CORE SYSTEMS



RUGGED AR5 MISSION COMPUTER

Military-Grade Tactical Computer

The **Rugged AR5** is a compact, fully sealed mission computer built for harsh, SWaP-sensitive environments. Its conduction-cooled chassis with a removable sealed CPU/SSD tray and 38999 MIL-circular connectors is tested to MIL-STD-810G and DO-160G for shock, vibration, thermal, altitude, and humidity, ensuring reliable operation in demanding defense and aerospace platforms.

Powered by an Intel® E3845 quad-core processor up to 1.91 GHz with 8 GB ECC memory and a 128 GB SSD, the AR5 delivers efficient edge performance in a 1.10" × 4.70" × 5.60", 2-lb enclosure. With 8x Gigabit Ethernet ports (remote boot and PoE), 2x USB 3.0, 2x USB 2.0, RS-232, 8254 timer/counters, and I²C support, it provides versatile I/O for tactical networking and control systems in space-constrained platforms.

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

Featured Specifications

Processor
Intel E3845 CPU - 1.91GHz
Quad-core - 10W TDP

Power
28VDC

RAM
8GB

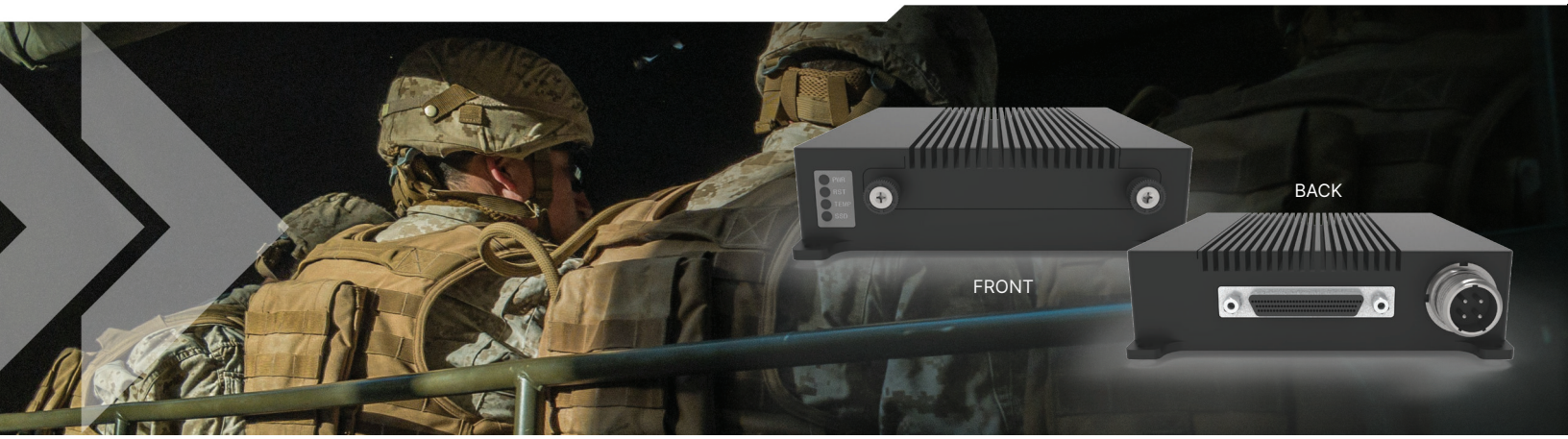
Storage
1x 128GB Solid State Drive

Chassis Type
Aircraft-Grade Aluminum

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Technical Specifications

Dimensions
Height: 1.10 inches, Width: 4.70 inches, Depth: 5.60 inches

Processor
Intel E3845 CPU - 1.91GHz Quad-core - 10W TDP

RAM
8GB

Storage
1x 128GB Solid State Drive

Power
28VDC

I/O
8x Gb Ethernet; 2x USB 2.0, 1x USB 3.0; Audio; Video Displayport, 2x PCIe

Ethernet
8x GbE Ports

Chassis
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: 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

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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