



Field tested, fail-safe and long-life performance in extreme conditions. As processing performance continues to improve, Crystal Group has minimized the SWaP envelope of the RS1304L23. High-end computing performance in a 1U chassis with a depth of 23" (58.4 cm) fits most any rack space.

Crystal Group rugged servers provide high-performance computing and high-capacity data storage in a rugged, all-aluminum package to withstand the roughest terrains and toughest applications. We provide broad range of military and industrial programs with integrated solutions for everything from communications and networking to weapons control, sensor and surveillance, and unmanned aircraft systems.

Innovative solutions. Crystal Group's portfolio of rugged and industrial computing products are engineered and tested to withstand challenging environments, meet or exceed military and industrial standards, and provide the latest COTS technologies to best manage cost, availability, upgradability, and flexibility.

Dependable services. When a computing application requires a custom solution, we deliver with a full range of vertically-integrated services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product lifecycle planning.

Dedicated support. Our expert staff and global network provide fast and effective product support when and where it is needed. Count on Crystal Group for fast response times, quick turnarounds, 5+ year warranties, and quality service around the clock and around the globe.

FEATURES

- Lightweight aluminum construction — 19-27 lbs.
- Easily mounted on Delrin glides, fixed mount, or Jonathan® rails
- Up to 3 TB of memory
- Rugged 1U rack-mounted, 23" depth
- Three PCIe x16 Gen3 slots
- Versatile with up to 12 removable 2.5" drives
- Intel® Xeon® Scalable processors
- Optional 8-port switch

A clear advantage.

Specifications

Mechanical 1U Height: 1.75" (4.45 cm) Width: 17.5" (44.45 cm) [accepts Crystal slides and Jonathan rails] EIA-310 rack compliant Depth: 23" (58.4 cm) Weight: 19-27 lbs. (depending on content)	Environmental Standards MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -25°C to +50°C ¹ MIL-STD-810, Storage, Method 501, Procedure I/II: -55°C to +85°C ¹ MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit ² MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport ² MIL-STD-810, Vibration, Method 514, Procedure I: 2.5 GRMS, 5-2,000Hz, 60 min/axis with solid state drives + vibration kits ² MIL-STD-810, Shock, Method 516, Procedures I/IV: 20g, 11msec-functional shock; 40g, 11msec crash hazard shock ¹ MIL-S-901, Grade B ²
CPU Intel® CPU architecture options from Intel embedded long-life roadmap Intel® Xeon® Scalable processors Up to 24 core options per socket (dependent on motherboard)	Electromagnetic Compatibility Standards Some standards may require an internal kit AC, FCC compliant ² AC, MIL-STD-461, RE102, CE102 compliant ² DC, MIL-STD-461, RE102, CE102 compliant ² RTCA DO-160 Section 21, Category M ²
Expansion Three PCIe 3.0 x16 slots	Memory 16 GB - 3 TB DDR4
External Bay Option 1: Up to 12 2.5" SATA or SAS HDDs or 4 NVMe Option 2: One CD/DVD/BD (R/W); can be combined with option 1	Cooling Six high-speed, high-volume fans, CPU temperature controlled
Mounting Option 1: Mounted on Delrin glides Option 2: Fixed mount, front and rear Option 3: Jonathan rails	Software Compatibility Supports Windows 10®, Windows Server 2019®, VMware® or Linux®
Power Supply Option 1: 460W 120/240VAC 50/60Hz w/PFC, 115VAC 400Hz Option 2: 505W 18-36VDC	System Board X11DDW-NT, Dual LGA 3647 Xeon, WIO 2x 10G LAN, VGA, 4x USB 3.0, IPMI 3x PCIe 3.0 x16

1 - Test report available
 2 - Qualified by similarity

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