

19"/2 Server CS1102



Xeon Server in a 19"/2 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 D1577 CPU
- Up to 16 cores (32 threads)
- RAID 0, 1, 5
- IPMI 2.0
- Optimized for VMWare
- Replaceable CMOS battery
- TPM 2.0

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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 D1577 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
TPM	TPM 2.0
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)
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)

Environmental Specification

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 55 °C (131 °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 2438m (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 at 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)
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

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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

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
Navy Mobile & Army
2MHz - 18GHz

EMS conducted CS101 MIL-STD-461F, Method CS101, conducted susceptibility, power leads.
CURVE #1
30Hz to 150kHz

EMS conducted CS114 MIL-STD-461F
Army, Ground
10kHz - 200MHz

EMS conducted CS115 MIL-STD-461F
Conducted susceptibility, bulk cable injection, impulse excitation

EMS conducted CS116 MIL-STD-461F
10kHz - 100MHz

EMS radiated RS103 MIL-STD-461F
Army
2MHz - 1GHz

ESD EN61000-4-2:2009 Level 3
EN55024:1998 Performance criteria B + A1:2001 + A2:2003