New Dell PowerEdge Server Delivers Breakthrough Performance and Lowers Costs for Telecom and Enterprise Edge Deployments

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- Industry's first single-server solution for Open RAN and Cloud RAN deployments [1] sets a new benchmark for unmatched performance, scalability and total cost of ownership (TCO) for telecom operators
- Technology upgrades offer enhanced connectivity and efficiency, with up to 72 cores and 24 x 25G port density, simplifying edge and telecom transformations
- Edge AI use cases like agentic AI and ML-driven operations help future-proof operations

ROUND ROCK, Texas--(BUSINESS WIRE)--Sep. 30, 2025-- Dell Technologies (NYSE: DELL) announces the new Dell PowerEdge XR8720t designed to transform edge and telecom infrastructure by delivering unprecedented performance and connectivity, especially for Open RAN and Cloud RAN deployments.

Why it matters:

Traditionally, the need for multi-server deployments has hindered the adoption of Cloud RAN and advanced edge computing, burdening organizations with higher costs, operational complexity, space issues and power demands. Inefficiencies and scalability limitations make it difficult to meet the real-time performance needs of next-generation applications.

The Dell PowerEdge XR8720t eliminates these barriers as the industry's first single-server solution for Cloud RAN, streamlining infrastructure, boosting performance and efficiency, and significantly reducing total cost of ownership for modern network and edge deployments.

A New Era in Telecom and Edge Infrastructure

The PowerEdge XR8720t compute sled integrates seamlessly with the Dell PowerEdge XR8000 platform, and is purpose-built to address the performance challenges that have historically hindered infrastructure adoption in challenging environments. With enhanced processing power and increased connectivity, the server enables robust support for high-demand applications while streamlining deployments and lowering operational costs.

- **Exceptional performance and scalability:** The PowerEdge XR8720t eliminates the performance gaps between Cloud and traditional RAN architecture, offering more than double the processing power compared to the previous generation, supporting up to 72 cores and 24 SFP28 connectivity ports in a compact 2U configuration.[2] The single-server consolidation reduces deployment time, operational complexity and maintenance requirements compared to multi-server architectures.
- **Advanced telecom features:** Powered by Intel Xeon 6 SoC with integrated Intel vRAN Boost and the Intel Ethernet E830-XXVDA8F networking technology features a hardware-enhanced timing follower for high-precision timing synchronization across networks. With PTP, PTM and SyncE support, the XR8720t delivers the processing power, a compact 430mm depth designed for space-constrained cell site deployments, the port density (24x SFP28) and network bandwidth (600 GbE) required for demanding Cloud RAN workloads.
- **AI-ready solution:** The server unlocks AI capabilities for CPU-based workloads making advanced edge AI use cases like agentic AI, real-time analytics and ML possible. Its flexible configuration also allows possible support for GPUs upon request, further extending the AI potential.
- **Rugged, modular design:** Engineered for extreme conditions, the XR8720t operates in temperatures ranging from -5°C to 55°C. Its modular design allows for easy maintenance and upgrades no matter its environment. This Network Equipment-Building System (NEBS) Level 3-compliant server includes features like front-accessible I/O that reduce downtime and operational complexity. Built for extended durability and reliability for telecom, edge and military applications, the system's intelligent cooling design optimizes cooling performance in tight spaces.

This compute sled makes it easier for telecommunications providers to support performance intensive applications, reduce costs and conduct AI at the edge. Enterprises across telecom, retail, defense and manufacturing will find this useful to drive AI, ML and other compute intensive workloads, as well as precision-driven tasks that require advanced synchronization..

Perspectives:

Dennis Hoffman, Senior Vice President, Dell Technologies: "The Dell PowerEdge XR8720t represents a significant step forward in telecom and edge infrastructure innovation. As a first platform of its kind, it is engineered to meet the rigorous demands of Open RAN and Cloud RAN deployments while delivering exceptional performance and scalability for edge workloads. This breakthrough allows organizations to consolidate workloads that once required multiple systems, simplifying infrastructure and paving the way for more powerful, efficient and AI-ready networks."

Availability

- The Dell PowerEdge XR8720t will be globally available in Q1 2026.

Additional resources

- Connect with Dell on [X](#) and [LinkedIn](#)
- [Find out more](#) about how the Dell PowerEdge XR8720t is leading at the edge.
- [Learn more](#) about the benefits of the Dell PowerEdge XR8720t for telecom operators.

About Dell Technologies

[Dell Technologies](#) (NYSE: DELL) helps organizations and individuals build their digital future and transform how they work, live and play. The company provides customers with the industry's broadest and most innovative technology and services portfolio for the AI era.

[1] Based on internal analysis, September 2025.

[2] Based on internal analysis, September 2025.

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