

NVIDIA GeForce RTX 4070 12GB vs NVIDIA GeForce RTX 4090 24GB

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

OVERVIEW

	NVIDIA GeForce RTX 4070 12GB	NVIDIA GeForce RTX 4090 24GB
FP32 TFLOPS	29.1	82.6
VRAM	12 GB	24 GB
Memory Bandwidth	504 GB/s	1.0 TB/s
TDP	200 W	450 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GeForce RTX 4070 12GB peak TFLOPS (dense)	NVIDIA GeForce RTX 4090 24GB peak TFLOPS (dense)
FP64	0.5	1.3
FP32	29.1	82.6
TF32	29.1	82.6
BF16	58.3	165.2
FP16	58.3	165.2
FP8	116.6	330.3
FP6	—	—
FP4	—	—
INT8	233.2	660.6

SPECIFICATIONS

	NVIDIA GeForce RTX 4070 12GB	NVIDIA GeForce RTX 4090 24GB
Architecture	Ada Lovelace	Ada Lovelace
Process Node	4nm	4nm
Launch Year	2023	2022
Form Factor	PCIe	PCIe
Memory Type	GDDR6X	—
Interface Width	192-bit	—

	NVIDIA GeForce RTX 4070 12GB	NVIDIA GeForce RTX 4090 24GB
Interconnect	—	—
TDP	200 W	450 W
FP32 Efficiency	0.15 TFLOPS/W	0.18 TFLOPS/W