Lenovo ThinkSystem SR250 Server (E-2100)

Product Guide (withdrawn product)

Lenovo ThinkSystem SR250 is an affordable, single-socket 1U rack server for small and medium businesses that need optimized performance and flexibility for future growth, along with enterprise-class reliability, management, and security.

The SR250 server offers a wide range of processors — from Intel Celeron to Intel Xeon E Series. With support for a memory capacity of up to 128 GB and internal storage of up to 32 TB, the SR250 server is an ideal choice for small- to medium-sized business, workgroups, distributed locations, and web-scale workloads.

Flexible and scalable internal storage configurations include up to ten 2.5-inch or four 3.5-inch drives with affordable software RAID or advanced hardware RAID protection and a wide selection of drive sizes and types, including NVMe PCIe SSDs, SAS/SATA SSDs, and SAS/SATA HDDs. Also, it features integrated dual-port 1 Gb Ethernet NIC and additional PCIe expansion slots for hardware RAID protection, network scalability, and external storage connectivity.

The next-generation Lenovo XClarity Controller, which is built into the SR250 server, provides advanced service processor control, monitoring, and alerting functions.

The following figure shows the Lenovo ThinkSystem SR250.

Figure 1 Lenovo ThinkSystem SR250

Did you know?

The SR250 server offers enterprise-class reliability features such as error correcting code (ECC), hot-swap components, and advanced RAID protection with flexible storage options at an affordable price.

The SR250 server has a mere 19.6-inch (498 mm) deep chassis, helping customers reduce their business footprint.

The SR250 server offers performance, energy efficiency, and serviceability features, such as NVMe PCIe SSDs, 80 PLUS Gold and Platinum certified power supplies, and easy access to upgrades and serviceable parts (such as memory DIMMs and adapter cards), which is not typically found in the single-socket value servers.

The SR250 server offers easy-to-use, enterprise-class manageability to monitor server availability and perform remote management with the built-in Lenovo XClarity Controller.

Key features

The SR250 server is a compact, cost-effective, single-processor 1U rack server that has been optimized to provide enterprise-class features to small-to-medium-sized businesses, retail stores, or distributed enterprises.

Scalability and performance

The SR250 server offers numerous features to boost performance, improve scalability, and reduce costs:

- Improves productivity by offering superior system performance with the Intel Xeon E Series processors with up to six cores, up to 12 MB of last level cache (LLC), up to 2666 MHz memory speeds, and up to 8 GT/s bus speed.
    - Choice of processors with up to six cores and up to 12 threads to enable the effective use of multithreaded applications.
    - Intelligent and adaptive system performance with energy efficient Intel Turbo Boost 2.0 Technology allows CPU cores to run at maximum speeds during peak workloads by temporarily going beyond processor thermal design power (TDP).
    - Intel Hyper-Threading Technology boosts performance for multithreaded applications by enabling simultaneous multithreading within each processor core, up to two threads per core.
    - Intel Virtualization Technology integrates hardware-level virtualization hooks that allow operating system vendors to better utilize the hardware for virtualization workloads.
    - Intel Advanced Vector Extensions (AVX) enable acceleration of enterprise-class and high performance computing (HPC) workloads.
- Provides memory speed, availability, and capacity of up to 64 GB memory with up to four 2666 MHz DDR4 ECC UDIMMs.
- Offers flexible and scalable internal storage in a 1U rack form factor with up to 10x 2.5-inch drives for performance-optimized configurations or up to 4x 3.5-inch drives for capacity-optimized configurations, providing a wide selection of SAS/SATA HDD/SSD and PCIe NVMe SSD types and capacities.
- Provides I/O scalability with the onboard LOM interface and up to three PCI Express (PCIe) 3.0 I/O expansion slots in a 1U rack form factor.
- Reduces I/O latency and increases overall system performance with Intel Integrated I/O Technology that embeds the PCI Express 3.0 controller into the Intel processors.

Availability and serviceability

The SR250 server provides many features to simplify serviceability and increase system uptime:

- Offers ECC protection which provides error correction not available in PC-class "servers" that use parity memory.
- Provides easy access to upgrades and serviceable parts (such as memory DIMMs and adapter cards) with tool-less cover removal.
- Offers data protection and greater system uptime with a choice of affordable onboard SATA RAID or advanced hardware RAID redundancy, along with hot-swap drives (select models).
- Provides availability for business-critical applications with redundant hot-swap power supplies (select models).
- Allows preventive actions in advance of possible failure, thereby increasing server uptime and application availability with Proactive Platform Alerts (including PFA and SMART alerts) for memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 SSDs), RAID controllers, and server ambient and sub-component temperatures.
- Continuously monitors system parameters, triggers alerts, and performs recovery actions in case of failure to minimize downtime with Built-in XClarity Controller (XCC).
- Provides quick access to system status, firmware, network, health, and alerts information via Virtual Operator Panel from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access.

- Speeds up troubleshooting tasks to reduce service time with diagnostics built into the XClarity Provisioning Manager.

Manageability and security

Powerful systems management features simplify local and remote management of the SR250 server and deliver enterprise-class data protection:

- Provides advanced service processor control, monitoring, and alerting functions with XClarity Controller, a next generation service processor.
- Improves Unified Extensible Firmware Interface (UEFI) system setup, configuration, updates, simplified error handling, and operating system deployment with the embedded XClarity Provisioning Manager.
- Offers XClarity Essentials software tools that can help customers set up, use, and maintain the server.
- Increases uptime, reduces costs, and improves productivity through advanced server management capabilities with Lenovo XClarity Administrator that provides comprehensive hardware management.
- Provides on-the-go monitoring and management of devices in XClarity Administrator from anywhere with the Lenovo XClarity mobile app, which can help improve efficiency and reduce downtime risks.
- Centralizes infrastructure resource management with Lenovo XClarity Integrators for VMware vCenter and Microsoft System Center, extending XClarity Administrator features to virtualization management software tools and enabling users to deploy and manage infrastructure end-to-end.
- Offers advanced cryptographic functionality (such as digital signatures and remote attestation) with an integrated Trusted Platform Module (TPM) or optional Nationz TPM (available only in PRC).
- Establishes a solid security foundation for workloads by delivering firmware that is securely built, tested, digitally signed, and verified prior to execution.
- Offers enterprise-class data protection with advanced RAID and optional self-encrypting drives.
- Provides faster, stronger encryption with industry-standard AES NI support.
- Helps prevent certain classes of malicious buffer overflow attacks with Intel Execute Disable Bit functionality, when combined with a supporting operating system.
- Enhances security through hardware-based resistance to malicious software attacks with Intel Trusted Execution Technology, allowing an application to run in its own isolated space, protected from all other software running on a system.
- Helps prevent unauthorized software from running on the server by protecting against boot block-level malicious software with Intel Boot Guard technology.
- Protects application code and data from disclosure or modification with Intel Software Guard Extensions (SGX), enabling high-assurance security use cases, such as blockchain, identity and records privacy, secure browsing, and digital rights management (DRM).

Energy efficiency

The SR250 server offers the following energy-efficiency features to save energy, reduce operational costs, increase energy availability, and contribute to the green environment:

- Delivers optimized compute power per watt, featuring 80 PLUS Gold (fixed) and Platinum (hot-swap) AC power supplies.
- Reduces power drawn with Intel Intelligent Power Capability that powers individual processor elements on and off as needed.
- Helps reduce power consumption with variable speed fans.
- Helps achieve lower heat output and reduced cooling needs with Lenovo XClarity Energy Manager that provides advanced data center power notification, analysis, and policy-based management.

Components and connectors

The following figure shows the front of the SR250 server with four 3.5-inch drive bays.

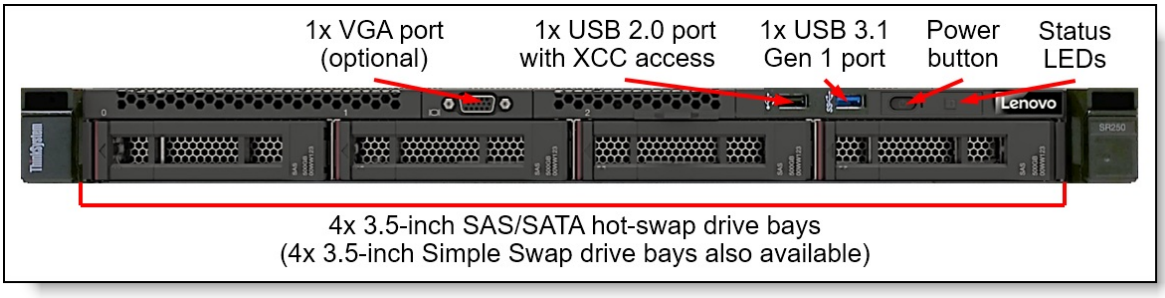

Figure 2. Front view of the SR250: 4x 3.5-inch drive bays

The following figure shows the front of the SR250 server with eight 2.5-inch drive bays.

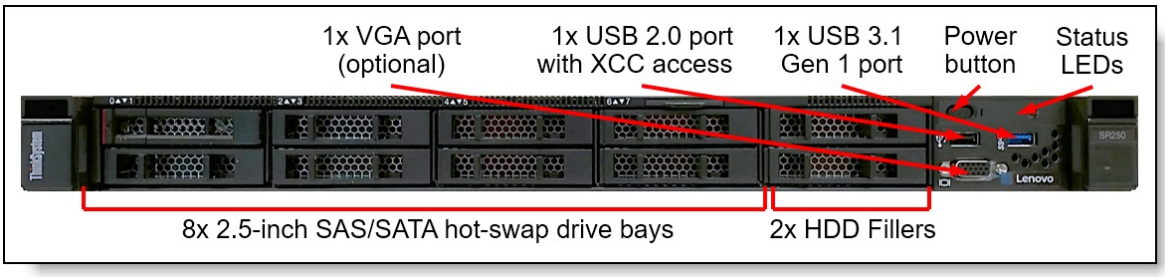

Figure 3. Front view of the SR250: 8x 2.5-inch drive bays

The following figure shows the front of the SR250 server with ten 2.5-inch drive bays.

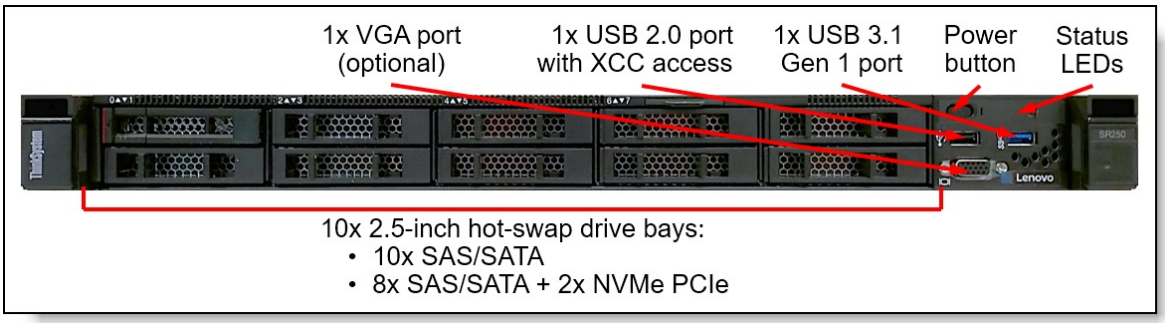

Figure 4. Front view of the SR250: 10x 2.5-inch drive bays

The front of the SR250 server includes the following components:

- Drive bays:
  - 4x 3.5-inch (Large Form Factor [LFF]) SATA simple-swap; or
  - 4x 3.5-inch SAS/SATA hot-swap; or
  - 8x 2.5-inch (Small Form Factor [SFF]) SAS/SATA hot-swap; or
  - 10x 2.5-inch hot-swap drive bays:
    - 10x SAS/SATA
    - 8x SAS/SATA and 2x NVMe PCIe
- One VGA port (optional)
- One USB 2.0 port with XClarity Controller access
- One USB 3.1 Gen 1 port
- A Power button
- Status LEDs

The following figure shows the rear of the SR250 server.

