

NVIDIA GeForce RTX 3060 12GB vs NVIDIA GeForce RTX 3090 24GB

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

OVERVIEW

	NVIDIA GeForce RTX 3060 12GB	NVIDIA GeForce RTX 3090 24GB
FP32 TFLOPS	12.7	35.6
VRAM	12 GB	24 GB
Memory Bandwidth	—	936 GB/s
TDP	170 W	350 W

PERFORMANCE BY PRECISION

Precision	NVIDIA GeForce RTX 3060 12GB peak TFLOPS (dense)	NVIDIA GeForce RTX 3090 24GB peak TFLOPS (dense)
FP64	0.2	0.6
FP32	12.7	35.6
TF32	12.7	35.6
BF16	25.5	71.0
FP16	25.5	71.0
FP8	—	—
FP6	—	—
FP4	—	—
INT8	101.9	284.0
INT4	203.8	568.0

SPECIFICATIONS

	NVIDIA GeForce RTX 3060 12GB	NVIDIA GeForce RTX 3090 24GB
Architecture	Ampere	Ampere
Process Node	8nm	8nm
Launch Year	2021	2020
Form Factor	PCIe	PCIe
Memory Type	GDDR6	—

	NVIDIA GeForce RTX 3060 12GB	NVIDIA GeForce RTX 3090 24GB
Interface Width	192-bit	—
Interconnect	—	—
TDP	170 W	350 W
FP32 Efficiency	0.07 TFLOPS/W	0.10 TFLOPS/W