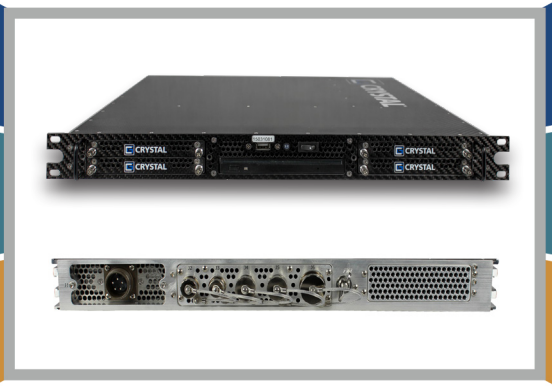
Crystal Group RS112PS18M Carbon Fiber Server

- Intel® Core i7/i9 processors
- 14 CFR 25 - Airworthiness Standards
- One full-height, 1/2 length PCIe x16 slot



- Optional MIL-CIRC I/O
- AC/DC power supply options
- Up to 64GB memory

High-end computing performance in a 1U chassis

As processing performance continues to improve, Crystal Group is dedicated to minimize the SWaP envelope of the RS112PS18M. An ultra-lightweight chassis providing EMI/EMC protection and shock and vibration resilience makes the RS112PS18M a popular choice for applications in extreme environments.

Available in multiple form factors, Crystal Group's turnkey rugged systems combine high-capacity data storage with leading-edge data protection features that meet or exceed strict critical certification levels and standards. With a range of capabilities, including FIPS 140-2 SAS solid state drives, NIAP-certified IPsec data encryption, intrusion detection and instant data destruction, your critical, confidential data is secure from attempted breaches, even in the most extreme air, land, sea and space conditions.

Use cases

- Airborne, shipboard, land-based warfare applications
- Transit case applications
- Strategic bomber
- Adaptable communications suite
- Front end compute system for message classification

Tested to MIL-STD-810

Humidity · Salt Fog · Shock · Electromagnetic Compatibility · Vibration · Sand Dust

Crystal Group RS112PS18M technical specifications

Mechanical	**Height:** 1.75" (4.45 cm) **Width:** 17.5" (44.45 cm); EIA-310 rack compliant **Depth:** 18" (45.7 cm) **Weight:** 10.5-15 lbs. (4.76 - 6.80 kg)
Power Supply	**Option 1:** 460W 120/240VAC 50/60Hz w/PFC, 115VAC 400Hz **Option 2:** 425W 18-36VDC
CPU Architecture	Intel® Core ™ i7, i9 processors
Memory	Up to 64GB
Expansion	One full-height, 1/2 length PCIe X16 slot
Cooling	High-speed, high-volume fans (6) CPU temperature controlled
External Bay	**Option 1:** Two removable SATA or SAS 2.5" **Option 2:** Four 2.5" SATA or SAS HDDs **Option 3:** Can be combined with HDD option: One CD/DVD/BD (R/W)
Software Compatibility	Windows 10®, Windows Server 2019®, VMware®, or Linux®
Mouting	**Option 1:** Crystal slides **Option 2:** Delrin glides **Option 3:** Jonathan rails
Optional: MIL-CIRC I/O	Options are motherboard dependent
Environmental testing standards	
MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests	**MIL-STD-810, Operational Temperature, Method 501, Procedure I/II:** -40°C to +55°C with SSD; capable of -40°C to +71°C with SSDs[2] **MIL-STD-810, Storage, Method 501, Procedure I/II:** -40°C to +85°C[2] **MIL-STD-810, Humidity, Method 507, Procedure II:** 240 hours with humidity kit[2] **MIL-STD-810, Operating Altitude, Method 500, Procedure II:** 12,500ft[2] **MIL-STD-810, Vibration, Method 514, Category 13:** 5.5 GRMS 10-2000Hz, 60 min/axis with solid state drives + vibration kits[1] **MIL-STD-810, Shock, Method 516, Procedure I:** 20G 11 ms[1]
MIL-S-901	Grade B[2] Grade A, with solid state drives & shock kits [2]
Electromagnetic compatibility standards	
MIL-STD-461	RE102, CE102 compliant[1]
RTCA DO-160	Section 21, Category M[2]

In-house test reports provided for baseline units; customer-specific test options available upon request.

1: Test report available

2: Designed to meet standard

AS9100D CERTIFIED ISO 9001

CRYSTAL™

info@crystalrugged.com | 800.378.1636 | crystalrugged.com

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