



NVIDIA QUADRO RTX 8000 THE POWER OF RTX IN THE DATA CENTER



QUADRO POWERED SERVERS

Bring the power of RTX to the data center with the NVIDIA Quadro RTX™ 8000, and Quadro Virtual Data Center Workstation (Quadro vDWS) software, built on the NVIDIA Turing™ architecture and the NVIDIA RTX™ platform for powerful server-based visual computing solutions. Equipped with 4,608 CUDA® cores, 576 Tensor Cores, 72 RT Cores, and 48 gigabytes (GB) of high-performance graphics memory, the NVIDIA Quadro RTX 8000 delivers the best performance and the largest graphics memory for the most demanding visual computing tasks. Accelerate multiple data center workloads including rendering, data science, virtual workstation, simulation, and augmented or virtual reality over 5G networks. Professionals can even serve multiple powerful virtual workstations with Quadro vDWS software. Support for NVIDIA NVLink® lets you scale performance, providing up to 96 GB² of combined GPU memory for the largest workloads.²

The RTX 8000 is optimized for reliability in enterprise data centers and built for 24/7 server environments. It features a passive thermal solution to fit into a variety of servers. Tackle the most graphics, compute, and GPU memory intensive workloads, such as batch rendering, data science, and simulation, or power scientific visualization, or provision powerful virtual workstations with Quadro vDWS software, all powered by NVIDIA RTX.

To learn more about the NVIDIA Quadro RTX 8000, visit
<https://www.nvidia.com/en-us/design-visualization/quadro-data-center/>



SPECIFICATIONS

GPU memory	48 GB GDDR6
Memory interface	384-bit
Memory Bandwidth	Up to 624 GB/s
Error-correcting code (ECC)	Yes
NVIDIA CUDA Cores	4,608
NVIDIA Tensor Cores	576
NVIDIA RT Cores	72
Single-Precision Performance	14.9 TFLOPS
Tensor Performance	119.4 TFLOPS
NVIDIA NVLink	Yes
NVIDIA NVLink bandwidth	100 GB/s
System Interface	PCI Express 3.0 x 16
Power Consumption	250 W
Thermal Solution	Passive
Form Factor	4.4" H x 10.5" L dual slot
Encode/decode engines	1x encode, 1x decode
Display connectors	None ³
NVIDIA Driver Requirement	R440 U2 and later
Graphics APIs	Shader Model 5.1, OpenGL 4.5, DirectX 12
Compute APIs	CUDA, DirectCompute, OpenCL™, OpenACC®

¹ NVIDIA NVLink sold separately.

² Connecting two RTX 8000 cards with NVLink to scale performance and memory capacity to 96 GB is only possible if your application supports NVLink technology. Please contact your application provider to confirm their support for NVLink.

³ An NVIDIA Quadro vDWS software license is required for graphics display support, including Windows WDDM.