

# 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 AI 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.

As an NVIDIA-certified System, the ThinkEdge SE450 is built for optimal performance, security, and management required for running AI applications at the edge.

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

<b>Form Factor</b>	2U rack server 300mm (11.8in) depth with 4x FHHL adapters; or 2U rack server 360mm (14.2in) depth with 4x FHFL adapters
<b>Processor</b>	1x 3rd Gen Intel® Xeon® Platinum processor, up to 36 cores, up to 225W TDP
<b>Drive Bays</b>	Up to 6x 2.5-inch 7mm drives; Up to 6x NVMe drives supported; 2x M.2 boot drives (RAID 1)
<b>Memory</b>	10x DDR4 memory slots; Maximum 1TB using 8x 128GB 3DS RDIMMs; Supports up to 2x Intel® Optane™ Persistent Memory 200 Series modules (PMem)
<b>Expansion Slots</b>	Up to 4x PCIe 4.0 slots, 1x OCP 3.0 slot
<b>GPUs</b>	Up to 4x NVIDIA single-width GPUs or 2x double-width NVIDIA Ampere GPUs
<b>Network Interface</b>	LOM adapter installed in the OCP 3.0 slot; PCIe adapters
<b>Ports</b>	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)
<b>HBA/RAID Support</b>	SW RAID standard; optional HW RAID with or without cache, or SAS HBAs
<b>Power</b>	Dual redundant power supplies AC (up to 1100W Platinum) or Dual redundant power supplies -48V DC 1100W
<b>Systems Management</b>	Lenovo XClarity Controller
<b>OS Support</b>	Microsoft, Red Hat, Ubuntu, CentOS, VMware. Visit <a href="http://lenovopress.com/osig">lenovopress.com/osig</a> for details
<b>Limited Warranty</b>	3-year customer replaceable unit and onsite service, next business service upgrades





### Benefits at a glance:

- 1S Intel® Xeon® Scalable 3rd-generation processor-based server, with a 2U height and short depth case that can go anywhere
- Designed to virtualize traditional IT applications as well as new transformative AI systems
- NVIDIA GPUs for enterprise and industrial AI at the edge applications, providing maximum accelerated performance.

## About Lenovo

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$60 billion Fortune 500 company and a global technology leader in driving Intelligent Transformation. Lenovo's infrastructure solutions (ThinkSystem, ThinkAgile & ThinkEdge) are creating the capacity and computing power that are changing business and society.



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