

# **RUGGED AR5D MISSION COMPUTER**

Rugged System Built for Extreme Environments

The Rugged AR5D mission computer from Core Systems has two independent Red/Black systems that are fully sealed and conduction cooled. The AR5D is a dual computer in one chassis that has two independent removable sealed trays for CPU/hard drives. It also includes 38999 MIL-Circular connectors for I/O and power.



The latest mission computer from Core Systems includes the latest Intel® Chipset technology with dual 1.91GHz Quad-core CPUs. The AR5 is tested to meet MIL-STD-810G & DO-160G Shock, Vibration, Thermal, Altitude, and Humidity.

Each of the independent computers have two USB 2.0 and one USB 3.0 ports support keyboard, mouse, and other devices. Also included is a RS-232 port, three 8254 timer/counters, and I2C support. There are 8 Gigabit Ethernet (GbE) ports on each computer with remote boot support and PoE support. Each system has integrated Intel HD Graphics with DisplayPort output (DP++).

For more info on the Rugged AR5D, please visit www.core-systems.com



## **RUGGED AR5D MISSION COMPUTER**

### **TECHNICAL SPECIFICATIONS**

MECHANICAL	Height - 2.2 in (5.5 cm), Width - 4.7 in (11.93 cm), Depth - 5.6 in (14.22 cm)
	Weight - 4 lbs (1.8 kg)
CPU	Intel® CPU architecture options from Intel embedded long-life roadmap
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	Heat pipe technology heatsinks used
	Intel® 1.86 GHz Core 2 Duo ULV CPU
	Single core CPU with integrated graphics chip
MEMORY	8GB Total System RAM - 1x 8GB DDR3L/1333MHz Module (per unit)
PROCESSOR	Intel E3845 CPU - 1.91GHz Quad-core - 10W TDP (per unit)
HARD DRIVE	1x 128GB Solid State Drive (per unit)
POWER SUPPLY	18VDC (per unit)

#### **ENVIRONMENTAL SPECIFICATIONS**

OPERATIONAL TEMP.	MIL-STD-810F, Method 501.5 Procedures I/II; -15°C to +55°C
STORAGE TEMP.	MIL-STD-810F, Method 501.5, Procedures I/II; -55°C to +85°C
HUMIDITY	MIL-STD-810F, Method 507.4; 48 Hour, 95% RH 40-65C (with conformal coat option)
ALTITUDE	MIL-STD-810F, Method 500.4; 12,500ft operation with 40,000ft transport
VIBRATION	MIL-STD-810G, Method 514.6 Procedure I; 4.43 GRMS, 5-20000Hz, 60min/axis
SHOCK	MIL-STD-810G, Method 516.6, Procedures I/V; 20g, 11msec - functional shock; 40g, 11msec crash hazard shock
OTHER	MIL-STD-461F CE & RE emissions (with 461 filter option)



### **ABOUT US**

Core Systems is a premier manufacturer of best-in-class rugged computers and rugged displays. We design and manufacture all of our products in Poway, California. Our 65,000+ square foot facility features onsite engineering, assembly, and testing along with a complete metal fabrication and machining facility. Our wide range of rugged products are deployed in ground vehicles, aircraft, and maritime installations worldwide.