CORE SYSTEMS



RUGGED AR2 MISSION COMPUTER

Military-Grade Tactical Computer

The **Rugged AR2** is a compact, SWaP-optimized tactical mission computer built for harsh military and aerospace environments. Featuring a fully sealed, conduction-cooled chassis, it uses proprietary thermal transfer technology to eliminate moving parts while delivering reliable performance in extreme temperature, shock, and vibration conditions. Its rugged, application-specific design makes it ideal for deployed edge computing and mobile mission systems.

Powered by the latest Intel® quad-core processor technology, the AR2 delivers high-performance computing in a lightweight small form factor package. Supporting up to four internal expansion cards for added I/O flexibility, including 1553, GPS, and D/A interfaces, the AR2 is tested to military specifications for dependable operation in mission-critical deployments.

- Application-specific design
- Tested to meet military standards
- Built in the USA

Featured Specifications

CPU
Latest Intel Quad-Core

Cores
4-12x

RAM
4GB

Power
28VDC

Chassis Type
Aircraft-Grade Aluminum

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Technical Specifications

Dimensions
Height: 4.75 inches, Width: 6.12 inches, Depth: 7.00 inches
Weight: 6.50 lbs

CPU
Latest Intel Quad-Core options

Power
28VDC

RAM
2GB

I/O Expansion
Supports up to four internal expansion cards for additional I/O capability, including MIL-STD-1553, GPS, and D/A interfaces

Cores
4-12x

Cooling
Fully conduction-cooled

Chassis
Lightweight aluminum 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, 5-2000Hz, 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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