



Rugged ATMOS2 GPU

Product Brief

High-performance GPU computing at the edge for AI, sensor processing, and real-time decision advantage.



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ATMOS2 GPU: Tactical Edge Node

Modern Design for the Modern Soldier

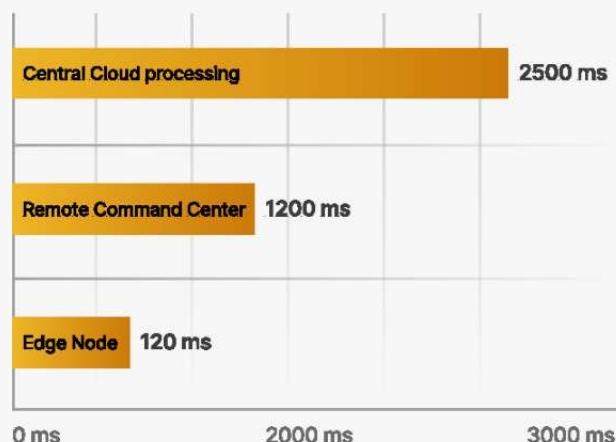
The **ATMOS2 GPU** is a rugged, high-performance tactical edge node featuring up to 144x CPU cores and an integrated NVIDIA GPU for real-time processing and AI workloads.

Engineered for the tactical edge, the Rugged ATMOS2 GPU from Core Systems delivers secure, high-speed communications and real-time processing in extreme military environments.

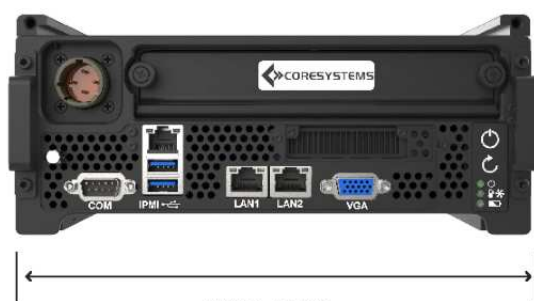
- Up to 144x Intel Xeon Cores
- Up to 2TB ECC RAM
- 4x NVME Hot-Swap SSD Drives
- NVIDIA L4 Tensor Core GPU Card

Edge AI Optimizes Your Mission

Decision Latency by Processing Location



FRONT VIEW



Width: 8.50 in

Height: 3.5 in

SIDE VIEW



Depth: 14.75 in



Technical Specifications

CPU CORES	Up to 144x
GPU	NVIDIA L4 Tensor Core
RAM	Up to 2TB per node
SECURITY	TPM 2.0 Module
NETWORK	2x 10G Onboard NIC
STORAGE	4x NVME Hot-Swap SSD
POWER	Onboard UPS Battery Backup



System Overview

Rugged. Powerful. Purpose-Built.

Built for AI at the tactical edge, the **Rugged ATMOS2 GPU** combines NVIDIA acceleration, Intel Xeon processing, high-speed storage, and integrated power protection to deliver real-time intelligence in demanding environments.

Designed for mission-critical operations, the ATMOS2 GPU provides the compute power, AI acceleration, and rugged reliability needed to transform data into actionable intelligence wherever the mission takes place.

That's why the ATMOS2 GPU was built for the tactical edge...

ATMOS2 GPU at a Glance

Purpose-Built for AI at the Edge

- NVIDIA GPU
- Up to 144x XEON Cores
- Integrated UPS
- Hot-Swap Storage
- MIL-SPEC Tested

ECC Memory Capacity
Up to 2TB RAM

Power Versatility
Integrated UPS

Removeable NVME
Hot-Swap SSD



Up to 144x CPU
Intel XEON Cores

Tensor Core Card
NVIDIA GPU

Equipped With NVIDIA GPU

Make decisions in real-time with the AI processing capabilities given by the latest NVIDIA L4 Tensor Card.



Data On-The-Move

Easily store and transfer data with 4 easily accessible NVME hot-swap storage drives.



Unmatched Compute Power

Get up to 144x cores of the latest Intel XEON Gold processor for mission-critical compute power.



Rugged & Stackable Design

MIL-SPEC Tested Tactical Edge Nodes

The **ATMOS2 Series** from **Core Systems** features a scalable, stackable architecture that expands compute, storage, networking and AI capabilities as mission demands evolve. Designed for flexibility, it enables organizations to deploy the right level of performance without changing platforms.

