predictive support and 24/7 access to senior engineers
- Benefit from an assigned customer advocate focused on your desired outcomes
- Rest easier knowing you have third-party collaboration and mission critical response for Severity 1 issues

Further optimize server performance with Dell Technologies Services expert consulting, deployment, managed services and more. Learn about ProSupport Plus for Infrastructure and Services.

Learn more about how PowerEdge XE Servers can provide unparalleled performance, scalability and seamless integration into new or existing infrastructures, making them the ideal solution for complex, data-intensive environments whether stand-alone or in an Integrated Rack Scalable Solution.

Dell Products that work better together

Dell PowerSwitch Z9864F-ON - High-density Ethernet fabric switch for powering AI/ML training and inferencing clusters.

Dell PowerVault - PowerVault provides SAN/DAS solutions that simplify capacity expansion for PowerEdge Servers

Feature	XE9785L (Shipping soon)
Systems	
Processors	Two 5th Generation AMD EPYC 9005 Series processors with up to 192 cores per processor
DDR5 RDIMM slots (max capacity)	24 (6 TB)*
GPUs	8 AMD Instinct™ MI355X 288GB 1400W OAM with AMD Infinity Fabric connectivity 8 x NVIDIA HGX B300 1200W SXM7 GPUs, fully interconnected with NVIDIA NVLink technology*
Rack	IR7000 required
Internal boot	Embedded BOSS: HWRAID 0/1, 2 x M.2 NVMe SSDs
Drives (max capacity)	16 x E1.S (122.88 TB) 8 x U.2 NVMe SSDs (122.88 TB) 16 x E3.S NVMe direct drives (245.76 TB)*
Power Supplies, redundant, hot swap	6 x 5500 W AC PSUs installed in the power shelf (33 KW)
Cooling options	Liquid cooled CPUs, GPUs, and NVLink Switches
Rack height	3 OU compute node installed in IR7000 = 44 OU (Open Rack Units)
PCIe slots	Up to 12 PCIe Gen5 x16 full-height, half-length slots
Network Options	1 x OCP NIC card 3.0 (x16 PCIe lanes)
Hot-swappable fans	4 HPR on UBB + 8 HPR on HPM
Height	140.5 mm (5.53 inches)
Width	537 mm (21.14 inches)
Depth	1047.95 mm (41.26 inches) for UBB 889.65 mm (35.03 inches) for HPM
Bezel	NA
Maximum Weight	95 kg (209.43 pounds)
Embedded Management	iDRAC10, iDRAC Direct, iDRAC RESTful API with Redfish, RACADM CLI, iDRAC Service Module
Tools	IPMI
OpenManage Integrations	Red Hat Ansible Modules, Terraform Providers
Integrated 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, Soldered down TPM on HPM board, Chassis Intrusion Detection, AMD Secure Memory Encryption (SME), AMD Secure Encrypted Virtualization (SEV)
Front Ports	1 x USB 3.0 Type - A port, 1 x Mini-DisplayPort, 1 x USB 2.0 Type - C port, 2 x RJ45 dedicated iDRAC Ethernet port Note: All front ports are located on the FIO (front I/O) board
Internal port	1 x USB 3.1 Type-A
Operating Systems	Canonical Ubuntu Server LTS, Red Hat Enterprise Linux, SUSE Linux Enterprise Server

For specifications and interoperability details, see Dell.com/OSsupport.
Note: * Feature not available at product launch. Refer to the product configurator page on Dell.com to confirm feature availability.

