



## RUGGED AR707 MISSION COMPUTER

### Military-Grade Tactical Computer

The **AR707** is a rugged edge computer designed for demanding AI, defense, and industrial applications. Powered by NVIDIA Grace Blackwell architecture and a 20-core Arm CPU, it delivers high compute density, efficiency, and AI performance in a compact 2.5-inch chassis. With up to 128 GB unified LPDDR5x memory and 4 TB encrypted NVMe storage, the AR707 supports mission-critical workloads requiring low latency and high reliability in harsh environments.

Tested to MIL-STD-810 and MIL-STD-461 standards, the AR707 withstands shock, vibration, humidity, and temperatures from  $-15\text{ }^{\circ}\text{C}$  to  $+55\text{ }^{\circ}\text{C}$ . It operates at altitudes up to 12,500 ft and is transport survivable to 40,000 ft. Optional EMI filtering ensures CE and RE compliance, making it ideal for tactical, aerospace, and rugged edge computing where performance and durability matter.

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

Copyright 2025 All Rights Reserved

### Featured Specifications

#### GPU

NVIDIA Grace Blackwell  
Blackwell Architecture DGX Spark

#### CPU

20 core Arm  
10 Cortex-X925 + 10 Cortex-A725

#### Memory

128 GB LPDDR5x unified system  
273 GB/s bandwidth

#### Storage

4 TB NVMe M.2 with self-encryption

#### Networking

10 GbE 1x RJ-45 connector  
ConnectX-7 Smart NIC  
4x USB Type C



## Technical Specifications

### Dimensions

Height: 2.50 inches, Width: 7.00 inches, Depth: 7.00 inches

### GPU

NVIDIA Grace Blackwell  
Blackwell Architecture

### CPU

20 core Arm, 10 Cortex-X925 + 10 Cortex-A725

### GPU

NVIDIA Grace Blackwell DGX Spark

### Tensor Cores

5th Generation

### RT Cores

4th Generation

### Tensor Performance<sup>1</sup>

1,000 AI TOPS

### System Memory

128GB LPDDR5x, unified system memory

### Memory Interface

256-bit

### Memory Bandwidth

273 GB/s

### OS

DGX OS

### Storage

4 TB NVME.M2 with self-encryption

### Connectivity

4x USB Type C  
10 GbE 1x RJ-45 connector  
ConnectX-7 Smart NIC

## Environmental Specifications

### Operational Temperature

MIL-STD-810F, Method 501.5, Procedures I/II: -15°C to +55°C

### Storage Temperature

MIL-STD-810F, Method 501.5, Procedures I/II: -15°C to +55°C

### 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.

### Core Systems

13000 Danielson St  
Poway, CA 92064

