CRYSTAL GROUP™
RUGGED TECH. ZERO LIMITS.

RE1218M
RUGGED EMBEDDED COMPUTER

- MIL-C-26482 MIL-CIRC I/O
- Intel® Core™ Processors
- One PCIe expansion slot
- Lightweight, aluminum construction
- Modular power supply
- Up to 8 2.5" SSD removable drives







RUGGED AND SECURE FOR CHALLENGING SWAP APPLICATIONS

The RE1218M's design includes vital security features that integrates leading-edge, rugged hardware with Roots of Trust encryption software from certified partners. With a foundation of essential features, including Trusted Performance Modules (TPM 2.0), FIPS 140-2 solid state drives, intrusion detection, tamper evidence and instant data destruction, this rugged solution can protect critical data from attempted breaches at the edge.

The RE1218M can accommodate up to eight 2.5" solid state drives, one PCIe x16 expansion card, and may be mounted in any orientation, making it ideal for space-challenged applications that require high end workstation performance and/or storage capability.

Crystal Group provides a 5-year warranty and forward-looking configuration management to enhance the long-term investment of your compute solution.

USE CASES

- Command & control
- Communications
- Inelligence, Surveillance and Reconnaissance (ISR)
- Workstation in demanding environments

CRYSTAL GROUP RE1218M TECHNICAL SPECIFICATIONS

Mechanical	**Height:** 4.1" (10.41 cm) **Width:** 10.1" (25.65 cm) **Depth:** 14.4" (36.58 cm) excluding connectors **Weight:** 13-18 lbs. (5.90- 8.16 kg) depends on card content (fully loaded)
CPU Architecture	Intel® Core™ Processors
Expansion	One PCIe x16
Cooling	High speed, high volume thermostatically controlled fans, air over components cooling design
Memory	Up to 64GB DDR4 SO-DIMM
Storage	Up to eight removable 2.5" drives
Connections	MIL-C-26482 military circular I/O connectors
Power Supply	**Option 1:** 18-36VDC (200W) with MIL-STD-461 filtering, MIL-STD-704 **Option 2:** 36-75VDC (200W) with MIL-STD-461 filtering, MIL-STD-704
Software Compatibility	Windows 11®, Windows Server®, VMWare®, Linux®

ENVIRONMENTAL TESTING STANDARDS

Environmental Engineering Considerations and Laboratory Tests	**Operational Temperature, Method 501, Procedure I/II:** -40°C to +60°C, with solid state drives[1] **Storage, Method 501, Procedure I/II:** -55°C to +85°C[1] **Humidity, Method 507, Procedure II:** 240 hours with humidity kit[2] **Altitude, Method 500:** 12,500ft operation, 40,000ft transport[2] **Vibration, Method 514, Procedure I:** 7.18GRMS x- and y-axis, 4.63GRMS z-axis, 5-2000Hz, 60 min/axis[1] **Shock, Method 516, Procedures I/V:** 20g, 11msec - functional shock; 40g, 11msec - crash hazard shock[1]

ELECTROMAGNETIC COMPATIBILITY STANDARDS

Some standards may require an internal kit; Testing with solid state drives

MIL-STD-461	CE102 (conducted) & RE102 (radiated) emissions, EMC[2]
Emissions	Radiated FCC Part 15. 109, Class A; conducted FCC Part 15. 107, Class A[2]

In-house test reports provided for baseline units; customer-specific test options available upon request.

1: Test report available

2: Testing in progress

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AS9100D CERTIFIED ISO 9001

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