Built on a common platform, the ATMOS2 Series simplifies integration and deployment while powering the most demanding edge AI workloads.

As requirements grow, ATMOS2 edge nodes scale seamlessly to meet the mission's objectives.

Scale Your Mission

One Platform. Multiple Configurations.

- Modular Design
- Stackable Chassis
- Networking Options
- Deployment Ready



Modular Design
Stackable Nodes

MIL-SPEC Tested
Rugged Chassis

SWaP-Optimized
Designed for C2

Mission-Scalable
Build Your Stack

MIL-SPEC Tested

The Rugged ATMOS series has been tested to meet or exceed military environmental specifications.



SWaP-Optimized

Each ATMOS node has been optimized for tactical use during C2 operations with limited space.



Built in the USA

Designed and built in San Diego, Core Systems is the world leader in rugged edge computing.



How the ATMOS2 GPU Works

Real-Time Intelligence at the Edge

The **ATMOS2 GPU** transforms raw sensor data into actionable intelligence at the tactical edge. By processing information closer to where it is generated, it reduces latency, minimizes network dependence, and accelerates operational decision-making.

Powered by NVIDIA GPU acceleration, ATMOS2 collects data from multiple sources, performs AI inference and sensor fusion in real time, and delivers mission-ready intelligence when and where it matters most.

From Data to Decisions

AI Processing at the Tactical Edge

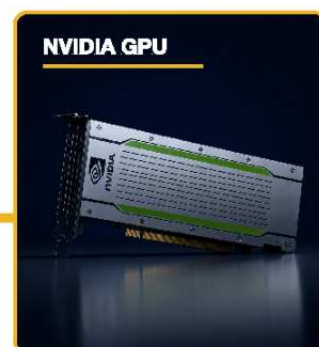
- Sensor Collection
- AI Processing
- Data Fusion
- Real-Time Insights

01 COLLECT Multi-Domain Sensor Inputs

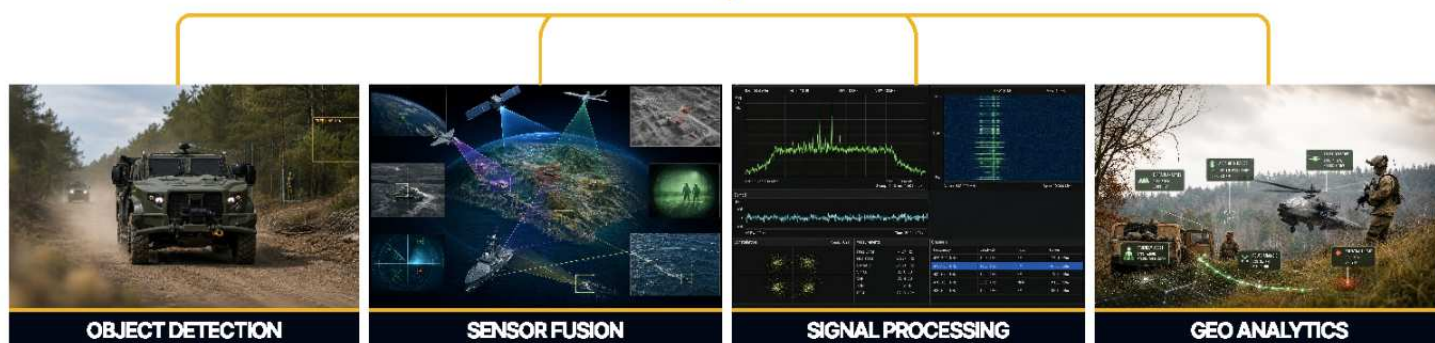


02 PROCESS Edge AI Processing

The ATMOS2 GPU leverages the power of the **NVIDIA L4 Tensor Core GPU** to perform AI inference and data fusion at the edge to deliver high-performance compute with minimal latency.



