

CORE SYSTEMS SAVE KIT

System Datasheet



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Tactical Edge Computing System

The Core Systems ATMOS SAVE Kit is a SAVE-compliant, fully integrated tactical edge solution combining an ATMOS2 GPU compute node, an ATMOS2 managed switch, and a dual-output battery power subsystem within a compact SAVE chassis. Engineered for rapid deployment, the system delivers high-performance AI processing, integrated networking, and resilient power in a single ruggedized platform.

Designed for mobile, vehicle, and expeditionary environments, the ATMOS SAVE Kit supports native DC input with onboard battery backup to ensure continuous operation during power interruptions. Its modular, stackable architecture enables scalable edge deployments while simplifying integration, transport, and field setup.

- SAVE-Compliant Chassis
- Vehicle Integration Ready Kit
- Built in the USA

Featured Specifications

- ATMOS2 GPU Compute Node
- ATMOS2 Switch
- Dual-Output Battery Power System
- SAVE-Compliant Rugged Chassis
- 24–28VDC Native Power Input
- 600W Power Distribution Architecture
- Onboard Battery Backup
- Dual 10GbE + Multi-Port 1GbE Networking
- Stackable Edge Deployment Platform



ATMO2 GPU

ATMO2 SWITCH

Technical Specifications - ATMO2 Switch

Dimensions

Height: 3.50 inches, Width: 8.50 inches, Depth: 14.75 inches

Downlink Ports

18x 1000BASE-T RJ-45

Uplink Ports

2x Gigabit dual-media (RJ-45 or SFP)

Switch Capacity

~24Gbps; ~17.8Mpps forwarding

Storage

SD card slot, micro-usb

Software

Cisco IOSXE with Network Essentials

Industrial Protocols

IEC61850-3, IEEE1613, EN50155; MRP, REP

Power Supply

9.6-60V DC; nominal 12-48V

Technical Specifications - ATMO2 GPU

Dimensions

Height: 3.50 inches, Width: 8.50 inches, Depth: 14.75 inches

CPU

144-Core Intel® Xeon® CPU

GPU

NVIDIA Tesla Blackwell 4000

RAM

Up to 2TB per node

Storage

4x NVMe SSD (Hot-Swap)

Networking

2x 10G onboard NIC Ports

I/O Ports

2x USB 2.0, 1x VGA

Power Supply

Onboard UPS Battery Backup; Native 24-28VDC Power Input

Key Features

- Integrated compute, networking, and power
- GPU acceleration for AI and edge processing
- Built-in switch simplifies connectivity
- Native DC with battery-backed operation
- Dual-output power distribution
- Compact, rugged, and stackable design
- Optimized for mobile and field deployment



SIDE



BACK



SAFE - COMPLIANT
CHASSIS & POWER

Technical Specifications - SAVE-Compliant Chassis & Power

Dimensions

Height: 9.3 inches, Width: 15.9 inches, Depth: 16.1 inches

SAVE Mount

Fully SAVE-compliant chassis with integrated mounting hardware

Cable & Interconnect Configuration

Pre-integrated internal cabling
Clearly labeled connections for rapid field deployment

Cables Included

1x RJ45 Ethernet Cables for Management & Uplinks
1x ATMOS DC Output Power Cable
1x AC Input Power Cable

Power

24-28VDC Input (500W) – Compute Node
100-240VAC Input (600W) – Battery System
24VDC Output (600W Total) – Dual Output Power
Dual-output DC power distribution to system components
Integrated Battery Backup System

DC Pinout (Compute Node Input)

A/B: +VDC
C/D: GND

DC Pinout (Battery Output J2/J3)

A/B: +VDC
C/D: GND

Environmental Specifications

Operational Temperature

MIL-STD-810F, Method 501.5, Procedures I/II: -15°C to +55°C

Storage Temperature

MIL-STD-810F, Method 501.5, Procedures I/II: -55°C to +85°C

Humidity

MIL-STD-810F, Method 507.4: 95% RH, 48 hours at 40 – 65°C

Altitude

MIL-STD-810F, Method 500.4: 12,500 ft operation; 40,000 ft transport

Vibration

MIL-STD-810G, Method 514.6: 4.43 GRMS, 5-20000Hz, 60 min/axis

Shock

MIL-STD-810G, Method 516.6: 20g, 11ms functional; 40g, 11ms crash hazard

EMC

MIL-STD-461F: CE & RE emissions (with 461 kit)

Work With Core Systems Today

Core Systems designs and builds rugged servers, displays, mission computers, and integrated cabinet solutions for military and industrial applications. From our 85,000 sq. ft. San Diego facility, we deliver cutting-edge, durable computing solutions for mission-critical needs.

Core Systems

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