

# 19"/2 Computer CS2101



## Computer in a 19inch2 form factor

The CS2100 Series provides a high performance Xeon computer with a wide range of interfaces all in the 19"/2 form factor. 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 aluminium casing, rugged MIL connectors for easy integration and will operate in temperatures up to 65° C.

## Guaranteed performance

Our products always come with a lifetime support to ensure your equipment maintains peak performance for many missions to come. We also serve units and stock spare parts for 5 years end-of-life.

### Features

- Intel HD Graphics P530
- Up to 32 GB RAM
- Intel Xeon E3-1505L V5 processor
- Passively cooled

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## Connector Interfaces

<b>SERVICE</b> (back)	<ul style="list-style-type: none"> <li>1x RS232 Service</li> </ul>
<b>X1</b> (front)	<ul style="list-style-type: none"> <li>3x USB2.0</li> <li>3x RS232</li> </ul>
<b>X2</b> (front)	<ul style="list-style-type: none"> <li>4x ETH 1000BASE-T</li> </ul>
<b>X3 DC IN</b> (front)	<ul style="list-style-type: none"> <li>1x Power</li> </ul>
<b>X4</b> (front)	<ul style="list-style-type: none"> <li>1x DVI</li> </ul>
<b>X5</b> (front)	<ul style="list-style-type: none"> <li>1x VGA</li> <li>1x Remote Power On</li> <li>1x AUDIO</li> </ul>
<b>X7</b> (front)	<ul style="list-style-type: none"> <li>1x USB3</li> </ul>
<b>X8</b> (front)	<ul style="list-style-type: none"> <li>1x USB3</li> </ul>

## Other Interfaces

- 1x Battery Cover (bottom)
- 1x System Button (front)

## Technical Specification

<b>Blanking</b>	Double-pressing the System button
<b>Computer Graphics</b>	Intel HD Graphics P530
<b>Computer Memory</b>	Up to 32 GB RAM
<b>Computer Processor</b>	Intel Xeon E3-1505L V5 processor
<b>Graphics resolution</b>	Max 1920 x 1200 @ 60H on DVI and VGA.
<b>IPMI SSIF access</b>	IPMI 2.0 (limited feature set) SSIF Interface
<b>Electrical bonding</b>	Less than 2,5mOhm between earth stud and any conducted part of the chassis.
<b>Electrical isolation</b>	More than 10MOhm between chassis and any GND signal measured in DC mode.
<b>MIL-STD-1275D</b>	5.3.2.2 5.3.2.3 5.3.2.4
<b>Polarity protection</b>	Protected against polarization failure on the power input in the voltage range of normal operation.
<b>Power consumption</b>	Idle 25 W (OS only) Typ 55 W(50% load, no USB load) Max 65 W(100% load, no USB load) Maxmax 95 W(active disk heater, 100% load, max USB load)
<b>Power input</b>	12-32 VDC
<b>Coating and color</b>	Dupont AE0305-6603120 (RAL6031)
<b>Cooling</b>	Passively cooled
<b>Dimensions Width and Height</b>	220x44mm (8,66x1,74 inch) (WxH)

<b>Earth point</b>	M6 12mm
<b>Rack Mounting depth</b>	400mm (17,4 inch)
<b>Surface treatment chassis</b>	Chromit-Al
<b>Weight</b>	3.5 kg (7.8 lbs)

## Environmental Specification (\* designed to meet)

<b>Functional Shock - Operating*</b>	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40g 11 ms
<b>High temperature - Operating*</b>	MIL-STD-810G, method 501.5, Procedure II - Operation 65 °C (149 °F)
<b>High temperature - Storage*</b>	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
<b>Humidity*</b>	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 %rh Ten 24-hour cycles
<b>IP Class (Solid Particle Protection)*</b>	IP Class 6X
<b>IP Class (Water)*</b>	IP Class X5
<b>Low air pressure - Rapid Decompression*</b>	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)
<b>Low air pressure - Operating*</b>	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4572m (15,000 ft)
<b>Low temperature - Operating*</b>	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
<b>Low temperature - Storage*</b>	MIL-STD-810G, method 502.5, Procedure I - Storage -40 C (-40 °F)
<b>Noise level*</b>	Maximum noise level of 40dB SPL A-weighting @ 1m (3,3 ft) distance
<b>Salt fog*</b>	MIL-STD-810G Method: 509.5 5% +- 1% (by weight) Two cycles, 24h wet + 24h dry /cycle
<b>Temperature Shock - Operating*</b>	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) - 40 °C (-40 °F)
<b>Transit drop, in shipping package*</b>	MIL-STD-810G, method 516.6, Procedure IV - Transit Drop. Table

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	516.6-VI, Transit drop test, < 45.4 kg (100 lbs), < 91 cm (36 inch), Manpacked or man-portable
<b>Vibration - Helicopter*</b>	MIL-STD-810G. Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter
<b>Vibration - Loose Cargo*</b>	MIL-STD-810G. Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo
<b>Vibration - Tracked Vehicles*</b>	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles
<b>Vibration - Wheeled Vehicle*</b>	MIL-STD-810G. Method: 514.6 , Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

## EMC Specification (\*designed to meet)

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