

# 19"/2 Computer CS2105



## Computer in a 19"/2 form factor

The 19"/2<sup>®</sup> CS2105 offers a high-performance Intel<sup>®</sup> Xeon<sup>®</sup> computer. The features include a removable M.2 SSD, Gigabit Ethernet (fiber and copper), USB3 and full-HD video output. It is based on the 19"/2 form factor and 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.

### Customizable

Are you looking for features and functions beyond the standard solution? MilDef specializes in customized solutions including connector changes, chassis modifications, mounting solutions, etc. Contact your nearest MilDef Sales Office and we will help you tailor a solution to meet your requirements.

## Guaranteed performance

Our products come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come. We also guarantee the availability of spare parts for 5 years after product end-of-life.

### Features

- Intel<sup>®</sup> Xeon<sup>®</sup> E3-1505L V5 processor
- 32 GB RAM ECC
- Multimode fiber
- USB3.0
- Full-HD DVI
- Passively cooled

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## Connector Interfaces

Service (back)	<ul style="list-style-type: none"> <li>1x RS232 Service</li> </ul>
X7, X8 (front)	2 connectors which each has: <ul style="list-style-type: none"> <li>1x USB3</li> </ul>
X4 (front)	<ul style="list-style-type: none"> <li>1x DVI</li> </ul>
X5 (front)	<ul style="list-style-type: none"> <li>1x ETH 1000BASE-SX</li> </ul>
X6 (front)	<ul style="list-style-type: none"> <li>2x RS232</li> </ul>
X2 (front)	<ul style="list-style-type: none"> <li>2x USB 2.0</li> </ul>
X3 (front)	<ul style="list-style-type: none"> <li>1x 1000BASE-T</li> </ul>
X1 DC IN (front)	<ul style="list-style-type: none"> <li>1x Power</li> </ul>

## Other Interfaces

1x Battery Cover (bottom)
1x MilDef M.2 Disk Slot (front)
1x Disk Status Indicator (front)
1x System Button (front)

## Technical Specification

Internal SSD	Optional internal SSD
Blanking	Double-pressing the System button
Computer Graphics	Intel HD Graphics P530
Computer Processor	Intel Xeon E3-1505L V5 processor
Computer primary memory	Up to 32 GB RAM ECC
Graphics resolution	Max 1920 x 1200 @ 60H on all video interfaces
IPMI SSIF access	IPMI 2.0 (limited feature set) SSIF Interface
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	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)
Power input	12-32 VDC
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions Width and Height	220x43,4 mm (8,66x1,71 inch) (WxH)
Earth point	M6 12mm
Rack Mounting depth	400 mm (17.4 inch)
Surface treatment chassis	Chromit-Al

Weight	3.5 kg (7.8 lbs)
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## 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 65 °C (149 °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