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## **Crystal Group RS112S14 Rugged 1U Server**



### Small footprint workstation for long-life performance at the edge

As processing performance continues to improve, Crystal Group is dedicated to minimize the SWaP envelope of the RS112S14. High-end computing performance in a 1U chassis with a depth of 13.4" (34.04 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.

#### **Use cases**

- · Communications and networking
- Weapons control
- Sensor
- Surveillance

#### **Tested to MIL-STD-810**





Shock





Humidity

Operational Temperature

Vibration Al

Altitude

Crystal Group RS112S14 technical specifications	
Mechanical	Height: 1.75" (4.45 cm) Width: 17.5" (44.45 cm); EIA-310 rack compliant Depth: 13.4" (34.04 cm) Weight: 7-15 lbs. (3.18-6.80 kg)
CPU Architecture	Intel® Core i3/i5/i7/i9 processor
Expansion	One PCle X16 full height half depth slot
External Bay	Option 1: Two removable SATA SSDs or HDDs Option 2: Three removable SATA SSDs or HDDs Option 3: Two 2.5", SATA internally fixed mount SSDs (can exist with any other option) Option 4: 1x M.2 SATA/PCIe 3.0x4, non-removable (can exist with any other option)
Memory	Up to 64GB (2x DDR4 SO-DIMM)
Power Supply	Option 1: 460W 120/240VAC 50/60Hz w/PFC, 115VAC 400Hz Option 2: 505W 18-36 VDC
Cooling	Thermally controlled high volume fans
Software Compatibility	Supports Windows 10® or Linux®
Mounting	Option 1: Mounted on Crystal glide rails Option 2: Fixed mount, front and rear Option 3: Jonathan rails
Environmental testing standards	
MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests	MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -40°C to +55°C <sup>1</sup> MIL-STD-810, Storage, Method 501, Procedure I/II: -55°C to +85°C <sup>1</sup> MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with conformal coating option <sup>1</sup> MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport <sup>1</sup> MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 GRMS, 5-2000Hz, 60 min/axis with solid state drives <sup>1</sup> MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec-functional shock; 40g, 11msec crash hazard shock <sup>1</sup>
MIL-STD-167-1A	Ship Vibration, Type 1
Electromagnetic compatibility standards	
Some standards may require an internal kit	
MIL-STD-461	AC/DC, RE102, CE102 compliant
RTCA DO-160	Section 21, Category M
FCC Compliant	AC

In-house test reports provided for baseline units; customer-specific test options available upon request. 1: Designed to meet standard

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