ATMOS2 SERIES
Product Brief

ATMOS2 by Core Systems



NGC2READY



ATMOS2 **GPU**

Accelerate AI workloads with NVIDIA GPU computing at the edge.



ATMOS2 **CDS**

Securely connect mission systems across multiple operational domains.



ATMOS2 **Switch**

Connect mission systems with rugged, reliable tactical network infrastructure.

NGC2 READY

MISSION READY

The **ATMOS2 Rugged Edge Node Series from Core Systems** is built to scale your mission at the edge. We design and manufacture rugged, stackable GPU compute and networking nodes. Accelerate your NGC2 mission with a proven tactical solution built for C2NOW and JADC2 requirements.

Is your mission NGC2 Ready?



ATMOS2 **Switch**

Connect your nodes with this rugged 20-port switch.

Request Quote

ATMOS2 **GPU**

Utilize the power of NVIDIA GPU and AI.

Request Quote

ATMOS2 **CDS**

Communicate across domains with this tactical node.

Request Quote

> We've collapsed an entire server stack into a single chassis: higher core counts, onboard SSD storage, the latest GPUs for AI workloads, and an integrated UPS battery, all in a fraction of the SWaP. That combination didn't exist before ATMOS2.

- CHRIS SCHAFFNER
PRESIDENT OF CORE SYSTEMS

ATMOS2 GPU

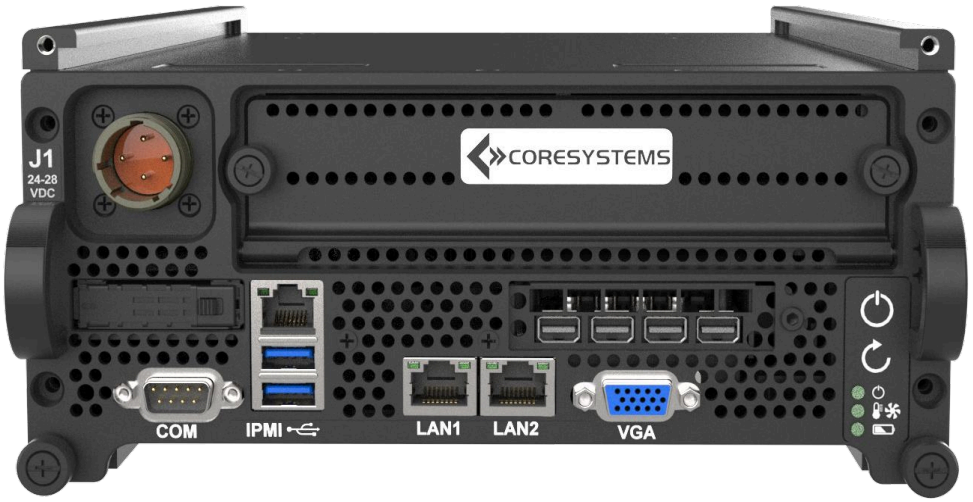
RUGGED AI COMPUTE NODE

The **ATMOS2 GPU** is a rugged AI edge node built for C2, ISR, and autonomous missions. Featuring up to **144 Intel® Xeon® CPU cores**, an **NVIDIA L4 Tensor Core GPU**, and high-speed **NVMe storage**, it delivers real-time AI processing and mission-critical performance at the tactical edge.

Designed for harsh military environments, it combines a **MIL-spec stackable chassis**, integrated UPS, and native DC power to provide reliable, scalable computing on vehicles, command posts, and expeditionary platforms while reducing latency and accelerating decisions.