03 ACT Actionable Operator Intelligence



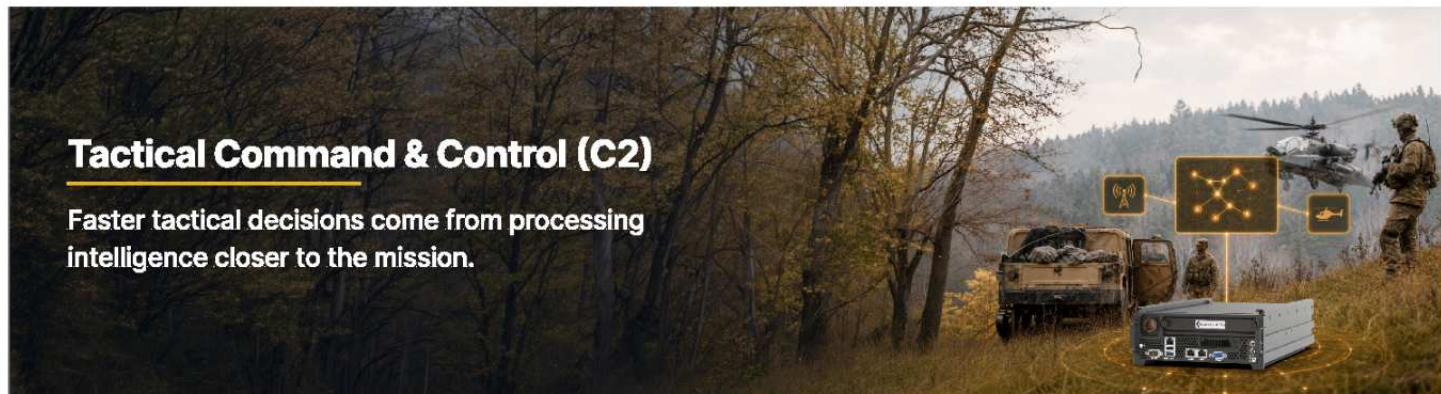
Common Applications

Designed for Cross-Domain Use

AI at the edge is transforming how defense organizations process and act on data. Discover how rugged edge computing with the ATMOS2 GPU enables today's most demanding missions.

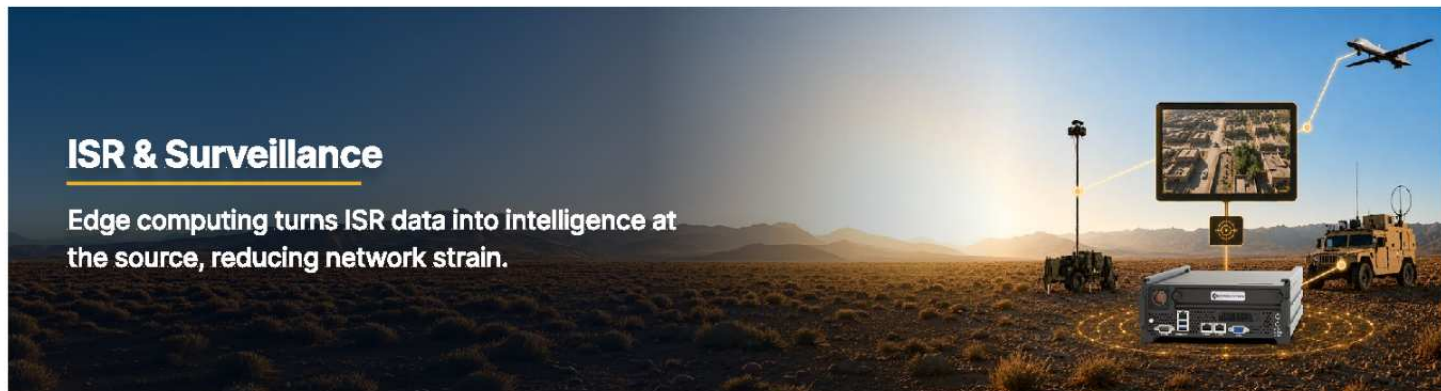
Tactical Command & Control (C2)

Faster tactical decisions come from processing intelligence closer to the mission.



