

# Dell EMC PowerEdge XR12

## Spec Sheet

### Expandable, ruggedized, and certified for conditions at the edge

The Dell EMC PowerEdge XR12 server offers 3rd generation Intel® Xeon® Scalable processors and it's built for challenging environments, including telecommunications, military, retail, and restaurants.



### Innovate at scale with challenging and emerging workloads

The new Dell EMC PowerEdge XR12 is a ruggedized, marine compliant 2U server.

Only 16 inches/400 mm deep, it offers new ways to:

- Boost services at the edge: The XR12 offers up to 36 x86 cores, support for accelerators, DDR4, PCIe 4.0, persistent memory and up to 6 drives
- Cope with challenges: Certified rugged for telco and defense applications, including dust, extreme temperatures, shock, vibration, and other environmental variants
- Add versatility without compromise: With reduced depth and front and rear port options that support reverse air flow, it gives administrators new flexibility without expensive retrofits or HVAC updates
- Improve longevity: built for long life so organizations can offer game-changing services without downtime and disruption

### Built-in protection through a complete portfolio of solutions

From the silicon and supply chain all the way to asset retirement, know that your servers are safe and secure with innovative Dell EMC and Intel technologies that give you the confidence of cyber resilience

- Start strong with platform security features, even before the server is built, including Secured Component Verification and Silicon Root of Trust
- Stay strong with continuous innovations that bolster cyber resilience, like OpenManage Secure Enterprise Key Manager and Automatic Certificate Enrollment
- Outmaneuver threats with intelligence, automation, and recovery tools that include iDRAC9 Telemetry, BIOS live scanning, and Rapid OS recovery

### Increase efficiency and accelerate operations with autonomous collaboration

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

- Built-in telemetry streaming, thermal management, and RESTful API with Redfish offer streamlined visibility and control for better server management
- Intelligent automation lets you enable cooperation between human actions and system capabilities for added productivity
- Integrated change management capabilities for update planning and seamless, zero-touch configuration and implementation
- Full-stack management integration with Microsoft, VMware, ServiceNow, Ansible and many other tools

### PowerEdge XR12

Keep your innovation flowing with the Dell EMC PowerEdge XR12, the latest 2U server that offers no-compromise capabilities for space-constrained, rugged conditions.

