Smarter creates the future

ThinkStation P620

AEC Solution Brief

Meet the ThinkStation P620
Redefining power, reliability, and speed for BIM

The Lenovo ThinkStation P620 sets a new performance benchmark; helping you better adopt emerging workflows and technologies for the built environment.

New design technologies continue to evolve for the built environment that extend what's possible with BIM. Emerging BIM workflows now adopt digital fabrication, real time visualization, artificial intelligence, robotics, generative design, VR, reality modelling, IoT and digital twins. These new workflows place even greater demand on workstation hardware.

As project size and complexity continue to evolve, power users need a solution that keeps pace with these scaling workloads. Designed specifically to provide fast, reliable processing power, the ThinkStation P620 not only meets but exceeds the requirements of these complex workflows. The P620 delivers game-changing performance, powered by AMD Ryzen Threadripper PRO processors with up to 64 cores and 4.5GHz, a new industry standard - redefining what can be accomplished with a single-CPU workstation.

AMD
THREADRIPPER
PRO

Lenovo

Architecture, Engineering, and Construction
P620 configurations for AEC workflows

Lenovo

Architects, Designers & Engineers

Workflow: High-performance BIM design and engineering

Description: Featuring the unique combination of high clock speeds with huge memory capacity and flexible graphics. NVIDIA RTX enables enhanced collaboration and product evaluation with immersive VR design reviews. The P620 is a powerful workstation for architects, designers, engineers, and visualization specialists who need maximum performance from every aspect of their BIM workflow.

Workflow: Reality Capture

Description: Lidar, point cloud scanning, photogrammetry processing, and visualization require a combination of multi-core solving and powerful graphics. Applications like Autodesk ReCap, Bentley ContextCapture, Faro SCENE and Leica Cyclone will benefit from the ThinkStation P620 next generation architecture and powerful configuration options.

Recommended configuration for BIM workflows:

CPU: Threadripper PRO (12 cores @ 4.5GHz)
GPU: NVIDIA RTX A4000 or A5000
Memory: 64GB, 3200MHz, ECC
SSD: 1TB M.2, NVMe

Visualization Specialists

Workflow: Rendering and visualization

Description: Create complex photorealistic renderings, animations, and VR experiences with applications like Twinmotion, 3ds Max, V-Ray, Unreal Engine, and Unity. For CPU-driven workloads, choose between 32 and 64-core Threadripper PRO processors for maximum performance. For workflows that require both GPU and CPU performance, the ThinkStation P620 offers 12, 16 and 24 core Threadripper PRO processors with up to two NVIDIA RTX A6000 professional GPUs for outstanding performance.

Recommended configuration for ProVis, VR, MR and AI workflows:

CPU: Threadripper PRO (32 or 64 cores)
GPU: NVIDIA RTX A6000
Memory: 128GB, 3200MHz, ECC
SSD: 2TB M.2, NVMe SSD (cache/scratch)

Performance Gains for ISV applications include:

NEMETSCHEK GROUP · 3ds Max · FARO · Leica · unity

Bentley Sustaining Infrastructure · Maya · V·ray · Rhino · UNREAL ENGINE · Trimble

Transforming what is possible in a single-CPU workstation

From complex BIM, to generative design, reality capture, geospatial analysis, digital fabrication, and visualization the ThinkStation P620 enables high performance for emerging workflows and technologies for the built environment.

Max cores for one processor

First to harness the unique power of the AMD Ryzen Threadripper PRO processor, providing up to 64 cores and up to 4.5GHz clock speed.

Fastest possible data I/O

First with PCIe Gen 4 support and up to 128 PCIe lanes. Up to 512GB ECC RAM over 8 channels and up to 20TB of storage.

Fast on-board connectivity

First to offer you 10Gb Ethernet as standard—for fast on-board connectivity without using a PCIe slot.
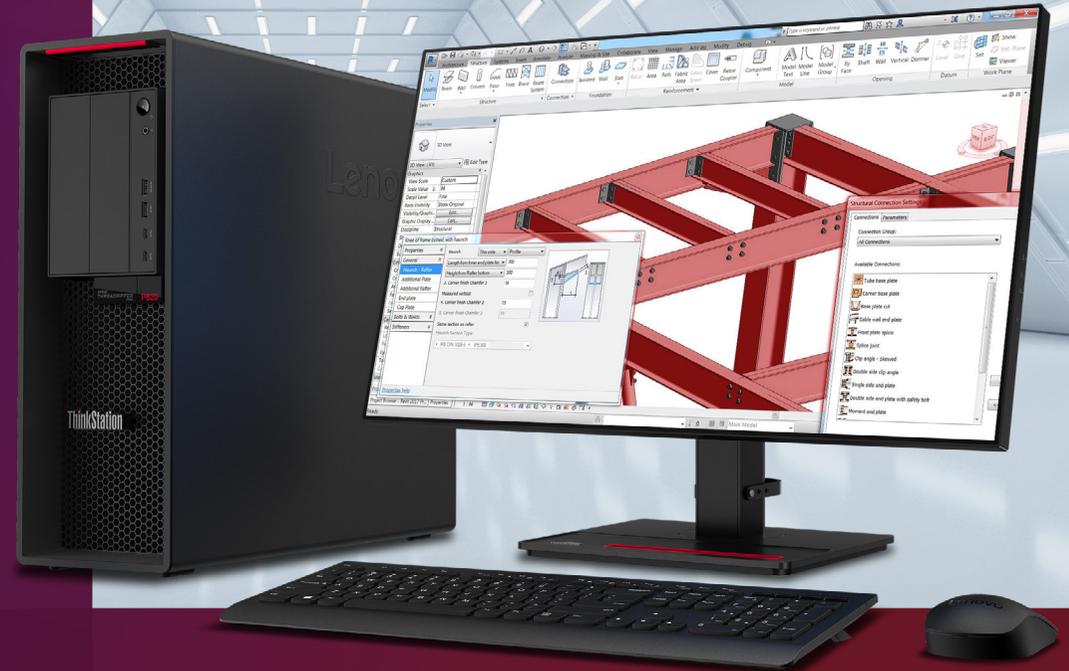
Stunning NVIDIA® graphics

Powering the highest end graphics from NVIDIA, including support for dual RTX 8000 or the A6000 GPUs, as well as support for up to four RTX 4000 GPUs.

Stunning Visuals
Pair the ThinkStation P620 with dual P32p-20 or P27q-20 displays for optimal productivity and user experience, featuring QHD resolution, daisy-chain connectivity, and factory color calibration, our professional displays enable a great out-of-the-box experience with simplified set up and deployment.

Limitless Possibilities
Powered by NVIDIA's latest and most powerful workstation GPU, RTX A6000, the P620 offers high-performance real-time ray tracing, AI-accelerated computing, and professional graphics rendering; allowing you to get much more done, much faster.

AMD THREADRIPPER PRO

NVIDIA.

For more information on the ThinkStation P620, please visit: www.Lenovo.com/thinkstationP620