

NVIDIA RTX 5000 ADA GENERATION

SPECIFICATIONS

Performance Highlights

Product	NVIDIA RTX 5000 Ada Generation
Architecture	NVIDIA Ada Lovelace Architecture
Foundry	TSMC
Process Size	4 nm NVIDIA Custom Process
Transistors	76.3 billion
Die Size	608.4 mm
CUDA Parallel Processing Cores	12,800
NVIDIA Tensor Cores	400
NVIDIA RT Cores	100
Single-Precision Performance ¹	65.3 TFLOPS
RT Core Performance ¹	151.0 TFLOPS
Tensor Performance ¹	1044.4 TFLOPS ²
GPU Memory	32 GB GDDR6 with ECC
Memory Interface	256-bit
Memory Bandwidth	576 GB/s
Max Power Consumption	250W
Graphics Bus	PCI Express 4.0 x16
Display Connectors	DP 1.4a (4) ³
Form Factor	4.4" H x 10.5" L x Dual Slot
Product Weight	1079.7 g
Thermal Solution	Blower Active Fan
vGPU Software Support ³	NVIDIA Virtual PC/Virtual Applications (vPC/vApps) NVIDIA RTX Virtual Workstation (vWS) ³
vGPU Profiles Supported	1 GB, 2 GB, 3 GB, 4 GB, 6 GB, 8 GB, 12 GB, 16 GB, 24 GB
NVIDIA 3D Vision® and 3D Vision Pro	Support via 3 pin mini DIN

Frame Lock	Compatible (with Quadro Sync II)
NVLink	Not Supported
Power Connector	1x 16-pin CEM5 PCIe
NVENC NVDEC	2x 2x (+AV1 Encode & Decode)

¹ Peak rates are based on GPU boost clock.

² Effective FP8 TFLOPS using the new sparsity feature.

³ Display ports are on by default for the RTX 5000 Ada Generation. Display ports are not active when using vGPU software. Virtualization support for the RTX 5000 Ada Generation will be available in an upcoming NVIDIA virtual GPU (vGPU) release, anticipated in Q3, 2023.

SUPPORTED PLATFORMS

- Microsoft Windows 11 (64-bit)
- Microsoft Windows 10 (64-bit)
- Red Hat Enterprise Linux 7.x
- SUSE Linux Enterprise Desktop 15.x
- OpenSuse 15
- Fedora 31
- Ubuntu 18.04
- FreeBSD 11.x
- Solaris 11