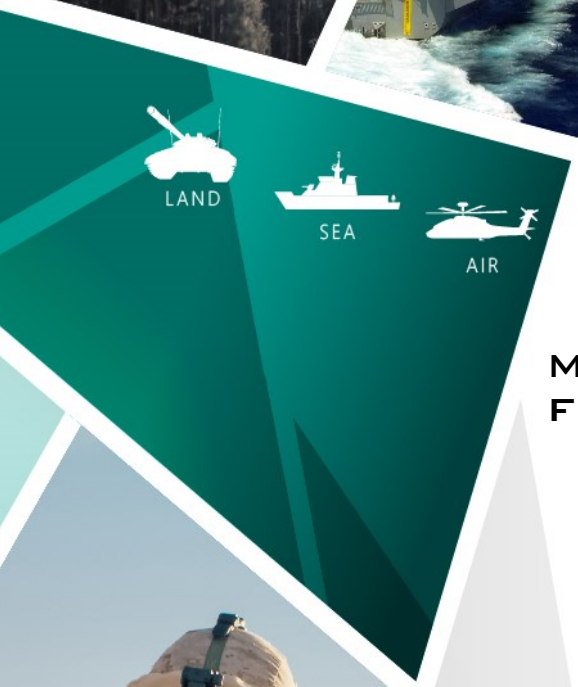






STAR LAKE

DGX10

MILITARY-RUGGEDIZED AI COMPUTING FOR MISSION-CRITICAL OPERATIONS



DELL Technologies

- Built on NVIDIA GB10 Grace Blackwell Superchip
- Blackwell GPU with 5th Gen Tensor Cores
- 20-core Arm CPU (10 × Cortex-X925 + 10 × Cortex-A725)
- 1 PFLOP FP4 AI Performance (1,000 AI TOPS)
- 64G/128G of Coherent, Unified System Memory
- 2TB of NVMe Storage
- Dual 200Gbps ConnectX-7 SmartNIC (2 x 200G QSFP, 1 required to connect to another DGX10)
- MIL-STD-810 Standards with D38999 Connectors
- Ruggedized Compact Small Form Factor

Introduction

Tactical Edge AI Inference Built on NVIDIA Grace Blackwell

Powered by Dell Pro Max architecture, the DGX10 is a rugged AI computing platform designed for next-generation defense AI workloads, including ISR, target detection and tracking, mission planning, and real-time situational awareness. As generative AI models continue to increase in size and complexity, DGX10 provides the memory capacity and computing performance required for local model development, fine-tuning, and inference. It enables defense organizations to accelerate AI innovation and deploy advanced AI capabilities from command centers to the tactical edge.

The DGX10 integrates the NVIDIA Grace Blackwell Superchip, bringing the performance of the NVIDIA Grace Blackwell architecture into a compact form factor. Its NVIDIA Blackwell GPU features fifth-generation Tensor Cores and FP4 support, delivering up to 1 PFLOP FP4 AI compute. A high-performance 20-core NVIDIA Grace Arm CPU accelerates data preprocessing, AI workload orchestration, model tuning, and real-time inference. NVLink™-C2C provides high-bandwidth, coherent CPU–GPU memory connectivity, delivering six times the bandwidth of PCIe Gen 5 for efficient AI workload processing.

Backed by 7STARLAKE's rugged computing expertise, the DGX10 is engineered for stable and reliable operation in demanding defense environments. Whether deployed in mobile command centers, military vehicles, forward operating locations, or outdoor tactical operations, the DGX10 delivers high-performance AI computing closer to the point of action. It provides a ruggedized AI inference platform for ISR, target detection and tracking, sensor fusion, and real-time situational awareness at the tactical edge.

MIL-STD-810, MIL-STD-461 Standards



The DGX10 is designed to meet strict size, weight, and power (SWaP) requirements and to withstand harsh environments, including temperature extremes, shock/vibe, sand/dust, and salt/fog.



Meeting the MIL-461 EMI/EMC standards, the rugged edge AI inference server passes numerous environmental tests including temperature, altitude, shock, vibration, voltage spikes, electrostatic discharge and more. The sealed compact chassis shields circuit cards from external environmental conditions such as sand, dust, and humidity.

Specifications

System	
Processor	20-core Arm (10 x Cortex-X925 + 10 x Cortex-A725 Arm)
Memory Type	64GB/ 128 GB LPDDR5X, unified system memory 256-bit 273 GB/s
Architecture	NVIDIA Grace Blackwell
GPU	
CUDA Cores	NVIDIA Blackwell Architecture
Tensor Cores	5th Generation
RT Cores	4th Generation
Tensor Performance	1000 AI TOPS
NIC	
Smart NIC	ConnectX-7 Smart NIC
Ethernet Speeds	10/25/40/50/100/200/400GbE
Network	Wi-Fi 7, Bluetooth 5.4
Storage	
HDD/SSD	2TB NVME.M2 with Self-encryption
Front I/O	
X1 (DC-IN)	1 x Amphenol 24FC4PN (4PIN)
X2 (HDMI)	1x Amphenol HDMIFTV2AGF459
X3 (10GbE)	1x Amphenol RJFTV6A7SA1N
X4 (200GbE)	1 x Amphenol FSI MPOFTV70ZNN
X5 (200GbE)	1 x Amphenol FSI MPOFTV70ZNN
Power button	1 with Power LEDs
Power Requirement	
Power Input	DC-IN 18-36V, (Optional with MIL-STD-461 Filter)
Applications, Operating System	
Operating System	NVIDIA DGX OS 7.3.1
NVIDIA GPU Driver	580.95.05
NVIDIA CUDA Toolkit	13.0.2

