



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 RS202FM. High-end computing performance in a 2U chassis with a depth of 19" (48.3 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

- Light weight aluminum construction – under 25 lbs.
- Easily mounted – Delrin glides, or Jonathan® rails
- Up to 512 GB of memory
- Rugged 2U, rack mounted 19" depth
- Versatility with up to two 2.5" SSDs in a single removable twin carrier sled
- Internal expansion with MIL-CIRC I/O
- Intel® Xeon processors

A clear advantage.

Specifications

Mechanical 2U

Height: 3.48" (8.84 cm)
Width: 17.46" (44.35 cm)
Depth: 19" (48.3 cm)
Weight: 25 lbs. (11.34kg)

CPU

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

External Bay

One or two 2.5" SSD's in a single twin carrier.
Internal expansion available with custom MIL-CIRC I/O

Memory

16-512 GB DDR3 or DDR4 (motherboard dependent)
--

Mounting

Option 1: Delrin glides
Option 2: Jonathan rails

Power Supply

505W DC ATX Power Supply 18-36 VDC

Environmental Standards

MIL-STD-810, Operational Temperature, Method 501, Procedure I/II: -15°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 ¹
MIL-STD-810, Altitude, Method 500: 11,000ft operation, 41,000ft transport ¹
MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 GRMS, 5-2,000Hz, 60 min/axis with solid state drives + vibration kits ²
MIL-S-901, Grade B ²
MIL-S-901, Grade A: With solid state drives + shock kits ²
MIL-STD-810G, Shock, Method 516.6, 15g, 11ms, operational ²

Electromagnetic Compatibility Standards

Some standards may require an internal kit
AC, FCC Compliant ²
AC, MIL-STD-461, RE102, CE102 compliant ¹
DC, MIL-STD-461, RE102, CE102 compliant ¹
RTCA DO-160 Section 21, Category M ²

Cooling

Four high speed, high volume fans, CPU temperature controlled

Software Compatibility

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

- 1 - Tested to meet standard
2 - Designed to meet standard

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Crystal Group. Crystal Group reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Due to the numerous models and component combinations, some configuration testing remains pending. Please contact your Crystal Group program manager for test data on desired requirements. Export of technical data contained in this document may require an export license from the United States government. Design and specifications are subject to change.

