PENGUIN SOLUTIONS

Datasheet

# Altus XE4318GTS-DTC



**4U NVIDIA HGX 8-GPU direct to chip liquid cooled server to ensure maximum AI performance in a dense and efficient package.**

## Overview

The Penguin Solutions® Altus® XE4318GTS-DTC server combines AMD's next-generation EPYC™ Turin processors with cutting-edge NVIDIA B200 HGX GPUs and advanced liquid cooling to deliver exceptional performance for AI training, inference, large language models, high-performance computing, and deep learning workloads.

Powered by AMD's Zen 5-based EPYC Turin architecture, the system provides high core density, enhanced memory bandwidth, and PCIe 5.0 connectivity to support data-intensive applications. NVIDIA's revolutionary B200 HGX platform, built on the Blackwell architecture, delivers unprecedented GPU acceleration and scalability for modern AI workloads.

Integrated liquid cooling technology ensures optimal thermal performance, enabling higher sustained compute densities, quieter operation, and improved energy efficiency compared to traditional air-cooled systems. This thermal advantage allows the system to maintain peak performance under heavy workloads while reducing overall power and cooling infrastructure requirements. Together, these technologies empower data scientists, researchers, and AI engineers.

## Key Features

- Dual AMD EPYC™ 9005 processors
- Up to 24 DDR5-6400 MT/s memory modules to deliver speed and efficiency for data-intensive workloads
- Storage density for up to 8x 2.5" hot-swap drive bays with NVMe support
- Supports up to 8 x Nvidia SXM GPUs with Dedicated GPUDirect RDMA NICs
- A/B, True N+N Power Redundancy

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## Technical Specifications

| | | |
|---|---|---|
| **Form Factor** | | |
| Form Factor | 4U Rackmount | |
| **Processors** | | |
| Processor Number | 2 | |
| Processor Type | AMD EPYC™ 9005/9004 Series | |
| Maximum TDP | 500W | |
| **Motherboard** | | |
| Chipset | SoC | |
| **Board Management** | | |
| BMC Chipset | ASpeed AST2600 | |
| Dedicated BMC Interface | RJ45 | |
| IPMI 2.0 | Yes | |
| Virtual Media Over LAN | Yes | |
| KVM Over LAN | Yes | |
| RedFish | Yes | |
| **Memory** | | |
| Memory Type | DDR5-6400 MT/s (EPYC 9005), DDR4-4800 MT/s (EPYC 9004) | |
| Memory Capacity | Up to 6TB (24 DIMMs) | |
| **Storage System** | | |
| Hard Drive Bays | SATA/U.2 NVMe (2.5") | 8 Hot-Swappable Bays |
| | M.2 (2280/22110) | 2 PCIe Gen3 |
| **Networking** | | |
| Ethernet Controller | Intel® X710-AT2 | |
| On-Board LAN | 2x 10GbE/RJ45 | |
| **PCI Expansion Slots** | | |
| Number of Slots/Gen/Speed (Size) | 8x PCIe Gen5 x16 FHHL Slots, 4x PCIe Gen5 x16 FHHL DW Slots | |
| **GPU** | | |
| GPU Capable | 8-GPU SXM | |
| GPU Supported | NVIDIA HGX™ B200, H200 | |
| **External I/O Interfaces** | | |
| USB Ports | 2x USB 3.2 Gen1 | |
| Video Output | 1x VGA | |
| **Supported Operating System** | | |
| Supported OS | RHEL, Rocky | |
| **Power System** | | |
| Power Supply Size | 4+4 x 3000W 80Plus Titanium | |

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|---|---|
| **Regulatory Compliance** | |
| Regulations | CE, FCC |
| **Mounting Hardware** | |
| Rackmount Rails | Standard Rails included |
| **Operating Environment** | |
| Operating Temperature | 10C to 35C (50F to 95F) |
| Non-operating Temperature | 0C to 60C (32F to 140F) |
| Operating Relative Humidity | 8% to 80% (non-condensing) |
| Non-operating Relative Humidity | 20% to 95% (non-condensing) |
| **System Dimensions & Weight** | |
| Height | 6.90 inches |
| Width | 17.60 inches |
| Depth | 36.22 inches |
| **Warranty** | |
| Warranty | 3 Years Standard; For details see the MPSA |
| **Cooling Options** | |
| Air Cooling | N/A |
| Direct-To-Liquid Cooling | Standard |

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## Contact Us

For sales queries, please contact sales@penguinsolutions.com.

To learn more about the Altus XE4318GTS-DTC Datasheet and other Penguin Solutions products, please visit: www.penguinsolutions.com

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