

Dell's AI-RAN Vision and Solutions



The image shows a Dell PowerEdge XR9700 server rack. The rack is white and has a vertical orientation. It is mounted on a metal frame. The server is a closed-loop liquid-cooled server. The rack is shown in a dark blue background. The Dell logo is visible in the top right corner of the image. The text on the right side of the image describes the server's capabilities and features.

DELL
PowerEdge XR9700
The future of 'outdoor'
Cloud RAN and Edge AI
Powered by Intel® Xeon 6 SoCs
with Integrated vRAN Boost and AMX

Ultra-compact, Ruggedized Server
IP66-rated, GR-3108 Class 4 certified
Temperatures from -40°C to +46°C
Industry's first Closed-Loop Liquid-Cooled

Dell® is an executive member of the **AI-RAN Alliance** and collaborates with industry leaders like **NVIDIA®**, **Ericsson®**, **Nokia®**, **Samsung®**, and many prestigious academic institutions. Dell is at the forefront of solving the telecom industry's most critical challenges, like integrating AI with RAN.

Dell offers purpose-built hardware like the **PowerEdge XR9700**, the industry's first Closed-Loop / Liquid-Cooled, ruggedized, high-performance **outdoor** server.

PowerEdge XR9700 controls both **RAN Functions** and **AI/ML Workloads**:

- RAN Functions – like baseband processing for mobile broadband, radio resource control, beamforming, and link adaptation
- AI/ML Workloads – like predictive maintenance, intelligence resource allocation, traffic prediction, network optimization, and generative AI models

By collocating **PowerEdge XR9700 outdoors** along with the **RAN** hardware, it assures you achieve **ultra-low-latency** and **highest-throughput**, providing for all the RAN processing and AI processing required on a single server.

Closed-Loop / Liquid-Cooled – it is critical to provide your AI server with the cooling it requires to enhance the AI server’s performance and prevent potential *throttling* when the thermal margin is exceeded. Some large-scale AI models and other AI training tasks could push your CPU to the brink of overheating, so deploying a cooling solution like **PowerEdge XR9700**’s industry first Closed-Loop / Liquid-Cooled outdoor server technology that can handle the heat is critical for any computationally heavy AI/ML workload.



Dell® PowerEdge XR9700 Outdoor Server

Form factor: compact 15-liter aluminum chassis

Weight: 40lbs (18kgs)

Enclosure rating: IP66

Environmental rating: GR-3108 Class 4

Temperature rating: -40°C to +46°C

Mounting: designed to be mounted on a base station, utility pole, ship’s mast, or building exterior in a ‘zero-footprint’ configuration

Processor: Intel® Xeon 6 SoC ‘Granite Rapids-D’ with up to 72 cores, integrated Intel® vRAN Boost and Intel® AMX technology for AI and Baseband processing

Memory & Storage: configurable depending on your Edge AI/ML workloads

Compute Performance: supporting up to fifteen 5G Sectors, equivalent to five 5G Cell Towers

I/O & Connectivity: high bandwidth I/O enabling low-latency processing



Claude Sweeton, Director
331.688.0507 cell
claude.sweeton@dualos.com

Contact **Dualos** for all your interest in **Dell®** solutions

Dualos – Native American WOSB based in Washington
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