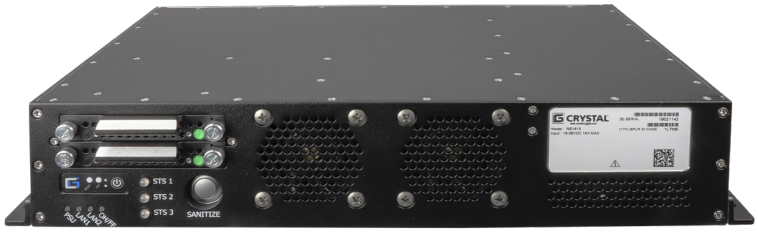
CRYSTAL SPECS

Crystal Group RE1813 Rugged Embedded Computer



Field tested, failsafe, and long life performance in extreme conditions. Feature rich Crystal Group Embedded Computer Systems are powerful, compact, and rugged. Completely and easily configurable, the Embedded product line boasts advanced thermal management, and are field-tested to withstand shock and vibration, extended temperature ranges, harsh elements and harsh environments. Crystal Group Embedded Computer Systems follow the Intel® Roadmap to ensure access to the latest, powerful Intel chipsets and processors.

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 – 10 lbs. (4.5 kg)
- Tray or wall mounted
- Large thermostatically controlled fans for quiet operation
- MS 3476L12 military circular power connector
- Up to three 2.5" SSD removable drives
- Xeon D or Skylake CPU motherboard options
- Modular power supply for multiple input options
- One PCIe x16 expansion slot
- Ultra rugged and compact for extreme ambient conditions

A clear advantage.

Crystal Group RE1813 Rugged Embedded Computer

SPECS

Specifications

Mechanical (Rack or Panel Mount)
Height: 3" (7.62 cm)
Width: 16.15 (41.02 cm) with mounting, 14.9 (37.84 cm) without mounting
Depth: 10.5" (6.67 cm) excluding connectors, ground stud, or drive carrier protrusions
Weight: 10 lbs. (4.53 kg) depends on card content (fully loaded)

Storage
Up to three 2.5" drives

Mounting
Fixed mount or tray mount

Power Supply
Option 1: 120/240 VAC (300W) 50/60Hz, 115 VAC 400Hz, with MIL-STD-461 filtering, MIL-STD-704
Option 2: 9-18VDC (144W) with MIL-STD-461 filtering, MIL-STD-704
Option 3: 18-36VDC (200W) with MIL-STD-461 filtering, MIL-STD-704
Option 4: 36-75VDC (200W) with MIL-STD-461 filtering, MIL-STD-704

Cooling
Modulated speed, high volume thermostatically controlled fans, air over components cooling design

Environmental Standards
MIL-STD-810, Operational Temperature: -25°C to +60°C, with solid state drives[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 humidity kit[1]
MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport[1]
MIL-STD-810, Vibration, Method 514, Procedure I: 7.18GRMS x- and y-axis, 4.63GRMS z-axis, 5-2000Hz, 60 min/axis[1]
MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec - functional shock; 40g, 11msec - crash hazard shock[1]

Electromagnetic Compatibility Standards
Some standards may require an internal kit
MIL-STD-461 CE102 (conducted) & RE102 (radiated) emissions, EMC[1]
Emissions: radiated FCC Part 15. 109, Class A; conducted FCC Part 15. 107, Class A[1]
Testing with solid state drives

Software Compatibility
Windows 10®, Redhat® 6.5/6.6, Windows Server® 2016, VMWare®, Linux

Motherboard	Motherboard Description	Processors	Maximum Memory
X11SSV-Q	LGA 1151, DP, HDMI, DVI-I, 2x 1G LAN, 1x PCI-E 3.0 x16	Multiple options available	32GB DDR4

1 - Designed to meet standard

AS9100D CERTIFIED ISO 9001

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