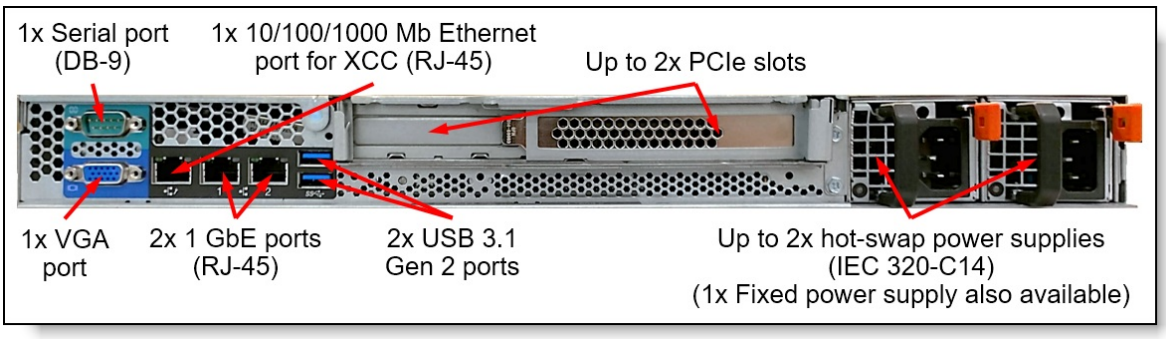

Figure 5. Rear view of the SR250

The rear of the SR250 server includes the following components:

- Up to two PCIe expansion slots (depending on the riser cards selected)
- One 1 GbE port for XClarity Controller
- One RS-232 serial port
- One VGA port
- Two 1 GbE data network ports
- Two USB 3.1 Gen 2 ports
- Power supplies
    - Up to two hot-swap power supplies; or
    - One fixed power supply

The following figure shows the locations of key components inside the SR250 server.

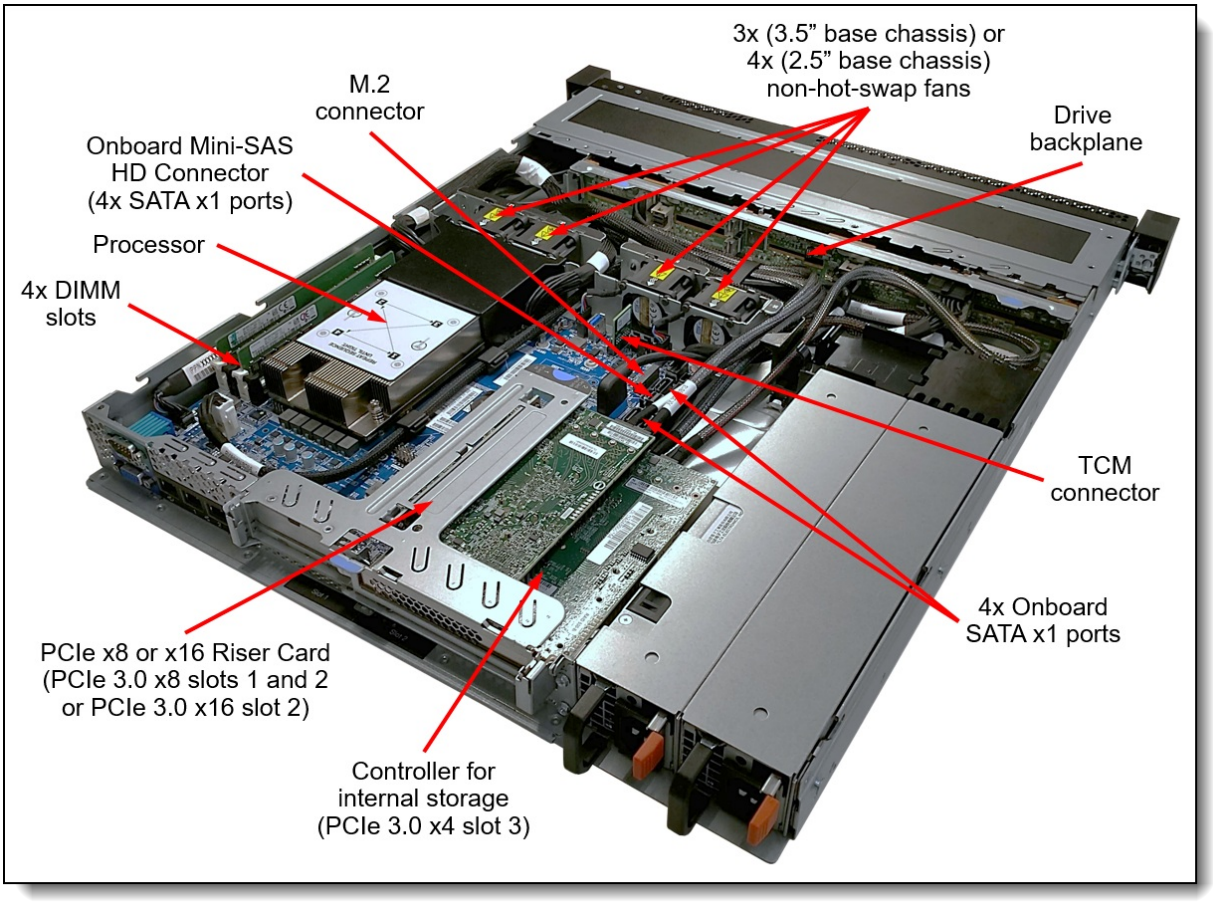

Figure 6. Internal view of the SR250

The SR250 server includes the following internal components:

- One processor
- Four DIMM slots
- Up to three PCIe 3.0 slots:
  - Slot 1: PCIe 3.0 x8 (not present if the Slot 2 is PCIe x16)
  - Slot 2: PCIe 3.0 x8 or x16
  - Slot 3: PCIe 3.0 x4 (only supports a controller for internal storage)
- Eight onboard SATA ports:
  - One Mini-SAS HD connector (4x SATA x1 ports)
  - Four SATA connectors (each connector provides the SATA x1 port)
- One TCM/TPM connector (supports Nationz TPM available in PRC only)
- Drive backplanes:
  - 4x LFF SATA simple-swap bracket; or
  - 4x LFF SAS/SATA hot-swap; or
  - 8x SFF SAS/SATA hot-swap; or
  - 8x SFF SAS/SATA and 2x SFF AnyBay hot-swap
- Four non-hot-swap system fans
- One M.2 connector

Standard specifications

The following table lists the system specifications for the SR250 server.

Table 1. SR250 system specifications

Attribute	Specification
Form factor	1U rack-mount.
Processor	One Intel Xeon E, Core i3, Pentium Gold, or Celeron processor.
Chipset	Intel C246.
Memory	4 DIMM sockets (two memory channels with two DIMMs per channel). Support for ECC UDIMMs. Memory speed up to 2666 MHz.
Memory capacity	• Xeon E Series: Up to 128 GB (4x 32 GB UDIMMs; 32 GB UDIMMs require the UEFI version ISE114H or later). • Core i3, Pentium Gold, Celeron G Series: Up to 64 GB (4x 16 GB UDIMMs).
Memory protection	Error correction code (ECC).

Drive bays	• 4 LFF (3.5-inch) SATA Simple Swap drive bays.
	• 4 LFF (3.5-inch) SAS/SATA hot-swap drive bays.
	• 8 SFF (2.5-inch) SAS/SATA hot-swap drive bays.
	• 10 SFF (2.5-inch) hot-swap drive bays:
	  ◦ 10x 2.5" SAS/SATA.
	  ◦ 8x 2.5" SAS/SATA & 2x 2.5" NVMe PCIe.

Internal storage capacity	• 2.5-inch drives:
	  ◦ 76.8TB using 10x 7.68TB 2.5-inch SAS/SATA SSDs
	  ◦ 3.84TB using 2x 1.92TB 2.5-inch NVMe SSDs
	  ◦ 24TB using 10x 2.4TB 2.5-inch HDDs
	• 3.5-inch drives:
	  ◦ 80TB using 4x 20TB 3.5-inch HDDs
	  ◦ 15.36TB using 4x 3.84TB 3.5-inch SAS/SATA SSDs
	• Intermix of SAS and SATA is supported

Storage controller	• Onboard 6 Gbps SATA:
	  ◦ AHCI non-RAID.
	  ◦ RAID 0/1/10/5 with Intel RSTe.
	• 12 Gbps SAS/6 Gbps SATA RAID:
	  ◦ RAID 0/1/10/5/50 with RAID 530-8i or RAID 730-8i 1GB Cache.
	  ◦ RAID 0/1/10/5/50/6/60 with RAID 730-8i 2GB Flash, RAID 930-8i 2GB Flash, or RAID 930-16i 4GB Flash.
	• 12 Gbps SAS/6 Gbps SATA non-RAID: 430-8i or 16i HBA.
	• NVMe PCIe non-RAID: 1610-4P NVMe Switch Adapter.

