Buyer's guide

Evolve seamlessly. Ready for whatever's next.

Lenovo ThinkSystem Servers
powered by Intel® Xeon® processors

intel XEON

That's the power
of Lenovo with
Intel Inside®

KomplexIT
PART OF CCIT



Your foundation for what's next

You're investing in more than IT—you're building a foundation for your business to innovate and evolve. The right infrastructure doesn't just keep operations running, it opens up new opportunities, strengthens resilience, and gives you the flexibility to compete with confidence.

This guide will help you explore:

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How to choose the right IT foundation for your business

Running IT today means finding the right balance—powering your business with reliable performance while minimizing risk and keeping costs under control. Achieving that balance depends on smart choices about where workloads run and the infrastructure you trust to run them.



Why choose on-premises over cloud?

A well-balanced hybrid approach means placing each workload where it delivers the most value. Cloud is often the go-to choice, but there are many cases where on-premises infrastructure provides greater control, stronger performance, and cost transparency.

Low latency for real-time responsiveness

Avoid cloud delays, keeping applications fast and reliable.

Reducing latency ensures applications respond instantly, delivering the speed today's customers and business leaders expect.

The business payoff: faster customer transactions, smoother collaboration in ERP and productivity tools, and improved performance for latency-sensitive workloads like video analytics or CAD.

Full control for data protection and compliance

Keep sensitive data secure, compliant, and in your control.

Full visibility into where data is stored and who has access helps ensure compliance with regulatory requirements, maintains data sovereignty, and reduces the risk of breaches or other violations.

The business payoff: reduced compliance burden, lower risk exposure, and stronger customer trust in how their information is handled.

Reliability for mission-critical applications

Deliver the uptime your critical systems can't afford to lose.

Your business depends on consistent performance and uptime. Downtime in mission-critical workloads can quickly halt operations, disrupt revenue, and damage customer trust.

The business payoff: continuous operations, minimized downtime risk, and greater confidence in the availability of mission-critical systems.

Cost transparency for always-on workloads

Predictable costs help you forecast accurately and avoid cloud surprises.

Always-on applications can drive runaway cloud costs from constant data transfer, but running them locally keeps expenses under control and delivers significant savings over time.

The business payoff: improved budget planning, fewer financial surprises, and stronger ROI for steady workloads like databases.



Keep your business competitive with modern IT infrastructure

Is your infrastructure helping your business—or holding it back? Aging servers don't just rack up maintenance costs, they can expose you to security risks, limit support for new workloads, and drain energy budgets. Modern servers deliver stronger security, higher performance, and greater efficiency—often cutting total cost of ownership in half. You'll also get deeper insight into your business and customers with real-time data and speed up decision-making with AI.

What to look for in a modern server

Reliability and resilience

Ensures critical workloads stay online, minimizing downtime and safeguarding data

Security

Built to protect your business, with proactive security and resilience at its core

Performance and scalability

Handles demanding workloads now, with the flexibility to expand capacity cost-effectively as your needs grow

Simplified operations

Streamlines deployment, monitoring, and management so lean IT teams can do more with less

Efficiency

Optimizes and consolidates workloads while reducing energy consumption and lowering operating costs

EVOLVE YOUR BUSINESS

Lenovo and Intel: performance and efficiency without compromise

Every business needs infrastructure that offers the power to handle demanding applications, the efficiency to control costs and the security to protect critical data. That's where Lenovo ThinkSystem servers, powered by Intel® Xeon® processors, deliver unmatched balance.

The smarter choice for your business

- Security and resilience built in, so your business stays protected and available
- Enterprise-grade performance to support everything from business applications to AI and advanced analytics
- Energy-efficient design that helps lower operating costs and supports sustainability goals

