NVIDIA RTX A5000
PERFECTLY BALANCED.
BLAZING PERFORMANCE.

Amplified Performance for Professionals

The NVIDIA RTX™ A5000 delivers the power, performance, capabilities, and reliability professionals need to bring their boldest ideas to life. Built on the NVIDIA Ampere architecture, the RTX A5000 combines 64 second-generation RT Cores, 256 third-generation Tensor Cores, and 8,192 CUDA® cores with 24 GB of graphics memory to supercharge rendering, AI, graphics, and compute tasks. Connect two RTX A5000s with NVIDIA NVLink[1] to scale memory and performance with multi-GPU configurations[2], allowing professionals to work with memory intensive tasks such as large models, ultra-high resolution rendering, and complex compute workloads. Support for NVIDIA virtual GPU software increases the versatility for enterprise deployments.

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 virtual GPU (vGPU) software support
> NVIDIA Quadro® Sync II[3] compatibility
> NVIDIA RTX Experience™
> NVIDIA RTX Desktop Manager software
> NVIDIA RTX IO support
> HDCP 2.2 support
> NVIDIA Mosaic[4] technology

To learn more about the NVIDIA RTX A5000, visit **www.nvidia.com/rtx-a5000/**

SPECIFICATIONS

GPU memory	**24 GB GDDR6**
Memory interface	**384-bit**
Memory bandwidth	**768 GB/s**
Error-correcting code (ECC)	**Yes**
NVIDIA Ampere architecture-based CUDA Cores	**8,192**
NVIDIA third-generation Tensor Cores	**256**
NVIDIA second-generation RT Cores	**64**
Single-precision performance	**27.8 TFLOPS[5]**
RT Core performance	**54.2 TFLOPS[5]**
Tensor performance	**222.2 TFLOPS[6]**
NVIDIA NVLink	**Low profile bridges connect two NVIDIA RTX A5000 GPUs[1]**
NVIDIA NVLink bandwidth	**112.5 GB/s (bidirectional)**
System interface	**PCI Express 4.0 x16**
Power consumption	**Total board power: 230 W**
Thermal solution	**Active**
Form factor	**4.4" H x 10.5" L, dual slot, full height**
Display connectors	**4x DisplayPort 1.4a[7]**
Max simultaneous displays	**4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz, 2x 7680 x 4320 @ 60 Hz**
Power connector	**1x 8-pin PCIe**
Encode/decode engines	**1x encode, 2x decode (+AV1 decode)**
VR ready	**Yes**
vGPU software support[7]	**NVIDIA vPC/vApps, NVIDIA RTX Virtual Workstation, NVIDIA Virtual Compute Server**
vGPU profiles supported	**See the Virtual GPU Licensing Guide**
Graphics APIs	**DirectX 12.07[8], Shader Model 5.17[8], OpenGL 4.68[9], Vulkan 1.2[9]**
Compute APIs	**CUDA, DirectCompute, OpenCL™**