Optical drive bays	None. Support for an external USB DVD RW Optical Disk Drive (SeeOptical drives).
Network interfaces	2x Onboard 10/100/1000 Mb Ethernet RJ-45 ports (BCM5720 NIC).
I/O expansion slots	Up to three slots. Slot 3 is the fixed slot on the system planar, and the remaining slots depend on the riser cards installed. The slots are as follows: • Slot 1: PCIe 3.0 x8; low profile (not present if the Slot 2 is x16) • Slot 2: PCIe 3.0 x8 (x16 physical connector) or x16; full-height, half-length • Slot 3: PCIe 3.0 x4 (supports an internal storage controller)

Attribute	Specification
Ports	• Front: 1x VGA port (optional), 1x USB 3.1 Gen 1 port, and 1x USB 2.0 port with XClarity Controller access. • Rear: 1x VGA port, 2x USB 3.1 Gen 2 ports, 1x DB-9 serial port, and 1x RJ-45 10/100/1000 Mb Ethernet systems management port.
Cooling	Four non-hot-swap system fans.
Power supply	One fixed 300 W Gold, or up to two redundant hot-swap 450 W Platinum AC power supplies.
Video	Matrox G200 with 16 MB memory integrated into the XClarity Controller. Maximum resolution is 1920x1200 at 60 Hz with 32 bits per pixel.
Hot-swap parts	Drives (select models) and power supplies (select models).
Systems management	XClarity Controller (XCC) Standard, Advanced, or Enterprise (Pilot 4 chip), proactive platform alerts, XClarity Provisioning Manager, XClarity Essentials, XClarity Administrator, XClarity Integrators for VMware vCenter and Microsoft System Center, XClarity Energy Manager, Capacity Planner.
Security features	Power-on password, administrator's password, secure firmware updates, Trusted Platform Module (TPM) 1.2 or 2.0 (configurable UEFI setting). Optional lockable front bezel. Optional Nationz TPM (available only in PRC).
Operating systems	Microsoft Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware ESXi. See the Operating systems section for specifics.
Warranty	One-year (7Y52) or three-year (7Y51, 7Y72, and 7Y73) customer-replaceable unit (CRU) and onsite limited warranty with 9x5 Next Business Day Parts Delivered.
Service and support	Optional service upgrades are available through Lenovo Services: 2-hour or 4-hour response time, 6-hour or 24-hour committed service repair (select areas), warranty extension up to 5 years, 1-year or 2-year post-warranty extensions, Premier Support, YourDrive Your Data, Enterprise Software Support, and Basic Hardware Installation Services.
Dimensions	Width: 435 mm (17.1 in.), height: 43 mm (1.7 in.), depth: 545 mm (21.5 in.). SeePhysical specifications for details.
Weight	Base configuration: 9.1 kg (20.1 lb), maximum: 12.3 kg (27.1 lb)

Models

ThinkSystem SR250 models can be configured by using the Lenovo Data Center Solution Configurator (DCSC).

Configure-to-order (CTO) models are used to create models with factory-integrated server customizations. For CTO models, two types of base CTO models are available for the SR250 as listed in the columns in the following table:

- General purpose base CTO models are for general business (non-HPC) and is selectable by choosing **General Purpose** mode in DCSC.
- AI and HPC base models are intended for Artificial Intelligence (AI) and High Performance Computing (HPC) configurations and solutions are enabled using the **AI & HPC Hardware - ThinkSystem Hardware** mode in DCSC. These configurations, along with Lenovo EveryScale Solutions, can also be built using System x and Cluster Solutions Configurator (x-config). **Tip**: Some HPC and AI models are not listed in DCSC and can only be configured in x-config.

Preconfigured server models may also be available for the SR250, however these are region-specific; that is, each region may define their own server models, and not all server models are available in every region.

The following table lists the base CTO models of the ThinkSystem SR250 server.

Table 2. Base CTO models

Machine Type/Model General purpose	Machine Type/Model for AI and HPC	Description
7Y51CTO1WW	7Y51CTOLWW	ThinkSystem SR250 – 3-year warranty
7Y52CTO1WW	7Y52CTOLWW	ThinkSystem SR250 – 1-year warranty

For customers in India, additional machine types are available as listed in the following table.

Table 3. CTO base models for India

Description	Machine Type/Model
ThinkSystem SR250 India with RDN PSU (3-Year Warranty)	7Y72CTO1WW
ThinkSystem SR250 India with Fixed PSU (3-Year Warranty)	7Y73CTO1WW

The following table lists the base chassis for CTO models of the SR250 server.

Table 4. Base chassis for CTO models

Feature code	Description
B403	ThinkSystem SR250/SR150 4x3.5" Chassis
B404	ThinkSystem SR250 2.5" Chassis

All models of the SR250 server are shipped with the *Electronic Publications Flyer.*

Models table conventions: The model tables shown in this section use the following conventions:

- Drive bays:
  - If the number is shown as "x", it represents the quantity of the SAS/SATA drive bays.
  - If the number is shown as "x+y", it represents the quantity of the SAS/SATA + NVMe drive bays.
- XClarity Controller: "S" = Standard, "A" = Advanced, "E" = Enterprise.
- Front VGA port: "Y" = Included; "N" = Not included, optional.
- Tool-less 4-Post Rail Kit: "Y" = Included; "N" = Not included, optional.
- Power cord:
  - "R2" = 2.8 m C13-C14 rack power cable.
  - "R4" = 4.3 m C13-C14 rack power cable.
  - "N" = Not included; see Power supplies and cables for the ordering information.

The following tables list the preconfigured models of the SR250 server for the following regions:

- North America
- Brazil
- Latin America (except Brazil)
- Europe, Middle East, and Africa (EMEA)
- Hong Kong, Taiwan, Korea
- Japan
- Association of Southeast Asian Nations (ASEAN)
- Australia and New Zealand

Table 5. SR250 server models (3-year warranty): North America

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - North America												
7Y51A04MNA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	N	Y	R2
7Y51A04PNA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 1TB SATA HDD§	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	N	Y	R2
7Y51A04QNA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	N	Y	R2
7Y51A04KNA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 2TB SATA HDD§	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	N	Y	R2
7Y51A04NNA	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	N	Y	R2
7Y51A04LNA	1x E-2174G 4C 71W 3.8GHz	1x 16GB (2Rx8)	1x RAID 530-8i	4 / 4 HS LFF	2x 480GB S4510§	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	N	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.
§ Configured in a RAID-1 drive group; ships with the Windows Server 2019 Standard (16 core) - English factory preload.

Table 6. SR250 server models (1-year warranty): North America

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models (1-year warranty) - North America												
7Y52A00ENA	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2
7Y52A00CNA	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2
7Y52A00YNA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2
7Y52A00UNA	1x E-2124G 4C 71W 3.4GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00TNA	1x E-2124G 4C 71W 3.4GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00KNA	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00FNA	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00HNA	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00QNA	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00DNA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00MNA	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00NNA	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00JNA	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00LNA	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00WNA	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A010NA	1x E-2176G 6C 80W 3.7GHz	1x 16GB (2Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00XNA	1x E-2176G 6C 80W 3.7GHz	1x 16GB (2Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y52A012NA	1x E-2176G 6C 80W 3.7GHz	1x 16GB (2Rx8)	1x 430-16i HBA	10 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00SNA	1x E-2186G 6C 95W 3.8GHz	1x 16GB (2R84)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A00RNA	1x E-2186G 6C 95W 3.8GHz	1x 16GB (2Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A013NA	1x E-2186G 6C 95W 3.8GHz	1x 16GB (2Rx8)	1x 430-16i HBA	10 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
TopSeller models (1-year warranty) - North America												
7Y52A011NA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2
7Y52A01BNA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 1TB SATA HDD†	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y52A00PNA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A01CNA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 2TB SATA HDD‡	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y52A00GNA	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y52A01ANA	1x E-2174G 4C 71W 3.8GHz	1x 16GB (2Rx8)	1x RAID 530-8i	4 / 4 HS LFF	2x 480GB S4510‡	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.
† Configured in a RAID-1 drive group; ships with the Windows Server 2019 Essentials - English factory preload and Windows Server 2019 to 2016 Downgrade Kit - Multilanguage.
‡ Configured in a RAID-1 drive group; ships with the Windows Server 2019 Standard (16 core) - English factory preload and Windows Server 2019 to 2016 Downgrade Kit - Multilanguage.

Table 7. SR250 server models (1-year warranty): Brazil

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
TopSeller models - Brazil												
7Y52A006BR	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A009BR	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A007BR	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A003BR	1x E-2136 6C 80W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A008BR	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A004BR	1x E-2146G 6C 80W 3.5GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 8. SR250 server models (1-year warranty): Latin America (except Brazil)

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
TopSeller models - Latin America (except Brazil)												
7Y52A00BLA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A001LA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A000LA	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A00ALA	1x E-2136 6C 80W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A002LA	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
7Y52A005LA	1x E-2146G 6C 80W 3.5GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2
TopSeller models - Mexico only												
7Y511001LA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	2x 480GB S4510	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	Y	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 9. SR250 server models (3-year warranty): EMEA

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - EMEA												
7Y51A02MEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 SS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02SEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 SS LFF	2x 1TB SATA HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02ZEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02XEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 1TB SATA HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A026EA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02NEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A025EA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02QEA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x SATA RAID	4 / 4 SS LFF	2x 2TB SATA HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02WEA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02YEA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x SATA RAID	4 / 4 HS LFF	2x 2TB SATA HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02FEA	1x E-2124 4C 71W 3.3GHz	1x 16GB (2Rx8)	1x RAID 530-8i	4 / 4 HS LFF	2x 1TB SATA HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A024EA	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A02GEA	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A027EA	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02LEA	1x E-2134 4C 71W 3.5GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02DEA	1x E-2144G 4C 71W 3.6GHz	1x 16GB (2Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02VEA	1x E-2144G 4C 71W 3.6GHz	1x 16GB (2Rx8)	1x RAID 530-8i	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02TEA	1x E-2144G 4C 71W 3.6GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02HEA	1x E-2146G 6C 80W 3.5GHz	1x 16GB (2Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	Y	R2
7Y51A029EA	1x E-2146G 6C 80W 3.5GHz	1x 16GB (2Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A02PEA	1x E-2174G 4C 71W 3.8GHz	1x 16GB (2Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A031EA	1x E-2176G 6C 80W 3.7GHz	1x 16GB (2Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y51A02UEA	1x E-2176G 6C 80W 3.7GHz	1x 16GB (2Rx8)	1x RAID 530-8i	4 / 4 HS LFF	2x 2TB SAS HDD	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A030EA	1x E-2186G 6C 95W 3.8GHz	1x 16GB (2Rx8)	1x SATA RAID	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 10. SR250 server models (1-year warranty): EMEA

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - EMEA												
7Y52A00VEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y52A00ZEA	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 11. SR250 server models (3-year warranty): Hong Kong, Taiwan, Korea

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
TopSeller models - Hong Kong, Taiwan, Korea												
7Y51A02CCN	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	N	N
7Y51A02ECN	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A040CN	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A028CN	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	N	N
7Y51A02KCN	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	N	N
7Y51A03WCN	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A02BCN	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	S	N	N	N

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y51A02ACN	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03XCN	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A02RCN	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 HS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A02JCN	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03YCN	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A041CN	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03ZCN	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A023CN	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	S	N	N	N

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 12. SR250 server models (3-year warranty): Japan

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - Japan												
7Y51A01RJP	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A036JP	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01HJP	1x E-2124G 4C 71W 3.4GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01WJP	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01JJP	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A037JP	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A015JP	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A017JP	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A038JP	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01QJP	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y51A00QJP	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A039JP	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01CJP	1x E-2176G 6C 80W 3.7GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01PJP	1x E-2186G 6C 95W 3.8GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00UJP	1x G5400 2C 54W 3.7GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01TJP	1x G5400T 2C 35W 3.1GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01NJP	1x G5500 2C 54W 3.8GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01KJP	1x G5500T 2C 35W 3.2GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01FJP	1x G5600 2C 54W 3.9GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00MJP	1x i3-8100 4C 65W 3.6GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00PJP	1x i3-8300 4C 62W 3.7GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00SJP	1x i3-8350K 4C 91W 4GHz	1x 8GB (1Rx8)	1x SATA RAID	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
TopSeller models - Japan												
7Y51A00RJP	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00NJP	1x E-2124G 4C 71W 3.4GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01BJP	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00VJP	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00XJP	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A016JP	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01ZJP	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01VJP	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A014JP	1x E-2176G 6C 80W 3.7GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01AJP	1x E-2186G 6C 95W 3.8GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01DJP	1x G5400 2C 54W 3.7GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01SJP	1x G5400T 2C 35W 3.1GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y51A01MJP	1x G5500 2C 54W 3.8GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01YJP	1x G5500T 2C 35W 3.2GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00YJP	1x G5600 2C 54W 3.9GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A011JP	1x i3-8100 4C 65W 3.6GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A00ZJP	1x i3-8300 4C 62W 3.7GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N
7Y51A01XJP	1x i3-8350K 4C 91W 4GHz	1x 8GB (1Rx8)	1x RAID 930-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	A	N	Y	N

