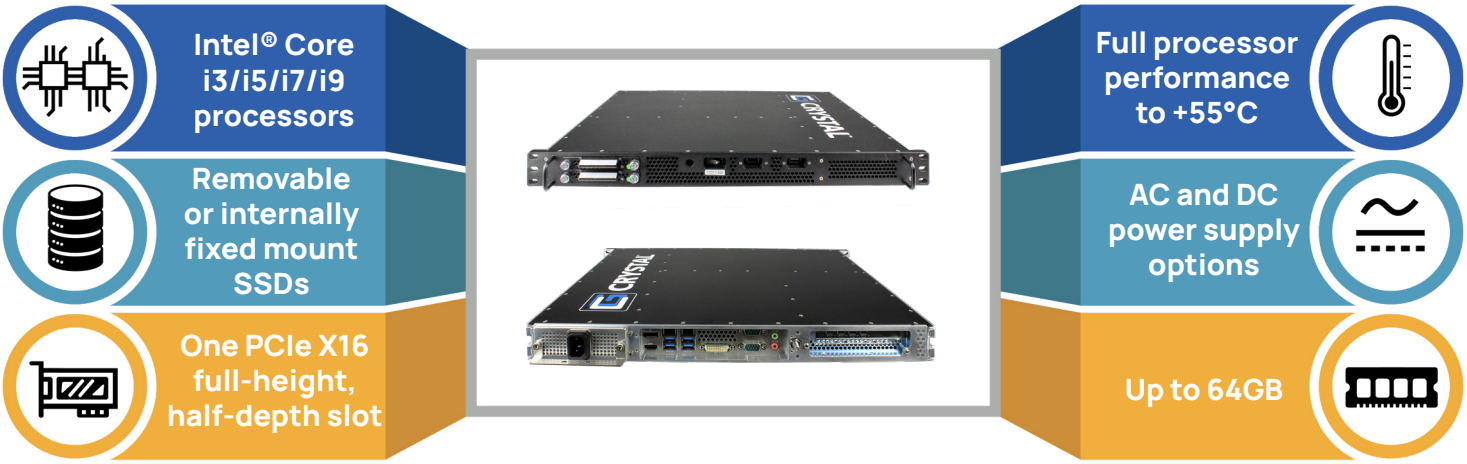
Crystal Group RS112S14 Rugged 1U Server



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

Humidity | Shock | Operational Temperature | Vibration | 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 PCIe 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[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 conformal coating option[1] **MIL-STD-810, Altitude, Method 500:** 12,500ft operation, 40,000ft transport[1] **MIL-STD-810, Vibration, Method 514, Procedure I:** 4.63 GRMS, 5-2000Hz, 60 min/axis with solid state drives[1] **MIL-STD-810, Shock, Method 516, Procedures I/V:** 20g, 11msec–functional shock; 40g, 11msec crash hazard shock[1]
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

AS9100D CERTIFIED ISO 9001

CRYSTAL™
info@crystalrugged.com | 800.378.1636 | crystalrugged.com

DOC-00385 REV Q 12/23