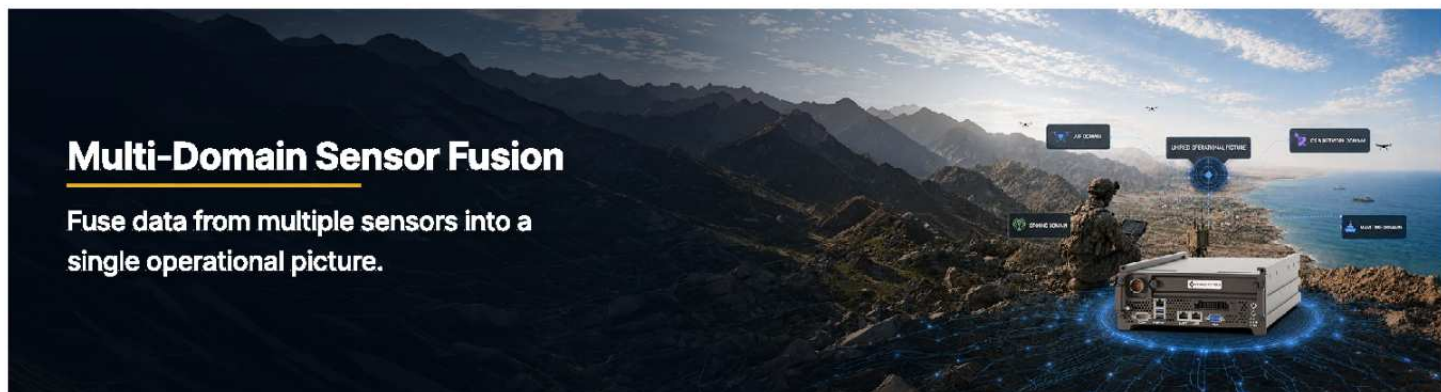
ISR & Surveillance

Edge computing turns ISR data into intelligence at the source, reducing network strain.



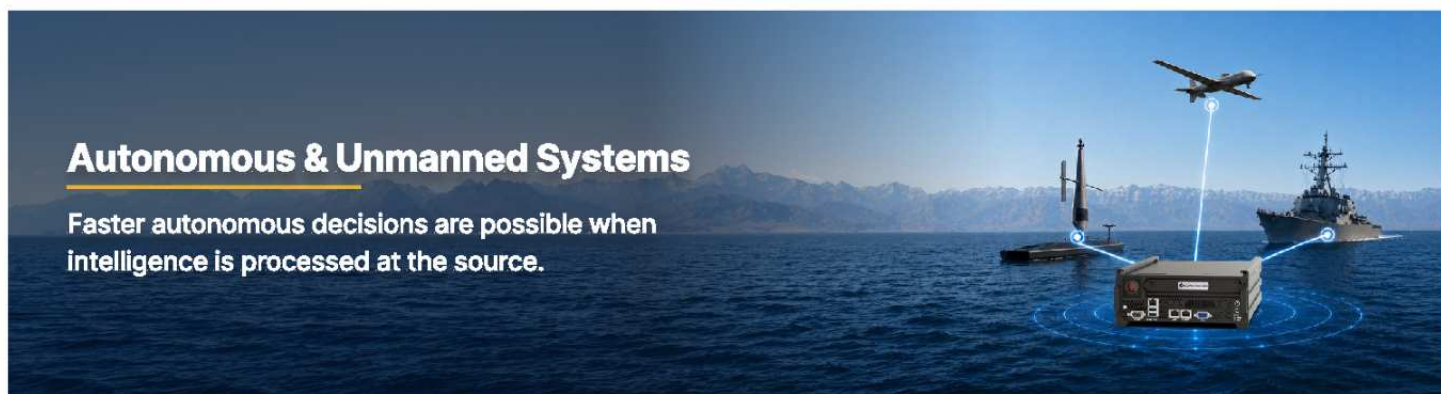
Multi-Domain Sensor Fusion

Fuse data from multiple sensors into a single operational picture.



Autonomous & Unmanned Systems

Faster autonomous decisions are possible when intelligence is processed at the source.



Technical Specifications

Rugged Tactical GPU Edge Node



FRONT



SIDE



BACK



Dimensions

3.5" H x 8.5" W x 14.75" D | 13 lbs

Processor

64, 96, or 144 Intel® Xeon® physical cores

GPU

NVIDIA L4 Tensor Core GPU

RAM

Up to 2 TB ECC memory

Storage

4 x NVMe hot-swap SSD drives

Security

TPM 2.0 Module

Power & Backup

Native 24–28 VDC input; optional AC-DC supply
Onboard UPS battery backup

Chassis Connectivity

Stackable via ATMOS Chassis Rail System



Environmental Specifications

OPERATIONAL TEMP	-15°C to +55°C
STORAGE TEMP	-55°C to +85°C
HUMIDITY	48-Hour: 95% RH
ALTITUDE	12,500ft/40,000ft
VIBRATION	4.43 GRMS, 60min/axis
SHOCK	20g functional/40g crash hazard
EMI	MIL-STDF CE & RE emissions





Tactical Edge Node ATMOS2 GPU

Elevate Your Mission



[REQUEST QUOTE](#)

