

# Compute Series X7000-RM



## 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:

- 2<sup>nd</sup> & 3<sup>rd</sup> 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.

# Compute Series

## X7000-RM

Motherboard	Server Rack Motherboard	
	Manufacturer	AsRock, Gigabyte or equivalent
	Chipset	System On Chip
	Socket	Single or Dual SP3 (LGA 4094)
CPUs	AMD 2 <sup>nd</sup> and 3 <sup>rd</sup> 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	
	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 & reservoir	
	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 dependent