

19"/2 Appliance Server CS9122



Appliance Server in a 19inch2 form factor

The 19"/2 Appliance Server packs high-performance computing power into a frame up to 75% smaller than standard 19" rugged servers. This significantly reduces the server's weight, energy consumption and heat production.

Built to take a beating

The Server is built to withstand the harshest conditions over the long haul. It features aluminium casing, rugged MIL connectors for easy integration and will operate down to -40 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.

Concept

A MilDef concept describes a possible implementation of customer specific requirements. Realization might involve NRE cost.

Features

- Up to 32 GB RAM ECC
- Intel Core i7-6822EQ processor
- Support for virtualization
- WiFi (dual SSID) and 4G/NET1 support

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Connector Interfaces

GSM 3G 4G (front)	• 1x 4G
DC IN (back)	• 1x Power
CONSOLE (front)	• 1x RS232 Console
ETH2-ETH7 (front)	6 connectors which each has: <ul style="list-style-type: none"> • 1x ETH
ETH8, ETH9 (back)	2 connectors which each has: <ul style="list-style-type: none"> • 1x ETH
ETH0 PoE+, ETH1 PoE+ (front)	2 connectors which each has: <ul style="list-style-type: none"> • 1x ETH
HDMI (back)	• 1x HDMI
SERVICE (back)	• 1x RS232 Service
USB3/4 (back)	• 2x USB
USB1/2 (front)	• 2x USB 3.0
VGA (back)	• 1x VGA
WIFI (front)	• 1x Wifi

Other Interfaces

1x Sim Card (Mini-SIM) (back)

1x System Button (front)

Technical Specification

Blanking	Double-pressing the System button
Computer primary memory	Up to 32 GB RAM ECC
Computer Processor	Intel Core i7-6822EQ processor
LAN	1000BASE-T standard
Operating system	CentOS 7 and later
POE power delivery	25W in total (each port can handle 25W)
Support for Virtualization	Support for virtualization
Wireless	WiFi (dual SSID) and 4G/NET1 support
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 input	12-32 VDC
Coating and color	Dupont AE0305-6603120 (RAL6031)
Cooling	Passively cooled
Dimensions Width and Height	220x44mm (8,66x1,74 inch) (WxH)
Earth point	M6 12mm
Rack Mounting depth	400mm (17,4 inch)

Surface treatment chassis	Chromit-Al
Weight	4.1 kg
MTBF	Greater than 82709h

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 - 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

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