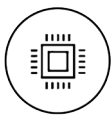# Power of a workstation

Price of a desktop

Mission-critical tasks require superior reliability and powerful performance. ThinkStation® P320 leads on both counts and does it with exceptional all-around value. Consider the latest high-performance Intel® Core® i and Xeon® processors, NVIDIA® Quadro® professional graphics, with VR Ready capability, cutting-edge storage technologies, including M.2, and innovative Flex module support for easy customization.

WHY YOU SHOULD BUY THE LENOVO™ THINKSTATION® P320 WORKSTATION

Fast and Reliable
The fastest Intel® processors offer blazing speeds of up to 4.2GHz, for unparalleled performance.

Exceptional value
Truly affordable for any organization requiring a comfortable combination of performance and value.

Make virtual a reality
The latest NVIDIA® Quadro® professional graphics helps bring virtual reality to entry-level workstation.

Environment friendly
Lenovo™ is the only workstation vendor that has been certified with GreenGuard® certification.

THE LENOVO™ THINKSTATION® P320 WORKSTATION IS BEST SUITED FOR

1 Companies ready to upgrade from PCs to more powerful workstations without breaking the budget.

2 Any organization requiring reliable performance – manufacturing, design, architecture, finance, medical imaging, software development etc.

3 Users in mission-critical environments, working on 2D and entry level 3D workflows as well as VR content

WHAT'S IN A THINKSTATION®

1 Superior thermal design

2 Diagnostics and self-monitoring

3 Flex configuration for ultimate customization

4 Modular design for easy upgradability

5 Wide range of ISV certifications

SPECIFICATIONS

PERFORMANCE

Processor[1]
Tower / SFF
Intel® Xeon® E3-1200 v6 Processor
7th Gen Intel® Core™ i7 Processor
7th Gen Intel® Core™ i5 Processor
7th Gen Intel® Core™ i3 Processor

Operating System
Windows 10 Pro 64-bit[2]
Windows 7 Pro 64-bit[3]
Ubuntu and RHEL Linux support

Graphics
SFF : NVIDIA® NVS™/ Quadro® Up to 2 x P1000
Tower : NVIDIA® NVS™/ Quadro® Up to P4000[4]

Memory
Up to 64GB 2400MHz ECC UDIMM DDR4,
4 slots

Storage
3.5" SATA 7200 rpm up to 4TB
3.5" SATA 7200 rpm Hybrid up to 2TB
2.5" SATA SSD up to 2TB
M.2 PCIe SSD up to 1TB

Tower :
Max M.2 = 2 (2TB)[5]
Max 3.5" = 4 (16TB)[5]
Max 2.5" = 4 (8TB)[5]

SFF :
Max M.2 = 2 (2TB)[5]
Max 3.5" = 2 (8TB)[5]
Max 2.5" = 3 (6TB)[5]

Power Supply
210W 85% Efficient
250W 85%[6] Efficient
400W 92%[6] Efficient

RAID
0, 1, 5, 10[6]

Flex Module
Choose up to 4 modules:
Intel® Thunderbolt™ 3 (Type- C)
9.0 mm Slim ODD
Media Card Reader
1394 IEEE Firewire
eSATA

OPTIONS AND ACCESSORIES

ThinkVision® P27q Monitor
3Dconnexion® CAD Mouse
Rack Shelf Conversion Kit

CONNECTIVITY

Ports
Front
(2) USB 3.0
(1) Microphone
(1) Headphone
(1) 29-in-1 Media Card Reader[7] (Optional)
(1) 9-in-1 Media Card Reader (Optional)
(1) 1394 IEEE Firewire[7]
(1) eSATA[7]

Rear
(4) USB 3.0
(2) USB 2.0
(1) Serial
(1) VGA
(2) DisplayPort™
(1) Ethernet
(1) Audio Line-in
(1) Audio Line-out
(1) Microphone-in

WiFi
Intel® Dual Band Wireless-AC 8265
802.11 b/g/n, 2 x 2,
2.4 GHz WiFi + Bluetooth® 4.0

PCI / PCIe Slots
1 x PCIe x16
1 x PCI x4 (x16 Mechanical)
2 x PCIe x1

DESIGN

Dimensions (W x D x H)
Small Form Factor
(mm) : 101.6 x 394.5 x 337.8
(inches): 4.0" x 15.5" x 13.3"

Tower
(mm) : 175.3 x 426 x 376
(inches): 6.9" x 16.8" x 14.8"

Chipset
Intel® C236

Physical Security
Cable Lock

SOFTWARE

Windows 10 Preload
CyberLink PowerDVD
(on systems with optical drives)
CyberLink Create
(on systems with optical drives)
Lenovo™ Companion
Microsoft Office 2016 (trial)

