

# UNMATCHED POWER. UNMATCHED CREATIVE FREEDOM.

## NVIDIA QUADRO RTX 8000

### THE WORLD'S MOST POWERFUL RAY TRACING GPU

NVIDIA® QUADRO RTX™ 8000, POWERED BY THE NVIDIA TURING™ ARCHITECTURE AND THE NVIDIA RTX™ PLATFORM, COMBINES UNPARALLELED PERFORMANCE AND MEMORY CAPACITY TO DELIVER THE WORLD'S MOST POWERFUL GRAPHICS CARD SOLUTION FOR PROFESSIONAL WORKFLOWS. DESIGNERS AND ARTISTS CAN NOW WIELD THE POWER OF HARDWARE-ACCELERATED RAY TRACING, DEEP LEARNING, AND ADVANCED SHADING TO DRAMATICALLY BOOST PRODUCTIVITY AND CREATE AMAZING CONTENT FASTER THAN EVER BEFORE.

THE QUADRO RTX 8000 FEATURES 72 RT CORES FOR REAL-TIME RAY TRACING AND 576 TENSOR CORES FOR AI ENHANCED WORKFLOWS, RESULTING IN OVER 130 TFLOPS OF DEEP LEARNING PERFORMANCE. WITH 48 GB OF GDDR6 MEMORY, SCALABLE TO 96 GB WITH NVIDIA NVLINK™ TECHNOLOGY, THE QUADRO RTX 8000 IS DESIGNED TO WORK WITH THE MOST MEMORY INTENSIVE WORKLOADS LIKE CREATING THE MOST COMPLEX MODELS, BUILDING MASSIVE ARCHITECTURAL DATASETS, VISUALIZING IMMENSE DATA SCIENCE WORKLOADS, WORKING WITH 8K MOVIE CONTENT IN REAL TIME, AND SPEEDING UP HIGH RESOLUTION FINAL FRAME RENDERING. VIRTUALLINK® PROVIDES CONNECTIVITY TO NEXT-GENERATION, HIGH-RESOLUTION VR HMDS TO LET YOU VIEW YOUR WORK IN THE MOST COMPELLING VIRTUAL ENVIRONMENTS. THE NVIDIA QUADRO RTX 8000 REDEFINES WHAT'S POSSIBLE.

### SPECIFICATIONS AND SOLUTIONS

#### Optimised for Exacta Proline Workstations NVIDIA Quadro RTX8000

CUDA Cores	4608
NVIDIA RT Cores	72
NVIDIA Tensor Cores	576
GPU Memory	48 GB GDDR6 with ECC
RTX-OPS	84T
Rays Cast	10 Giga Rays/Sec
Peak Single Precision FP32 Performance Peak Half Precision	16.3 TFLOPS FP16 Performance 32.6 TFLOPS 206.1 TOPS
Peak INT8 Performance	130.5 Tensor TFLOPS
Deep Learning TFLOPS 1	NVLink
Multi-GPU Scalability	
NVLink Bandwidth	100 GB/Sec
Memory Bandwidth	672 GB/s
System Interface	PCI Express 3.0 x16
Maximum Power Consumption	295 W
Quadro Power Guidelines	
Energy Star Enabling	Yes
Thermal Solution	Ultra-quiet active fansink
Form Factor	4.4" H x 10.5" L, Dual Slot, Full Height 1.4 (4) + VirtualLink
Display Connectors	DisplayPort
DVI-D Single-Link Connector	Yes, via included adapter
HDMI Support	Yes, via included adapter
Number of Displays Supported	4
Maximum DP 1.4 Resolution	HDR 7680 x 4320 at 60 Hz
Quadro and NVS Display Resolution Support	
5K Display Support	HDR 5120 x 2880 at 60 Hz
4K Display Support	HDR 4096 x 2160 or 3840 x 2160 at 120 Hz
Maximum DVI-D DL Resolution	Maximum DVI-D 2560 x 1600 at 60 Hz via 3rd party adapter
SL Resolution	1920 x 1200 at 60 Hz via included adapter
HDCP Support	Yes
Professional 3D Support	Via optional Stereo Connector Bracket
Quadro Sync II Compatible	Yes (Frame Lock and Genlock)
NVIDIA GPU Direct Compatible	Yes
NVIDIA GPU Direct for Video Compatible Graph APIs	Yes
Compute APIs	Shader Model 5.1, OpenGL 4.5, DirectX 12.0, Vulkan 1.0
NVIEW	CUDA, DirectCompute, OpenCL
NVIDIA MOSAIC	Yes
Warranty	3 Year

