

**More Power
More Performance
More Productivity**

Lenovo™ ThinkStation® P Series and ThinkPad® P Series



ThinkStation | ThinkPad



Why Lenovo

Lenovo focuses on power, performance and reliability in every machine we design; both ThinkStation and ThinkPad. By combining the absolute top-of-the-line components with groundbreaking designs, we are able to push our systems harder and have raw power necessary to handle the most demanding workloads. Absolutely key for a top performing workstation is the ability to keep it's components cool. This is where our innovative Tri-Channel cooling in our towers and FLEX Performance cooling in our notebooks comes to fruition. These revolutionary designs allow CPUs and GPUs to run at peak performance until the job is done while simultaneously keeping the components cool which makes for long lasting and reliable machine.

Lenovo Workstation Design Philosophy

Architects, product and software designers, financial traders, medical professionals and engineers – all need high performing, easy-to-use, reliable power to get the job done. Lenovo workstations deliver the highest levels of performance, ease of use and reliability. Lenovo ThinkStation P Series are designed from the ground up for reliability and ease of use. With our ingenious modular design, making upgrades and customizations is effortless and supports a staggering number of possible configurations. The combination our ground-breaking design with the latest Intel® Xeon® CPUs and NVIDIA® Quadro® GPUs delivers to our customers the absolute best possible user experience to turn ideas in to reality.

The Lenovo ThinkStation P Series are the best designed workstations ever. The ThinkPad P Series are mobile workstations that grant freedom from the desk while keeping productivity high. Designed for unmatched usability, superior reliability and unparalleled performance. The ThinkPad P Series offers the full range of mobile workstations from the thin-and-light mobile workstation meant for users constantly on-the-go to the mighty and powerful 17-inch P71. They are certified to run mission-critical ISV applications and are MIL-SPEC tested for durability to last.

Perfect for:

- Engineers • Financial Professionals • Game Designers • Healthcare and Life Sciences • Animators • Energy and Oil & Gas



Powerful Intel® Xeon® Processors

Lenovo workstations combine the latest high-performance Intel® Xeon® processors, featuring unmatched performance and multicore processing efficiency. Like all Think-branded products, our Lenovo workstation computers boast innovation and design excellence, while delivering quiet, reliable, and powerful solutions for your work environment. The Lenovo workstation's powerful Intel® Xeon® CPUs offer:

- 24/7 uninterrupted performance
- ISV certifications for maximum reliability and performance
- Intel® Dynamic Power Management, offering better performance per watt
- Intel® Turbo Boost Max Technology 2.0, delivering extra power when you need it
- Advanced Intel® Virtualization Technology



Performance Graphics

Lenovo workstations deliver powerful graphics needed for professional applications—from 2D and 3D content creators, to users of CAD and EDA applications, to finance and medical professionals. Powered by NVIDIA® Quadro® and NVS graphics, each workstation is built to maximize your productivity so you can do more in less time. Professional graphics cards also offer longer life cycles and much more reliability than their consumer counterparts and come with certified and optimized drivers from leading software vendors for a truly enhanced experience.



Think Innovation

Lenovo workstations provide an innovative answer for challenges such as thermal management, higher levels of component support and an intuitive design.

All Lenovo workstations offer unique thermal designs engineered for maximum cool air delivery to key components, reducing the risk of hardware failure. Lenovo workstations are also whisper-quiet. The new intuitive and tool-less design makes performing upgrades easier than ever.



ISV Certified



Every workstation is ISV (Independent Software Vendor) tested and certified to ensure maximum compatibility and performance. Certification means that should you ever require support on the specialized applications you use every day, the ISVs will be ready to help. Only a certified workstation-class product is eligible for this level of support.

Workstation Product Comparisons



ThinkStation P320 Tiny



ThinkStation P320 (TWR & SFF)



ThinkStation P520c



ThinkStation P520



ThinkStation P720



ThinkStation P920

Purpose

STEM Education
Architecture
Product Design
Finance
Control Room Video Surveillance
Healthcare
Factory Automation

Entry CAD/DCC
Autodesk® AutoCAD®
Autodesk® Revit®
Adobe® Photoshop®
Adobe® Illustrator®
SOLIDWORKS®
Medical EMR/HER

Engineering Design Automation
SOLIDWORKS®
Dassault Systèmes CATIA®
Adobe®
AVEVA™
Autodesk® Inventor®
Autodesk® 3ds Max®
Autodesk® Maya®

Engineering Design Automation
SOLIDWORKS®
Dassault Systèmes CATIA®
Autodesk® 3ds Max®
Autodesk® Revit , Inventor®
Autodesk® Maya®
PTC® Creo®
Avid®