Feature	Technical Specifications					
Processor	One 3rd Generation Intel Xeon Scalable processor with up to 36 cores					
Memory	<ul style="list-style-type: none"> <li>Eight DDR4 DIMM slots, supports RDIMM 512 GB max or LRDIMM 1 TB max, speeds up to 3200 MT/s</li> <li>Up to four Intel Optane PMem 200 Series slots, 512 GB max</li> <li>Supports registered ECC DDR4 DIMMs only</li> </ul>					
Storage controllers	<ul style="list-style-type: none"> <li>Internal controllers (RAID): PERC H755, PERC H345, H355, S150</li> <li>Internal Boot: Boot Optimized Storage Subsystem (BOSS-S1): HWRAID 2 x M.2 SSDs, USB</li> <li>External PERC (RAID): PERC H840</li> <li>12 Gbps SAS HBAs (non-RAID): internal- HBA355i, external-HBA355e</li> </ul>					
Drive bays	6 x 2.5-inch SATA/SAS/NVMe (SSDs) max 92 TB					
Power supplies	<ul style="list-style-type: none"> <li>1400 W Platinum AC/240 HVDC</li> <li>1100 W DC/-48 - (-60) V</li> <li>1100 W . Titanium Mixed Mode AC/100-240 V DC/240 V</li> <li>800 W Platinum AC/240 HVDC</li> <li>800 W DC/-48 (-40 - (-72) )V</li> </ul>					
Cooling options	Air cooling					
Fans	<ul style="list-style-type: none"> <li>High Performance GOLD fans</li> <li>Six cold swap fans</li> </ul>					
Dimension	<b>Rear Accessed configuration</b> <ul style="list-style-type: none"> <li>Height: 86.8 mm (3.41 inches)</li> <li>Width: 482.6 mm (19 inches)</li> <li>Depth: 400 mm (15.74 inches) Ear to rear wall 477 mm (18.77 inches) with bezel 463 mm (18.22 inches) without bezel</li> </ul>	<b>Front Accessed configuration</b> <ul style="list-style-type: none"> <li>Height: 86.8 mm (3.41 inches)</li> <li>Width: 482.6 mm (19 inches)</li> <li>Depth: 400 mm (15.74 inches) Ear to rear wall 553 mm (21.76 inches) with bezel 463 mm (18.22 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 Service Module</li> </ul>					
Bezel	Optional bezel or security bezel					
OpenManage Software	<ul style="list-style-type: none"> <li>OpenManage Enterprise</li> <li>OpenManage Power Manager plugin</li> <li>OpenManage SupportAssist plugin</li> <li>OpenManage Update Manager plugin</li> </ul>					
Mobility	OpenManage Mobile					
Integrations and Connections	<b>OpenManage Integrations</b> <ul style="list-style-type: none"> <li>BMC Truesight</li> <li>Microsoft System Center</li> <li>Red Hat Ansible Modules</li> <li>VMware vCenter and vRealize Operations Manager</li> </ul>	<b>OpenManage Connections</b> <ul style="list-style-type: none"> <li>IBM Tivoli Netcool/OMNibus</li> <li>IBM Tivoli Network Manager IP Edition</li> <li>Micro Focus Operations Manager</li> <li>Nagios Core</li> <li>Nagios XI</li> </ul>				
Security	<ul style="list-style-type: none"> <li>Cryptographically signed firmware</li> <li>Secure Boot</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	4 x 25 GbE SFP+ LOM					
GPU options	<ul style="list-style-type: none"> <li>2 x 75 W/150 W (SW)</li> <li>2 x 300 W (DW/FH/FL)</li> </ul>					
Ports	<b>For Rear Accessed configuration</b> <table border="1"> <tr> <td> <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> </ul> </td> <td> <b>Rear Ports</b> <ul style="list-style-type: none"> <li>1 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> </ul> </td> </tr> <tr> <td> <b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul> </td> <td></td> </tr> </table>	<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> </ul>	<b>Rear Ports</b> <ul style="list-style-type: none"> <li>1 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> </ul>	<b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul>		
<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> </ul>	<b>Rear Ports</b> <ul style="list-style-type: none"> <li>1 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> </ul>					
<b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul>						
	<b>For Front Accessed configuration</b> <table border="1"> <tr> <td> <b>Front Ports</b> <ul style="list-style-type: none"> <li>2 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> <li>1 x iDRAC Direct (Micro-AB USB) port</li> </ul> </td> <td> <b>Rear Ports</b> <ul style="list-style-type: none"> <li>N/A</li> </ul> </td> </tr> <tr> <td></td> <td> <b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul> </td> </tr> </table>	<b>Front Ports</b> <ul style="list-style-type: none"> <li>2 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> <li>1 x iDRAC Direct (Micro-AB USB) port</li> </ul>	<b>Rear Ports</b> <ul style="list-style-type: none"> <li>N/A</li> </ul>		<b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul>	
<b>Front Ports</b> <ul style="list-style-type: none"> <li>2 x USB 2.0</li> <li>1 x iDRAC dedicated port</li> <li>1 x USB 3.0</li> <li>1 x Serial port</li> <li>1 x VGA</li> <li>1 x iDRAC Direct (Micro-AB USB) port</li> </ul>	<b>Rear Ports</b> <ul style="list-style-type: none"> <li>N/A</li> </ul>					
	<b>Internal Ports</b> <ul style="list-style-type: none"> <li>1 x USB 3.0</li> </ul>					
PCIe	5 x PCIe Gen4 slots					
Operating System and Hypervisors	<ul style="list-style-type: none"> <li>Canonical Ubuntu Server LTS</li> <li>Citrix Hypervisor</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> <li>RHEL Realtime</li> </ul> <p>For specifications and interoperability details, see <a href="http://Dell.com/OSsupport">Dell.com/OSsupport</a></p>					

## Feature

## Technical Specifications

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](https://www.dell.com/OEM)

### Recommended support and services

Choose Dell ProSupport Plus or Dell ProSupport for premium hardware and software support. Consulting and deployment offerings are also available. Contact your Dell representative today for more information. Availability and terms of Dell Services vary by region. For more information, visit [www.delltechnologies.com/Services](https://www.delltechnologies.com/Services)

### Dell Technologies on Demand

Consume technology, infrastructure and services any way you want with Dell Technologies on Demand, the industry's broadest end-to-end portfolio of flexible consumption and as-a-Service solutions. For more information, visit [www.delltechnologies.com/ondemand](https://www.delltechnologies.com/ondemand)



### Discover more about PowerEdge servers



Learn more about our PowerEdge servers



Learn more about our systems management solutions



Search our Resource Library



Follow PowerEdge servers on Twitter



Contact a Dell Technologies Expert for [Sales](#) or [Support](#)