CPU Cores	Up to 144x
GPU	NVIDIA L4 Tensor Core
RAM	Up to 2TB per node
Network	2× 10G Onboard NIC
Storage	4x NVME Hot-Swap SSD
Power	Onboard UPS Battery Backup

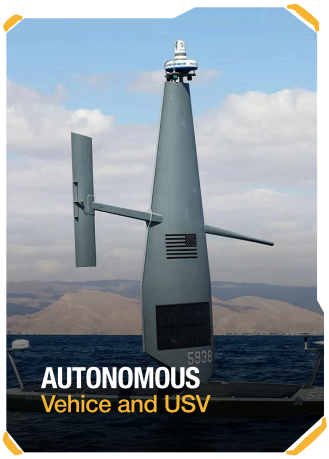


DESIGNED FOR









ATMOS2 CDS

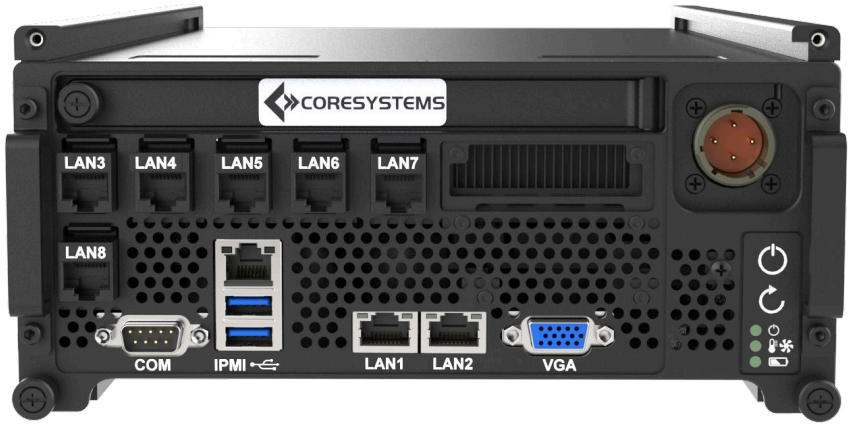
RUGGED CROSS DOMAIN NODE

The Rugged **ATMOS2 CDS** (Cross-Domain-Solution) is a compact, mission-scalable server designed with **7 physically independent Ethernet Controllers**. Each ATMOS2 CDS node features up to 144x physical Intel® Xeon® Gold cores with onboard UPS battery backup for uninterrupted C2 on-the-move.

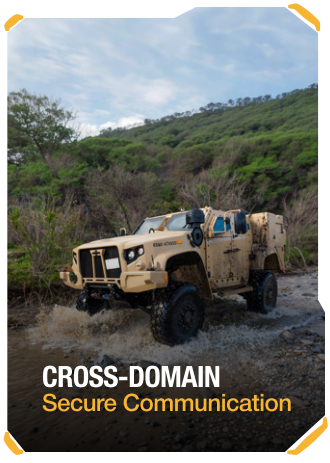
Engineered for mission-critical operations, the ATMOS2 CDS Node delivers rugged, secure computing in a compact, stackable design that reduces footprint by over 10x. With an **onboard UPS**, seamless data transfer, and secure multi-domain communication, it provides reliable performance for military and government missions.

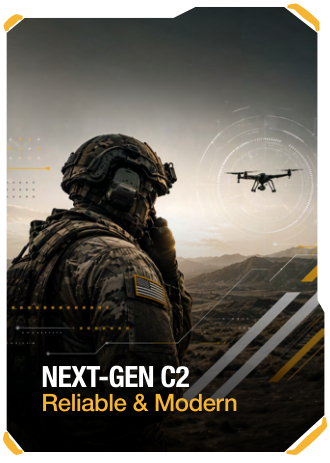


CPU Cores	Up to 144x
GPU	NVIDIA L4 Tensor Core
RAM	Up to 2TB per node
Network	7x Independent NIC
Storage	2x NVME Hot-Swap SSD
Power	Onboard UPS Battery Backup