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 13. SR250 server models (3-year warranty): ASEAN

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - ASEAN												
7Y51A03QSG	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	N	N
7Y51A03MSG	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	N	N
7Y51A03USG	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	Y	N
7Y51A03PSG	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	N	N
7Y51A03NSG	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	N	N
7Y51A03TSG	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	Y	Y	N
TopSeller models - ASEAN												
7Y51A03CSG	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A045SG	1x E-2124 4C 71W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03DSG	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A042SG	1x E-2134 4C 71W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03ESG	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
7Y51A044SG	1x E-2136 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03FSG	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A043SG	1x E-2144G 4C 71W 3.6GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03GSG	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03VSG	1x E-2146G 6C 80W 3.5GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03HSG	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N
7Y51A03SSG	1x E-2174G 4C 71W 3.8GHz	1x 8GB (1Rx8)	1x RAID 530-8i	4 / 4 SS LFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	N

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Table 14. SR250 server models (3-year warranty): Australia and New Zealand

Model number	Intel processor*	Memory UDIMM (4 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots	Power supply^	XClarity Controller	Front VGA port	Tool-less Rail Kit	Power cord
Relationship models - Australia and New Zealand												
7Y51A01UAU	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A046AU	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	N	R4
7Y51A047AU	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	1x PCIe x16 1x PCIe x4	1x 450W HS	S	N	Y	R2
7Y51A018AU	1x E-2104G 4C 65W 3.2GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A013AU	1x E-2124G 4C 71W 3.4GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A01LAU	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A010AU	1x E-2126G 6C 80W 3.3GHz	1x 8GB (1Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A00TAU	1x E-2144G 4C 71W 3.6GHz	1x 16GB (2Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A00WAU	1x E-2144G 4C 71W 3.6GHz	1x 16GB (2Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A012AU	1x E-2174G 4C 71W 3.8GHz	1x 16GB (2Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A01EAU	1x E-2186G 6C 95W 3.8GHz	1x 16GB (2Rx8)	1x SATA AHCI	8 / 10 HS SFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 450W HS	E	Y	Y	R2
7Y51A01GAU	1x G5600 2C 54W 3.9GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2
7Y51A019AU	1x i3-8300 4C 62W 3.7GHz	1x 8GB (1Rx8)	1x SATA AHCI	4 / 4 HS LFF	Open bay	2x 1 GbE	2x PCIe x8 1x PCIe x4	1x 300W Fixed	E	Y	Y	R2

* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.
^ The server supports one fixed power supply or up to two hot-swap (HS) power supplies.

Processors

The SR250 supports one processor from the Intel product family formerly known by the codename "Coffee Lake-S". This includes processors from the Intel Xeon E, Core i3, Pentium Gold, and Celeron G families.

Topics in this section:

- UEFI operating modes

E-2200 processors: The SR250 also supports Xeon E-2200 processors. For details, see https://lenovopress.com/lp1272.

The server supports the processors that are listed in the following table.

Integrated graphics and management: Xeon processors with a G suffix include integrated graphics, however, this functionality is not used in the SR250. Instead, graphics support is provided by XClarity Controller (XCC), or by an GPU add-in card. Similarly system management of the SR250 is handled by XCC and as a result, the AMT management processor is disabled.

Table 15. Processor specifications (HT = Hyper-Threading, TB = Turbo Boost, VT = Virtualization Technology)

CPU model	Core frequency (Base / TB Max)	Number of cores / threads	Cache	Max DDR4 frequency	Max memory capacity	Bus speed	TDP	ECC	HT	TB	VT-x	VT-d	SGX*
Intel Xeon E processors													
E-2104G	3.20 GHz	4 / 4	8 MB	2666 MHz	64 GB	8 GT/s	65 W	Yes	No	No	Yes	Yes	No
E-2124	3.30 / 4.30 GHz	4 / 4	8 MB	2666 MHz	64 GB	8 GT/s	71 W	Yes	No	Yes	Yes	Yes	No
E-2124G	3.40 / 4.50 GHz	4 / 4	8 MB	2666 MHz	64 GB	8 GT/s	71 W	Yes	No	Yes	Yes	Yes	No
E-2126G	3.30 / 4.50 GHz	6 / 6	12 MB	2666 MHz	64 GB	8 GT/s	80 W	Yes	No	Yes	Yes	Yes	No
E-2134	3.50 / 4.50 GHz	4 / 8	8 MB	2666 MHz	64 GB	8 GT/s	71 W	Yes	Yes	Yes	Yes	Yes	No
E-2136	3.30 / 4.50 GHz	6 / 12	12 MB	2666 MHz	64 GB	8 GT/s	80 W	Yes	Yes	Yes	Yes	Yes	No
E-2144G	3.60 / 4.50 GHz	4 / 8	8 MB	2666 MHz	64 GB	8 GT/s	71 W	Yes	Yes	Yes	Yes	Yes	No
E-2146G	3.50 / 4.50 GHz	6 / 12	12 MB	2666 MHz	64 GB	8 GT/s	80 W	Yes	Yes	Yes	Yes	Yes	No
E-2174G	3.80 / 4.70 GHz	4 / 8	8 MB	2666 MHz	64 GB	8 GT/s	71 W	Yes	Yes	Yes	Yes	Yes	Yes
E-2176G	3.70 / 4.70 GHz	6 / 12	12 MB	2666 MHz	64 GB	8 GT/s	80 W	Yes	Yes	Yes	Yes	Yes	Yes
E-2186G	3.80 / 4.70 GHz	6 / 12	12 MB	2666 MHz	64 GB	8 GT/s	95 W	Yes	Yes	Yes	Yes	Yes	Yes
Intel Core i3 processors													
i3-8100	3.60 GHz	4 / 4	6 MB	2400 MHz	64 GB	8 GT/s	65 W	Yes	No	No	Yes	Yes	No
i3-8100T	3.10 GHz	4 / 4	6 MB	2400 MHz	64 GB	8 GT/s	35 W	Yes	No	No	Yes	Yes	No
i3-8300	3.70 GHz	4 / 4	8 MB	2400 MHz	64 GB	8 GT/s	62 W	Yes	No	No	Yes	Yes	No
i3-8300T	3.20 GHz	4 / 4	8 MB	2400 MHz	64 GB	8 GT/s	35 W	Yes	No	No	Yes	Yes	No
i3-8350K	4.00 GHz	4 / 4	8 MB	2400 MHz	64 GB	8 GT/s	91 W	Yes	No	No	Yes	Yes	No
Intel Pentium Gold processors													
G5400	3.70 GHz	2 / 4	4 MB	2400 MHz	64 GB	8 GT/s	58 W	Yes	Yes	No	Yes	Yes	No
G5400T	3.10 GHz	2 / 4	4 MB	2400 MHz	64 GB	8 GT/s	35 W	Yes	Yes	No	Yes	Yes	No
G5500	3.80 GHz	2 / 4	4 MB	2400 MHz	64 GB	8 GT/s	54 W	Yes	Yes	No	Yes	Yes	No
G5500T	3.20 GHz	2 / 4	4 MB	2400 MHz	64 GB	8 GT/s	35 W	Yes	Yes	No	Yes	Yes	No
G5600	3.90 GHz	2 / 4	4 MB	2400 MHz	64 GB	8 GT/s	54 W	Yes	Yes	No	Yes	Yes	No
Intel Celeron processors													
G4900	3.10 GHz	2 / 2	2 MB	2400 MHz	64 GB	8 GT/s	54 W	Yes	No	No	Yes	Yes	No
G4900T	2.90 GHz	2 / 2	2 MB	2400 MHz	64 GB	8 GT/s	35 W	Yes	No	No	Yes	Yes	No
G4920	3.20 GHz	2 / 2	2 MB	2400 MHz	64 GB	8 GT/s	54 W	Yes	No	No	Yes	Yes	No

* Intel SGX support requires UEFI V1.03 (ISE110C) or later.

The following table lists feature codes for the processors that are available for the SR250 server.

Table 16. Processor feature codes

Description	Feature code
Intel Xeon E processors	
Intel Xeon E-2104G 4C 65W 3.2GHz Processor	B354
Intel Xeon E-2124 4C 71W 3.3GHz Processor	B353
Intel Xeon E-2124G 4C 71W 3.4GHz Processor	B352
Intel Xeon E-2126G 6C 80W 3.3GHz Processor	B351
Intel Xeon E-2134 4C 71W 3.5GHz Processor	B350
Intel Xeon E-2136 6C 80W 3.3GHz Processor	B34Z
Intel Xeon E-2144G 4C 71W 3.6GHz Processor	B34Y
Intel Xeon E-2146G 6C 80W 3.5GHz Processor	B34X
Intel Xeon E-2174G 4C 71W 3.8GHz Processor	B34W
Intel Xeon E-2176G 6C 80W 3.7GHz Processor	B34V
Intel Xeon E-2186G 6C 95W 3.8GHz Processor	B34U
Intel Core i3 processors	
Intel Core i3-8100 4C 65W 3.6GHz Processor	B357
Intel Core i3-8100T 4C 35W 3.1GHz Processor	B359
Intel Core i3-8300 4C 62W 3.7GHz Processor	B356
Intel Core i3-8300T 4C 35W 3.2GHz Processor	B358
Intel Core i3-8350K 4C 91W 4GHz Processor	B355
Intel Pentium Gold processors	
Intel Pentium Gold G5400 2C 54W 3.7GHz Processor	B35C
Intel Pentium Gold G5400T 2C 35W 3.1GHz Processor	B35G
Intel Pentium Gold G5500 2C 54W 3.8GHz Processor	B35B
Intel Pentium Gold G5500T 2C 35W 3.2GHz Processor	B35F
Intel Pentium Gold G5600 2C 54W 3.9GHz Processor	B35A
Intel Celeron G processors	
Intel Celeron G4900 2C 54W 3.1GHz Processor	B35E
Intel Celeron G4900T 2C 35W 2.9GHz Processor	B35H
Intel Celeron G4920 2C 54W 3.2GHz Processor	B35D

UEFI operating modes

The SR250 offers preset operating modes that affect energy consumption and performance. These modes are a collection of predefined low-level UEFI settings that simplify the task of tuning the server to suit your business and workload requirements.

The following table lists the feature codes that allow you to specify the mode you wish to preset in the factory for CTO orders.

