

**Specification Sheet** 



# PowerEdge XR8000

## Sled based, Flexible, Rugged Compute

## Dell Technology's multi-node, short depth, dense compute for the edge

Experience ultimate flexibility at the edge with Dell's purpose-built server featuring an innovative sled-based architecture positioned to take us farther than any other Edge product. Designed for a broad range of workloads with the flexibility to extend from RAN at the cell site to Al/ML on a factory floor. This short-depth Class 1 server delivers high-performance compute in the harshest of environments with TCO at the center of every design decision.

## Ultimate Flexibility for Scalability

Choose from multiple sled configurations with up to 4 nodes per chassis to meet all your growing and changing workloads

- 1U and 2U sled options for optimum compute configurations enabling common platforms across Core, Edge, Far-edge, and RAN
- 5th and 4th generation Intel® Xeon® Scalable Processors up with optional vRAN boost upto 32 cores
- · Both DC and AC power supply options

## TCO Optimized Design

Reduce support and maintenance costs, decrease service outages, and capitalize on energy savings

- · Advanced system power design enables dual PSUs to support up to 4 sleds
- · Integrated fan infrastructure to support higher efficiency cooling
- · Compute, power, sleds and chassis are serviceable separately simplifying field maintenance

#### Purpose built for the edge

Achieve high-performance compute in any environment

- Built rugged to operate in temperatures from -20°C to 65°C\*
- · Offers easy serviceability with front I/O and power
- · Short-depth (430 mm) chassis to fit in space constrained 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 XR8000

The Dell PowerEdge XR8000 is a high-performance server designed and optimized for telecom and edge use cases like

- Centralized RAN
- Distributed RAN
- Network Edge
- Manufacturing
- Retail
- Military & Defense

