

kontron

COBALT™ RR-2500

Rugged Rackmount Server for Your Critical Defense Missions



Endurance. Performance. Reliability.

The **COBALT™ RR-2500** delivers uncompromising compute power at the tactical edge, driving AI for rapid decision-making, and secure data processing in the most demanding military environments. Built to meet rugged MIL-rated standards, it thrives where conventional servers fail—maintaining mission readiness through shock, vibration, extreme temperatures, and unpredictable conditions. With scalability and mission-focused security at its core, the RR-2500 ensures reliable, high-throughput data processing and secure communications on the battlefield, at sea, or within mobile command units.

Why Choose Kontron's COBALT™ RR-2500 for Defense?

› Military-Grade System with a Compact Design

Short-depth (20") 2U chassis ideal for vehicle, vessel, or command center deployment.

› Ruggedized Solution

Designed to meet MIL-STD-810 and NEBS Level 3 for extreme environments.

› High Performance, Flexible Compute

Supports 4th/5th Generation Intel® Xeon® SP and AMD EPYC 9004/9005 processors. Plus, expandable architecture with up to 7x PCIe Gen5 slots for GPUs or accelerator cards.

› Modular, Hot-Swap Storage

Holds 6x hot-swap, tool-less U.2/U.3 NVMe SSDs—designed for fast, field-replaceable storage and high data throughput.

› Mission-Secure Computing Foundations

Built on Kontron's COBALT platform, utilizing ECC memory, TPM 2.0, intrusion detection and rapid shutdown mechanisms—ideal for combating data corruption and ensuring secure operations.

› C4ISR & Network Interoperability

Designed for seamless compatibility enabling C4ISR infrastructure.

› Secure, Lifecycle-Aligned Supply Chain

Long product availability (7-10 years) and configuration stability assure defense programs sustained readiness and cost-effective certification.

Designed to meet:

- MIL-STD-810 (ruggedization)
- NEBS Level 3 / ETSI (reliability)
- ITAR Registered for US
- ITAR-free worldwide
- ISO9001 / AS9100
- ETSI

Mission Use Cases

1. C2/C4 Command Center Data Collection

Rugged servers host mission applications that collect battlefield data—from sensors, drones, satellites, and soldiers in the field—into a real-time operational picture. Designed for quiet operation as well as durability, they ensure commanders can make rapid, informed decisions even in harsh environments like forward operating bases or mobile command centers.

2. Intelligence, Surveillance & Reconnaissance (ISR)

Servers process high-volume data streams — radar, video, thermal imaging, signals intelligence — directly at the edge. Ruggedization ensures they can survive vibrations, extreme temperatures, and dust while still delivering reliable data to analysts and operators.

3. Cybersecurity & Secure Communications

Defense missions rely on secure, always-available communication. Rugged servers act as hardened, quiet nodes for encrypted networks, authentication services, and intrusion monitoring, ensuring trusted information exchange in contested environments.

4. AI-Enabled Decision Support

Rugged servers provide the compute power for AI algorithms that detect threats, prioritize alerts, or recommend optimal resource deployment—all at the tactical edge, without waiting on remote data centers.

5. Simulation & Mission Readiness

In deployed scenarios, servers run training simulations, mission rehearsal software, or digital twins of equipment, enabling troops to practice, adapt, and respond quickly to evolving mission needs.



Your Contact

Kontron Canada Inc.

4555 Rue Ambroise-Lafortune,
Boisbriand, Quebec J7E 4K6, Canada
+1 800 387 4222
info.americas@kontron.com

Kontron America Inc.

9477 Waples Street,
San Diego, CA 92121, USA
+1 888 294 4558
info.americas@kontron.com