Compute Series
X7000-RM

FLUID WORKS
POWERED BY: xenowulf

Self-Contained, Fully Liquid Cooled
5U Rackmount GPU Server

EK Fluid Works X7000-RM Rackmount GPU servers are designed to drop into any existing server rack environment, providing liquid cooled computing performance and reliability with unmatched simplicity and flexibility.

Quick Specs:

- 2nd & 3rd Gen AMD® EPYC™ CPUs
- Up to 7x GPUs
- 128GB to 2TB ECC Memory
- 3+1 3240W Constant Power, Hot-Swappable, Redundant PSU
- Self-Contained Removable/Replaceable CPU & GPU Liquid Cooling System

Optimized For:

- Data Science
- Machine Learning & Deep Learning
- Scientific Computing

Innovation Sets Us Apart

SELF-CONTAINED LIQUID COOLING
No Reliance on Rack-Level or Facility Level Liquid Cooling Infrastructure

MODULAR LIQUID COOLING UNIT
Entire Liquid Cooling System Is Removable & Replaceable as a Modular Unit

EASILY EXPANDABLE COMPUTE CAPACITY
Industrial Quick Disconnect Couplings (QDCs) on GPUs Make Adding/Removing GPUs a Plug-and-Play Task

HIGH EFFICIENCY 3+1 POWER SUPPLY
Constant 3240W Power Supply with 4 Load-Sharing Hot-Swappable / Hot-Pluggable N+1 Redundant Power Cells

Why Liquid Cooling?

UNPARALLELED COOLING PERFORMANCE
Water is more effective at removing heat, resulting in lower sustained operating temperatures.

LONGER LIFESPAN
Liquid cooling eliminates thermal fatigue, allowing components to stay cooler and last longer.

GREATER PERFORMANCE OUTPUT
Eliminating thermal throttling removes bottlenecks and increases performance output.

INCREASED COMPUTE DENSITY
Liquid cooled GPUs occupy less space, allowing 2x- 3x compute power in the same cubic footprint.

ENVIRONMENTALLY FRIENDLY
Liquid cooled computing components consume 10%- 15% less energy to produce the same power output as comparable air-cooled components.

Motherboard	Server Rack Motherboard	
	Manufacturer	AsRock, Gigabyte or equivalent
	Chipset	System On Chip
	Socket	Single or Dual SP3 (LGA 4094)
CPUs	AMD 2nd and 3rd Generation AMD EPYC	
	TDP	Up to 280W per CPU
	Cores / Threads	Up to 64 / 128 per CPU
	Cooling	EK Fluid Works Professional Liquid Cooling
Memory	128GB (4 x 32GB) to 4TB* (16 x 256GB)	
	DIMM Sockets	Up to 16 x DDR4*
	Speed	2666/3200 MHz
	Error Correcting	Yes
Expansion Slots	5 to 7 x PCIe 4.0 x16*	
GPUs	NVIDIA RTX A6000, Quadro RTX 8000, Quadro GV100, Tesla V100, A100, NVIDIA RTX 4090**	
	Max GPUs	7
	Cooling	Liquid
Storage	1x NVMe M.2 SSD	
	Boot Drive	1 x NVMe M.2 SSD PCIe 4.0 x4 (500GB, 1TB, 2TB)
	External storage via dual 10GbE LAN	
Power Supply	3+1 Gold 3240W constant power, balanced load sharing design, hot swappable / hot pluggable redundant capability	
I/O Ports	Front I/O	
	2 x USB (Type-A)	
	Rear I/O*	
	1 x USB 3.2 Gen 2 (Type-C)	
	2 x USB 3.2 Gen 1	
	2 x 10GbE LAN	
	1 x IPMI LAN	
Cooling	Self contained, modular & replaceable CPU & GPU EK custom liquid cooling system	
	Integrated dual pump & reservior	
	3 x 360mm x 60mm newly designed low fin density radiators	
	6 x 120mm x 38mm industrial server-grade fans	
	Quick Disconnect Couplings (QDC)	
	xenowulf Smart Pump/Fan Controller	
Chassis	5U rackmount EK/xenowulf custom design	
	Dimensions: W x H x D (in)	19 x 9 x 32
	Dimensions: W x H x D (cm)	48.3 x 22.9 x 81.3
Warranty	Standard 3 years from ship date	

*Motherboard dependant
**Maximum number of NVIDIA RTX 4090 GPUs supported in a single X7000-RM chassis is 6.