

NVIDIA® RTX™ SERVER

FEATURING QUADRO RTX HIGH-PERFORMANCE AND FLEXIBLE RENDERING IN THE DATA CENTER

NVIDIA® RTX™ Server is a highly configurable reference design that provides the power needed to boost rendering performance on the desktop, accelerate offline rendering, and provision high-performance virtual workstations and virtual compute servers, all in a single, flexible solution.



**Highly configurable
server**

**Accelerated desktop
rendering**

**Virtual workstations
and compute server**

Learn more at
altair.com/rackmount

Altair Helps Boost Your GPUs in Engineering

To help engineers gain deeper insights into their designs, Altair offers Altair AcuSolve™ and Altair Thea Render that provide enhanced support for NVIDIA GPUs, which produce incredible performance and speedups.

In addition to GPU support, Altair offers NVIDIA RTX Server validation of Altair ultraFluidX™, an aerodynamics computational fluid dynamics (CFD) software, and Altair nanoFluidX™, a particle-based CFD software. As a powerful reference design, RTX Server

allows engineers to use high performance computing for simulating physics and iterating designs — all with GPU-accelerated rendering and computer-aided engineering (CAE) simulation computing times.

With RTX Server powering ultraFluidX and nanoFluidX, users can design new models faster and more efficiently during the day on NVIDIA Quadro virtual workstations and then complete large-scale CFD simulations overnight instead of taking days to compute the data.

NVIDIA RTX SERVER BY ALTAIR IN COLLABORATION WITH PNY WITH QUADRO RTX6000/RTX8000

Validated for Altair ultraFluidX™ and Altair nanoFluidX™



Best Suited for HPC, Rendering and Virtualization Workloads

Product Number	NVIDIA Card	Max. Cards	Compute Power	Compute Performance	PNY Professional Services
PNYRTX488RTX8K-102F	Quadro RTX8000 48GB GDDR6	8	CUDA Cores: 4608 TMUs: 288 SM Count: 72 Tensor Cores: 576	FP32: 16.3 TFLOPS FP16: 32.62 TFLOPS INT8: 261 TOPS RT Cores/RTX-OPS: 72/84 Trillion	Optional for 1/3/5-year NBD SLA (service plan includes: Advanced RMA, On-Site Maintenance and Remote Technical Support)
PNYRTX488RTX6K-102F	Quadro RTX6000 24GB GDDR6	8			

FEATURES

- Hot-Swap Redundant PSU's & System Fans
- Onboard SATA RAID 0/1/5/10 (Intel RSTe)
- PLX PCIe Switch Topology
- AMI MegaRAC™ SP-X SoC for IPMI:
 - User-friendly Graphics User Interface
 - Users management
 - Services settings & Sessions control
 - LDAP settings
 - Power control & voltages, fans and temperatures monitoring
 - Events management (platform events, trap settings, email settings)
 - Serial Over LAN
 - vKVM & vMedia (launch, configuration)

SPECIFICATIONS

- **Form Factor & Dimensions:** 4U, 770 x 438 x 176 (D x W x H, mm)
- **CPU:** 2 x Intel® Xeon® Scalable Skylake Gold 6126 processors (2.6-3.7GHz; 12 Cores, 24 threads per CPU)
- **Socket & Chipset:** 2 x LGA 3647, Intel® C621
- **System Memory:** 12x32GB Samsung 2666MHz DDR4 ECC RDIMM
- **Storage:** 1 x Intel 240GB SATA3 2.5" SSD + 1 x Intel 1.92GB SATA3 SSD (expansion up to 14 drives in total supported)
- **Network Controllers:** 2 x 10GbE LAN ports (Intel® X550-AT2) + 1 x GbE LAN port dedicated for IPMI (Realtek® RTL8211E)
- **Expansion Slots:** 1 x PCIe Gen3 x16 slot + 2 x PCIe Gen3 x8
- proprietary mezzanine slots (for storage controller, NIC)
- **Front/Back I/Os:** 2 x USB 3.0, 1 x VGA, 1 x Serial, 3 x RJ45
- **System Cooling:** 5+1 x hot-swappable 12cm system fans
- **Power Supply:** 2+1 x 1600W redundant PSU (80 PLUS Platinum)

