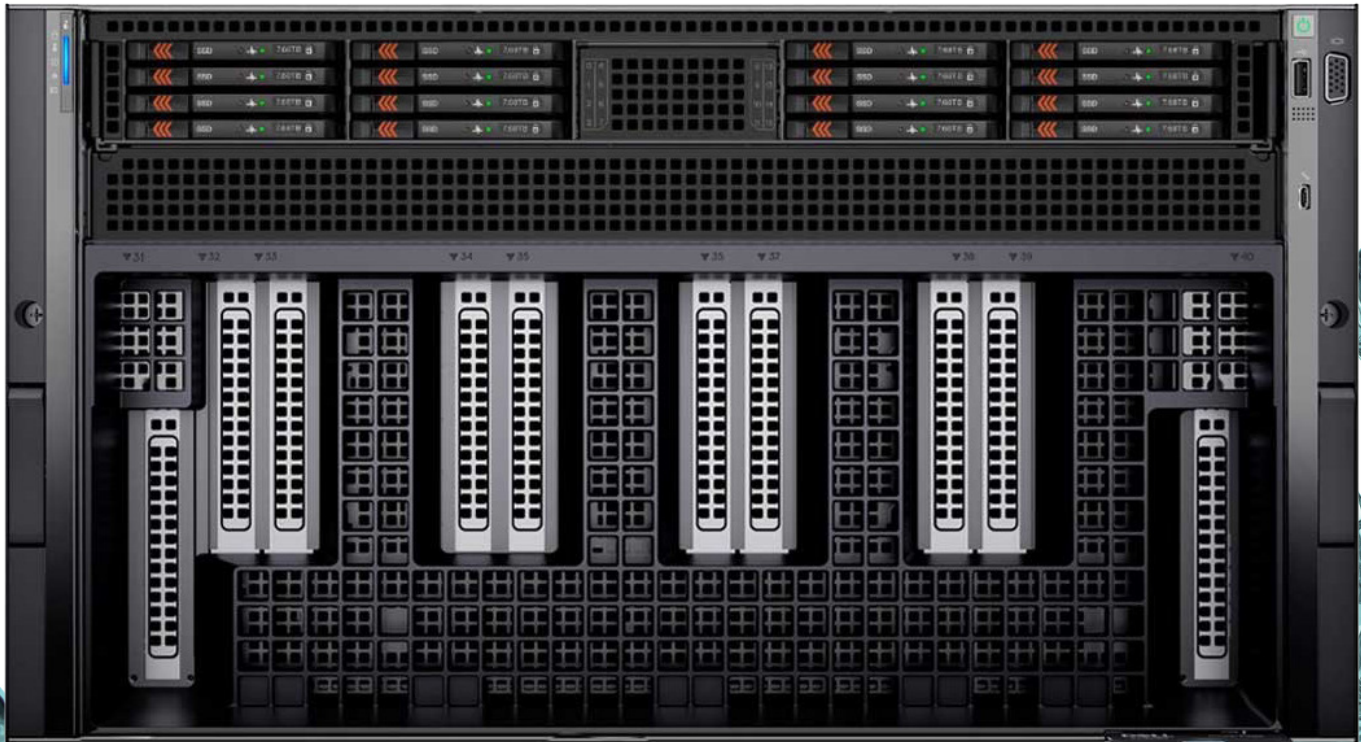


# OPTIMIZED FOR IMMERSION

## XE9680-IR HGX 8-WAY GPU PLATFORM



Experience unprecedented acceleration for AI/ML/DL training with the immersion-ready XE9680-IR HGX 8-way GPU platform, optimized by UNICOM Engineering. Delivering superior performance, density, and scalability while leveraging single-phase immersion cooling to meet demanding energy-efficiency requirements. Powered by up to two 5th Generation Intel Xeon Scalable processors with up to 64 cores each, this 6U platform features eight NVIDIA H100 or H200 700W SXM5 GPUs connected via four NVLink switch chips, making it acceleration-optimized for AI workloads at scale.

A breakthrough in data center cooling technology, designed for immersion cooling environments, delivering:

- Significantly enhanced power and water usage efficiency
- Substantially reduced noise levels compared to air cooling
- More computing power in the same footprint
- Superior thermal management for sustained high-performance

### BUILT FOR ADVANCED AI WORKLOADS

- Generative AI (GenAI)
- Large Language Models (LLMs)
- Machine Learning (ML)
- Deep Learning (DL)

### HIGH-LEVEL FEATURES

- Advanced Compute Architecture
- Enhanced Memory Performance
- Extensive Expansion Options
- Comprehensive Support

# TECHNICAL SPECIFICATIONS

## XE9680-IR HGX 8-WAY GPU PLATFORM

### Processor

- Up to two 4th or 5th Generation Intel Xeon Scalable processor with up to 64 cores per processor

### Memory

- 32 DDR5 DIMM slots, supports RDIMM 4TB max speeds up to 5600 MT/s
- Supports registered ECC DDR5 DIMMs only

### Storage Controllers

- Internal boot: Boot Optimized Storage Subsystem (NVMe BOSS-N1): HWRAID 1, 2 x M.2 SSDs

### Front Drive Bays

- Up to 8 x 2.5-inch NVMe SSD drives max 122.88 TB
- Up to 16 X E3.S NVMe

### Power Supplies

- 2800W Titanium 200-240 VAC or 240 VDC, hot swap redundant

### Dimensions

- Height: 263.2 mm (10.36 inches)
- Width: 482.0 mm (18.97 inches)
- Depth: 995 mm (39.17 inches) without bezel

### Form Factor

- 6U rack server

### Embedded Management

- iDRAC9
- iDRAC Direct
- iDRAC RESTful API with Redfish
- iDRAC Service Module

### Embedded NIC

- 2 x 1 GbE LOM

### Networking Options

- 1 x OCP 3.0 (x8 PCIe lanes)

### GPU Options

- 8 NVIDIA HGX H100 80GB or 8 NVIDIA HGX H200 141GB 700W SXM5 GPUs, fully interconnected with NVIDIA NVLink technology

### Cooling

- Optimized for Immersion Cooling

### Top Ports

- 1 x iDRAC Direct (Micro-AB USB)port
- 1 x USB 2.0
- 1 x VGA

### Bottom Ports

- 1 x USB 2.0
- 1 x USB 3.0
- 1 x VGA
- 1 x RJ45 iDRAC9 ethernet port

### PCIe

- Up to 10 x16 Gen5 (x16 PCIe) full-height, half-length

### Operating System and Hypervisors

- Canonical Ubuntu Server LTS
- Red Hat Enterprise Linux

## TESTING AND VALIDATION

Each XE9680-IR undergoes rigorous validation and testing to ensure optimal performance in immersion environments addressing:

- Thermal management requirements
- Signal integrity optimization
- Material compatibility verification
- Performance reliability in immersion conditions

## WARRANTY SUPPORT

UNICOM Engineering provides a standard 1-year base warranty that can be enhanced with extended coverage options up to 5 years, ensuring long-term protection for your critical infrastructure investment. This holistic approach helps organizations fully realize the efficiency and performance benefits of immersion cooling solutions, making it an ideal choice for high-density data centers facing increasing AI computational demands.

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