Financial Trading Floors
Dassault Systèmes CATIA®
Siemens NX™
ANSYS®
Monte Carlo Analysis
Black Scholes Modeling

Oil & Gas Exploration
High-end CAD/CAM/CAE
Autodesk® Maya®
Landmark GeoProbe®
Schlumberger Petrel®
Paradigm™
ANSYS®

CPU

7th Generation Intel® Core™ i3, i5, i7

Up to 1x Intel® Xeon® E3-1200 v6
7th Generation Intel® Core™ i3, i5, i7

Intel® Xeon® W Series Processor
(Up to 18 cores, Up to 4.5GHz)

Intel® Xeon® W Series Processor
(Up to 18 cores, Up to 4.5GHz)

Dual Intel® Xeon® Platinum, Gold Silver and Bronze (up to 28 cores, up to 3.6GHz per CPU)

Dual Intel® Xeon® Platinum, Gold Silver and Bronze (up to 28 cores, up to 3.6GHz per CPU)

Chipset

Intel® Q270

Intel® C236

Intel® C422

Intel® C422

Intel® C621

Intel® C621

Memory Support

Up to 32GB DDR4 2400MHz SoDIMM Memory

Up to 64GB DDR4. 4 DIMM Slots
ECC memory supported

Up to 128GB DDR4
4 DIMM Slots

Up to 256GB DDR4
8 DIMM Slots

Up to 384GB RDIMM 2666MHz
DDR4, 12 DIMM Slots

Up to 2TB DDR4, 2666MHz,
16 DIMM Slots (Supports RDIMM)

Optical Types Supported

DVD-ROM
DVD-RW

DVD-ROM
DVD-RW
Blu-ray Disc™ Burner

DVD-ROM
DVD-RW
Blu-ray Disc™ Burner

DVD-ROM
DVD-RW
Blu-ray Disc™ Burner

DVD-ROM
DVD-RW
Blu-ray Disc™ Burner

DVD-ROM
DVD-RW
Blu-ray Disc™ Burner

Maximum Storage Drives

2

2

6

8

12

12

Max Storage²

Dual M.2 NVMe SSD (1TB)

SFF TWR
Max M.2 = 2 (2 TB)¹ Max M.2 = 2 (2 TB)¹
Max 3.5" = 2 (8 TB)¹ Max 3.5" = 4 (16 TB)¹
Max 2.5" = 3 (6 TB)¹ Max 2.5" = 4 (8 TB)¹

Max M.2 = 2 (2 TB)
Max 3.5" = 4 (16 TB)
Max 2.5" = 4 (8 TB)

Max M.2 = 2 (2 TB)
Max 3.5" = 6 (36 TB)
Max 2.5" = 6 (12 TB)

Max M.2 = 2 (2 TB)¹
Max 3.5" = 6 (60 TB)¹
Max 2.5" = 10 (20 TB)¹

Max M.2 = 2 (2 TB)¹
Max 3.5" = 6 (60 TB)¹
Max 2.5" = 10 (20 TB)¹

Power Supply

135W (external)
210W 85% / 92% Efficient
250W 85% Efficient - Tower Only
400W 92% Efficient - Tower Only

210W 85% / 92% Efficient
250W 85% Efficient - Tower Only
400W 92% Efficient - Tower Only

500W / 92% Efficient

690W / 92% Efficient
900W / 92% Efficient

690W / 92% Efficient
900W / 92% Efficient

1400W / 92% Efficient

Graphics Cards

(Support for select previous generation NVIDIA® Quadro® GPUs available)

Intel® Integrated HD
NVIDIA® Quadro® P600

Intel® Integrated HD
NVIDIA® Quadro® NVS 310
NVIDIA® Quadro® NVS 315
NVIDIA® Quadro® NVS 510
NVIDIA® Quadro® NVS 810*
NVIDIA® Quadro® P400
NVIDIA® Quadro® P600
NVIDIA® Quadro® P1000
NVIDIA® Quadro® P2000
NVIDIA® Quadro® P2000*
NVIDIA® Quadro® P4000*
*Tower only

NVIDIA® Quadro® NVS 310
NVIDIA® Quadro® NVS 315
NVIDIA® Quadro® NVS 510
NVIDIA® Quadro® NVS 810
NVIDIA® Quadro® P400
NVIDIA® Quadro® P600
NVIDIA® Quadro® P1000
NVIDIA® Quadro® P2000
NVIDIA® Quadro® P4000
NVIDIA® Quadro® P5000

NVIDIA® Quadro® NVS 310
NVIDIA® Quadro® NVS 315
NVIDIA® Quadro® NVS 510
NVIDIA® Quadro® NVS 810
NVIDIA® Quadro® P400
NVIDIA® Quadro® P600
NVIDIA® Quadro® P1000
NVIDIA® Quadro® P2000
NVIDIA® Quadro® P4000
NVIDIA® Quadro® P5000
NVIDIA® Quadro® P6000