Table 17. UEFI operating mode presets in DCSC

Feature code	Description
BFYB	Operating mode selection for: "Maximum Performance Mode"
BFYC	Operating mode selection for: "Minimal Power Mode"
BFYD	Operating mode selection for: "Efficiency Favoring Power Savings Mode"
BFYE	Operating mode selection for: "Efficiency - Favoring Performance Mode"

The preset modes for the SR250 are as follows:

- **Maximum Performance Mode** (feature BFYB): Achieves maximum performance but with higher power consumption and lower energy efficiency.
- **Minimal Power Mode** (feature BFYC): Minimize the absolute power consumption of the system.
- **Efficiency Favoring Power Savings Mode** (feature BFYD): Maximize the performance/watt efficiency with a bias towards power savings. This is the favored mode for SPECpower benchmark testing, for example.
- **Efficiency Favoring Performance Mode** (feature BFYE): Maximize the performance/watt efficiency with a bias towards performance. This is the favored mode for Energy Star certification, for example.

Memory

The SR250 server supports up to 4 TruDDR4 memory UDIMMs with ECC protection. The processor has two memory channels with two DIMMs per channel.

Lenovo TruDDR4 memory uses the highest-quality components sourced from Tier 1 DRAM suppliers and only memory that meets strict requirements is selected. It is compatibility tested and tuned on every ThinkSystem server to maximize performance and reliability.

TruDDR4 memory has a unique signature programmed into the DIMM, which enables Lenovo servers to verify whether the memory installed is qualified and supported. Lenovo qualified and supported TruDDR4 memory is covered by Lenovo warranty, and service and support provided worldwide.

The following rules apply when selecting the memory configuration:

- The server supports memory configurations with 1, 2, 3, or 4 UDIMMs.
- Mixing UDIMMs of different capacity is *not* supported.
- All DIMMs in the server operate at the same speed up to 2666 MHz, which is determined by the maximum memory speed supported by the specific processor (see Processors for details).
  Note: Maximum memory speed can be achieved when Max performance mode is enabled in UEFI.
- The server supports up to 128 GB of memory.
  Note: 32 GB UDIMMs are supported only with the Intel Xeon E Series processors and require the UEFI version ISE114H or later; Core i3, Pentium Gold, and Celeron G Series processors do not support 32 GB UDIMMs.

The following table lists memory options available for the SR250 server.

Table 18. Memory options

Description	Part number	Feature code	Maximum quantity
ThinkSystem 8GB TruDDR4 2666MHz (1Rx8, 1.2V) ECC UDIMM	4ZC7A08696	B35J	4
ThinkSystem 16GB TruDDR4 2666MHz (2Rx8, 1.2V) ECC UDIMM	4ZC7A08699	B35K	4
ThinkSystem 32GB TruDDR4 2666MHz (2Rx8, 1.2V) ECC UDIMM	4ZC7A15142	B96E	4

Internal storage

The SR250 server supports the following internal drive bay configurations:

1. 4 LFF SATA Simple Swap drive bays
2. 4 LFF SAS/SATA hot-swap drive bays
3. 8 SFF SAS/SATA hot-swap drive bays
4. 10 SFF hot-swap drive bays:
    a. 10x 2.5" SAS/SATA
    b. 8x 2.5" SAS/SATA & 2x 2.5" NVMe PCIe

In addition, the SR250 server models can be configured with one internal M.2 SATA non-hot-swap SSD.

The following figure shows the internal drive bay configurations.

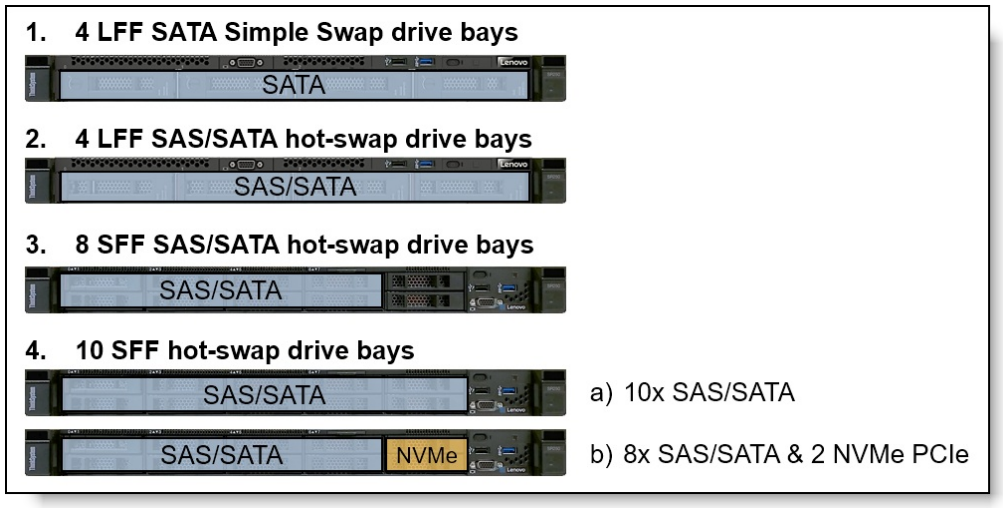

Figure 7. Internal drive bay configurations

The following table lists the internal storage options for the SR250 server.

X30 and X40 adapters: Some of the kits are for X30 adapters, which correspond to any of the RAID 930, 730, 530 or HBA 430 storage adapters. Some kits are for use with X40 adapters, which correspond to RAID 940 and HBA 440 storage adapters.

Table 19. Internal storage options

Part number	Feature code	Description	Maximum quantity
Simple-swap (SS) backplane kits			
None*	BMNP	ThinkSystem SR250 4x3.5" SS BP BKT Kit v2	1
None*	B407	ThinkSystem SR250 4x3.5" SS BP BKT Kit	1
4M17A80597	BN11	ThinkSystem SR250/SR150 4x3.5" SS HBA BP Bracket Kit v2 (for X30 RAID/HBA)	1
4M17A14200	B408	ThinkSystem SR250/SR150 4x3.5" SS Backplane Bracket Kit for HW X30 RAID/HBA	1
4M17A80601	BM7L	ThinkSystem SR250 Series 4x3.5" Simple Swap Backplane Kit for X40 RAID/HBA	1
Hot-swap (HS) backplanes and kits			
None*	BMPU	ThinkSystem SR250 Series 8x2.5" Hot Swap SAS/SATA Backplane Kit for X350/X40 RAID/HBA v2	1

Part number	Feature code	Description	Maximum quantity
None*	B413	ThinkSystem SR250 2.5" SATA/SAS 8-Bay BP	1
4M17A80605	BMPX	ThinkSystem SR250 3.5" SATA/SAS 4-Bay BP with X30 RAID Cable Kit v2	1
4M17A13565	B412	ThinkSystem SR250 3.5" HS SATA/SAS 4-Bay Backplane with X30 RAID Cable Kit (for X30 RAID/HBA)	1
4M17A80607	BMPX	ThinkSystem SR250 3.5" Hot Swap SAS/SATA 4-Bay Backplane Kit for X40 RAID v2	1
4M17A80602	BN9K	ThinkSystem SR250 3.5" HS SATA/SAS 4-Bay Backplane with X40 RAID Cable Kit	1
4C57A80517	BMPV	ThinkSystem SR250 2.5" Anybay 10-Bay BP v2	1
4C57A12112	B414	ThinkSystem SR250 2.5" Anybay 10-Bay BP	1
Cables for hot-swap backplanes			
None*	B405	ThinkSystem SR250 3.5"x4 OB MSHD to BP MSHD Cable (4x3.5" HS SATA x4 Cable for Onboard SATA)	1
None*	B406	ThinkSystem SR250 2.5"x8 OB MSHD/SATA to BP 2xMSHD Cable (8x2.5" HS SATA 2x4 Cable for Onboard SATA)	1
4Z57A12652	B415	ThinkSystem SR250 3.5"/2.5" HS SAS/SATA x4 Cable for HW X30 RAID/HBA (for X30 RAID/HBA)	3
4Z57A80610	BN9L	ThinkSystem SR250 3.5"/2.5" HS SAS/SATA x4 Cable for HW X40 RAID/HBA	3
4Z57A12651	B416	ThinkSystem SR250 2.5"x10 NVMe Cable	2

* Factory-installed only, no field upgrade.

Configuration notes:

- The AnyBay backplane allows either SAS/SATA drives or NVMe PCIe drives in the drive bays 8 and 9.
- Configurations with NVMe PCIe drives are supported only for Machine Types 7Y51, 7Y52, and 7Y72; Machine Type 7Y73 does not support configurations with NVMe PCIe drives.
- Field upgrades for models with 3.5-inch drive bays:
  - Models with 4x 3.5" SS drive bays and an onboard SATA controller can be upgraded to support a hardware RAID controller or HBA by using one of the following:
    - For use with X30 RAID/HBA adapters: 4x3.5" SS Backplane Bracket Kit for HW RAID/HBA (4M17A80597 or 4M17A14200)
    - For use with X40 RAID/HBA adapters: 4x3.5" SS Backplane Bracket Kit for HW X40 RAID/HBA (4M17A80601)
  - Models with 4x 3.5" SS drive bays can be upgraded to support 4x 3.5" HS drive bays and a hardware RAID controller or HBA by using one of the following:
    - For use with X30 RAID/HBA adapters: 3.5" HS SATA/SAS 4-Bay Backplane Cable Kit (4M17A80605 or 4M17A13565). The kit includes the hot-swap backplane (BMPX or B412) and the SAS/SATA cable for HW RAID/HBA (B415).
    - For use with X40 RAID/HBA adapters: 3.5" HS SATA/SAS 4-Bay Backplane with X40 RAID Cable Kit (4M17A80607 or 4M17A80602). The kit includes the backplane and the cable for connecting to the X40 adapters
  - Models with 4x 3.5" HS drive bays and an onboard SATA controller can be upgraded to support a hardware RAID controller or HBA by using one of the following:
    - For use with X30 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW RAID/HBA (4Z57A12652)
    - For use with X40 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW X40 RAID/HBA (4Z57A80610)
- Field upgrades for models with 2.5-inch drive bays:
  - Models with 8x 2.5" HS drive bays and an onboard SATA controller can be upgraded to support a hardware RAID controller or HBA by using **two** of the following:
    - For use with X30 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW

RAID/HBA (4Z57A12652)

- For use with X40 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW X40 RAID/HBA (4Z57A80610)

- Models with 8x 2.5" HS drive bays and an onboard SATA controller can be upgraded to support 10x 2.5" HS drive bays and a hardware RAID controller or HBA by using the 2.5" HS AnyBay 10-Bay Backplane (4C57A80517 or 4C57A12112). The following additional cables are needed:
  - NVMe support: **Two** 3.5"/2.5" HS SAS/SATA x4 Cables for HW RAID/HBA (4Z57A12652 for X30 or 4Z57A80610 for X40) and **two** 10x2.5" HS NVMe Cables (4Z57A12651).
  - No NVMe support: **Three** 3.5"/2.5" HS SAS/SATA x4 Cables for HW RAID/HBA (4Z57A12652 for X30 or 4Z57A80610 for X40).
- Models with 8x 2.5" HS drive bays and a hardware RAID controller or HBA can be upgraded to support 10x 2.5" HS drive bays by using the 2.5" HS AnyBay 10-Bay Backplane (4C57A80517 or 4C57A12112). The following additional cables are needed:
  - NVMe support: **Two** 10x2.5" HS NVMe Cables (4Z57A12651).
  - No NVMe support: One 3.5"/2.5" HS SAS/SATA x4 Cable for HW RAID/HBA (4Z57A12652 for X30 or 4Z57A80610 for X40).
- Models with 10x 2.5" HS drive bays and an NVMe Switch Adapter can be upgraded to support a hardware RAID controller or HBA by using **two** of the following:
  - For use with X30 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW RAID/HBA (4Z57A12652)
  - For use with X40 RAID/HBA adapters: 3.5"/2.5" HS SAS/SATA x4 Cable for HW X40 RAID/HBA (4Z57A80610)

- Controllers for internal storage are not included with the field upgrade options.
- The M.2 SSD cannot be used in the configurations with eight drives that are connected to the onboard SATA controller (the SATA port 7 is shared between the drive bay 7 and the M.2 connector).

