Crystal Group RS2301S8F Rugged 2U Workstation

8th/9th Gen i3/i5/i7 socket LGA1151

Short depth chassis

One PCIe x16 Gen 3

Up to three removable drives

DC power

Up to 64GB 3200 Mhz SO-DIMM

A workstation with significant compute capability

Using the latest Intel Core processors, the RS2301S8F accelerates compute intensive workloads required for seamless execution of today's most demanding applications. With vital cybersecurity features and options ranging from rugged FIPS 140-2 SAS SSDs, and key management, intrusion detection and instant data destruction, this rugged workstation secures your critical, confidential data from potential threats.

The RS2301S8F comes with standard features, including: 7, 9.5, and 15mm 2.5" drive compatibility; high-speed, high-volume fans; and a lightweight billet aluminum chassis.

Like other Crystal Group rugged solutions, this workstation can be customized with additional features, like a chassis intrusion switch, tamper resistant fasteners and security coatings.

Use cases

- Machine learning
- Sensor fusion
- Artificial intelligence
- Unmanned systems
- Signals intelligence
- Electronic warfare
- Intelligence, surveillance, and reconnaissance (ISR)

Tested to MIL-STD-810

Humidity

Salt Fog

Shock

Electromagnetic Compatibility

Vibration

Sand Dust

Crystal Group RS2301S8F technical specifications

Mechanical	**Height:** 3.5" (8.89 cm) **Width:** 17.5" (44.45 cm) **Depth:** 8" (20.32 cm) **Weight:** 11.1lbs. (5.03 kg)
Mounting	Mounted on Delrin glides
Power Supply	MIL-STD-1275/704 28VDC, MIL-DTL-26482 5-Pin shell size 14 connector
CPU Architecture	8th/9th Gen i3/i5/i7 socket LGA1151
Memory	Up to 64GB 3200Mhz SO-DIMM
Expansion	One PCIe x16 Gen 3, bifurcation enabled LP
External Bays	One bay with up to 3 removable drives
Software Compatibility	Supports Windows® 10, Windows® Server, VMware®, or Linux®
System Board	Fujitsu D3633-S Mini-ITX
Environmental testing standards	
MIL-STD-810: Environmental Engineering Considerations and Laboratory Tests	**MIL-STD-810, Operational temperature:** -40°C to +55°C[1] **MIL-STD-810, Storage, Method 501, Procedure I/II:** -40°C to +85°C[1] **MIL-STD-810, Humidity, Method 507, Procedure II:** 240 hours (with optional conformal coating kit) **MIL-STD-810, Altitude, Method 500:** 12,500ft operation, 40,000ft transport[2] **MIL-STD-810, Vibration, Method 514, Procedure I:** 4.7G, 5-2,000Hz, 60 min/axis, 3 axes **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[1]
MIL-S-901	**Grade B**
Electromagnetic compatibility standards	
MIL-STD-461	DC, RE102, CE102 compliant[2]
RTCA/DO-160	Section 21, Category M[2]

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

1: Testing in process

2: Designed to meet standard

AS9100D CERTIFIED ISO 9001

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info@crystalrugged.com | 800.378.1636 | crystalrugged.com

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