Windows 7 Preloads
Adobe® Acrobat® Reader
CyberLink PowerDVD
(on systems with optical drives)
CyberLink Create
(on systems with optical drives)
Microsoft Office 2016 (trial)
McAfee™ LiveSafe 30-day trial
(systems with Core i5 and i7 CPU)
ThinkVantage® System Update
Rescue and Recovery®
Lenovo™ Solution Center
Lenovo™ PowerEngage
Splashtop®

GREEN CERTIFICATION

ENERGY STAR® 6.0 Qualified
EPEAT™ GOLD Rating
GREENGUARD® Certified
80 PLUS® Platinum – 400 W 92% PSU
80 PLUS® Bronze – 250 W 85% PSU
                          210 W 85% PSU

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[1] 6th Gen Intel Core i and Intel® Xeon® E3-1200 v5 processors also available
[2] Home®, Enterprise® and IoT®
[3] Available via Windows 10 Pro 64-bit license downgrade facilitation using 6th Gen Intel® Core™ i and Intel® Xeon v5 processors
[4] Only available with 400 W power supply
[5] Any combination of storage to equal maximum storage drives
[6] Tower only
[7] Via FLEX module

RECOMMENDED SERVICES

Lenovo™ offers a comprehensive portfolio of services to support and protect your ThinkStation® investment. Focus on your customers and business, not your IT.

PRIORITY TECHNICAL SUPPORT[8]
Makes your priority, our priority. 24x7 priority call routing to advanced-level technicians, electronic incident tracking, and rapid response and resolution.

WARRANTY UPGRADES - ON-SITE AND NEXT BUSINESS DAY
Maximizes PC uptime and productivity by providing convenient, fast repair service the next business day.

**WARRANTY EXTENSIONS
(1-TO-4 YEARS TOTAL DURATION)**
This fixed-term, fixed-cost service helps accurately budget for PC expenses, protect your valuable investment and potentially lower the cost of ownership over time.

[8] Not available in all regions.

WWW.LENOVO.COM

ThunderIT for the REMC SAVE Contract

ThunderIT offers products and services for REMC SAVE contract customers at a discounted price in accordance to the REMC price list.

Overview for the REMC SAVE contract

REMC SAVE provides large volume contracts for a variety of educational resources, including furniture, school and office supplies, software and digital services, and technology.

The program saves time and money by providing bids compliant with the Michigan Revised School Code that also provides local school districts with the authority to purchase using REMC contracts. The legislation that established REMCs (Michigan Compiled Laws Act 451 Section 380.671), and State Board of Education Rules, enables REMCs to bid on behalf of local school districts and also provide local school districts with the authority to purchase using REMC contracts. All items and vendors are awarded through a sealed bid process by the REMC SAVE Bid Project and approved by the REMC Association.

REMC SAVE is provided as a project of the REMC Association of Michigan for all Michigan schools. REMC SAVE provides large-volume contracts for a variety of educational resources. By using REMC SAVE contracts, Michigan schools have saved more than $1 billion since 1990. Every dollar saved through REMC SAVE today is one more dollar to invest in instruction tomorrow.

ThunderIT services the following REMC districts; REMC 1, REMC 2N, REMC 2C, REMC 2S, REMC 3, REMC 4, REMC 5, REMC 6, REMC 7, REMC 8, REMC 9, REMC 10, REMC 11, REMC 12W, REMC 12E, REMC 13, REMC 14W, REMC 14E, REMC 15, REMC 16, REMC 17, REMC 18S, REMC 18N, REMC 19W, REMC 19E, REMC 20, REMC 21, REMC 22

ThunderIT services the following REMC customers; AKIVA HEBREW DAY SCHOOL, BIRNEY MIDDLE SCHOOL, BUSSEY CTR-EARLY CHILDHOOD DEV, DEVRY UNIVERSITY - SOUTHFIELD – CENTRAL, HAMILTON ACADEMY CENTRAL OFFICE, LEONHARD ELEMENTARY SCHOOL, MCINTYRE ELEMENTARY SCHOOL, OAKLAND INTERNATIONAL ACADEMY

Other REMC contract holders include: Inacomp Technical Services Group, Sentinel Technologies, Software Services Group, Insight Direct USA, Information Systems Intelligence, Netech, Secant Technologies, CDW Logistics Inc (CDWG)

ThunderIT offers a variety of Solutions & Services to meet your every need

Digital Workplace

Transform your digital workplace and empower employees to drive your business forward. We deliver flexible, tailored, end-to-end solutions to keep your workforce engaged and productive. With an innovative approach centered around exceptional user experiences.

