PENGUIN SOLUTIONS

Datasheet

Relion XE8318GTS



Versatility and performance at scale

Overview

Penguin Solutions® Relion® XE8318GTS server combines Intel's proven 5th Generation Xeon Scalable Emerald Rapids processors with cutting-edge NVIDIA B200 HGX GPUs to deliver exceptional performance for AI training, inference, large language models, high-performance computing, and deep learning workloads.

The mature Emerald Rapids architecture provides reliable computational foundation with optimized memory bandwidth and PCIe 5.0 connectivity, while NVIDIA's revolutionary B200 HGX platform accelerates AI workloads with unprecedented GPU performance and advanced Blackwell architecture capabilities.

This powerful combination enables data scientists, researchers, and AI engineers to tackle the most demanding computational challenges including generative AI, scientific simulation, and real-time analytics across enterprise and hyperscale deployments.

Key Features

- Dual 5th Gen Intel® Xeon® Scalable Processors
- Up to 32 DDR5-5600 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 SATA and 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	8U Rackmount	
Processors		
Processor Number	2	
Processor Type	5th/4th Gen Intel® Xeon® Scalable Processors	
Maximum TDP	350W	
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	DDR5-5600 MT/s (5th Gen), DDR4-4800 MT/s (4th Gen)	
Memory Capacity	Up to 8TB (32 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 or 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	6+6 x 3000W 80Plus Titanium	

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	
Height	13.82 inches
Width	17.60 inches
Depth	36.22 inches
Warranty	
Warranty	3 Years Standard; For details see the MPSA
Cooling Options	
Air Cooling	Standard
Direct-To-Liquid Cooling	N/A

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Contact Us

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

To learn more about the Relion XE8318GTS and other Penguin Solutions products, please visit: www.penguinsolutions.com

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