RUGGED 3U SERVER DEPLOYMENT FOR MILITARY-CLASS TRANSPORTING

Challenge

The Indian military identified a need for advanced computing systems to support predictive decision-making and real-time risk management in dynamic, high-stakes environments. The equipment must operate reliably in extreme conditions and offer high mobility for rapid, flexible field deployment—ensuring mission readiness and operational efficiency under pressure.

To support real-time decision-making in demanding environments, the project required an AI-powered rugged server equipped with the latest-generation GPU for high-throughput computing. The server needed to meet stringent durability standards, including MIL-STD-810 and MIL-STD-461 certifications for environmental and electromagnetic compliance.

Solution

SP Integration delivered adaptable, custom-built rugged servers tailored to the client's operational needs. The solution featured high-performance GPUs capable of handling intensive, mission-critical workloads, along with an optimized thermal design to ensure stable performance under extreme conditions.

Requirements

- Dual Intel Xeon Gold 6330N CPU
- RTX A6000 Ada 48GB GDDR6 PCIe
- MIL-STD-810 certification

Benefits

- **MIL-STD-810 & MIL-STD-461 Certified**

  Ruggedness and reliability in harsh environments with full compliance to military-grade environmental and EMI standards

- **Optimized Thermal Design**

  Engineered with advanced cooling systems for stable performance under extreme and continuous load conditions

- **High-Performance Computing**

  Integrated powerful GPUs for massive parallel processing in mission-critical, data-intensive tasks