ThinkEdge SE450

Powerful Edge AI server



Purpose Built for AI at the Edge

Today, remote locations are forced to make a choice between underpowered IOT gateways and PCs, or overpowered and non-rugged data center servers. Now they have an option—a right-sized compact edge server designed specifically to meet the needs of remote locations, as well as the right processing power to run Al workloads.

The Lenovo ThinkEdge SE450 is a 1-socket 3rd Gen Intel® Xeon® Platinum processor-based server, with a 2U height and short depth case that can go almost anywhere. It can be hung on a wall, stacked on a shelf, or mounted in a rack. This rugged edge server can handle continuous operating temperatures from 5°C and 45°C; and some configurations are designed to meet NEBS Level-3 and ETSI requirements for 96 hours operating excursions from -5°C and 55°C as well as tolerance to locations with high-dust and vibration.

The ThinkEdge SE450 is designed to virtualize traditional IT applications as well as new transformative AI systems, providing the processing power, storage, accelerator, and networking technologies required for today's edge workloads. Lenovo's innovation makes the ThinkEdge SE450 one of the most powerful, yet quiet servers on the market, allowing it to be deployed next to end users without disturbing the workplace.

Secure, Connected and Reliable

At Lenovo, security begins with design and continues through supply chain, delivery, and the full lifecycle of the system.

Edge locations command special attention for security of the data and device itself. That's why the ThinkEdge SE450 is delivered with ThinkShield capabilities, loaded with a secure BIOS and optional tamper detection protection for extra security at the edge.

The ThinkEdge SE450 provides numerous connectivity options with wired and secure wireless Wi-Fi capabilities. Reliability features such as wireless failover, redundant boot and data drives, high temperature components and support for hyperconverged clustering keep critical Edge workloads running.



Agility and Remote Manageability

It is costly and time consuming to send IT staff to remote sites. The ThinkEdge SE450 features XClarity Controller, an enterprise-grade embedded management engine. It also supports XClarity Administrator, which enables IT managers to efficiently maintain server, storage, and networking infrastructure and accelerate services provisioning.

In addition to a dedicated wired networking management port, the ThinkEdge SE450 can deliver management over a secure wireless connection so IT managers can perform updates, management tasks, and access sites even when the primary Ethernet connection is down.

Specifications

Form Factor	2U rack server 300mm (11.8in) depth with 4x FHHL adapters; or 2U rack server 360mm (14.2in) depth with 4x FHFL adapters
Processor	1x 3rd Gen Intel® Xeon® Platinum processor, up to 36 cores, up to 225W TDP
Drive Bays	Up to 6x 2.5-inch 7mm drives; Up to 6x NVMe drives supported; 2x M.2 boot drives (RAID 1)
Memory	10x DDR4 memory slots; Maximum 1TB using 8x 128GB 3DS RDIMMs; Supports up to 2x Intel® Optane™ Persistent Memory 200 Series modules (PMem)
Expansion Slots	Up to 4x PCle 4.0 slots, 1x OCP 3.0 slot
GPUs	Up to 4x single-width GPUs or 2x double-width GPUs
Network Interface	LOM adapter installed in the OCP 3.0 slot; PCIe adapters
Ports	Front: 1x Power Button, 1x system locator, health with LED, 1x VGA, 2x USB 3.1, 1x Serial Port (optional), 1x RJ-45 1Gb for dedicated management, 1x system locator LED; Optional Wi-Fi (management)
HBA/RAID Support	SW RAID standard; optional HW RAID or SAS HBA
Power	Dual redundant power supplies AC (up to 1800W Platinum) or Dual redundant power supplies -48V DC 1100W
Systems Management	Lenovo XClarity Controller
OS Support	Microsoft, Red Hat, Ubuntu, CentOS, VMware. Visit lenovopress.com/osig for details.
Limited Warranty	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\$70 billion revenue global technology powerhouse, ranked #159 in the Fortune Global 500, employing 75,000 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 ThinkEdge SE450, contact your Lenovo representative or Business Partner, or visit lenovo.com/systems/servers.



© 2023 Lenovo. All rights reserved.

Availability: Offers, prices, specifications and availability may change without notice. Lenovo is not responsible for photographic or typographic 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, ThinkEdge®, ThinkShield®, 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 DS0135, published January 31, 2022. For the latest version, go to lenovopress.lenovo.com/ds0135.