DESIGNED FOR









ATMOS2 SWITCH

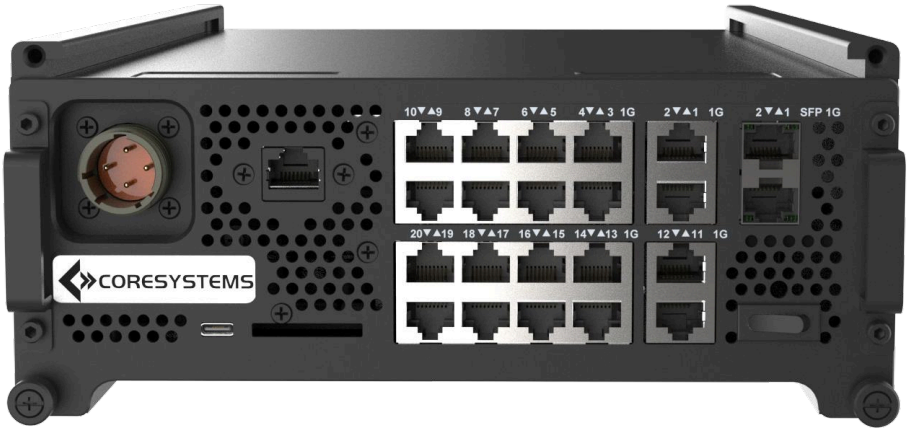
RUGGED NETWORKING NODE

The Rugged **ATMOS Switch** is a compact, ruggedized Cisco IE-3100 Ethernet switch featuring **18 Gigabit ports, 2 combo copper/SFP uplinks, and Cisco IOS XE**. Built for harsh environments, it delivers reliable Layer 2 networking, dual DC power inputs, industrial protocol support, and flexible mounting options.

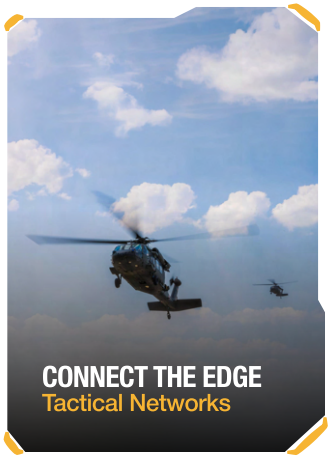
Designed to pair with ATMOS tactical nodes, it slides and locks directly onto the ATMOS chassis to create a unified networking and compute platform. This modular design simplifies deployment while enabling compact, high-performance edge operations.



Connectivity	Up to 144x
Performance	NVIDIA L4 Tensor Core
Throughput	Up to 2TB per node
Cisco Hardware	2× 10G Onboard NIC
Storage	SD Card Slot & Micro-USB
Power	Onboard UPS Battery Backup



DESIGNED FOR









ATMOS2 SAVE

SAVE-COMPLIANT SOLUTION

The Core Systems **ATMOS SAVE Kit** is a SAVE-compliant tactical edge solution that integrates an ATMOS2 GPU compute node, ATMOS2 managed switch, and **dual-output battery power subsystem** into a compact SAVE chassis. Built for rapid deployment, it delivers high-performance AI processing, integrated networking, and resilient power in one rugged platform.

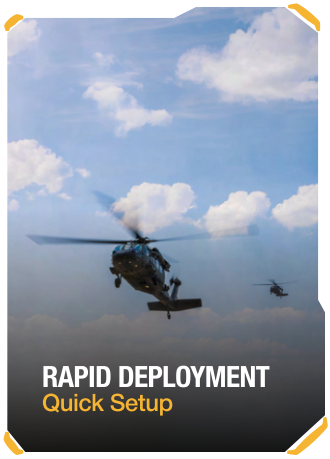
Designed for mobile, vehicle, and expeditionary operations, the ATMOS SAVE Kit **supports native DC input with onboard battery backup** for uninterrupted operation. Its modular, stackable architecture simplifies transport, integration, and field deployment while enabling scalable edge computing.



