CORE SYSTEMS



TACTICAL ATMOS2 EDGE NODE

Rugged ATMOS2 Node

The NEW **Rugged ATMOS2 Node** is a tactical edge server with up to 144 CPU cores, offering the highest core count in the industry. Designed for harsh environments, it handles AI, real-time processing, and secure communications. It operates independently or connects to multiple enclaves via the ATMOS Chassis Rail System.

Each node includes a built-in UPS battery to maintain uninterrupted command and control (C2) during movement or power shifts. Rugged and mission-ready, the ATMOS2 Node is built for defense, aerospace, and demanding edge computing applications.

- Onboard UPS battery backup
- Tested to meet military standards
- Built in the USA

Featured Specifications

- 64, 96 or 144 Physical Xeon® Cores
- Up to 2TB ECC RAM
- 4x NVME Hot-Swap SSD Drives
- 4-Port 10GB NIC card
- Onboard UPS Battery Backup
- Rugged MIL-Spec Chassis
- Native 24-28VDC Power Input
- Optional AC-DC External Power Supply
- Under 500W Total Power Draw
- Stackable Chassis Rail System



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Technical Specifications

Dimensions
Height: 3.5 inches, Width: 8.5 inches, Depth: 14.75 inches
Weight: 13 lbs

CPU
64x, 96x or 144x Intel® Xeon® Cores

RAM
Up to 2TB per node

Security
TPM 2.0 Module

Network
1× 4-Port 10G NIC Card
2x 10G Onboard NIC Ports

Power
Onboard UPS Battery Backup
Under 500W Total Power Draw

Power Supply
Native 24-28VDC Power Input
Optional AC-DC External Power Supply

Storage
4x NVME Hot-Swap SSD Drives

Chassis
Stackable Rugged MIL-Spec Chassis

Environmental Specifications

Operational Temperature
-15°C to +55°C; MIL-STD-810F, Method 502.4 Procedure II (Low Temperature) and Method 501.4 Procedure II (High Temperature)

Storage Temperature
-55°C to +85°C; MIL-STD-810F, Method 502.4 Procedure I (Low Temperature) and Method 501.4 Procedure I (High Temperature)

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 Procedure I; 4.43 GRMS, 5-2000 Hz, 60 min/axis

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

EMC
MIL-STD-461F: CE & RE emissions

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.



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