The following table lists supported internal storage configurations with the SAS/SATA and AnyBay backplanes.

Table 20. Internal storage configurations

Drive bay configuration	Backplane and cable type and quantity									Storage controller quantity and type*
	4x 3.5" SS BP SW (BMNP / B407)	4x 3.5" SS BP HW (BN11 / B408)	4x 3.5" HS BP (BMPX / B412)	8x 2.5" HS BP (BMPU / B413)	10x 2.5" HS BP (B414)	4x3.5" HS x4 Cable SW (B405)	8x2.5" HS 2x4 Cable SW (B406)	3.5"/2.5" HS x4 Cable HW (B415)	10x 2.5" HS NVMe Cable (B416)	
3.5" chassis (Feature code B403)										
4x 3.5-in. SATA simple-swap	1	0	0	0	0	0	0	0	0	1x Onboard AHCI / RSTe (4)
	0	1	0	0	0	0	0	0	0	1x RAID 530/730/930-8i/930-16i (4)
										1x 430-8i/16i HBA (4)
4x 3.5-in. SAS/SATA hot-swap	0	0	1	0	0	1	0	0	0	1x Onboard AHCI / RSTe (4)
	0	0	1	0	0	0	0	1	0	1x RAID 530/730/930-8i/930-16i (4)
										1x 430-8i/16i HBA (4)
2.5" chassis (Feature code B404)										
8x 2.5-in. SAS/SATA hot-swap	0	0	0	1	0	0	1	0	0	1x Onboard AHCI / RSTe (8)
	0	0	0	1	0	0	0	2	0	1x RAID 530/730/930-8i/930-16i (8)
										1x 430-8i/16i HBA (8)
10x 2.5-in. SAS/SATA hot-swap	0	0	0	0	1	0	0	3	0	1x RAID 930-16i (10)
										1x 430-16i HBA (10)
8x 2.5-in. SAS/SATA + 2x 2.5-in. NVMe hot-swap	0	0	0	0	1	0	0	2	2	1x RAID 530/730/930-8i/930-16i (8) + 1x 1610-4P (2)
										1x 430-8i/16i HBA (8) + 1x 1610-4P (2)
2x 2.5-in. NVMe hot-swap	0	0	0	0	1	0	0	0	2	1x 1610-4P (2)

* The number in brackets (x) specifies the quantity of drive bays connected to each of the controllers.

SED encryption key management with SKLM

The server supports self-encrypting drives (SEDs) as listed in the Internal drive options section. To effectively manage a large deployment of these drives in Lenovo servers, IBM Security Key Lifecycle Manager (SKLM) offers a centralized key management solution. A Lenovo Feature on Demand (FoD) upgrade is used to enable this SKLM support in the management processor of the server.

The following table lists the part numbers and feature codes for the upgrades.

Table 21. FoD upgrades for SKLM support

Part number	Feature code	Description
Security Key Lifecycle Manager - FoD (United States, Canada, Asia Pacific, and Japan)		
00D9998	A5U1	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 1 year S&S
00D9999	AS6C	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 3 year S&S
Security Key Lifecycle Manager - FoD (Latin America, Europe, Middle East, and Africa)		
00FP648	A5U1	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 1 year S&S
00FP649	AS6C	SKLM for System x/ThinkSystem w/SEDs - FoD per Install with 3 year S&S

The IBM Security Key Lifecycle Manager software is available from Lenovo using the ordering information listed in the following table.

Table 22. IBM Security Key Lifecycle Manager licenses

Part number	Description
7S0A007FWW	IBM Security Key Lifecycle Manager Basic Edition Install License + SW Subscription & Support 12 Months
7S0A007HWW	IBM Security Key Lifecycle Manager For Raw Decimal Terabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007KWW	IBM Security Key Lifecycle Manager For Raw Decimal Petabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007MWW	IBM Security Key Lifecycle Manager For Usable Decimal Terabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months
7S0A007PWW	IBM Security Key Lifecycle Manager For Usable Decimal Petabyte Storage Resource Value Unit License + SW Subscription & Support 12 Months

Controllers for internal storage

The following table lists the storage controllers and options for internal storage of the SR250 server.

Table 23. RAID controllers and HBAs for internal storage

Part number	Feature code	Description	Maximum quantity	I/O slots supported
6 Gbps SATA controllers				
None*	None*	Onboard AHCI (non-RAID) / Intel RSTe (RAID)	1	-
12 Gb SAS/SATA RAID controllers				
7Y37A01082	AUNG	ThinkSystem RAID 530-8i PCIe 12Gb Adapter	1	2, 3
4Y37A78834	BMFT	ThinkSystem RAID 540-8i PCIe Gen4 12Gb Adapter	1	2, 3
7Y37A01083	AUNH	ThinkSystem RAID 730-8i 1GB Cache PCIe 12Gb Adapter	1	2, 3
4Y37A09722	B4RQ	ThinkSystem RAID 730-8i 2GB Flash PCIe 12Gb Adapter	1	2, 3
7Y37A01084	AUNJ	ThinkSystem RAID 930-8i 2GB Flash PCIe 12Gb Adapter	1	2, 3

Part number	Feature code	Description	Maximum quantity	I/O slots supported
7Y37A01085	AUNK	ThinkSystem RAID 930-16i 4GB Flash PCIe 12Gb Adapter	1	2, 3
4Y37A09728	B8NY	ThinkSystem RAID 940-8i 4GB Flash PCIe Gen4 12Gb Adapter	1	2, 3
4Y37A78600	BM35	ThinkSystem RAID 940-16i 4GB Flash PCIe Gen4 12Gb Adapter	1	2, 3
12 Gb SAS/SATA HBAs (non-RAID)				
7Y37A01088	AUNL	ThinkSystem 430-8i SAS/SATA 12Gb HBA	1	2, 3
7Y37A01089	AUNM	ThinkSystem 430-16i SAS/SATA 12Gb HBA	1	2, 3
4Y37A78601	BM51	ThinkSystem 440-8i SAS/SATA PCIe Gen4 12Gb HBA	1	2, 3
4Y37A78602	BM50	ThinkSystem 440-16i SAS/SATA PCIe Gen4 12Gb HBA	1	2, 3
NVMe PCIe adapters (non-RAID)				
7Y37A01081	AUV2	ThinkSystem 1610-4P NVMe Switch Adapter	1	2

* The onboard SATA controller integrated into the Intel C246 Platform Controller Hub (PCH) supports non-RAID (JBOD) AHCI mode or a hardware-assist, software RAID feature (Intel Rapid Storage Technology Enterprise [RSTe]).

For a comparison of the functions of the supported storage adapters, see the ThinkSystem RAID Adapter and HBA Reference:
https://lenovopress.com/lp1288-thinksystem-raid-adapter-and-hba-reference#sr250-support=SR250

Configuration notes:

- The onboard SATA controller does not consume a PCIe slot.
- SAS RAID controllers and HBAs for internal storage are supported in the following PCIe slots:
  - PCIe slot 2 on the PCIe x8/x8 Riser Card (feature code B418):
    - No additional PCIe adapters are installed
    - One additional PCIe adapter is installed in the server in the PCIe slot 1
  - PCIe slot 3 on the system board:
    - Two additional PCIe adapters are installed in the server in the PCIe slots 1 and 2
    - A GPU adapter is installed in the server in the PCIe slot 2
    - The PCIe x16 Riser Card (feature code B417) is installed in the server
- The total quantity of the RAID 730-8i 2GB, 930-8i, 930-16i, and 930-8e controllers in the server must not exceed 1 (up to 1 supercapacitor can be mounted in the server).
- The 1610-4P NVMe Switch Adapter is supported in the PCIe slot 2 supplied by the PCIe x8 or x16 riser card.
- The 1610-4P NVMe Switch Adapter provides two PCIe 3.0 x4 ports for JBOD (non-RAID) connectivity to U.2 NVMe PCIe SSDs in the drive bays 8 and 9.
- The onboard Intel RSTe is not supported by virtualization hypervisors, including VMware vSphere (ESXi), Linux KVM, Xen, and Microsoft Hyper-V.
- The onboard Intel RSTe supports up to eight drives in a RAID-0 or RAID-5 array, two drives in a RAID-1 array, and four drives in a RAID-10 array. In a Windows Server-based environment, the onboard Intel RSTe supports up to six drives in a RAID-0 or RAID-5 array.

For more information, see the list of Product Guides in the following categories:

- RAID adapters
  http://lenovopress.com/servers/options/raid#rt=product-guide
- Host bus adapters
  http://lenovopress.com/servers/options/hba#rt=product-guide

Internal drive options

The following tables list the drive options for internal storage of the server.

2.5-inch hot-swap drives:

- 2.5-inch hot-swap 12 Gb SAS HDDs
- 2.5-inch hot-swap 6 Gb SATA HDDs
- 2.5-inch hot-swap 6 Gb SATA SSDs
- 2.5-inch hot-swap PCIe 4.0 NVMe SSDs
- 2.5-inch hot-swap PCIe 3.0 NVMe SSDs

3.5-inch hot-swap drives:

- 3.5-inch hot-swap 12 Gb SAS HDDs
- 3.5-inch hot-swap 6 Gb SATA HDDs
- 3.5-inch hot-swap 6 Gb SATA SSDs

Simple-swap drives:

- 3.5-inch simple-swap 6 Gb SATA HDDs
- 3.5-inch simple-swap 6 Gb SATA SSDs

M.2 drives:

- M.2 SATA drives

M.2 drive support: The use of M.2 drives requires an additional adapter as described in the Internal storage section.

PCIe 4.0 NVMe drive support: When installed in this server, PCIe 4.0 NVMe drives will operate at PCIe 3.0 speeds.