Feature	XE9785 (Shipping soon)	XE9780
Systems		
Processors	Two 5th Generation AMD EPYC 9005 Series processors with up to 192 cores per processor	Two 6th Generation Intel Xeon Scalable Processors with up to 86 cores per processor
DDR5 RDIMM slots (max capacity)	24 (6 TB)*	32 (4 TB)
GPUs	8 AMD Instinct™ MI355X 288GB 1400W OAM with AMD Infinity Fabric connectivity 8 NVIDIA HGX B300 NVL8 270 GB 1100W SXM6 GPUs, fully interconnected with NVIDIA NVLink technology*	8 NVIDIA HGX B300 NVL8 270 GB 1100W SXM6 GPUs, fully interconnected with NVIDIA NVLink technology 8 NVIDIA HGX B200 180GB 1000W SXM6 GPUs, fully interconnected with NVIDIA NVLink technology No GPU configuration
Internal boot	Boot Optimized Storage Subsystem (BOSS-N1 DC-MHS with 2 x 2280 M.2 SSDs)	
Embedded OSFP	B300: 8 x CX8 OSFP (default)*	B300: 8 x CX8 OSFP (default)
Drives (max capacity)	16 x E3.S NVMe direct drives (245.76 TB) 10 x U.2 NVMe SSDs (153.6 TB)*	16 x E3.S NVMe direct drives (245.76 TB) 10 x U.2 NVMe SSDs (153.6 TB)*
Power Supplies, redundant, hot swap	12 x 3200W Titanium 200-240 VAC or 240 VDC	
Cooling options	Air cooling	
Rack height	10U	
PCIe slots	MI355X: 12 x 75W Gen5 x16 FHHL cards, or 4 x 150W + 8 x 75W Gen5 x16 FHHL cards B300: 4 x 150W Gen5 x16 FHHL cards*	B300: 4 x 150W Gen5 x16 FHHL cards B200: up to 12 (8 x 75W, 4 x up to 150W) Gen5 x16 FHHL cards
Network Options	1 x OCP NIC card 3.0 (x8 PCIe lanes)	
Fans	15 Standard grade GPU fans, All are hot swap fans + 5 Standard grade CPU fans, All are cold swap fans	
Height	439.5 mm (17.30 inches)	
Width	482.3 mm (18.98 inches)	
Depth	1044.7 mm (41.12 inches) with bezel 1023 mm (40.27 inches) without bezel	
Bezel	Front Security bezel	
Maximum Weight	163.6 kg (360.67 pounds)	163.20 kg (359.04 pounds)
Embedded Management	iDRAC10, iDRAC Direct, iDRAC RESTful API with Redfish, iDRAC Service Module	
Tools	Dell System Update, Dell Repository Manager, Enterprise Catalogs, iDRAC RESTful API with Redfish, IPMI, RACADM CLI	
OpenManage Integrations	BMC Truesight, OpenManage Integration with ServiceNow, RedHat Ansible Modules, Terraform Providers	
Integrated 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, Soldered down TPM on Mezzanine DC-SCM, Chassis Intrusion Detection, AMD Secure Memory Encryption (SME), AMD Secure Encrypted Virtualization (SEV)	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, Soldered down TPM on Mezzanine DC-SCM, Chassis Intrusion Detection
Front Ports	1 x iDRAC Direct (USB C) port, 2 x RJ45 dedicated iDRAC Ethernet ports, 1 x USB A, 1 x Mini DisplayPort	
Rear ports	NA	
Operating Systems	Canonical Ubuntu Server LTS, Red Hat Enterprise Linux*, SUSE Linux Enterprise Server*	

For specifications and interoperability details, see Dell.com/OSsupport.
Note: * Feature not available at product launch. Refer to the product configurator page on Dell.com to confirm feature availability.