Industry-leading reliability, security, and energy efficiency

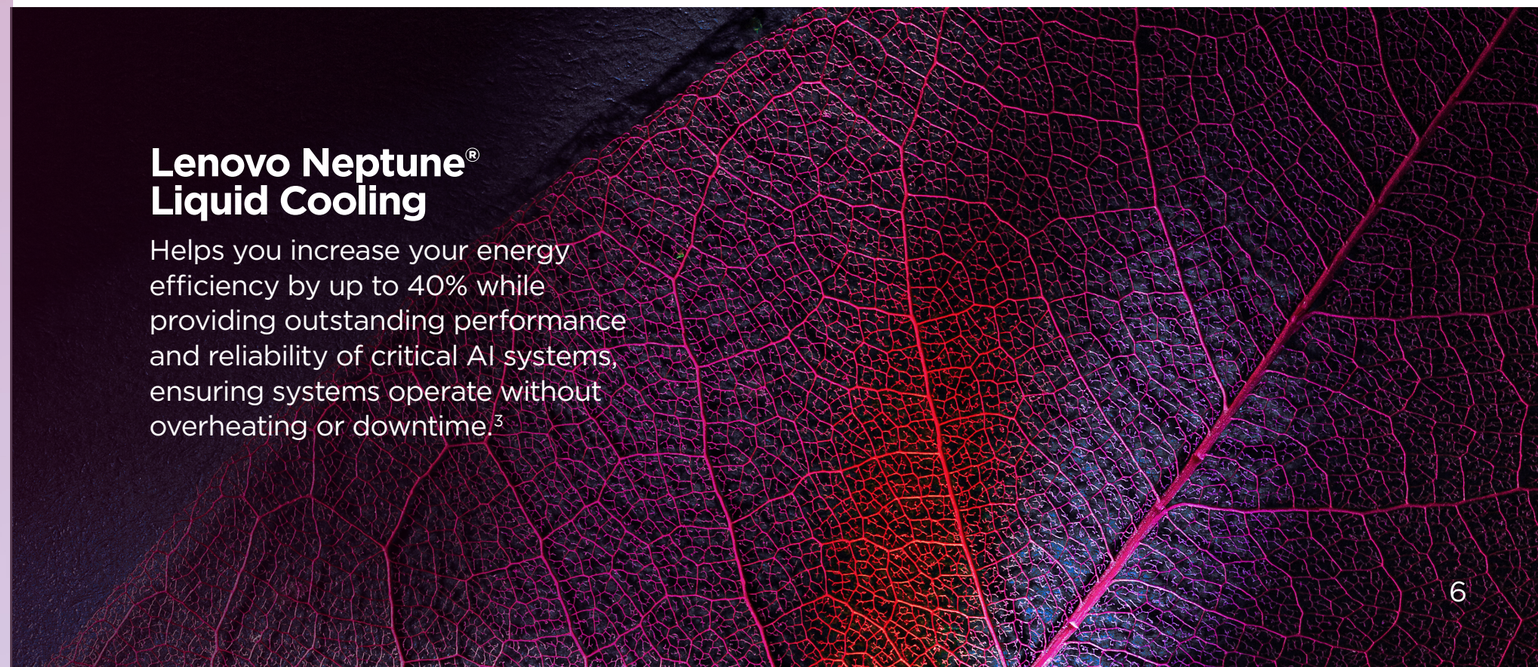
Lenovo offers the most secure and reliable x86 servers

#1
in x86 server reliability for 11 consecutive years[1]

#1
in x86 security for 6 consecutive years[1]

Lenovo global supply chain excellence—strong supplier partnerships and a security-by-design approach

#8
in the Gartner® Supply Chain Top 25 for 2025[2]



Lenovo Neptune® Liquid Cooling

Helps you increase your energy efficiency by up to 40% while providing outstanding performance and reliability of critical AI systems, ensuring systems operate without overheating or downtime.[3]

Intel® Xeon® Processors

Excel in a dynamic world with workload-optimized processors adaptable for today and tomorrow.

Performance

Deliver new levels of performance across the greatest range of workloads.

Security

Protect data and platform-integrity with hardware-based security features, confidential computing, and trust services.

Efficiency

Improve workload efficiency and lower power consumption.

Quality

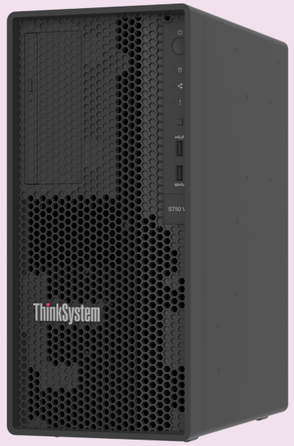
Built and tested for scale to maximize uptime and operational efficiency.