| Processor  | Feature             | Technical Specifications for XR8000r XR8610  | and  | XR8620t                             |                                       |  |
|--|---------------------|--|--|-------------------------------------|---------------------------------------|--|
| Memory   |                     |  |  |                                     |                                       |  |
| Memory   Storage   | 110063301           |  |  |                                     |                                       |  |
| Supports registered ECC DDR5 DIMS only   | Memory              |  |  |                                     |                                       |  |
| 2 x M Z 2280 SSDs on ROR-N1 (RAISER) with RAID V1 in XR8620t   | ,                   |  |  |                                     |                                       |  |
| BOSS N1 with z x280 N/Me SSDs in XR8620t and XR8610t   | Storage             |  |  |                                     |                                       |  |
| Single M 2 riser with 1 x 2280 M 2 SSD in XR86101 and XR86201  | _                   | · · · · · ·  |  |                                     |                                       |  |
| Dual M.2 riser (non-RAID) with 2 x M.2 2280 or 22110 M.2 SSDs in XR86101   Sleds   |                     | BOSS N1 with 2 x 2280 NVMe SSDs in XR8620t and XR8610t   |  |                                     |                                       |  |
| Chassis  |                     |  |  |                                     |                                       |  |
| Sleds  | 01 .                |  | in XR86  | 510t                                |                                       |  |
| Hot swap Redundant   Power Supplies   - 1800 W Titanium 200—240 VAC or 240 HVDC   - 1100W DC/ -48 — (-60) V   -    |                     |  |  |                                     |                                       |  |
| Power Supplies   - 1400 W Platinum 100—240 VAC or 240 HVDC   - 1100W DC/ -48 — (-60) V   - 800W DC/    |                     |  | - 1400W DC/ 48 / 60\\/                                     |                                     |                                       |  |
| Reating and Cooling  | · ·                 |  | · · ·  |                                     |                                       |  |
| Heating and Cooling  | ''                  | 1400 W Flatinum 100 240 W O St 240 HVDO  |  | ` '                                 |                                       |  |
| Parison  | Heating and Cooling | Air cooling  |  | (00,1                               |                                       |  |
| Name   | Options             | Optional Heater Manager  |  |                                     |                                       |  |
| Height   | Fans                | Up to 4 standard cabled cooling fans with reverse air-flow installed in XR8610t sled and up to 8 Standard (STD) cabled cooling fans with |  |                                     |                                       |  |
| Width  | Dimensions and      | XR8000r  | XR861  | Ot                                  | XR8620t                               |  |
| - 482 mm (18.97 inches) with mount ear without bezel - 448 mm (17.63 inches) without mount ear without bezel - 448 mm (17.63 inches) without mount ear wall - 430 mm (16.92 inches) cable management to rear wall - 430 mm (16.92 inches) mounting surface to rear wall - 450 mm (16.92 inches) mounting surface to rear wall - 450 mm (16.92 inches) mounting surface to rear wall - 450 mm (16.92 inches) mounting surface to rear wall - 450 mm (16.92 inches) - 450 mm (17.06 inches) - 450 mm (17 | Weight              | Height — 87.05 mm (3.42 inches)  | • He   | eight — 41.25 mm (1.62 inches)      | ,                                     |  |
| - 448 mm (17.63 inches) without mount ear - Depth — 430 mm (16.92 inches) cable management to rear wall - Weight — 18.52 kg (40.84 pounds)  Form Factor  2U chassis and 1U and 2U half-width sleds  GPU  Up to 3 x NVIDIA 70W L4 GPU  Embedded Management  1DRAC Direct  Mosuported  OpenManage  - CloudIQ for PowerEdge plug in - OpenManage Enterprise - OpenManage Enterprise Integration for Wiware vCenter - OpenManage Integration for Microsoft System Center  OpenManage  Mobility  OpenManage  B MC Truesight - Microsoft System Center - OpenManage Integration with ServiceNow  Secure Boot - Secure Boot - Secure Boot - Secure Component Verification (Hardware integrity check)  Embedded NIC  Front Ports - A 48 mm (17.63 inches) without mount ear - Weight — 5.36 kg (11.83 pound) - Neight — 6.02 kg (13.27 pound) - Neight — 6.02 kg (13.27 pound) - Weight — 6.02 kg (13.27 pound) - Veight — 6.02 kg (13.27 pound) - ipRAC Service Module  - ipRAC Service Module  - ipRAC Service Module  - OpenManage Integration with Windows Admin Center - OpenManage Power Manager plugin - OpenManage Power Manager plugin - OpenManage Update Manager plugin - OpenManage Integration with Service Now - Terraform Providers - VMware vCenter and vRealize Operations Manager - Viware vCenter and vRealize Operations Manager - Viware vCenter and vRealize Operations Manager - Secure Boot - Secure Boot - Secure |                     |  |  |                                     | ′                                     |  |
