

# RS265P Crystal Carbon Fiber Server





**Field tested, failsafe and long life performance in extreme conditions.** As processing performance continues to improve, Crystal Group is dedicated to minimize the SWaP envelope of the RS265P. High-end computing performance in a 2U chassis with a depth of 20" (50.8cm) fits most any rack space.

Crystal Group combines 30 years of server experience with advanced carbon-fiber and coating technologies to deliver its innovative Rugged Carbon Fiber Server product line. An ultra-lightweight chassis providing EMI/EMC protection and shock and vibration resilience make Crystal Group Carbon Fiber Servers a popular choice for airborne, shipboard, land-based, and transit case applications.

**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**

- Ultra light weight carbon fiber chassis 18-27 lbs., Easily mounted – Delrin glides or Jonathan® rails
- Up to 512 GB of memory
- Rugged 2U, rack mounted 20" depth
- Versatility with ten (10) removable 2.5" drives or five (5) removable 3.5" drive bays
- Expandable with multiple slot configurations
- Leading edge Intel® Sandy Bridge, Ivy Bridge, Haswell or Broadwell CPU options

A clear advantage.



# RS265P Crystal Carbon Fiber Server

# **Specifications**

#### **Mechanical 2U**

Height: 3.5" (8.89 cm)

Width: 17.5" (44.45 cm) [accepts Crystal Slides and Jonathan Rails] EIA-310 Rack

Compliant

Depth: 20" (50.8 cm)

Weight: 18-27 lbs. (8.2-12.3 kg)\*

#### **CPU**

#### Intel® CPU architecture options from Intel embedded long-life roadmap

Option 1: Sandy Bridge or Ivy Bridge LGA1155, X9SAE-V

Option 2: Haswell or Broadwell LGA2011, X10SRL-F or X10DRL-I

Dual, Quad, Hexa, Octa, Deca, or Dodeca Core options (dependent on motherboard)

#### **Expansion**

Six (6) low profile, 3/4 length length PCIe or PCI slot

#### **External Bay**

Option 1: Ten (10) removable SATA or SAS 2.5" SSD

Option 2: Five (5) removable SAS or SATA 2.5" or 3.5" HDD

Option 3: (can be combined with hard drive options): One (1) CD/DVD/BD (R/W)

#### Memory

16-512 GB DDR3 or DDR4 (motherboard dependent)

#### Mounting

Option 1: Mounted on Delrin glides

Option 2: Jonathan rails

#### **Power Supply**

Option 1: 600W 120/240VAC w/PFC, 115VAC 400Hz

Option 2: 585W 18-36VDC

#### **System Board**

Option 1: X9SAE-V, Single LGA1155, Xeon\*, i3/5/7, ATX, 2LAN1000, VGA, 2XHDMI, AUDIO, 1 PCI, 2 PCI-E X1, 1 PCI-E X4, 1 PCI-E X8, 2 PCI-E X16, SATAX4, SATA3X2

Option 2: X10SRL-F, Single LGA2011 R3 Xeon®, ATX, 2LAN1000, VGA, 2 PCI-E X16, 5 PCI-E X8, IPMI, IPKVM, SATA3X10

Option 3: X10DRL-I, Dual LGA2011 R3 Xeon®, ATX, 2LAN1000, VGA, 5 PCI-E X8, 1 PCI-E X16, IPMI, IPKVM, SATA3X10

#### **Environmental Standards**

MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -15°C to +55°C, capabale of -40°C to +71°C with select processors<sup>1</sup>

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 kit<sup>2</sup>

MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport<sup>2</sup>

MIL-STD-810, Vibration, Method 514, Procedure I: 5.5 GRMS, 10-2000Hz, 60 min/axis with solid state drives + vibration kits<sup>2</sup>

MIL-STD-810, Crash Hazard Shock for Flight Vehicle Equipment, Method 516, Procedure V: 40G 11  $\,\mathrm{ms^1}$ 

MIL-S-901, Grade B<sup>2</sup>

MIL-S-901, Grade A: With solid state drives & shock kits<sup>2</sup>

## **Electromagnetic Compatibility Standards**

#### Some standards may require an internal kit

MIL-STD-461, EMC, CE102 (conducted) & RE102 (radiated) emissions, CS101, RS103, CS114, CS115, and CS116, RTCA DO-160 Sections 20 and 21<sup>2</sup>

AC, FCC Compliant<sup>2</sup>

AC, MIL-STD-461, RE102, CE102 compliant<sup>2</sup>

DC, MIL-STD-461, RE102, CE102 compliant<sup>2</sup>

RTCA DO-160 Section 21, Category M<sup>2</sup>

#### 14 CFR 25- Airworthiness Standards

Flammability Airworthiness Test 14 CFR Part 25: Amendment 25-83 and 25-116, Appendix F, Part I, Para a(1), subparagraphs i, ii, and iv

### **Export Compliance**

ECCN: 5A992

Classification is dependent on configuration and is subject to change. Please contact your Business Development Manager to receive the classification for your product.

#### Cooling

High speed, high volume fans (6) CPU temperature controlled

#### **Software Compatibility**

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



For further information or pricing, please contact Metromatics

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2 - Designed to meet standard

Certification reports for select products are available on Crystalrugged.com. Crystal Group designs all servers to meet or exceed the specifications listed herein. Due to the sheer number of models and combinations of components (memory, CPU, peripheral cards, hard drives), it is not practical to test every combination of servers offered. Please ask your Crystal Business Development Manager for data on qualification testing for configurations similar to the desired configuration for your application.

\*Weight depends on hard drive components selected (SSD=0.2 lbs. ea., HDD=1.5 lbs. ea.)

AS9100C:2009 and ISO 9001:2008 Certified QMS