Smart Spaces

We provide smart workspace solutions to help you deliver consistent network performance and give guests, employees and students an uninterrupted experience.

Secure Network Solutions

Our security solutions help protect your network and critical data from cybersecurity threats

Safe Environments

We believe that employee, student, and customer safety is paramount in any environment. That's why our solutions provide a cloud based platform to help you intuitively manage and monitor physical locations to ensure a safe experience for everyone.

Next Generation WiFi

Power new and improved user experiences with our managed wifi solutions, offering faster speeds for enhanced application experience and more capacity for high density indoor and outdoor environments.

Remote Work Solutions

With our remote work solutions, working away from the office is no big deal. Give employees a secure, optimized connection to your entire network from anywhere.

Hybrid Workforce

We provide a seamless hybrid workforce solution that embraces change and operational scale. Give your employees and customers unrivaled experiences with a cloud platform that unifies best-in-class technologies.

Free Network Evaluation & Demo

ThunderIT offers a FREE Network Evaluation and/or product Demo to help ensure you are well informed and confident when choosing the right Cisco Meraki solution for your needs. During our call we'll architect a custom built Cisco Meraki solution for your business or environment.

Migration & Deployment

ThunderIT offers Migration and Deployment Services for your Cisco Meraki solution. Our experienced team of IT Professionals can configure, deploy and support your products to meet your needs. Our custom solutions ensure maximum efficiency and provide a clear path for your business going forward.

Managed Security

ThunderIT offers the best and most cost-effective solution to lower your risk in a heightened threat environment. Our team of certified Cisco engineers are ready to ensure that your network is secure, and your firewall is optimally configured to defend your business.

Mobile device management (MDM) Services

Our Mobile Device Management (MDM) solution unifies management of thousands of endpoint devices in a secure cloud platform, driving your organization's mobility initiatives, while maintaining an environment of agility and security.

Support & Monitoring

ThunderIT offers network support and monitoring services that are designed to fit the needs of every customer.

FAQs for the REMC SAVE Contract

Q: Does REMC SAVE meet the legal requirement for competitive bidding? A: The legislation that established REMCs (Michigan Compiled Laws Act 451 Section 380.671), and State Board of Education Rules, enables REMCs to bid on behalf of local school districts and also provide local school districts with the authority to purchase using REMC contracts. All items are competitively bid by REMC SAVE and awarded by the REMC Association.

Q: Who can Use REMC SAVE contracts? A: The following agencies are eligible to purchase using REMC SAVE contracts: PreK-12 Public, Charter (PSA) and Non-Public Schools, Community Colleges, Universities and Colleges, Public Libraries, Museums, State, County, and Local Government Agencies, Educational Non-profit Organizations and Health Care Facilities. Personal purchases at awarded bid pricing are at the discretion of the vendors.

Q: What is REMC SAVE? A: REMC SAVE is a free service of the REMC Association for all Michigan schools. There are 3 staff of REMC SAVE, and they conduct all of the bids and maintain vendor contracts. You can ask your local REMC Center questions. Find your local REMC Center by scrolling down the REMC SAVE home screen to view the map for your region or look up by zip code.

Q: How do I provide feedback? A: Your local REMC SAVE contact will always listen to any feedback you wish to provide. If you have feedback about the product, scroll down the home screen at remcsave.org and click 'View All Vendors' and you can complete a vendor evaluation form.

Q: What if my company wishes to become an awarded vendor? A: Go to vendorcenter.remcbids.org and create an account by clicking Login or Register in the upper right corner. Follow the directions! The only requirement is that you need five Michigan K12 school references. Customers can send their vendor recommendations to their local REMC contact or email remcsave@remc.org

Q: How are the vendors and products selected? A: Products and Vendors are awarded through a competitive bid process. REMC SAVE staff analyzes all bids and make recommendations to the REMC SAVE Advisory Committee for award. Once the REMC SAVE Advisory Committee votes on the award recommendations, they are then voted on by the REMC Association Board of Directors for final award.

Q: Where do I send my order or contact an awarded vendor? To contact vendors, navigate to the vendor listing by scrolling down the home screen and click 'view all vendors,' or navigate to https://www.remcsave.org/vendors. Click on the vendor name to find their contact information.

Q: What do I need to include on my purchase order? Please make sure your purchase order is itemized and includes the REMC item number, the model number/name, the reseller product number (if available), the quantity of each item to be purchased, and the unit price. A quote may be attached, but the purchase order should still be itemized. Sometimes the item numbers for the warranties, accessories, and upgrades are located on the spec sheet, linked from the awarded item page – be sure to include on the Purchase Order.