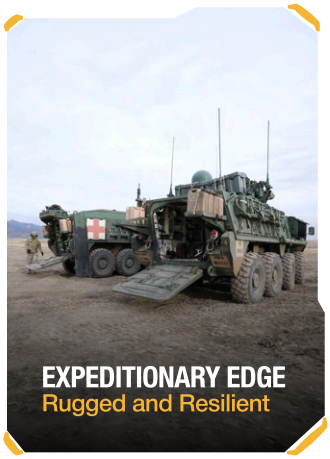
Compute	ATMOS2 GPU
Networking	ATMOS2 Switch
Chassis	SAVE-Compliant
Mounting	Integrated Hardware
Battery	Dual-Output
Power	Onboard UPS Battery Backup

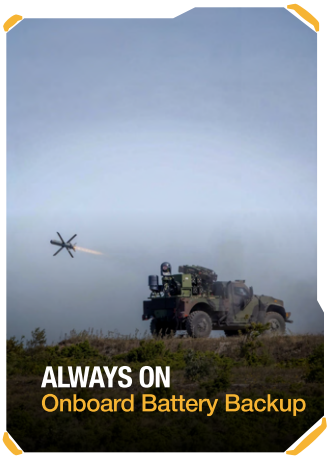


DESIGNED FOR









HOW IT WORKS

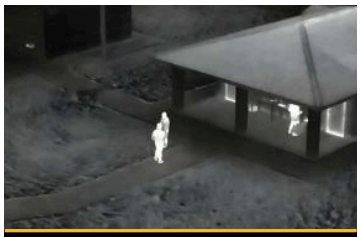
THE ATMOS2 SERIES

The **ATMOS2 GPU** an **ATMOS2 CDS** 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. Connect at the edge with the **ATMOS2 Switch** in order to make informed decisions in real-time.

01 COLLECT
Multi-Domain Sensor Inputs


AERIAL DRONES

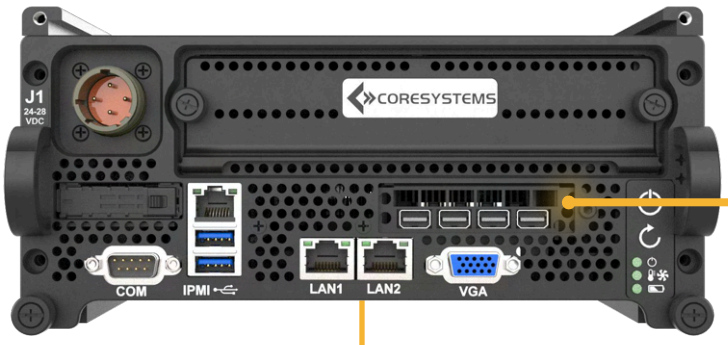

ISR CAMERAS

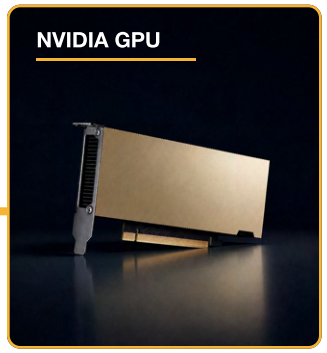

THERMAL IMAGING


MARITIME SYSTEMS

02 PROCESS
Edge AI Processing

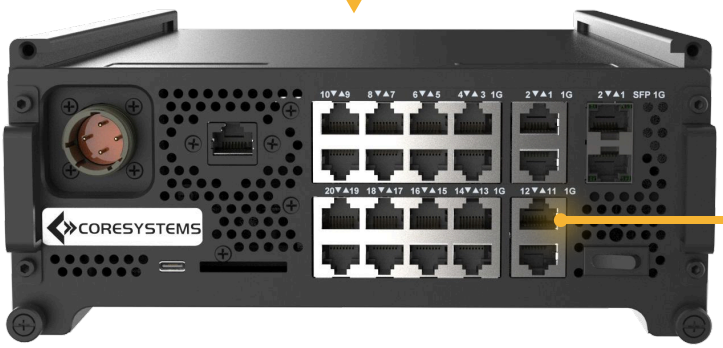
The ATMOS2 GPU leverages the power of the **NVIDIA L4 Tensor Core GPU** to perform AI inference and data fusion at the edge to deliver high-performance compute with minimal latency.




