



**Field tested, failsafe and long life performance in extreme conditions.** As processing performance continues to improve, Crystal Group is dedicated to minimize the SWaP envelope of the IS200. High-end computing performance in a 2U chassis with a depth under 20" (51.11 cm) fits most any rack space.

Crystal Group's Industrial Servers are designed for industrial and commercial applications that require high-performance computing and high-capacity data storage in a system built to last. IS servers are powerful and compact with rugged, all-aluminum chassis construction and state-of-the-art thermal management for demanding applications and harsh environments. Crystal Group's Industrial Servers meet emission, military, and industrial standards, while packing superior performance in a compact, economical, and environmentally friendly package.

**Innovative solutions.** Crystal Group's portfolio of rugged and industrial computing products are engineered and tested to withstand challenging environments, meet and exceed military and industrial standards, and provide the latest COTS technologies and benefits, such as cost, availability, upgradability, and flexibility.

**Dependable services.** When a computing application requires a custom solution, Crystal Group delivers – on time and on budget – with professional services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product lifecycle planning.

**Dedicated support.** Crystal Group's expert staff and global network provide fast and effective product support when and where it is needed, whether in-house or in the field. Count on Crystal Group for fast response times, quick turnarounds, 5+ year warranties, and quality service around the clock and around the globe.

## FEATURES

- Light weight aluminum construction – 18.6 - 28.8 lbs.
- Easily mounted on ball bearing slides
- Up to 512 GB of memory
- Industrial 2U, 20" depth
- Front power switch with LED and HDD activity lights
- Leading edge Intel® Sandy Bridge, Ivy Bridge, Haswell or Broadwell CPU options
- Modular design allows for easy reconfiguration and versatility

*A clear advantage.*

### Specifications

<b>Mechanical 2U</b>
Height: 3.5" (8.89 cm)
Width: 16.93" (43 cm) EIA-310 Rack Compliant
Depth: 20" (51.11 cm)
Weight: 18.6 - 28.8 lbs. (8.4-13.1 kg)

<b>CPU</b>
Intel® CPU architecture options from Intel embedded long-life roadmap
Option 1: Sandy Bridge or Ivy Bridge LGA1155, X9SAE-V
Option 2: Haswell or Broadwell LGA 2011, X10SRL-F or X10DRL-I
Dual, Quad, Hexa, Octa, Deca, or Dodeca Core options (dependent on motherboard)

<b>Expansion</b>
Option 1: Five (5) low profile slots
Option 2 (FH): Three (3) PCI full-height slots

<b>External Bay</b>
Option 1: Five (5) removable SATA or SAS 2.5" or 3.5" HDD
Option 2: Ten (10) 2.5" SATA or SAS HDDs
Option 3: One (1) CD/DVD/BD (R/W)

<b>Memory</b>
8-512 GB DDR3 or DDR4 (motherboard dependent)

<b>Mounting</b>
EIA rack mounted slides: Mounted on ball bearing slides

<b>Power Supply</b>
Option 1: 600W 110/240 VAC w/ PFC
Option 2: 18-36 VDC
Option 3: 1200W 1+1 110/240 VAC w/PFC

<b>System Board</b>
Option 1: X9SAE-V, Single LGA1155, Xeon®, i3/5/7, ATX, 2LAN1000, VGA, 2XHDMI, AUDIO, 1 PCI, 2 PCI-E X1, 1 PCI-E X4, 1 PCI-E X8, 2 PCI-E X16, SATA4, SATA3X2
Option 2: X10DRL-I, Dual LGA2011 R3 Xeon®, ATX, 2LAN1000, VGA, 5 PCI-E X8, 1 PCI-E X16, IPMI, IPKVM, SATA3X10
Option 3: X10SRL-F, Single LGA2011 R3 Xeon®, ATX, 2LAN1000, VGA, 2 PCI-E X16, 5 PCI-E X8, IPMI, IPKVM, SATA3X10

<b>Environmental Standards</b>
MIL-STD-810, Operational Temperature, Method 501, Procedure I/II: -10°C to +55°C, capable of -40°C to +71°C with select processors
MIL-STD-810, Storage, Method 501, Procedure I/II: -30°C to +75°C
MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit
MIL-STD-810, Altitude, Method 500: 10,000ft operation, 20,000ft transport
MIL-STD-810, Vibration, Method 514, Procedure I: 1.5 GRMS, 5-500Hz, 75 min/axis
MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec; 3 axes, each direction

<b>Electromagnetic Compatibility Standards</b>
FCC Class A

<b>Export Compliance</b>
ECCN: 5A992
Classification is dependent on configuration and is subject to change. Please contact your Business Development Manager to receive the classification for your product.

<b>Cooling</b>
Three (3) high speed, high volume fans temperature controlled

<b>Software Compatibility</b>
Accepts Windows 10®, Windows Server 2012®, Windows Server 2016®, VMware®, or Linux®



For further information or pricing, please contact Metromatics

Ph +61 7 3868 4255  
[sales@metromatics.com.au](mailto:sales@metromatics.com.au)  
[www.metromatics.com.au](http://www.metromatics.com.au)

Certification reports for select products are available on [CrystalRugged.com](http://CrystalRugged.com). Crystal Group designs all servers to meet or exceed the specifications listed herein. Due to the sheer number of models and combinations of components (memory, CPU, peripheral cards, hard drives), it is not practical to test every combination of servers offered. Please ask your Crystal Business Development Manager for data on qualification testing for configurations similar to the desired configuration for your application.

**AS9100C:2009 and ISO 9001:2008 Certified QMS**