Feature	XE9680L	XE9685L
Systems		
Processors	Two 5th Generation Intel® Xeon® Scalable processors with up to 64 cores per processor	Two 5th Generation AMD EPYC™ 9005 Series processors with up to 192 cores per processor
DDR5 RDIMM slots (max capacity)	32 (4 TB)	24 (3 TB)
GPUs	8 x NVIDIA HGX B200 180GB 1000W SXM6 GPUs, fully interconnected with NVIDIA NVLink technology	
Rack	IR5000 required	
Internal boot	BOSS-N1: HWRAID 1, 2 x M.2 NVMe SSDs	
Drives (max capacity)	8 x 2.5” NVMe/SAS/SATA SSDs (122.88 TB)	
Power Supplies, redundant, hot swap	3000W Titanium 200-240 VAC or 240 VDC	3000W Titanium 200-240 VAC or 240 VDC 3000W when used at 209.1-240 VAC or 240 VDC 2800W when used at 200-209 VAC
Cooling options	Liquid cooled CPUs, GPUs, and NVLink Switches	
Rack height	4U	
PCIe slots	Up to 12 PCIe Gen5 x16 full-height, half-length slots	
Embedded NIC	2 x 1 GbE	
Network Options	1 x OCP NIC card 3.0 (x8 PCIe lanes)	
Hot-swappable fans	6 HPR on top layer + 6 HPR on bottom layer	
Height	174.3 mm (6.86 inches)	
Width	Upper 2U: 447 mm (17.59 inches) Lower 2U: 434 mm (17.08 inches)	
Depth	1037.57 mm (40.82 inches) with bezel 1025.62 mm (40.37 inches) without bezel	
Bezel	Optional LCD bezel or security bezel	
Maximum Weight	95.60 kg (206.35 pounds)	91.63 kg (202.00 pounds)
Embedded Management	iDRAC9, iDRAC Direct, iDRAC RESTful API with Redfish, iDRAC Service Module, Dell Connectivity Client	
OpenManage Software	CloudIQ for PowerEdge plug in, OpenManage Enterprise (OME), OpenManage Service plugin, OpenManage Power Manager plugin, OpenManage Update Manager plugin	OME APEX AIOps Observability OpenManage Enterprise (OME), OpenManage Service plugin, OpenManage Power Manager plugin, OpenManage Update Manager plugin
OpenManage Integrations	BMC Truesight, OpenManage Integration with ServiceNow, Red Hat Ansible Modules, Terraform Providers	OpenManage Integration with ServiceNow, Red Hat Ansible Modules, Terraform Providers
Integrated Security	TPM 2.0 FIPS, CC-TCG certified, Cryptographically Signed Firmware, Secure Boot being standard security, Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), Data at Rest Encryption (SEDs with local or external key mgmt), Secured Component Verification (Hardware integrity check) and System Erase on all racks.	
Front Ports	1 x iDRAC Direct (Micro-AB USB) port, 1 x USB 2.0, 1 x VGA	
Rear ports	1 x USB 2.0, 1 x USB 3.0, 1 x iDRAC Direct ethernet port	
Operating Systems	Canonical Ubuntu Server LTS, Red Hat Enterprise Linux	
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 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.	

For specifications and interoperability details, see Dell.com/OSsupport.