NVIDIA GPU

03 CONNECT
Rugged Networking

The ATMOS2 Switch is equipped with 20-ports to increase connectivity and bandwidth in missions at the edge.




EDGE NETWORKING

NGC2 EXTREMES

ATMOS2 IS BUILT FOR THE CHALLENGE

NGC2 missions push computing into environments where extreme heat, dust, vibration and mobility are everyday challenges. The ATMOS2 series from Core Systems is engineered for these conditions, **combining rugged construction, thermal management and tactical edge performance** to keep critical compute and networking closer to the mission.

ENVIRONMENT: ARCTIC COLD

THE CHALLENGE

Extreme cold causes contraction, condensation, battery degradation and lubricant failure.

THE SOLUTION

ATMOS2 operates from -15°C to +55°C with conduction cooling, cold-start circuitry and conformal-coated PCBs.



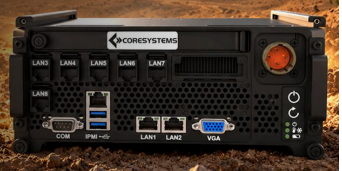
ENVIRONMENT: DESERT & SAND

THE CHALLENGE

Extreme heat, dust and sand strain cooling, damage connectors and threaten compute performance.

THE SOLUTION

Rugged thermal design and sealed construction sustain compute in harsh desert conditions.



ENVIRONMENT: HIGH HUMIDITY

THE CHALLENGE

Humidity, biological growth, corrosion and thermal cycling degrade unprotected hardware.

THE SOLUTION

Conformal-coated PCBs, sealed chassis and tropical testing protect NGC2 compute in harsh environments.



ENVIRONMENT: AIRBORNE OPS

THE CHALLENGE

Rotor vibration, hard landings and altitude changes can damage conventional systems.

THE SOLUTION

ATMOS2 is tested for vibration, shock and altitude, with MIL-STD-461F compliance available.



REQUEST A QUOTE

GET IN TOUCH TODAY

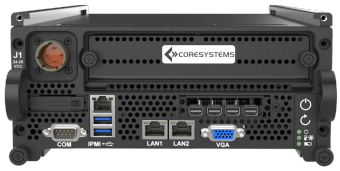
Optimize your mission today with the ATMOS2 Tactical Edge Server Series from Core Systems. With an integrated UPS, stackable chassis rail system, and MIL-SPEC-tested rugged design, ATMOS2 delivers the resilient infrastructure needed to maintain compute availability, scale performance, and operate confidently in demanding environments.

One platform. Multiple configurations. Mission-ready compute at the edge.

ATMOS2 **GPU**

Utilize the power of NVIDIA GPU and AI.

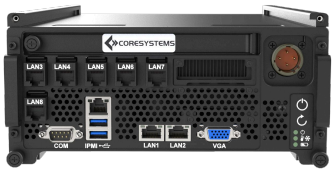
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ATMOS2 **CDS**

Operate across domains with 7 independent NIC controllers and GPU.

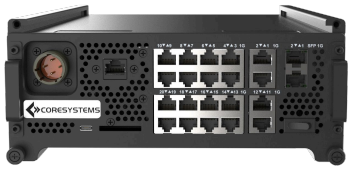
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ATMOS2 **Switch**

Networking for your all-in-one computing setup.

Click Here to View >



ATMOS2 **SAVE**

SAVE-compliant, fully integrated edge solution.

Click Here to View >



ATMOS2™ by CORE SYSTEMS

BUILD YOUR SOLUTION
NGC2 COMPUTING EXPERTS

Learn More >

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