LENOVO TOWER SERVERS

ThinkSystem ST50 V3

Compact server built for remote offices and growing teams



Key workloads

- Business applications
- Near-side data backup

Processor

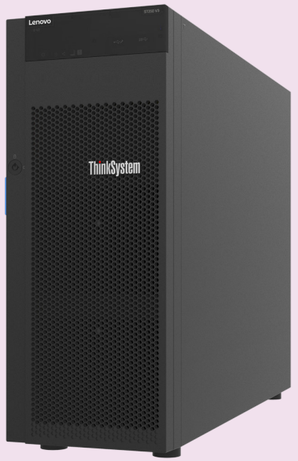
Powered by Intel® Xeon® 6300 processors

Why buy?

Deliver enterprise-grade performance in a compact, whisper-quiet design (17L chassis). It’s perfect for branch offices and remote locations with limited space.

ThinkSystem ST250 V3

Scalable compute built for growing data demands



Key workloads

- Business applications
- Local data processing
- Video analytics
- Near-side data backup

Processor

Powered by Intel® Xeon® 6300 processors

Why buy?

Deploy in remote or branch offices and seamlessly transition to a data center with the option to rack mount, future-proofing your infrastructure investment.

LENOVO RACK SERVERS



ThinkSystem SR250 V3

Compact powerhouse with maximum storage flexibility

Key workloads

- Virtualization
- File and print services
- Web hosting (internal sites, intranet)
- Backup and recovery

Processor

Powered by Intel® Xeon® 6300 processors

Why buy?

A unique combination of storage density, single-socket simplicity, and enterprise reliability. The smart choice for storage-intensive workloads where every rack unit matters.



Lenovo Neptune®
Liquid Cooling

ThinkSystem SR630 V3

Maximum density server for virtualization and AI workloads

Key workloads

- Virtualization
- VDI
- Business critical apps
- Containerized workloads
- Real-time data analytics and dashboards

Processor

Powered by 5th Gen Intel® Xeon® Scalable processors

Why buy?

Transform data center efficiency challenges into competitive advantages, and deliver the dense computing power essential for demanding workloads. Plus innovative cooling options ensure sustained performance even under heavy computational loads.



Lenovo Neptune®
Liquid Cooling

ThinkSystem SR630 V4

Maximum performance, minimal footprint–efficiency redefined

Key workloads

- Data analytics
- Business analytics
- Virtualization

Processor

Powered by Intel® Xeon® 6 processors

Why buy?

Redefines what's possible in a single rack unit, delivering twice the processing power of previous generations while Neptune Core Module technology dramatically reduces energy consumption by over 30%. This next-generation server transforms growing businesses' biggest IT challenges—limited space, tight budgets, and small teams—into strategic advantages through intelligent workload consolidation and energy efficiency.

LENOVO RACK SERVERS



Lenovo Neptune®
Liquid Cooling

ThinkSystem SR650 V3

One versatile server for all your workloads

Key workloads

- AI inferencing and GPU accelerated tasks
- Business critical applications
- Database
- Virtualization
- Backup, file, and storage heavy applications

Processor

Powered by 5th Gen Intel® Xeon® Scalable processors

Why buy?

For IT teams managing diverse infrastructure requirements. Handles mixed workloads from traditional databases to modern analytics, from file services to emerging AI initiatives. This server adapts rather than forcing you to buy multiple specialized systems.



Lenovo Neptune®
Liquid Cooling

ThinkSystem SR650 V4

Scalable AI-ready performance for growing businesses

Key workloads

- AI inferencing and GPU accelerated tasks
- Business critical applications
- Database
- Virtualization
- Backup, file, and storage heavy applications

Processor

Powered by Intel® Xeon® 6 processors

Why buy?

Engineered to support emerging AI applications and advanced analytics that drive competitive advantage. This server consolidates multiple business-critical applications with an energy-efficient design that enables up to 4:1 rack consolidation, cutting operational costs while you grow.

Lenovo ThinkSystem V3 or V4 series?

The Lenovo ThinkSystem V4 series, powered by Intel® Xeon® 6 processors, allows you to run more VMs, faster analytics, and denser workloads with improved performance and energy efficiency.

7x
higher compute performance

11x
faster AI inferencing on large language models

4x
more memory bandwidth

4:1
server consolidation



lower energy consumption



reduction in server count



lower TCO

Sources: Compared to previous generations: Lenovo, “Lenovo Hybrid AI Advantage Accelerates Enterprise AI Transformation with New Services, Solutions and Platforms,” June 2025. Compared to previous generations. See Intel® TCO and ROI Calculator.