Feature	XE7745	XE7740
Systems		
Processors	Two 5th Generation AMD EPYC™ 9005 Series processors with up to 192 cores per processor	Two Intel® Xeon® 6 series processors with up to 144 cores per processor
DDR5 RDIMM slots (max capacity)	24 (3 TB)	32 (4 TB)
GPUs	8x PCIe Gen 5 x16 DW-FHFL up to 600W or 16x PCIe Gen 5 x16 SW-FHFL up to 75W	
	• NVIDIA RTX Pro™ 6000 Blackwell Server Edition 600W (DW, 96GB) • NVIDIA H200 NVL 600W (DW, 141GB) • NVIDIA H100 NVL 400W (DW, 94GB) • NVIDIA L40S 350W (DW, 48GB) • NVIDIA L4 72W (SW, 24GB)	• NVIDIA RTX Pro™ 6000 Blackwell Server Edition 600W (DW, 96GB) • NVIDIA H200 NVL 600W (DW, 141GB) • NVIDIA H100 NVL 400W (DW, 94GB) • NVIDIA L40S 350W (DW, 48GB) • INTEL Gaudi3 600W (DW, 128GB) • NVIDIA L4 72W (SW, 24GB)
Internal boot	BOSS-N1: HWRAID 1, 2 x M.2 NVMe SSDs	
Drives (max capacity)	8 x 2.5” NVMe/SAS/SATA SSDs (122.88 TB)	
Power Supplies, redundant, hot swap	• 3200W Titanium 200-240 V AC or 240 V DC Multi capacity for 3200W PSU:3200W for 220.1-240 V AC or 2900W for 200-220 V AC • 3200W Titanium 277 V AC or 336 V DC	
Cooling options	Air cooling	
Rack height	4U	
PCIe slots	Up to 8 PCIe Gen5 x16 SW-FHHL cards, each up to 150W	
Embedded NIC	NA	
Network Options	1 x OCP NIC card 3.0 (x8 PCIe lanes)	
Hot-swappable fans	4 sets HPR in mid tray + 12 HPR on the front	
Height	174.3 mm (6.86 inches)	
Width	482 mm (18.98 inches)	
Depth	899.56 mm (35.42 inches) with bezel 886.73 mm (34.91 inches) without bezel	
Bezel	Optional security bezel	
Maximum Weight	68.5 Kg (151.02 pounds)	71.35 Kg (157.30 pounds)
Embedded Management	iDRAC10, iDRAC Direct, iDRAC RESTful API with Redfish, iDRAC Service Module, RACADM CLI	
OpenManage Console	OpenManage Enterprise (OME), OME Power Manager, OME Services, OME Update Manager, OME APEX AIOps Observability, OME Integration for VMware vCenter (with VMware Aria Operations)	
Tools	IPMI	
Change Management	Enterprise Catalogs / Linux Repositories	
OpenManage Integrations	Red Hat Ansible Modules, Terraform Providers	
Integrated Security	TPM 2.0 FIPS, CC-TCG certified, Cryptographically Signed Firmware, Chassis Intrusion Detection, Secure Boot being standard security, Silicon Root of Trust, System Lockdown (requires iDRAC10 Enterprise or Datacenter), Data at Rest Encryption (SEDs with local or external key mgmt), Secured Component Verification (Hardware integrity check) and System Erase on all racks.	
Front Ports	1 x USB 2.0 Type-A (optional), 1 x Mini-Display port (optional), 1 x USB 2.0 Type-C dual mode (Host/iDRAC Direct port)	
Rear ports	1 x Dedicated iDRAC/BMC Direct Ethernet port, 2 x USB 3.1 Type A port, 1 x VGA	
Internal ports	1 x USB 3.1 Type-A	
Operating Systems and Hypervisors	Canonical Ubuntu Server LTS, 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. For more information, visit Dell.com/OEM.	

For specifications and interoperability details, see Dell.com/OSsupport.
Note: * Feature not available at product launch. Refer to the product configurator page on Dell.com to confirm feature availability.