NVIDIA® Quadro® NVS 310
NVIDIA® Quadro® NVS 315
NVIDIA® Quadro® NVS 510
NVIDIA® Quadro® NVS 810
NVIDIA® Quadro® P400
NVIDIA® Quadro® P600
NVIDIA® Quadro® P1000
NVIDIA® Quadro® P2000
NVIDIA® Quadro® P4000
NVIDIA® Quadro® P5000
NVIDIA® Quadro® P6000
NVIDIA® Quadro® GP100
NVIDIA® Tesla® M60

NVIDIA® Quadro® NVS 310
NVIDIA® Quadro® NVS 315
NVIDIA® Quadro® NVS 510
NVIDIA® Quadro® NVS 810
NVIDIA® Quadro® P400
NVIDIA® Quadro® P600
NVIDIA® Quadro® P1000
NVIDIA® Quadro® P2000
NVIDIA® Quadro® P4000
NVIDIA® Quadro® P5000
NVIDIA® Quadro® P6000
NVIDIA® Quadro® GP100
NVIDIA® Tesla® M60



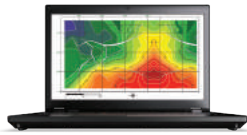
Find out how Lenovo Workstations can help you do more. Contact your authorized Lenovo reseller or visit www.lenovo.com/workstation

¹ Any combination of storage to equal Maximum Storage Drives.

² Additional M.2 or Add-In-Card PCIe SSD drives can be installed via rear PCIe adapters

³ Special Bid Only.

Workstation Product Comparisons



ThinkPad P71



ThinkPad P52



ThinkPad P52s

Purpose	Oil & Gas Exploration High-end CAD/CAM/DCC Adobe® Autodesk® 3ds Max Dassault Systèmes CATIA® Siemens® NX Halliburton™ Paradigm™ Schlumberger™	Mid-range CAD / DCC Adobe® Autodesk® Revit, Inventor Dassault Systèmes CATIA® PTC® Creo® Siemens® NX SOLIDWORKS® VR Ready ²	SOLIDWORKS® Dassault Systèmes CATIA® PTC® Creo® Adobe® Autodesk® 3ds Max® Autodesk® Inventor®
CPU Support	6 th Generation Intel® Xeon® E3-1500M (4-core) 7 th Generation Intel® Core™ (4-core)	8 th Generation Intel® Xeon® E-2100M (6-core) 8 th Generation Intel® Core™ (6-core)	8 th Generation Intel® Core™ (4-core)
Chipset	CM238	CM246	Integrated on SoC
Memory Support	4 SODIMM, 64GB Max, 2400MHz	4 SODIMM, 128GB Max, 2400MHz	2 SODIMM , 32 GB Max. 2400MHz
Total Storage	Max 4 drives Max HDD = 1TB (2TB) Max PCIe SSD = 1 TB (2TB)	Max 3 drives Max HDD = 2TB (5400RPM) Max NVMe SSD = 4TB	Max 1 drive Max HDD = 2TB (5400RPM) Max NVMe SSD = 1TB
Battery (WHr)	8 Cell (96 WHr)	6 Cell (90WHr)	4 Cell (32 WHr) Front + Up to 6 Cell (72 WHr) Rear
Supported Graphics Cards	NVIDIA® Quadro® M620 NVIDIA® Quadro® P3000 NVIDIA® Quadro® P4000 NVIDIA® Quadro® P5000	NVIDIA® Quadro® P1000 NVIDIA® Quadro® P2000 NVIDIA® Quadro® P3200	NVIDIA® Quadro® P500
Display	17" FHD (1920 x 1080) IPS, 300 nits, 72% color gamut 4K UHD (3840 x 2160) IPS, 300nits, 100% Adobe color gamut	15.6" FHD (1920 x 1080) IPS, 300nits, 72% color gamut 4K UHD Touch (3840 x 2160) IPS, 400 nits, 100% Adobe color gamut, 10-bit color depth	15.6" FHD (1920 x 1080) IPS, 250 nits, 45% color gamut FHD Touch (1920 x 1080) IPS, 250 nits, 45% color gamut 4K UHD (3840 x 2160) IPS, 300 nits, 72% color gamut
Weight	Starting at 7.6 lbs (3.4 kg)	Starting at 5.4lbs (2.45Kg)	Starting at 4.3 lbs (1.95 kg)

¹ Any combination of storage to equal Maximum Storage Drives.

² VR Ready only available for NVIDIA® Quadro® P3200