



DTECH Fusion™ eHPC

Features & Benefits

- Built Tough – Enterprise-level performance in a half rack form factor, rugged and deployable
- GPU Processor – NVIDIA GPU Processor supports unrivaled AI and Machine learning capabilities in this rugged small form factor
- 64 Core AMD EPYC Processor – Class-defining processing power
- High-Speed Switch – Rugged and proven DTECH 10G Switch developed for the most demanding heavy, data-transfer centric compute applications
- UPS/Power Supply – Proven and reliable power and UPS. Protect against unstable power, and ride out short power outages while maintaining operations
- 8 SSD bays for over 120TB local, completely tool-less removable storage

The DTECH Fusion™ Edge High Performance Compute (eHPC) stands alone in its ability to provide enterprise-level computing power to the tactical edge. Smaller, lighter, and better performing than current solutions, the Fusion eHPC allows for complex data-rich workloads, even in Denied, Disrupted, Intermittent, and Limited (DDIL) environments.

The speed at which decisions are made in our evolving battlespaces dictates that greater processing power moves to the tactical edge. Existing edge compute solutions are not purpose-built for deployment to the tactical edge and lack the processing power, durability, SWaP or speed to satisfy data processing and analysis demands at the tactical edge.

DTECH, the trusted edge computing and networking platform provider, has collaborated with users in real-world scenarios to develop the Fusion eHPC for the most demanding data applications. Designed by veterans from the ground up, Fusion eHPC is built to be trouble-free, intuitive to operate, rugged, and powerful enough to support the most demanding data requirements that, until now, have yet to be available at the tactical edge. Fusion eHPC provides a high core count processor with integrated GPU, eight-slot removable SSD drives, a highspeed switch, and a battery-backed power supply in a single case to support the most demanding processing, computing, Artificial Intelligence, and Machine Learning requirements.

Fusion eHPC

Compute Module Specifications

General Features	
CPU	AMD EPYC™ 7713p 64-Core CPU @ 2.0Ghz (Max. Boost Clock 3.67 GHz)
RAM	512GB DDR4 3200MHz
GPU	NVIDIA RTX 5000 ADA Generation GPU with 12,800 Cuda Cores and 32GB GDDR6 Memory
Storage Controller	Broadcom MegaRAID 9560
SSD Slots	8 x 2.5" x 7mm
Networking Connectivity	4 x 10/25G SFP+ Ports, 2 x 10G RJ45 Ports
Server Management	1 x 1G RJ45 Port, Dedicated IPMI
Serial Console	1 x DB9 Port
Server Management Video	1 x VGA Port
USB Connectivity	2 Type-A (USB3.2 Gen1) Ports

Power Requirements	
Server Input Voltage	24vDC
Server Maximum Current	25 Amps
Server Output Voltage	24vDC (Unregulated, passed through from Input)

Size	
Width	9.5" (1/2 Rack)
Depth*	13.5"
Height	5.25" (3U Rack)

Switch Module Specifications

Cisco ESS9300 IOS-XE Layer 3 Switch	
Networking Connectivity	10 x 10G SFP+ Ports, 1 x 1G RJ45 Port
Switch Management	1 x RJ45 Serial Console Port, 1 x Micro-USB Port
Removable Storage	1 x SD Card Slot, 1 x USB-A Port
Alarm Port	1 x RJ11, User Configurable

Power Requirements	
Switch Input Voltage	24vDC
Switch Maximum Current	3 Amps
Switch Output Voltage	24vDC (Unregulated, passed through from Input)

Size	
Width	9.5" (1/2 Rack)
Depth*	13.5"
Height	1.75" (1U Rack)

Power Supply/UPS Module Specifications

Power Supply	
AC Input Voltage	90-265 VAC @ 43-67Hz AC
AC Input Circuit Breaker	20A
DC Output Voltage	24vDC
DC Output Maximum Current	35 Amps
Projected Operating time on UPS	16 Minutes (Based on 500W Server/Switch demand)

Size	
Width	9.5" (1/2 Rack)
Depth*	15"
Height	1.75" (1U Rack)

Complete Solution Specifications

Description	Size		Weight
	Width	Depth	
DTECH Fusion eHPC Server. No GPU. 10G Switch, and Power Supply/UPS in aluminium 9.5" rack transit case. SFP+ network cables	12.83"	22.27"	55 lbs.
DTECH Fusion eHPC Server. NVIDIA GPU. 10G Switch, and Power Supply/UPS in aluminium 9.5" rack transit case. SFP+ network cables	12.06"		60 lbs.

*Additional depth may be required for cable installation