Table 24. 2.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00021	AULV	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00022	AULW	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00023	AULX	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	10
2.5-inch hot-swap HDDs - 12 Gb SAS 10K				
7XB7A00024	AULY	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00025	AULZ	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00026	AUM0	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00027	AUM1	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00028	AUM2	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	No	10
7XB7A00069	B0YS	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	No	10
2.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00034	AUM6	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	10
7XB7A00035	AUM7	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	10
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K				
7XB7A00030	AUM4	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD SED	Support	10

Table 25. 2.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap HDDs - 6 Gb NL SATA				
7XB7A00036	AUUE	ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	10
7XB7A00037	AUUJ	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	10

Table 26. 2.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A82289	BQ21	ThinkSystem 2.5" 5400 MAX 480GB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82290	BQ24	ThinkSystem 2.5" 5400 MAX 960GB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82291	BQ22	ThinkSystem 2.5" 5400 MAX 1.92TB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A82292	BQ23	ThinkSystem 2.5" 5400 MAX 3.84TB Mixed Use SATA 6Gb HS SSD	Support	10
4XB7A17125	BA7Q	ThinkSystem 2.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A17126	BA4T	ThinkSystem 2.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A17087	B8J1	ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17088	B8HY	ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17089	B8J6	ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A17090	B8JE	ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A13633	B49L	ThinkSystem 2.5" S4610 240GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A13634	B49M	ThinkSystem 2.5" S4610 480GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A13635	B49N	ThinkSystem 2.5" S4610 960GB Mixed Use SATA 6Gb HS SSD	No	10
4XB7A10237	B488	ThinkSystem 2.5" 5200 240GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A10238	B489	ThinkSystem 2.5" 5200 480GB Mainstream SATA 6Gb Hot Swap SSD	No	10
4XB7A10239	B48A	ThinkSystem 2.5" 5200 960GB Mainstream SATA 6Gb Hot Swap SSD	No	10
2.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A82258	BQ1Q	ThinkSystem 2.5" 5400 PRO 240GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82259	BQ1P	ThinkSystem 2.5" 5400 PRO 480GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82260	BQ1R	ThinkSystem 2.5" 5400 PRO 960GB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82261	BQ1X	ThinkSystem 2.5" 5400 PRO 1.92TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82262	BQ1S	ThinkSystem 2.5" 5400 PRO 3.84TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A82263	BQ1T	ThinkSystem 2.5" 5400 PRO 7.68TB Read Intensive SATA 6Gb HS SSD	Support	10
4XB7A72438	BM8B	ThinkSystem 2.5" PM893 480GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72439	BM8A	ThinkSystem 2.5" PM893 960GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72440	BM89	ThinkSystem 2.5" PM893 1.92TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72441	BM88	ThinkSystem 2.5" PM893 3.84TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A72442	BM87	ThinkSystem 2.5" PM893 7.68TB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17072	B99D	ThinkSystem 2.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17101	BA7G	ThinkSystem 2.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A17102	BA7H	ThinkSystem 2.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A38271	BCTC	ThinkSystem 2.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	No	10

Part number	Feature code	Description	SED support	Max Qty
4XB7A38272	BCTD	ThinkSystem 2.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38273	BCTE	ThinkSystem 2.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38274	BCTF	ThinkSystem 2.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38275	BCTG	ThinkSystem 2.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17075	B8HV	ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17076	B8JM	ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17077	B8HP	ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17078	B8J5	ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A17079	B8JP	ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A38185	B9AC	ThinkSystem 2.5" 5210 960GB Entry SATA 6Gb Hot Swap QLC SSD	No	10
4XB7A10247	B498	ThinkSystem 2.5" S4510 240GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A10248	B499	ThinkSystem 2.5" S4510 480GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A10249	B49A	ThinkSystem 2.5" S4510 960GB Read Intensive SATA 6Gb HS SSD	No	10
4XB7A10195	B34H	ThinkSystem 2.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10196	B34J	ThinkSystem 2.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10197	B34K	ThinkSystem 2.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10153	B2X2	ThinkSystem 2.5" 5200 480GB Entry SATA 6Gb Hot Swap SSD	No	10
4XB7A10154	B2X3	ThinkSystem 2.5" 5200 960GB Entry SATA 6Gb Hot Swap SSD	No	10

Table 27. 2.5-inch hot-swap PCIe 4.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 4.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A13941	BMGD	ThinkSystem 2.5" U.2 P5520 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	Support	2
4XB7A17145	BCFT	ThinkSystem 2.5" U.2 P5500 1.92TB Read Intensive NVMe PCIe 4.0 x4 HS SSD	No	2

Note: NVMe PCIe SSDs support surprise hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 28. 2.5-inch hot-swap PCIe 3.0 NVMe SSDs

Part number	Feature code	Description	SED support	Max Qty
2.5-inch SSDs - U.2 PCIe 3.0 NVMe - Read Intensive/Entry (<3 DWPD)				
4XB7A10202	B58F	ThinkSystem U.2 Intel P4510 1.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	2
7SD7A05779	B11C	ThinkSystem U.2 Intel P4500 1.0TB Entry NVMe PCIe3.0 x4 Hot Swap SSD	No	2

Note: NVMe PCIe SSDs support surprise hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 29. 3.5-inch hot-swap 12 Gb SAS HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap HDDs - 12 Gb SAS 15K				
7XB7A00038	AUU2	ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00039	AUU3	ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00040	AUUC	ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	No	4
3.5-inch hot-swap HDDs - 12 Gb NL SAS				
7XB7A00041	AUU4	ThinkSystem 3.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00042	AUU5	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00043	AUU6	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	No	4
7XB7A00044	AUU7	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00045	B0YR	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
7XB7A00067	B117	ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A13911	B7EZ	ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A38266	BCFP	ThinkSystem 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4
4XB7A80353	BPKU	ThinkSystem 3.5" 20TB 7.2K SAS 12Gb Hot Swap 512e HDD	No	4

Table 30. 3.5-inch hot-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap HDDs - 6 Gb NL SATA				
7XB7A00049	AUUF	ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00050	AUUD	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00051	AUU8	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	No	4
7XB7A00052	AUUA	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
7XB7A00053	AUU9	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
7XB7A00068	B118	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A13914	B7F0	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A38130	BCFH	ThinkSystem 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4
4XB7A80354	BPKV	ThinkSystem 3.5" 20TB 7.2K SATA 6Gb Hot Swap 512e HDD	No	4

Table 31. 3.5-inch hot-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch hot-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17137	BA4W	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17138	BA4X	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A17096	B8JL	ThinkSystem 3.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17097	B8JF	ThinkSystem 3.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17098	B8J0	ThinkSystem 3.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A17099	B8HR	ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A13639	B49R	ThinkSystem 3.5" S4610 240GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A13640	B49S	ThinkSystem 3.5" S4610 480GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A13641	B49T	ThinkSystem 3.5" S4610 960GB Mixed Use SATA 6Gb HS SSD	No	4
4XB7A10242	B48D	ThinkSystem 3.5" 5200 240GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A10243	B48E	ThinkSystem 3.5" 5200 480GB Mainstream SATA 6Gb Hot Swap SSD	No	4
4XB7A10244	B48F	ThinkSystem 3.5" 5200 960GB Mainstream SATA 6Gb Hot Swap SSD	No	4
3.5-inch hot-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A17118	BA7K	ThinkSystem 3.5" S4520 240GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17119	BA7L	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17120	BA7M	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A38276	BCTH	ThinkSystem 3.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38277	BCTJ	ThinkSystem 3.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38278	BCTK	ThinkSystem 3.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38279	BCTL	ThinkSystem 3.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A38281	BCTM	ThinkSystem 3.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17081	B8JB	ThinkSystem 3.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17082	B8J9	ThinkSystem 3.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17083	B8JC	ThinkSystem 3.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17084	B8HZ	ThinkSystem 3.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17085	B8HQ	ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A13625	B49D	ThinkSystem 3.5" S4510 240GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13626	B49E	ThinkSystem 3.5" S4510 480GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A13627	B49F	ThinkSystem 3.5" S4510 960GB Read Intensive SATA 6Gb HS SSD	No	4
4XB7A17176	B6TM	ThinkSystem 3.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17177	B6TN	ThinkSystem 3.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A17179	B6JY	ThinkSystem 3.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A10158	B2X7	ThinkSystem 3.5" 5200 480GB Entry SATA 6Gb Hot Swap SSD	No	4
4XB7A10159	B2X8	ThinkSystem 3.5" 5200 960GB Entry SATA 6Gb Hot Swap SSD	No	4

Table 32. 3.5-inch simple-swap 6 Gb SATA HDDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch simple-swap HDDs - 6 Gb NL SATA				
7XB7A00055	AUZS	ThinkSystem 1TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00056	AUZT	ThinkSystem 2TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00057	AUZU	ThinkSystem 4TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	No	4
7XB7A00058	AXC7	ThinkSystem 6TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	No	4
7XB7A00059	AXC6	ThinkSystem 8TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	No	4

Table 33. 3.5-inch simple-swap 6 Gb SATA SSDs

Part number	Feature code	Description	SED support	Max Qty
3.5-inch simple-swap SSDs - 6 Gb SATA - Mixed Use/Mainstream (3-5 DWPD)				
4XB7A17134	BK7M	ThinkSystem 3.5" S4620 480GB Mixed Use SATA 6Gb SS SSD	No	4
4XB7A17135	BK7N	ThinkSystem 3.5" S4620 960GB Mixed Use SATA 6Gb SS SSD	No	4
4XB7A13960	B5Y5	ThinkSystem 3.5" S4610 240GB Mixed Use SATA 6Gb SS SSD	No	4
4XB7A13961	B5Y6	ThinkSystem 3.5" S4610 480GB Mixed Use SATA 6Gb SS SSD	No	4
4XB7A13962	B5Y7	ThinkSystem 3.5" S4610 960GB Mixed Use SATA 6Gb SS SSD	No	4
4XB7A14052	B5Y8	ThinkSystem 3.5" 5200 240GB Mainstream SATA 6Gb Simple Swap SSD	No	4
4XB7A14053	B5Y9	ThinkSystem 3.5" 5200 480GB Mainstream SATA 6Gb Simple Swap SSD	No	4
4XB7A14054	B5YA	ThinkSystem 3.5" 5200 960GB Mainstream SATA 6Gb Simple Swap SSD	No	4
3.5-inch simple-swap SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A17109	BK7C	ThinkSystem 3.5" S4520 240GB Read Intensive SATA 6Gb SS SSD	No	4
4XB7A17110	BK7D	ThinkSystem 3.5" S4520 480GB Read Intensive SATA 6Gb SS SSD	No	4
4XB7A17111	BK7E	ThinkSystem 3.5" S4520 960GB Read Intensive SATA 6Gb SS SSD	No	4
4XB7A08515	B5Y3	ThinkSystem 3.5" 5200 480GB Entry SATA 6Gb Simple Swap SSD	No	4
4XB7A10151	B5Y4	ThinkSystem 3.5" 5200 960GB Entry SATA 6Gb Simple Swap SSD	No	4
4XB7A13951	B4KE	ThinkSystem 3.5" Intel S4510 240GB Entry SATA 6Gb Simple Swap SSD	No	4
4XB7A13952	B4KC	ThinkSystem 3.5" Intel S4510 480GB Entry SATA 6Gb Simple Swap SSD	No	4
4XB7A13953	B4KD	ThinkSystem 3.5" Intel S4510 960GB Entry SATA 6Gb Simple Swap SSD	No	4

Table 34. M.2 SATA drives

Part number	Feature code	Description	SED support	Max Qty
M.2 SSDs - 6 Gb SATA - Read Intensive/Entry (<3 DWPD)				
4XB7A82286	BQ1Z	ThinkSystem M.2 5400 PRO 240GB Read Intensive SATA 6Gb NHS SSD	Support	1
4XB7A82287	BQ1Y	ThinkSystem M.2 5400 PRO 480GB Read Intensive SATA 6Gb NHS SSD	Support	1
4XB7A82288	BQ20	ThinkSystem M.2 5400 PRO 960GB Read Intensive SATA 6Gb NHS SSD	Support	1
7N47A00129	AUUL	ThinkSystem M.2 32GB SATA 6Gbps Non-Hot Swap SSD	No	1
7N47A00130	AUUV	ThinkSystem M.2 128GB SATA 6Gbps Non-Hot Swap SSD	No	1
4XB7A14049	B5S4	ThinkSystem M.2 5100 240GB SATA 6Gbps Non-Hot Swap SSD	No	1
7SD7A05703	B11V	ThinkSystem M.2 5100 480GB SATA 6Gbps Non-Hot Swap SSD	No	1
4XB7A17071	B8HS	ThinkSystem M.2 5300 240GB SATA 6Gbps Non-Hot Swap SSD	No	1
4XB7A17073	B919	ThinkSystem M.2 5300 480GB SATA 6Gbps Non-Hot Swap SSD	No	1

USB memory key

For general portable storage needs, the server also supports the USB memory key option that is listed in the following table.

