

NVIDIA RTX PRO 4500 Blackwell 32GB vs NVIDIA GeForce RTX 5090 32GB

Side by side datacenter GPU specifications from the Flopper.io database.

OVERVIEW

	NVIDIA RTX PRO 4500 Blackwell 32GB	NVIDIA GeForce RTX 5090 32GB
FP32 TFLOPS	51.0	104.8
VRAM	32 GB	32 GB
Memory Bandwidth	896 GB/s	1.8 TB/s
TDP	200 W	575 W

PERFORMANCE BY PRECISION

Precision	NVIDIA RTX PRO 4500 Blackwell 32GB peak TFLOPS (dense)	NVIDIA GeForce RTX 5090 32GB peak TFLOPS (dense)
FP64	—	1.6
FP32	51.0	104.8
TF32	—	104.8
BF16	—	209.5
FP16	—	419.1
FP8	—	838.2
FP6	—	—
FP4	808.5	1676.0
INT8	—	838.2

SPECIFICATIONS

	NVIDIA RTX PRO 4500 Blackwell 32GB	NVIDIA GeForce RTX 5090 32GB
Architecture	Blackwell	Blackwell
Process Node	4nm	4nm
Launch Year	2025	2025
Form Factor	PCIe	PCIe
Memory Type	GDDR7	GDDR7

	NVIDIA RTX PRO 4500 Blackwell 32GB	NVIDIA GeForce RTX 5090 32GB
Interface Width	256-bit	512-bit
Interconnect	—	—
TDP	200 W	575 W
FP32 Efficiency	0.26 TFLOPS/W	0.18 TFLOPS/W