



# NVIDIA RTX A4000

SLEEK DESIGN.  
POWERFUL PERFORMANCE.



## Amplified Performance for Professionals

The NVIDIA RTX™ A4000 is the most powerful single-slot GPU for professionals, delivering real-time ray tracing, AI-accelerated compute, and high-performance graphics to your desktop. Built on the NVIDIA Ampere architecture, the RTX A4000 combines 48 second-generation RT Cores, 192 third-generation Tensor Cores, and 6,144 CUDA® cores with 16 GB of graphics memory with error-correction code (ECC) so you can innovate with uncompromised computing accuracy and reliability. The RTX A4000 also features a power-efficient, single-slot PCIe form factor that fits into a wide range of workstation chassis, so you can do exceptional work without limits.

NVIDIA RTX professional graphics cards are certified with a broad range of professional applications, tested by leading independent software vendors (ISVs) and workstation manufacturers, and backed by a global team of support specialists. Get the peace of mind needed to focus on what matters with the premier visual computing solution for mission-critical business.

## Features

- > PCI Express Gen 4
- > Four DisplayPort 1.4a connectors
- > AV1 decode support
- > DisplayPort with audio
- > 3D stereo support with stereo connector
- > NVIDIA GPUDirect® for Video support
- > NVIDIA Quadro® Sync II compatibility
- > NVIDIA RTX Experience™
- > NVIDIA RTX Desktop Manager software
- > NVIDIA RTX IO support
- > HDCP 2.2 support
- > NVIDIA Mosaic<sup>2</sup> technology

To learn more about the NVIDIA RTX A4000, visit [www.nvidia.com/rtx-a4000/](http://www.nvidia.com/rtx-a4000/)

<sup>1</sup> Quadro Sync II card sold separately. | <sup>2</sup> Windows 10 and Linux. | <sup>3</sup> Peak rates based on GPU Boost Clock. | <sup>4</sup> Effective teraFLOPS (TFLOPS) using the new sparsity feature. | <sup>5</sup> GPU supports DX 12.0 API, hardware feature level 12 + 1. | <sup>6</sup> Product is based on a published Khronos specification and is expected to pass the Khronos conformance testing process when available. Current conformance status can be found at [www.khronos.org/conformance](http://www.khronos.org/conformance)

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## SPECIFICATIONS

GPU memory	16 GB GDDR6
Memory interface	256-bit
Memory bandwidth	448 GB/s
Error-correcting code (ECC)	Yes
NVIDIA Ampere architecture-based CUDA Cores	6,144
NVIDIA third-generation Tensor Cores	192
NVIDIA second-generation RT Cores	48
Single-precision performance	19.2 TFLOPS <sup>3</sup>
RT Core performance	37.4 TFLOPS <sup>3</sup>
Tensor performance	153.4 TFLOPS <sup>4</sup>
System interface	PCI Express 4.0 x16
Power consumption	Total board power: 140 W
Thermal solution	Active
Form factor	4.4" H x 9.5" L, single slot
Display connectors	4x DisplayPort 1.4a
Max simultaneous displays	4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz, 2x 7680 x 4320 @ 60 Hz
Power connector	1x 6-pin PCIe
Encode/decode engines	1x encode, 1x decode (+AV1 decode)
VR ready	Yes
Graphics APIs	DirectX 12.07 <sup>5</sup> , Shader Model 5.17 <sup>5</sup> , OpenGL 4.68 <sup>6</sup> , Vulkan 1.2 <sup>6</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™