



NVIDIA H100 SXM5 80GB vs NVIDIA A100 SXM4 80GB

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

OVERVIEW

	NVIDIA H100 SXM5 80GB	NVIDIA A100 SXM4 80GB
FP32 TFLOPS	67.0	19.5
VRAM	80 GB	80 GB
Memory Bandwidth	3.4 TB/s	2.0 TB/s
TDP	700 W	400 W

PERFORMANCE BY PRECISION

Precision	NVIDIA H100 SXM5 80GB peak TFLOPS (dense)	NVIDIA A100 SXM4 80GB peak TFLOPS (dense)
INT8	1979.0	624.0
INT4	—	1248.0
FP8	1979.0	—
FP16	990.0	312.0
BF16	990.0	312.0
TF32	494.0	156.0
FP32	67.0	19.5
FP64_TC Tensor Core	67.0	—
FP64	34.0	9.7

SPECIFICATIONS

	NVIDIA H100 SXM5 80GB	NVIDIA A100 SXM4 80GB
Architecture	Hopper	Ampere
Process Node	4nm	7nm
Launch Year	2022	2020
Form Factor	SXM	SXM

	NVIDIA H100 SXM5 80GB	NVIDIA A100 SXM4 80GB
Memory Type	—	—
Interface Width	—	—
Interconnect	—	—
TDP	700 W	400 W
FP32 Efficiency	0.10 TFLOPS/W	0.05 TFLOPS/W