



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°C to $+55^{\circ}\text{C}$. 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

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Featured Specifications

GPU

NVIDIA Grace Blackwell
Blackwell Architecture

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

Tensor Cores

5th Generation

RT Cores

4th Generation

Tensor Performance¹

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

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