



# 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 16GB 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<sup>1</sup> compatibility
- > NVIDIA RTX Experience™
- > NVIDIA RTX Desktop Manager software
- > NVIDIA RTX IO support
- > HDCP 2.2 support
- > NVIDIA Mosaic<sup>2</sup> technology

1 Quadro Sync II card sold separately. | 2 Windows 10, Windows 11, and Linux. | 3 Peak rates based on GPU Boost Clock. | 4 Effective teraFLOPS (TFLOPS) using the new sparsity feature. | 5 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)

## SPECIFICATIONS

GPU memory	<b>16GB GDDR6</b>
Memory interface	<b>256-bit</b>
Memory bandwidth	<b>448 GB/s</b>
Error-correcting code (ECC)	<b>Yes</b>
NVIDIA Ampere architecture-based CUDA Cores	<b>6,144</b>
NVIDIA third-generation Tensor Cores	<b>192</b>
NVIDIA second-generation RT Cores	<b>48</b>
Single-precision performance	<b>19.2 TFLOPS<sup>3</sup></b>
RT Core performance	<b>37.4 TFLOPS<sup>3</sup></b>
Tensor performance	<b>153.4 TFLOPS<sup>4</sup></b>
System interface	<b>PCIe 4.0 x16</b>
Power consumption	<b>Total board power: 140 W</b>
Thermal solution	<b>Active</b>
Form factor	<b>4.4" H x 9.5" L, single slot</b>
Display connectors	<b>4x DisplayPort 1.4a</b>
Max simultaneous displays	<b>4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz, 2x 7680 x 4320 @ 60 Hz</b>
Power connector	<b>1x 6-pin PCIe</b>
Encode/decode engines	<b>1x encode, 1x decode (+AV1 decode)</b>
VR ready	<b>Yes</b>
Graphics APIs	<b>DirectX 12 Ultimate, Shader Model 6.6, OpenGL 4.6<sup>5</sup>, Vulkan 1.3<sup>5</sup></b>
Compute APIs	<b>CUDA 11.6, DirectCompute, OpenCL 3.0</b>

[Learn more](#)

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

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