| Poepth — 430 mm (16.92 inches) cable management to rear wall wall — 350 mm (17.00 inches) — 250 mm (13.77 inches) mounting surface to rear wall — 350 mm (17.00 inches) — Weight — 6.02 kg (13.27 pound)  Form Factor 2U chassis and 1U and 2U half-width sleds  GPU Up to 3 x NVIDIA 70W L4 GPU  Embedded iDRAC9  |                     |  |  |                                     |                                       |  |
| Note      |                     | ` '  | • VV6  | eignt — 5.36 kg (11.83 pound)       | · · · · · · · · · · · · · · · · · · · |  |
| Power   Powe   |                     | , , , ,  |  |                                     |                                       |  |
| Form Factor 2U chassis and 1U and 2U half-width sleds  GPU Up to 3 x NVIDIA 70W L4 GPU  Embedded iDRAC9 iDRAC Direct iDRAC Direct iDRAC Direct iDRAC Service Module  Bezel Not supported iDrange Enterprise integration for VMware vCenter iDrange Update Manager plugin iDrange Integration for Microsoft System Center iDrange Update Manager plugin iDrange Integration iDrange Integration for Microsoft System Center iDrange Update Manager plugin iDrange Integration iDrange IDran |                     | — 350 mm (13.77 inches) mounting surface to rear wall  |  |                                     | · ·                                   |  |
| Embedded   Discription   Dis   |                     | Weight — 18.52 kg (40.84 pounds)   |  |                                     | pound)                                |  |
| Embedded Management   • iDRAC9 • iDRAC Direct   • iDRAC Direct   • iDRAC Service Module  Bezel   Not supported  OpenManage   • CloudIQ for PowerEdge plug in   • OpenManage Integration with Windows Admin Center   • OpenManage Power Manager plugin   • OpenManage Enterprise   • OpenManage Service plugin   • OpenManage Power Manager plugin   • OpenManage Integration for VMware vCenter   • OpenManage Update Manager plugin   • OpenManage Update Manager plugin   • Microsoft System Center   • Microsoft System Center   • Microsoft System Center   • OpenManage Integration with ServiceNow   • VMware vCenter and vRealize Operations Manager   • Security   • Secure Boot   • Secure Boot   • Secure Gomponent Verification (Hardware integrity check)  Embedded NIC   • 1 x iDRAC Direct (Micro-AB USB) port   • 1 x k Micro USB serial port   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet input connector   • 1 x k RJ45 iDRAC9 ethernet port   • 1 x k RJ45 iDRAC9 ethernet port |                     |  |  |                                     |                                       |  |
| Management   Bezel   Not supported   CloudIQ for PowerEdge plug in   OpenManage   Software   OpenManage Enterprise   OpenManage Integration for VMware vCenter   OpenManage Update Manager plugin   OpenManage Integration for Wicrosoft System Center   OpenManage Integration    Mobility   OpenManage Integration with ServiceNow   OpenManage Integration with ServiceNow   OpenManage Integration with ServiceNow   OpenManage Integration Will ServiceNow   OpenManage Update Manager plugin   OpenManage Update Manager plugin   OpenManage Update Manager plugin   OpenManage Update Manager plugin   OpenManage Service Plugin   O |                     |  |  |                                     |                                       |  |
| OpenManage Software  - CloudIQ for PowerEdge plug in - OpenManage Enterprise - OpenManage Enterprise Integration for VMware vCenter - OpenManage Enterprise Integration for VMware vCenter - OpenManage Service plugin - OpenManage Integration for Microsoft System Center  - OpenManage Update Manager plugin  OpenManage Integration Soft System Center  - Red Hat Ansible Modules - Terraform Providers - OpenManage Integration with ServiceNow  - VMware vCenter and vRealize Operations Manager  - Security  - Cryptographically signed firmware - Secure Boot - Secure Boot - Secure Erase - Secured Component Verification (Hardware integrity check)  - Embedded NIC  - Terraform Providers - Secure Component Verification (Hardware integrity check)  - Termager - TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ - TPM 2.0 |                     |  |  |                                     | edfish                                |  |
