Compute Series X5000 - AMD



Professional Liquid Cooled Workstations

EK Fluid Works Compute Series workstations are designed for **researchers and deep learning developers** who demand the computing power typically reserved for rack-mount servers, but prefer a deskside solution.

Optimized for:

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



- $3^{\rm rd}$ Gen AMD Threadripper CPUs
- 1x to 4x GPUs
- 64 GB to 256 GB Memory
- 2 x 1200W PSUs



Innovation Sets Us Apart



UNRIVALED THERMAL PERFORMANCE Liquid Cooling Unleashes Performance and Longevity



UNMATCHED FLEXIBILITY
User Serviceable and Upgradeable



UNBEATABLE ACOUSTIC PERFORMANCE
Extreme Performance Without Noise
Pollution



UNDENIABLY BETTER ROI
Better than Air Cooled – Better than other
Liquid Cooled

Why Liquid Cooling?

UNPARALLELED COOLING PERFORMANCE

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

QUIET OPERATION

Larger fans move more air at lower speeds and are almost imperceptible under normal operation.

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.

LONGER LIFESPAN

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

X5000 - AMD



	ASRock TRX40 Creator			
Motherboard	Chipset	AMD TRX40		
	Socket	sTR4		
	PCIe Lanes per GPU	16		
	Multi-Threading	Yes		
	Onboard WiFi	WiFi6 802.11ax		
	Onboard Bluetooth	BT 5.0		
	AMD Ryzen Threadripper	3960X	3970X	3990X
CPUs	Frequency (GHz) Base / Boost	3.8 / 4.8	3.7 / 4.5	2.9 / 4.3
	Cores / Threads	24 / 48	32 / 64	64 / 128
	Cooling	Liquid		
Memory	64GB (2 x 32GB), 128GB (4 x 32GB), 256GB (8 x 32GB)			
	DIMM Sockets	8 x DDR4		
	Speed	3200 MHz		
	Error Correcting	Non-ECC		
Expansion Slots	4 x PCle 4.0 x16			
GPUs	NVIDIA GeForce RTX 3090, RTX A6000			
	Max GPUs	4		
	Cooling	Liquid		
Storage	3 x NVMe M.2 SSD / 8 x SATA SSD or 6 x SATA SSD + 1 x ODD			
	Boot Drive	1 x NVMe M.2 SSD PCIe 4.0 x4 (500GB, 1TB, 2TB)		
	Additional NVMe Storage	2 x NVMe M.2 SSD PCIe 4.0 x4 [500GB, 1TB, 2TB]		
	Additional SATA Storage	8 x SATA III 2.5" SSD (1, 2,	4 or 8TB)	6 x SATA III 2.5" SSD [1, 2, 4 or 8TB]
	Optical Drive (ODD)	N/A		1 x DVD±RW or DVD±RW/Blu-ray
Power Supply	2 x 1200 Watt Platinum			
I/O Ports	Front I/O			
	Audio			
	4 x USB (Type-A)			
	Rear I/O			
	2 x USB 3.2 Gen 2 (Type-A)			
	1 x USB 3.2 Gen 2x2 (Type-C)			
	4 x USB 3.2 Gen 1			
	1 x 10GbE LAN (RJ-45)			
	1 X 1000L LAN (NO-43)			
	1 x 2.5GbE LAN (RJ-45)			
	1 x 2.5GbE LAN (RJ-45)			
	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks	cooling, Case: Forced air		
	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out	cooling, Case: Forced air		
	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid o	cooling, Case: Forced air		
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps	cooling, Case: Forced air		
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs	ooling, Case: Forced air		
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators			
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators 8 x 120mm fans 1x 140mm fan	DC)		
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators 8 x 120mm fans 1x 140mm fan Quick Disconnect Couplings (QI	DC)		
Cooling	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators 8 x 120mm fans 1x 140mm fan Quick Disconnect Couplings (QU xenowulf Smart Pump/Fan Con	DC)		
	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators 8 x 120mm fans 1x 140mm fan Quick Disconnect Couplings (QI xenowulf Smart Pump/Fan Con	DC) troller		
	1 x 2.5GbE LAN (RJ-45) 5 x Audio jacks 1 x Optical S/PDIF out CPU & GPU: EK custom liquid of 2 x pumps 2 x reservoirs 2 x 120mm x 480mm radiators 8 x 120mm fans 1x 140mm fan Quick Disconnect Couplings (QI xenowulf Smart Pump/Fan Context EK-C232 Design Dimensions: W x H x D (in)	DC) troller 15.6 x 23.5 x 25 39.6 x 59.2 x 63.5		