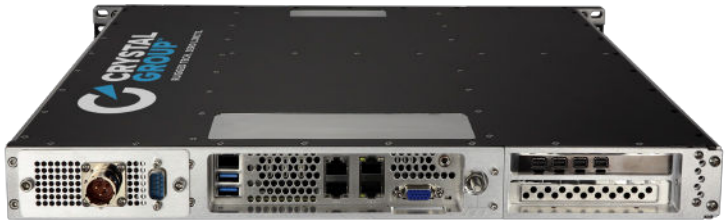
CRYSTAL GROUP™
RUGGED TECH. ZERO LIMITS.

RS121S16

RUGGED 1U SERVER

- Intel® Xeon® D series and core i7 processors
- Two or three removable 2.5" sleds
- Full processor performance to 55°C
- AC power
- Expandable with PCIe x8 slot
- Up to 128 GB DDR4





LIGHTWEIGHT, HIGH-END COMPUTING SYSTEM

The RS121S16 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. This short-depth, lightweight server has been 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.

Crystal Group provides a 5-year warranty and forward-looking configuration management to enhance the long-term investment of your compute solution.

USE CASES

- Communications and networking
- Weapons control, sensor and surveillance
- Unmanned aircraft systems

CRYSTAL GROUP RS121516 TECHNICAL SPECIFICATIONS

Mechanical	**Height:** 1.75" (4.45 cm) **Width:** 16.5" (41.91 cm) **Depth:** 16" (40.64 cm) **Weight:** 7–15 lbs (3.18-6.80 kg)
Mounting	**Option 1:** Mounted on Crystal glide rails **Option 2:** Fixed mount, front and rear
Power Supply	460W 120/240VAC 50/60Hz w/PFC, 115VAC 400Hz
CPU Architecture	Intel® Xeon® D-1500 series and 13th Gen Core Series CPU Options
Memory	Up to 128 GB DDR4
Expansion	Two full height half-length PCIe x8 slots
External Bays	**Option 1:** Up to three removable SATA SSDs or HDDs, 7mm height **Option 2:** Up to two removable SAS SSDs or HDDs, up to 15mm height **Option 3:** 1x M.2 SATA/PCIe 3.0x4, non-removable (can exist with any other option) **Option 4:** Optical drive
System Board	**Option 1:** Xeon D-1587, 6x SATA 3, 2x 10GBE, VGA graphics, IPMI, 2x USB 3.0 rear, 1x USB 2.0 front **Option 2:** Supermicro X13SAV-LVDS
Software Compatibility	Supports Windows 11®, Linux®, or Windows Server
ENVIRONMENTAL TESTING STANDARDS	
MIL-STD-810: **Environmental Engineering Considerations and Laboratory Tests**	**Operational Temperature, Method 501/502 Procedure I/II:** -30°C to +50°C[1] **Storage, Method 501, Procedure I/II:** -55°C to +85°C[1] **Humidity, Method 507, Procedure II:** 240 hours with humidity kit[1] **Altitude, Method 500:** 12,500ft operation, 40,000ft transport[1] **Vibration, Method 514, Procedure I:** 2 GRMS, 5-2000Hz, 60 min/axis with solid state drives **Shock, Method 516, Procedures I/V:** 20g, 11msec--functional shock; 40g, 11msec crash hazard shock[1]
MIL-S-901	**Grade B**[1]
MIL-STD-167-1	**Ship Vibration**, Type 1[1]
ELECTROMAGNETIC COMPATIBILITY STANDARDS	
Compliance	AC, FCC Compliant AC, RE102, CE102 compliant

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

1: Test report available
2: Testing in progress

Notice: This document is for marketing purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service 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 document describes features that may not be currently available or are subject to change. 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 associated with this system may require an export license from the United States government.

AS9100D CERTIFIED ISO 9001

CRYSTAL GROUP™
RUGGED TECH. ZERO LIMITS.

INFO@CRYSTALRUGGED.COM ▪ 800.378.1636
CRYSTALRUGGED.COM

©Crystal Group, Inc. All trademarks are property of their respective owners. All rights reserved.