Physical

Dimensions	250 x 325 x 138 mm (H x W x D)
Estimated Weight	5 kg (11.02lbs) Final Weights Dependent on Specific Configuration
Chassis	Aluminum Alloy, Corrosion Resistant
Finish	Anodic Aluminum Oxide
Cooling	Conduction Cooling with Air Force Smart Fan Ingress Protection
Ingress Protection	IP65

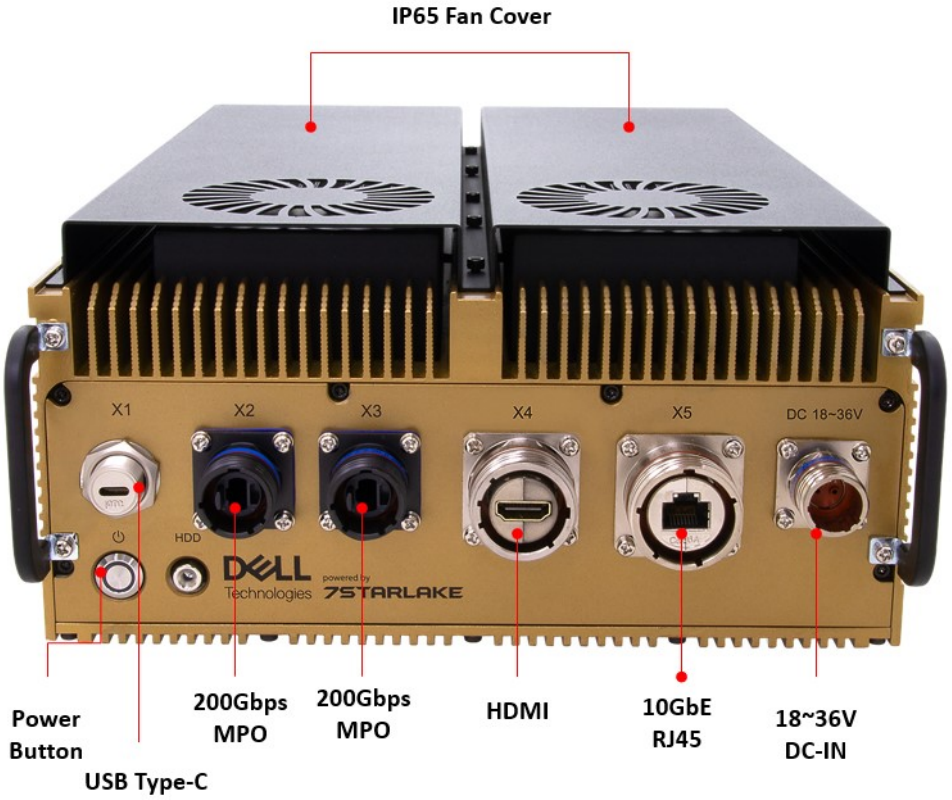
MIL-STD-810 Standards

High Temperature	High Temperature Storage	+74°C per MIL-STD-810G/501.5/I for 7 Cycles
High Temperature	High Temperature Operation	55°C per MIL-STD-810G/501.5/II for 3 Cycles
Low Temperature	Low Temperature Storage	-46°C for 72 Hours Per MIL-STD-810G/502.5/I
Low Temperature	Low Temperature Operation	-33°C per MIL-STD-810G/502.5/II
Vibration	C-130(J/K) aircraft	Test Duration 400 Minutes Per Axis (x,y,z), Simulating 120 Flight Hours Including 20 Landings and TakeOffs
	Functional Vibration	Vibration Experienced on Ford F-550 in Neutral Gear
	Tactical Transportation test not Operational	Test Duration: 120 Minutes Per Axis to Simulate 500,000 km Driving Distance.
Shock	Road Transportation	10 Grms, 11ms, 3 (X, Y, Z) axes, Sawtooth Pulse
Immersion	Method 502.5	Test According to IEC 60529/ IP65

MIL-STD-461 Standards

Conducted Emissions Power Leads	CE102	10KHz to 10MHz (Figure CE102-1)
Conducted Susceptibility Power Leads	CE101	30Hz to 150KHz (Figure CS101-1: Curve #2)
Conducted Susceptibility, Bulk Cable Injection	CS114	10KHz to 200MHz, curves 3&4 (10 kHz to 2 MHz: Curve #3 2MHz to 200MHz: Curve #4)
Conducted Susceptibility, Bulk Cable Injection	CS115	Impulse Excitation (5A)
Conducted Susceptibility Damped Sinusoidal Transients, Cables and Power Leads	CS116	10KHz to 100MHz (10A)
Radiated Emissions Electric Filed	RE102	2MHz to 18GHz (Figure RE102-4)
Radiated Susceptibility Electric Filed	RS103	2MHz to 18GHz, 50V/m (2MHz to 100MHz: 50V/m 100MHz to 18GHz: 50V/m)

Appearance & Dimensions





This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representatives.