

Crystal Group RS1004L21X2 Rugged Twin Server



Intel® Xeon® Scalable processors

Up to 16 cores per socket

Four low-profile PCIe x16 slots

Two dual socket motherboards per chassis

Shared 1500W power supply

Up to 4TB DDR4 ECC RDIMM/ LRDIMM per node

Compact and rugged.

The RS1004L21X2 packs twice the computing performance in a 1U rugged server. This compact, powerful solution is critical for successful execution of applications in extreme and unpredictable environments across all domains, including cyber. The integrated design consolidates system availability, superior cooling, and shock/vibe resistance into a smaller footprint that fits easily into standard rack slots.

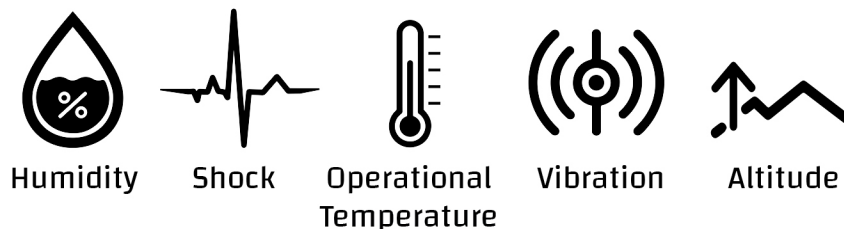
Warfighters achieve dominance with accurate, real-time information—which requires fail-safe computer hardware that works in any conditions. To ensure seamless accuracy at the tactical edge, we engineer and test our products to meet or exceed strict military standards.

Our unsurpassed thermal performance leverages custom heat-sink solutions and special air management techniques. Likewise, we meticulously assemble unique GPU and networking capabilities with the latest Intel® Xeon® Scalable processors to deliver secure, near-zero latency at the tactical edge.

Use cases

- Combat applications
- Sonar applications
- ISR applications
- Electronic warfare applications

Tested to MIL-STD-810



Crystal Group RS1004L21X2 technical specifications

Mechanical	Height: 1.75" (4.45 cm) Width: 17.5" (44.45 cm) Depth: 21" (53.34 cm) Weight: 28 lbs. (12.7 kg)
CPU Architecture	Up to 16 cores per socket (two sockets per node, four total) up to 110W each 2nd Gen Intel Xeon Scalable processors
Expansion	Two PCIe x16 HHHL low-profile cards per node (four total) One Supermicro SIOM card per node (two total)
Storage	Four 128Gb SATA DOM
Memory	16GB to 4TB DDR4 ECC RDIMM/LRDIMM per node (two nodes)
Power Supply	Single 1500W power supply shared by both nodes Operates from 90-264V AC (50/60Hz)
Cooling	Nine high-speed, high-volume fans
Software Compatibility	Accepts Windows 10®, Windows Server, VMware®, or Linux®
Environmental testing standards	
MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests	MIL-STD-810, Operational Temperature: -30°C to +50°C MIL-STD-810, Storage, Method 501, Procedure I/II: -40°C to +85°C MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with conformal coating MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport MIL-STD-810, Shock, Method 516, Procedures I/V: 6g, 11msec functional shock; 20g, 11msec crash hazard shock MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 Grms, 5-2,000Hz, 60 min/axis, 3 axis
MIL-STD-167-1A	Ship Vibration, Type 1
Electromagnetic compatibility standards	
MIL-STD-461	RE102, CE102 compliant

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

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DOC-00811 REV E 12/23