COMPARISON CHART

Which Lenovo ThinkSystem servers are right for you?

Tower Servers			Rack Servers				
Model	**ST50 V3**	**ST250 V3**	**SR250 V3**	**SR630 V3**	**SR630 V4**	**SR650 V3**	**SR650 V4**
							
Typical Workloads	Business applications Near-side data backup	Business applications Local data processing Video analytics Near-side data backup	Virtualization File and print services Web hosting (internal sites, intranet) Backup and recovery	Business critical apps Virtualization VDI Containerized workloads Real-time data analytics and dashboards	Business critical apps Virtualization VDI Containerized workloads Real-time data analytics and dashboards	AI inferencing and GPU accelerated tasks Business critical applications Database Virtualization Backup, file, and storage heavy applications	AI inferencing and GPU accelerated tasks Business critical applications Database Virtualization Backup, file, and storage heavy applications
Rack Units	4U	4U	1U	1U	1U	2U	2U
Processor	1x Intel® Xeon® 6300 processor	1x Intel® Xeon® 6300 processor	1x Intel® Xeon® 6300 processor	2x 5th Gen Intel® Xeon® Scalable processors	Up to 2x Intel® Xeon® 6 processors	Up to 2x 5th Gen Intel® Xeon® Scalable processors 350W	Up to 2x Intel® Xeon® 6 processors 350W
Memory Maximum	128GB	128GB	128GB	8TB	8TB	8TB	8TB
Storage Maximum (TB)	24TB	76TB	88TB	737.28TB	368.64TB	1966.08TB	2211.84TB
Lenovo's Neptune™ cooling option				Neptune Core Compute Complex Module	Neptune Core Compute Complex Module		Neptune Core Compute Complex Module

Services to support your success at every step

When you choose Lenovo ThinkSystem servers, you can choose to add ongoing support to help you optimize operations and accelerate innovation.

From factory to functionality: Your path to faster ROI with Factory Integrated Services

Get servers that are ready to deploy the moment they arrive. Lenovo Factory Integrated Services ensures your ThinkSystem servers are built, configured, and tested in Lenovo's factory—so they arrive pre-loaded with the right hardware, firmware, and settings for your IT environment. Backed by a supply chain ranked within Gartner's Top 10 for four consecutive years, Lenovo delivers the consistency, precision, and expertise you need to accelerate deployment, reduce errors, and keep your IT team focused on strategic priorities.

Maximize uptime, minimize disruption with Lenovo Premier Support

Get faster resolutions, fewer handoffs, and expert help whenever you need it. Lenovo Premier Support provides global, 24/7 access to advanced technical experts who take full ownership of your toughest IT challenges—helping you resolve issues up to twice as fast, minimize escalations, and reduce costly downtime across your entire environment. Trusted by 91% of customers who would recommend it again, Premier Support delivers end-to-end coverage across devices, infrastructure, networking, storage, servers, and software—simplifying resolution and reducing delays.

Power your transformation with Lenovo TruScale IaaS

Maximize performance, agility, and innovation through the full lifecycle of your infrastructure with Lenovo TruScale IaaS. Scalable, modular services and flexible financing options let you quickly meet changing demands with industry-leading technology solutions from Lenovo and our trusted ecosystem of partners.

IT operations made easy



Lenovo XClarity One is an integrated, cloud-based IT operations platform for managing the full lifecycle of your IT infrastructure, from edge to cloud. It simplifies and automates deployment, management, and support, enabling you to accelerate time to value, reduce operational complexity, and increase agility.

Ready to take your business to the next level?

Unlock more business potential with **Lenovo ThinkSystem Servers powered by Intel® Xeon® processors**. Whether you're considering large-memory, AI-ready or edge servers, you're making a safe choice with industry-leading reliability, security, and efficiency.

www.komplexit.dk/ai-datacenter-infrastruktur#guide

[1]Source: ITIC, "ITIC 2024 Global Server Hardware, Server OS Reliability Report," November 2024.

[2]Source: https://news.lenovo.com/pressroom/press-releases/lenovo-ranks-8th-in-the-gartner-supply-chain-top-25-for-2025/

[3]Source: https://www.lenovo.com/us/en/servers-storage/neptune/

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