| Software  OpenManage Enterprise OpenManage Enterprise Integration for VMware vCenter OpenManage Integration for Microsoft System Center OpenManage Integration for Microsoft System Center OpenManage Integration for Microsoft System Center OpenManage Integration Mobile  OpenManage Integration Mobile  Providers Nicrosoft System Center Nicrosoft Manager Plugin Nicrosoft System Center Nicrosoft Manager Plugin Nicrosoft System Center Nicrosoft Manager Nicrosoft Manager Nicrosoft Anaiste Manager Nicrosoft Anaiste Manager Nicrosoft Manager Nicrosoft Anaiste Manager Nicrosoft Anaiste Manager Nicrosoft Anaiste Manager Nicrosoft Manager Nicrosoft Anaiste Manager Nicrosoft  | Bezel               | Not supported  |  |                                     |                                       |  |
| OpenManage Enterprise Integration for VMware vCenter     OpenManage Service plugin     OpenManage Update Manager plugin      OpenManage Update Manager plugin      OpenManage Update Manager plugin      OpenManage Update Manager plugin      Red Hat Ansible Modules     Nicrosoft System Center     Microsoft System Center     OpenManage Integration with ServiceNow     OpenManage Update Manager plugin      Red Hat Ansible Modules     Terraform Providers     VMware vCenter and vRealize Operations Manager      Security     Secure Boot     Secure Boot     Secure Erase     Secure Erase     Secured Component Verification (Hardware integrity check)  Embedded NIC  Front Ports     1 x iDRAC Direct (Micro-AB USB) port     1 x USB 3.0     1 x RJ45 iDRAC9 ethernet port     1 x RJ45 Alert\Dry contact input connector  |                     |  | OpenManage Integration with Windows Admin Center           |                                     |                                       |  |
| <ul> <li>OpenManage Integration for Microsoft System Center</li> <li>OpenManage Update Manager plugin</li> <li>Mobility</li> <li>OpenManage Mobile</li> <li>OpenManage Integrations</li> <li>BMC Truesight</li> <li>Microsoft System Center</li> <li>OpenManage Integration with ServiceNow</li> <li>Parraform Providers</li> <li>VMware vCenter and vRealize Operations Manager</li> <li>Security</li> <li>Cryptographically signed firmware</li> <li>Secure Boot</li> <li>Secure Erase</li> <li>Secure Erase</li> <li>Secure Component Verification (Hardware integrity check)</li> <li>Embedded NIC</li> <li>2 x 25 GbE SFP 28 LOM connectors (optional)</li> <li>Front Ports</li> <li>1 x iDRAC Direct (Micro-AB USB) port</li> <li>1 x RJ45 iDRAC9 ethernet port</li> <li>1 x RJ45 Alert\Dry contact input connector</li> </ul>   | Software            |  |  |                                     |                                       |  |
| Mobility OpenManage   BMC Truesight   Red Hat Ansible Modules   Integrations   Microsoft System Center   Terraform Providers   OpenManage Integration with ServiceNow   VMware vCenter and vRealize Operations Manager   Security   Cryptographically signed firmware   Silicon Root of Trust   Secure Boot   System Lockdown (requires iDRAC9 Enterprise or Datacenter)   Secure Erase   TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ    Embedded NIC   2 x 25 GbE SFP 28 LOM connectors (optional)   Front Ports   1 x iDRAC Direct (Micro-AB USB) port   1 x Mini-DisplayPort   1 x USB 3.0   1 x RJ45 iDRAC9 ethernet port   1 x Micro USB serial port   1 x RJ45 Alert\Dry contact input connector   |                     |  |  |                                     |                                       |  |
| OpenManage Integrations  • BMC Truesight • Microsoft System Center • OpenManage Integration with ServiceNow  • Cryptographically signed firmware • Secure Boot • Secure Erase • Secure Component Verification (Hardware integrity check)  Embedded NIC  • 1 x iDRAC Direct (Micro-AB USB) port • 1 x Wicro USB serial port  • Red Hat Ansible Modules • Terraform Providers • Terraform Providers • Vilware vCenter and vRealize Operations Manager • Silicon Root of Trust • System Lockdown (requires iDRAC9 Enterprise or Datacenter) • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  • 1 x Mini-DisplayPort • 1 x Mini-DisplayPort • 1 x RJ45 iDRAC9 ethernet port • 1 x RJ45 Alert\Dry contact input connector  | Mobility            |  | • Орепмападе Ороате мападег ріцдіп                         |                                     |                                       |  |
