



Field tested, fail-safe and long-life performance in extreme conditions. As processing performance continues to improve, Crystal Group is dedicated to minimize the SWaP envelope of the RS120F. High-end computing performance in a 1U chassis with a depth of 21" (53.34 cm) fits most any rack space.

Crystal Group Rugged Servers provide high-performance computing in a rugged, all-aluminum package able to withstand the roughest terrains and toughest applications. Crystal Group's highly customizable Rugged Servers are used by the U.S. Armed Forces, Foreign Military, Power Distribution, Autonomous Vehicles, Oil & Gas, and others 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 and exceed military and industrial standards, and provide the latest COTS technologies and benefits, such as cost, availability, upgradability, and flexibility.

Dependable services. When a computing application requires a custom solution, Crystal Group delivers — on time and on budget — with professional services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product lifecycle planning.

Dedicated support. Crystal Group's expert staff and global network provide fast and effective product support when and where it is needed, whether in-house or in the field. 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 — 18.25 lbs.
- Easily mounted with Crystal Glides
- Up to 1 TB of memory
- Rugged 1U, rack mounted 21" depth
- Expandable with one or two expansion slots
- Intel® Xeon® Scalable processors

A clear advantage.



Specifications

Mechanical 1U

Height: 1.75" (4.45 cm)
Width: 17.75" (45.1 cm)
Depth: 21" (53.34 cm)
Weight: 18.25 lbs

CPU

Intel® CPU architecture options from Intel embedded long-life roadmap
Intel® Xeon® Scalable processors
Up to 18 core options per socket

Expansion

X10DRW-IT: Two PCIe 3.0 x8 low profile

Memory

32 GB - 1 TB DDR4

Mounting

Crystal Glides

Power Supply

460W 120/240VAC 50/60Hz w/PFC, 115VAC 400Hz

Software Compatibility

Supports Windows 10®, Windows Server 2016®, Windows Server 2012®, VMware®, or Linux®

Environmental Standards

MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -15°C to +50°C, -40°C operational with temperature kit and SSD¹
MIL-STD-810, Storage, Method 501, Procedure I/II: -55°C to +85°C¹
MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit¹
MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport¹
MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 GRMS, 5-2,000Hz, 60 min/axis with solid state drives + vibration kits¹
MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec-functional shock; 40g, 11msec crash hazard shock¹
MIL-S-901, Grade B¹
MIL-S-901, Grade A: With solid state drives + shock kits¹
FAR 25.853(a)²

Electromagnetic Compatibility Standards

Some standards may require an internal kit
AC, FCC Compliant¹
AC, MIL-STD-461, RE102, CE102 compliant¹
DC, MIL-STD-461, RE102, CE102 compliant¹
RTCA DO-160 Section 21, Category M¹

Cooling

Option 1: Eight high speed, high volume fans CPU temperature controlled
Option 2: Fanless, requires external front to back forced air cooling



For further information or pricing, please contact us:

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- 1 - Designed to meet standard
2 - Available option for specific BBS

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