

CS1200 Series

High-performance server-class computing for tactical edge

MilDef CS1200 series is a rugged server-class computing platform that delivers data centre performance in demanding environments. Powered by an Intel® Xeon® D-series processor, it combines high memory capacity, high-speed networking, and flexible expansion to support next-generation mission systems and edge applications.

Key features

High-performance processing	Intel Xeon-D processor with up to 20 cores
Capability bay	Capability bays for additional capabilities
High-speed ethernet	Multiple high speed Ethernet interface
Remote management	Integrated remote management
Secure Boot	Hardware-validated cryptographic boot protection

Capabilities

The CS1200 delivers centralized processing, storage, and virtualization capabilities for demanding edge and mission environments. Designed to host multiple applications, services, and workloads on a single platform, it enables organizations to deploy data-centre-class functionality wherever the mission requires it. Its powerful computer architecture supports data-intensive applications such as sensor fusion, AI analytics, mission-system backends, and ISR exploitation, while reducing the need for multiple dedicated systems.

The capabilities of the CS1200 series include:

- **Server-Class Processing:** Powered by Intel® Xeon® D-Series processors with 20 cores and 40 threads, the CS1200 delivers the compute density required for data-intensive mission applications, backend services, and multi-user workloads.
- **Compact Form Factor:** The 19"/2 form factor enables half-rack integration, which saves space and allows mounting in any orientation or angle.
- **High-Capacity Data Storage:** Up to 12 M.2 NVMe SSDs with RAID options for local mission data storage and processing.
- **Remote Management:** Integrated remote management capabilities enable monitoring, troubleshooting, system administration without requiring physical access to the platform.

Form factors

The CS1200 series offers different form factors depending on best fit for a particular use case.

19"/2 Half Rack



- High-performance server
- Standard or customized configurations
- Form, fit & function over generations

Customized form factor



- High-performance server
- Project driven offering and form factor

MilDef 19"/2 modular design

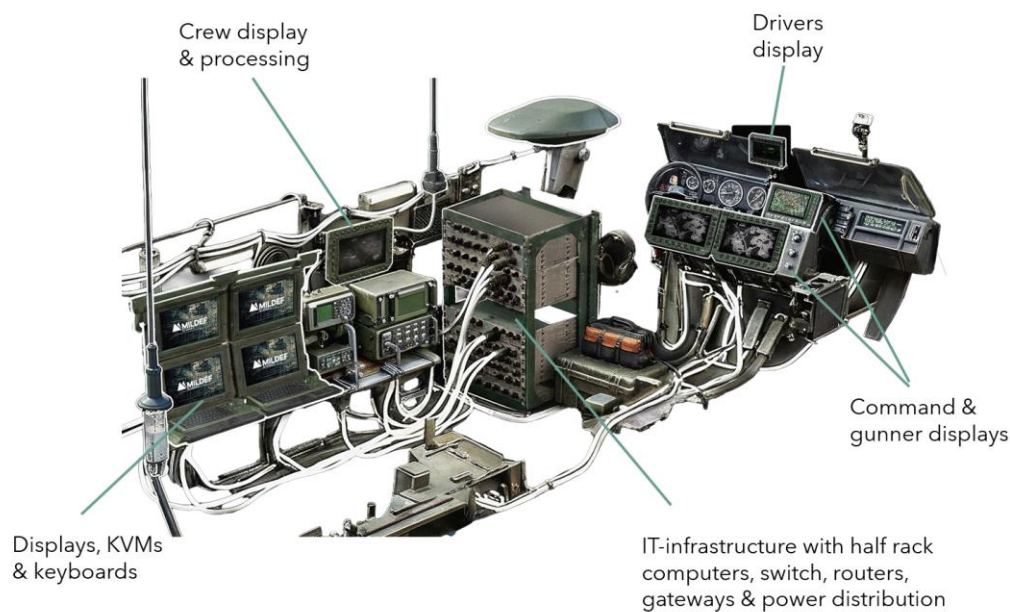
The MilDef 19"/2® addresses the requirements for small, high-performance IT hardware. The modular design and broad product offering (computer, network, power and peripherals) enables the use of 19"/2® units as building blocks for creating built to purpose solution. Same form factor over multiple generations enable reuse of cable, mounting solution etc for midlife upgrades along the system life cycle.

Solution provider

MilDef offers solution and integration delivering seamless, end-to-end solutions by integrating hardware and software into complete systems that meet customer requirements. Managing integration projects/programs to ensure alignment with mission objectives/business strategy and technological capabilities.

Hardware ECO-system

Our hardware offering including all the building blocks for complete IT infrastructure for the tactical edge, such as displays, network products, power products, docking stations, mounting solutions etc.



Use case

The CS1200 series is a core component of many tactical platform designs. Some use case examples are:

- **ISR (Intelligence, Surveillance, and Reconnaissance) data collection and exploitation server**
Functions as a high-performance ISR server, collecting and processing data from multiple sensors while supporting local storage, analysis, and intelligence dissemination. The platform enables faster exploitation of mission data and enhanced situational awareness in environments where reliability and performance are mission critical.
- **Tactical cloud and virtualization services**
Acts as a mobile data center for command vehicles, deployable headquarters, and remote platforms, hosting virtualized mission applications, shared databases, and communications services locally when access to centralized cloud infrastructure is unavailable.

Specifications

Computing capability			
Processor	Intel Xeon D-2796TE 20 Core / 40 threads	Security	Error Correction Code (ECC), TPM2.0, Secure Boot.
Memory	Up to 512GB DDR4 ECC	Video	DVI (BMC) Option for DVI, HDMI, VGA and SDI via capability bay
Graphics	NVIDIA GPU option	Communication Interfaces	RS232/422/485, CAN, USB 3.2 Gen 1, USB 2.0
Storage	M2 NVME SSD (up to 12 SSDs) Hardware RAID options	Remote Management	BMC, IPMI, iKVM
Network	1G or 10G Ethernet NICs Built in switch options	Other	Integration of PCIe card available at request as well as customizable BIOS
Environmental			
MIL-STD-810			
Shock operating	Functional Shock. 40G/11ms	Noise level	Max noise level of 60 dB SPL 1 m (3.3 ft)
Temp. operating	-40 to 55°C (-40 to 131 °F)*	Salt fog	5 ± 1%
Temp. storage	-40 to 71°C (-40 to 160 °F)*	Temp. shock	55 °C (131 °F) / -40 °C (-40 °F)*
Humidity	Aggravated, 95 ± 4% RH	Vibration	Rotary wing aircraft - helicopter
IP Class	IP65*		Truck/trailer - loose cargo
Low air pressure	Rapid Decompression		Ground vehicles:
	2 438 m/12 192 m (8000 ft / 40000 ft) Operation/Air Carriage 4 572 m (15,000 ft)		- ground mobile tracked - ground mobile wheeled
Optional standards			
RTCA/D0160, VG, DEFSTAN, MIL-STD, etc can be included on request.			
EMC			
MIL-STD-461			
EMI/EMS	Ground Army	ESD	EN61000-4-2:2009 Level 3 EN55024:1998 Performance criteria B + A1:2001 + A2:2003
Optional standards			
RTCA/D0160, VG, DEFSTAN, MIL-STD, etc can be included on request.			
Power			
Vehicle Power	MIL-STD-1275		
Optional standards			
VG, DEFSTAN, MIL-STD, etc can be included on request.			

*Higher available on request