| Integrations  • Microsoft System Center • OpenManage Integration with ServiceNow  • VMware vCenter and vRealize Operations Manager  Security  • Cryptographically signed firmware • Secure Boot • Secure Erase • Secured Component Verification (Hardware integrity check)  Embedded NIC  • 2 x 25 GbE SFP 28 LOM connectors (optional)  Front Ports  • 1 x iDRAC Direct (Micro-AB USB) port • 1 x USB 3.0 • 1 x Micro USB serial port  • Terraform Providers • VMware vCenter and vRealize Operations Manager  • VMware vCenter and vRealize Operations Manager  • VMware vCenter and vRealize Operations Manager  • Silicon Root of Trust • System Lockdown (requires iDRAC9 Enterprise or Datacenter) • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  • TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  • 1 x Mini-DisplayPort • 1 x Mini-DisplayPort • 1 x RJ45 iDRAC9 ethernet port • 1 x RJ45 Alert\Dry contact input connector  | -                   | 1  | • Re   | d Hat Ansible Modules               |                                       |  |
| OpenManage Integration with ServiceNow     Secure Boot     Secure Boot     Secure Erase     OpenManage Integration with ServiceNow     Secure Boot     Secure Boot     Secure Erase     OpenManage Integration with ServiceNow     Secure Boot     Secure Boot     Secure Erase     OpenManage Integration with ServiceNow     Secure Boot     Secure Boot     Secure Boot     Secure Component Verification (Hardware integrity check)  Embedded NIC     OpenManage Integration with ServiceNow     Secure Boot     System Lockdown (requires iDRAC9 Enterprise or Datacenter)     TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ     T      | -                   | _  |  |                                     |                                       |  |
| Secure Boot     Secure Erase     Secured Component Verification (Hardware integrity check)  Embedded NIC  Pront Ports  1 x iDRAC Direct (Micro-AB USB) port 1 x USB 3.0 1 x Micro USB serial port  System Lockdown (requires iDRAC9 Enterprise or Datacenter) TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ  TPM 2.0 FIPS, CC-TCG certified, TPM 2.0 China NationZ   |                     |  |  |                                     |                                       |  |
| Secure Erase     Secured Component Verification (Hardware integrity check)  Embedded NIC      2 x 25 GbE SFP 28 LOM connectors (optional)  Front Ports     1 x iDRAC Direct (Micro-AB USB) port     1 x USB 3.0     1 x Micro USB serial port      1 x Micro USB serial port      1 x RJ45 Alert\Dry contact input connector   | Security            | Cryptographically signed firmware  | • Sil  | , ,                                 |                                       |  |
| Secured Component Verification (Hardware integrity check)  Embedded NIC      2 x 25 GbE SFP 28 LOM connectors (optional)  Front Ports      1 x iDRAC Direct (Micro-AB USB) port     1 x USB 3.0     1 x RJ45 iDRAC9 ethernet port     1 x Micro USB serial port      1 x RJ45 Alert\Dry contact input connector  |                     | Secure Boot  | System Lockdown (requires iDRAC9 Enterprise or Datacenter) |                                     |                                       |  |
| Embedded NIC  • 2 x 25 GbE SFP 28 LOM connectors (optional)  Front Ports  • 1 x iDRAC Direct (Micro-AB USB) port  • 1 x USB 3.0  • 1 x RJ45 iDRAC9 ethernet port  • 1 x Micro USB serial port  • 1 x RJ45 Alert\Dry contact input connector  |                     |  |  |                                     |                                       |  |
| Front Ports  |                     |  |  |                                     |                                       |  |
| <ul> <li>1 x USB 3.0</li> <li>1 x RJ45 iDRAC9 ethernet port</li> <li>1 x Micro USB serial port</li> <li>1 x RJ45 Alert\Dry contact input connector</li> </ul>  |                     |  |  | Mili Di II Di i                     |                                       |  |
| • 1 x Micro USB serial port  • 1 x RJ45 Alert\Dry contact input connector  | Front Ports         |  |  |                                     |                                       |  |
|  |                     |  |  |                                     |                                       |  |
| PCIe • 1 CPU configuration: Up to 3 PCIe slots: (3 x16 Gen5) in XR8620t  | PCle                | 1 CPU configuration: Up to 3 PCIe slots: (3 x16 Gen5) in XR8620  |  | The 197 liertibry contact input con |                                       |  |
| 1 CPU configuration: 1 PCle slot: (1 x16 Gen5) in XR8610t  |                     | , , ,  |  |                                     |                                       |  |
| Operating System • Red Hat Enterprise Linux • Wind River   | Operating System    | . ,  |  | Wind River                          |                                       |  |
| and Hypervisors  • SUSE Linux Enterprise Server  For specifications and interoperability details, see Dell.com/  |                     |  |  | For enceifications and intereners   | ability details see Dell com/         |  |
| VMware ESXi     OSsupport.   | and Hypervisors     | SUSE Linux Enterprise Server   |  | i or specifications and interopera  | ability dotains, see Bellicolli       |  |

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