Lenovo ThinkSystem ST650 V3

Enterprise capacity and performance in a 2P/4U tower



Powerful performance

The high core count of the 4th Gen Intel® Xeon® Scalable processor increases the performance of the ThinkSystem ST650 V3 by 59% over previous generations.

Combining the processing power with the added speed and bandwidth of the latest DDR5 memory and PCle Gen 5, the ST650 V3 is ready to tackle virtualization and private cloud workloads.

It also offers high-performance computing power inside or outside a traditional data center.

Expandable capabilities

As your workloads evolve, so should your server. Adding agility with ease to your IT Infrastructure enables a private cloud or virtualized environment to optimize workloads as needed.

The highly configurable ST650 V3 tower server allows you to set up your IT infrastructure to meet your unique demands.

With support for up to 9 PCle Gen 4/Gen 5 slots and 32 drives with multiple drive technologies, the ST650 V3 can be configured to your unique infrastructure needs.

And with XClarity Software Suite to provide innovative centralized management, you can easily manage your infrastructure as your business evolves.

Faster insights and reliability

The ThinkSystem ST650 V3 speeds insights with 8 single-width (SW) or 4 double-width (DW) or a combination of 4 SW and 4 DW GPUs. This GPU-rich tower server maximizes capabilities with the ability to process large blocks of data in parallel. This is ideal for video creation and editing along with applications which require quick analysis of large blocks of data.

It also includes validated and pre-validated solutions that are designed for reliability and stability.

Ideal for remote installations, the ST650 V3 provides enterprise performance, faster insights, and reliability either in-rack or as a stand-alone server.





Comprehensive Security

We design every ThinkSystem server with security in mind. This includes the ThinkSystem ST650 V3 which contains Lenovo ThinkShield security software. ThinkShield is a comprehensive end-to-end approach to security from development to supply chain and the full life cycle of the device. It also offers additional physical security technologies which include the lockable security bezel ideal for safety in remote installations.

Integrated IT Management

Lenovo XClarity Controller is the management hardware engine inside every ThinkSystem server, and XClarity Administrator centralizes the management of your ThinkSystem and ThinkAgile infrastructure.

With Redfish APIs and XClarity integrators, you can easily integrate the Lenovo infrastructure into higher-level IT applications. Lenovo servers continue to be the industry's #1 most reliable*.

Specifications

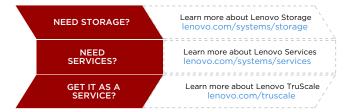
Form Factor/Height	4U rackable tower
Processors	Up to 2x 4 th Gen Intel® Xeon® Scalable processors, up to 250W
Drive Bays	Up to 32x 2.5" bays (including 24 NVMe bays) or 16x 3.5" bays (including 16 NVMe bays)
Memory	Up to 4TB in 32x DIMM slots using 128GB DIMMs; 4800MHz TruDDR5
Expansion Slots	Up to 9x PCIe Slots (5x Gen 5 and 4x Gen 4)
Network Interface	2x 10GbE ports; 1x 1GbE dedicated management port
Ports	 Front: 1x USB 3.1 G1, 1x USB 2.0 with XClarity Mobile support Rear: 4 x USB; 1 x VGA, 1x COM port (Optional), 1x External LCD Diagnostics Handset Port (Optional)
HBA/RAID Support	 Onboard SATA and NVMe support with VROC RAID PCle Gen 3, Gen 4, and Gen 5 (when available) RAID/HBA adapters Wide range of 8, 16, and 32 port RAID adapters 8 and 16 port HBAs NVMe Retimer adapters for an additional 12x NVMe
Power	 Dual redundant AC power supplies up to 2600W Titanium Energy Star 3.0 compliant
Systems Management	 XClarity Controller with upgrades Full XClarity software suite including XClarity Administrator Optional intrusion switch and lockable door Support for External Diagnostics Handset Pluggable RoT Module
OSes Supported	Microsoft, SUSE, Red Hat, VMware. Visit lenovopress.com/osig for details.
Security	Lenovo ThinkShield, lockable security bezel, chassis intrusion switch, TPM 2.0
Reliability	Predictive Failure Analysis, hot-swap/redundant drives, fans and power supplies
Limited Warranty	1-year and 3-year customer replaceable unit and onsite service, next business day 9x5; optional service upgrades

About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$62 billion revenue global technology powerhouse, ranked #171 in the Fortune Global 500, employing 77,000 people around the world, and serving millions of customers every day in 180 markets. Focused on a bold vision to deliver smarter technology for all, Lenovo is expanding into new growth areas of infrastructure, mobile, solutions and services. This transformation is building a more inclusive, trustworthy, and sustainable digital society for everyone, everywhere.

For More Information

To learn more about the Lenovo ThinkSystem ST650 V3, contact your Lenovo representative or Business Partner or visit lenovo.com/thinksystem. For detailed specifications consult ST650 V3 Product Guide.



© 2023 Lenovo. All rights reserved.

Availability: Offers, prices, specifications and availability may change without notice. Lenovo is not responsible for photographic or typographic



^{*} ITIC Global Reliability Report.

3 | Lenovo ThinkSystem ST650 V3

errors. **Warranty**: For a copy of applicable warranties, write to: Lenovo Warranty Information, 1009 Think Place, Morrisville, NC, 27560. Lenovo makes no representation or warranty regarding third-party products or services. **Trademarks:** Lenovo, the Lenovo logo, ThinkAgile*, ThinkShield*, ThinkSystem*, and XClarity* are trademarks or registered trademarks of Lenovo. Intel* and Xeon* are trademarks of Intel Corporation or its subsidiaries. Microsoft* is a trademark of Microsoft Corporation in the United States, other countries, or both. Other company, product, or service names may be trademarks or service marks of others. Document number DS0144, published May 2, 2023. For the latest version, go to lenovopress.lenovo.com/ds0144.

