CORE SYSTEMS



RUGGED AR3 MISSION COMPUTER

Military-Grade Tactical Computer

The **Rugged AR3** is a rugged, SWaP-optimized tactical mission computer designed for reliable operation in extreme military and aerospace environments. Built with a fully sealed, conduction-cooled chassis, the AR3 is engineered to withstand harsh temperature, shock, vibration, and humidity conditions while maintaining dependable performance in mission-critical deployments.

Powered by the latest Intel® processors, the AR3 supports expanded I/O capability with multiple internal card options including 1553, GPS, and D/A modules. Its compact form factor and rugged design make it ideal for command, control, ISR, and edge computing applications where size, weight, power, and reliability are critical.

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

Featured Specifications

CPU
Latest Intel Quad-Core

Cores
4-12x

RAM
8GB

Power
28VDC

Chassis Type
Aircraft-Grade Aluminum

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Technical Specifications

Dimensions
Height: 4.40 inches, Width: 7.50 inches, Depth: 7.30 inches
Weight: 6.50 lbs

CPU
Latest Intel Quad-Core options

Power
28VDC

RAM
8GB

I/O Expansion
Optional 1553, GPS, and D/A modules

Cores
4-12x

Cooling
Fully conduction-cooled, fanless design

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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