

19"/2 Server CS1103



Xeon Server in a 19inch2 form factor

The CS1100 series provides a powerful Xeon server optimized for virtual server applications. It comes with a 3 disk hardware RAID and a wide range of interfaces and options. It is optimized for low size, weight and power (SWaP) to meet industry requirements without sacrificing reliability, ruggedness or performance.

Mounting

The 19"/2 standard enables flexible mounting with customized brackets. The unit can be mounted in a 19" rack, half racks, directly to a surface and in any angle.

Built to take a beating

The Computer is built to withstand the harshest conditions over the long haul. It features aluminum casing, rugged MIL connectors and IP65 rated disk caddies to enable the unit to work in demanding environments.

Features

- Up to 128 GB RAM
- Intel Xeon D1548 CPU
- Up to 8 cores (16 threads)
- RAID 0, 1, 5
- IPMI 2.0
- Optimized for VMWare
- Replaceable CMOS battery
- Passively cooled

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Connector Interfaces

FAN (back)	• 1x FAN
SERVICE (back)	• 1x RS232 Service
X1 (front)	• 1x VGA • 1x AUDIO_IN • 1x AUDIO_OUT • 2x USB • 1x RS232
X2 (front)	• 4x ETH 1000BASE-T
X3 (front)	• 1x USB3
X4 (front)	• 1x USB3
X5 DC IN (front)	• 1x Power
X6 (back)	• 1x IPMI • 1x RS232 • 1x RS Console • 3x USB2.0 • 1x Remote Power (28 GND) • 2x RS232 RX-TX

Other Interfaces

3x MilDef Disk Slot (front)
1x Battery Cover (right side)
1x System Button (front)

Technical Specification

Blanking	Double-pressing the System button
Computer Memory	Up to 128 GB RAM
Computer Processor	Intel Xeon D1548 CPU
Computer Storage	RAID 0, 1, 5
IPMI access	IPMI 2.0
Optimized for VMWare	Optimized for VMWare
CMOS Battery	Replaceable CMOS battery, located behind a cover for easy access.
MIL-STD-1275D	5.3.2.2 5.3.2.3 5.3.2.4
Polarity protection	Protected against polarization failure on the power input in the voltage range of normal operation.
Power consumption	160W
Power input	16-32 VDC
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions Width and Height	220x88mm (8,7x3,5 inch) (WxH)
Earth point	M6 12mm
Rack Mounting depth	430mm

Surface treatment chassis	Chromit-Al
Weight	8 kg (17,7 lbs)
MTBF	Greater than 25000 h

Environmental Specification (*designed to meet)

Functional Shock - Operating*	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40g 11 ms
High temperature - Operating*	MIL-STD-810G, Method 501.5, Procedure II - Operation 55C (131F)
High temperature - Operating*	MIL-STD-810G, method 501.5, Procedure II - Operation 60 °C (140 °F)
High temperature - Storage*	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
Humidity*	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 %rh Ten 24-hour cycles
IP Class (Solid Particle Protection)*	IP Class 6X
IP Class (Water)*	IP Class X5
Low air pressure - Rapid Decompression*	MIL-STD-810G, Method 500.5, Procedure III - Rapid Decompression 75.2kPa, corresponding to 2,438m (8.000 ft) 17kPa, corresponding to 12192m (40.000 ft)
Low air pressure - Operating*	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4572m (15.000 ft)
Low temperature - Operating*	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
Low temperature - Storage*	MIL-STD-810G, method 502.5, Procedure I - Storage -40 C (-40 °F)
Noise level*	Maximum noise level of 40dB SPL A-weighting @ 1m (3,3 ft) distance
Salt fog*	MIL-STD-810G Method: 509.5 5% +- 1% (by weight) Two cycles, 24h wet + 24h dry /cycle
Temperature Shock - Operating*	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) - 40 °C (-40 °F)

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Transit drop, in shipping package* MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table 516.6-VI, Transit drop test, < 45.4 kg (100 lbs), < 91 cm (36 inch), Manpacked or man-portable

Vibration - Helicopter* MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter

Vibration - Loose Cargo* MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo

Vibration - Tracked Vehicles* MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles

Vibration - Wheeled Vehicle* MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

EMC Specification (* designed to meet)

CE EMI*	EN61000-6-3:2007
CE EMS*	EN55032:2015
EMI conducted CE102*	MIL-STD-461F, Method CE102 BASIC CURVE 10kHz to 10MHz
EMI radiated RE102*	MIL-STD-461F 2MHz - 18Ghz Navy Mobile & Army
EMS conducted CS101*	MIL-STD-461F, Method CS101, conducted susceptibility, power leads CURVE #1 30Hz to 150kHz
EMS conducted CS114*	MIL-STD-461F 10kHz - 200MHz Army, Ground
EMS conducted CS115*	MIL-STD-461F Conducted susceptibility, bulk cable injection, impulse excitation
EMS conducted CS116*	MIL-STD-461F 10 kHz to 100 MHz
EMS radiated RS103*	MIL-STD-461F 2MHz to 1GHz Army
ESD*	EN61000-4-2:2009 Level 3 EN50024:1998 Performance criteria B + A1:2001 + A2:2003