Feature	XE9680	XE9640	XE8640
Systems			
Intel® Xeon® Scalable Processors with Intel® C741 chipset:	Two 5th Generation Intel® Xeon® Scalable processors with up to 64 cores per processor Two 4th Generation Intel® Xeon® Scalable processors with up to 56 cores per processor		
DDR5 RDIMM slots (max capacity)	32 (4 TB)		
GPUs	8 NVIDIA HGX H100 80GB 700W SXM5 GPUs, fully interconnected with NVIDIA NVLink technology or 8 NVIDIA HGX H200 141GB 700W SXM5 GPUs, fully interconnected with NVIDIA NVLink technology or 8 NVIDIA HGX H20 96GB 500W SXM5 GPUs, fully interconnected with NVIDIA NVLink technology or 8 AMD Instinct MI300X 192GB 750W OAM accelerator with AMD Infinity Fabric connectivity or 8 Intel Gaudi 3 128GB 900W OAM accelerator with embedded RoCE ports for ethernet connectivity Note: Improve generative AI training performance with GPU-GPU communication and up to 1.5TB shared coherent GPU memory integrated into these offers.	4 NVIDIA H100 or Intel Data Center Max GPU Series 1550	4 NVIDIA H100
Internal controller	PERC H965i (Not supported with Intel Gaudi3)	NA	NA
Internal boot	BOSS-N1: HWRAID 1, 2 x M.2 NVMe SSDs		
Software RAID	S160		
Drives (max capacity)	8 x 2.5” NVMe/SAS/SATA SSDs (122.88 TB) , 16 x E3.S NVMe direct drives (122.88 TB) Note: Only 8 x 2.5-inch NVMe SSDs are supported with Intel Gaudi3.	4 x 2.5” NVMe SSDs (61.44 TB)	8 x 2.5” NVMe/SAS/SATA SSDs (122.88 TB) , 16 x E3.S NVMe SSDs (122.88 TB)
Power Supplies, redundant, hot swap	3200W Titanium 277 VAC or 260-400 VDC (only available in the US & Canada) 3000W Titanium 200-240 VAC or 240 VDC (only with Intel Gaudi 3) Multi capacity for 3000W PSU: 3000W for 209.1 - 240 V AC or 2800W for 200 - 209 V AC 2800W Titanium 200-240 VAC or 240 VDC	2800W Titanium 200-240 VAC or 240 VDC	3200W Titanium 277 VAC or 260-400 VDC 2800W Titanium 200-240 VAC or 240 VDC
Cooling options	Air cooling	Liquid Cooling with internal manifold	Air cooling for CPUs + Liquid Assisted Air Cooling for GPU
Rack height	6U	2U	4U
PCIe slots	Up to 10 front-facing PCIe Gen 5 slots, with 8 slots available for Intel Gaudi3	4 x16 Gen5	
Embedded NIC	2 x 1 GbE		
Embedded OSFP	6 x 800 Gb (only with Intel Gaudi 3)	NA	NA
Network Options	1 x OCP 3.0 (x8 PCIe lanes)		
Hot-swappable fans	10 HPR in mid tray + 10 HPR on the rear (up to 12 fans with Intel Gaudi 3)	4 sets (dual fan module) HPR	6 STD in mid tray + 5 HPR on the front
Height	263.2 mm (10.36 inches)	86.8 mm (3.41 inches	174.3 mm (6.86 inches)
Width	482.0 mm (18.97 inches)	482 mm (18.97 inches)	481.91 mm (18.97 inches)
Depth	1008.77 mm (39.71 inches) with bezel 995 mm (39.17 inches) without bezel	926.5 mm (36.47 inches) with bezel 912.8 mm (35.93 inches) without bezel	901.4 mm (35.48 inches) with bezel 865.54 mm (34.07 inches) without bezel
Bezel	Optional LCD bezel or security beze		
Maximum Weight	114.05 kg (251.44 pounds)	46.3 kg (102.07 pounds)	61.4 kg (135.36 pounds)

Feature	XE9680	XE9640	XE8640
Embedded Management	iDRAC9, iDRAC Direct, iDRAC RESTful API with Redfish, iDRAC Service Module		
OpenManage Software	CloudIQ for PowerEdge plug in, OpenManage Enterprise, OpenManage Service plugin, OpenManage Power Manager plugin, OpenManage Update Manager plugin		
OpenManage Integrations	BMC Truesight, OpenManage Integration with ServiceNow, Red Hat Ansible Modules, Terraform Providers		
Integrated Security	TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ, Cryptographically Signed Firmware, Chassis Intrusion Alert, Secure Boot being standard security, Silicon Root of Trust, System Lockdown (requires iDRAC9 Enterprise or Datacenter), Data at Rest Encryption (SEDs with local or external key mgmt) Secured Component Verification (Hardware integrity check) and System Erase on all racks.		
Front Ports	1 x iDRAC Direct (Micro-AB USB) port, 1 x USB 2.0, 1 x VGA		
Rear ports	1 x USB 2.0, 1 x USB 3.0, 1 x VGA 1 x RJ45 iDRAC9 ethernet port	1 x USB 2.0, 1 x USB 3.0, 1 x RJ-45 iDRAC9 Ethernet port	1 x USB 2.0, 1 x USB 3.0, 1 x VGA, 1 x RJ45 iDRAC9 ethernet port
Operating Systems and Hypervisors	Canonical Ubuntu Server LTS Red Hat Enterprise Linux SUSE Linux Enterprise Server VMware ESXi	Canonical Ubuntu Server LTS Red Hat Enterprise Linux	
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 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.		

To shop for Dell PowerEdge Servers, see Dell.com.
For more information on platform-specific specifications and additional details, refer to the Technical Guide on Dell.com.

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.