Table 35. USB memory key

Part number	Feature	Description
4X77A08621	B8NV	ThinkSystem 32GB USB Flash Drive

Optical drives

The server supports the external USB optical drive listed in the following table.

Table 36. External optical drive

Part number	Feature code	Description
7XA7A05926	AVV8	ThinkSystem External USB DVD RW Optical Disk Drive

The drive is based on the Lenovo Slim DVD Burner DB65 drive and supports the following formats: DVD-RAM, DVD-RW, DVD+RW, DVD+R, DVD-R, DVD-ROM, DVD-R DL, CD-RW, CD-R, CD-ROM.

I/O expansion

The SR250 server supports up to three PCIe slots: one slot on the system planar that supports an internal storage controller and up to two PCIe slots on a riser card.

The slot form factors are as follows:

- Slot 1: PCIe 3.0 x8; low profile (not present if the Slot 2 is x16)
- Slot 2: PCIe 3.0 x8 (x16 physical connector) or x16; full-height, half-length
- Slot 3: PCIe 3.0 x4 (x8 physical connector; supports an internal storage controller)

The locations of the PCIe slots are shown in the following figure.

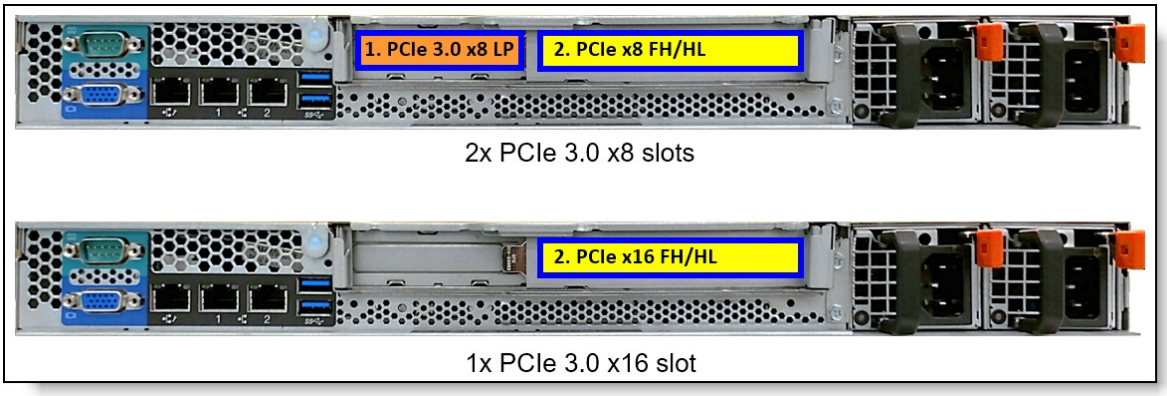

Figure 8. Slot locations

The following table lists available PCIe riser card options.

Table 37. PCIe riser cards

Description	Part number	Feature code	Maximum quantity
ThinkSystem SR250/SR150 PCIe x16/x8 Riser	4C57A12111	B418	1
ThinkSystem SR250 PCIe x16 Riser	4C57A12110	B417	1

Configuration notes:

- A riser card is required.
- The PCIe x8 riser card supplies slots 1 and 2, and the PCIe x16 riser card supplies slot 2.

Network adapters

The SR250 server supports two onboard Gigabit Ethernet network ports that are based on the Broadcom BCM5720 network interface controller (NIC) chip.

The integrated NIC has the following features:

- Two 10/100/1000 Mb Ethernet RJ-45 ports
- NIC Teaming (load balancing and failover)
- IEEE 802.3ad Link Aggregation
- I/O Virtualization (IOV) for VMWare NetQueue and Microsoft VMQ
- IEEE 802.1Q Virtual Local Area Networks (VLANs)
- IEEE 802.3x flow control
- TCP, IP, and UDP checksum offload
- Large Send Offload (LSO) and TCP Segmentation Offload (TSO)
- Receive Side Scaling (RSS) and Transmit Side Scaling (TSS)
- Jumbo frames up to 9600 bytes
- IEEE 802.3az-2010 Energy Efficient Ethernet (EEE) compliant
- Hardware assist for IEEE 1588 and IEEE 802.1AS time synchronization implementations
- Preboot eXecution Environment (PXE) and iSCSI remote boot options

The following table lists the network adapters that are supported with the SR250 server.

Table 38. Network adapters

Part number	Feature code	Description	Maximum quantity	I/O slots supported
PCIe Low Profile adapters - 1 Gb Ethernet				
7ZT7A00482	AUZX	Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter	2	1, 2
7ZT7A00484	AUZV	Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	1	2
7ZT7A00533	AUZZ	ThinkSystem I350-F1 PCIe 1Gb 1-Port SFP Ethernet Adapter	2	1, 2
7ZT7A00534	AUZY	ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter	2	1, 2
7ZT7A00535	AUZW	ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter	1	2
PCIe Low Profile adapters - 10 Gb Ethernet				
7ZT7A00496	AUKP	Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	2	1, 2
00AG570	AT7S	Emulex VFA5.2 2x10 GbE SFP+ PCIe Adapter	2*	1, 2
00AG580	AT7T	Emulex VFA5.2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	2*	1, 2
00MM850	ATRY	Intel X550-T1 Single Port 10GBase-T Adapter	2	1, 2
00MM860	ATPX	Intel X550-T2 Dual Port 10GBase-T Adapter	2	1, 2
7ZT7A00537	AUKX	Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter	2*	1, 2
7XC7A05927	B0X1	Intel X710-T4 PCIe 10Gb 4-Port Base-T Adapter	1	2
4XC7A08225	B31G	QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter	1	2
PCIe Full Height adapters - 10 Gb Ethernet				
7ZT7A00493	AUKN	Emulex OCe14104B-NX PCIe 10Gb 4-Port SFP+ Ethernet Adapter	1*	2
7XC7A05525	B0YL	Intel X710-DA4 PCIe 10Gb 4-Port SFP+ Ethernet Adapter	1*	2
PCIe Low Profile adapters - 25 Gb Ethernet				
7ZT7A00505	AUKS	Broadcom 57412 10/25GbE SFP28 1-Port PCIe Ethernet Adapter	2*	1, 2
7XC7A05523	B0WY	Intel XXV710-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2*	1, 2
01GR250	AUAJ	Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-Port PCIe Eth. Adapter	2*	1, 2
4XC7A08228	B21R	QLogic QL41262 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	2*	1, 2

* The adapter comes without transceivers or cables; for ordering information, see the adapter product guide.

Configuration notes:

- PCIe full-height network adapters are supported in the full-height PCIe slot 2 supplied by the PCIe x8 or x16 riser card.
- PCIe Low Profile network adapters are supported in the full-height and low profile slots supplied by the PCIe x8 or x16 riser card.
- Supported transceivers or DAC cables should be purchased for the SFP+ and SFP28 adapters, and UTP Category 6 or Category 5e cables should be purchased for the 10 GbE (Cat6) or 1 GbE (Cat5e or Cat6) RJ-45 adapters. The maximum number of transceivers or cables that are supported per adapter equals the quantity of the adapter ports, and all adapter ports must have the same type of the transceiver or cable selected.

For more information, see the list of Product Guides in the Ethernet Adapters category:
http://lenovopress.com/servers/options/ethernet#rt=product-guide

SAS adapters for external storage

The following table lists SAS RAID controllers and HBAs for external storage attachments that are supported by the SR250 server.

Table 39. SAS RAID adapters and HBAs for external storage

Description	Part number	Feature code	Maximum quantity	I/O slots supported
12 Gbps SAS RAID adapters				
ThinkSystem RAID 930-8e 4GB Flash PCIe 12Gb Adapter	7Y37A01087	AUNQ	1	1, 2
12 Gbps SAS HBAs				
ThinkSystem 430-8e SAS/SATA 12Gb HBA	7Y37A01090	AUNR	1	1, 2
ThinkSystem 430-16e SAS/SATA 12Gb HBA	7Y37A01091	AUNN	1	1, 2

Configuration notes:

- Low profile SAS RAID controllers and HBAs for external storage are supported in the low profile and full-high PCIe slots supplied by the x8 or x16 riser card.
- The total quantity of the RAID 730-8i 2GB, 930-8i, 930-16i, and 930-8e controllers in the server must not exceed 1 (up to 1 supercapacitor can be mounted in the server).

Mixing storage adapter families: The following HBA/RAID adapter combinations are supported:

- X30 external adapters with other X30 adapters (internal or external)
- X40 external adapters with other X40 adapters (internal or external)
- X40 external adapters with X350 internal adapters

The following HBA/RAID adapter combinations are *not* supported:

- X30 adapters (internal or external) with X40 adapters (internal or external)
- X30 adapters (internal or external) with X350 internal adapters

The following table summarizes features of supported RAID controllers and HBAs for external storage.

Table 40. Features and specifications of the RAID controllers and HBAs for external storage

Feature	RAID 930-8e	430-8e HBA	430-16e HBA
Form factor	PCIe LP	PCIe LP	PCIe LP
SAS controller chip	SAS3516	SAS3408	SAS3416
Host interface	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8
Port interface	12 Gb SAS	12 Gb SAS	12 Gb SAS
Number of ports	8	8	16
Connector type	SFF-8644 x4	SFF-8644 x4	SFF-8644 x4
Number of connectors	2	2	4
Drive interface	SAS, SATA	SAS, SATA	SAS, SATA
Drive type	HDD, SSD, SED	HDD, SSD, SED*	HDD, SSD, SED*
Hot-swap drive support	Yes	Yes	Yes
Number of devices	240	1024	1024
RAID levels	0/1/10/5/50/6/60	None	None
JBOD mode	Yes	Yes	Yes
Cache	4 GB	None	None
Cache protection	Flash backup (Included)	None	None
SED key management (SafeStore)	Yes	No	No
SSD I/O acceleration (FastPath)	Yes	No	No

Feature	RAID 930-8e	430-8e HBA	430-16e HBA
SSD Caching (CacheCade Pro 2.0)	No**	No	No
Consistency check	Yes	No	No
Patrol read	Yes	No	No
Online capacity expansion	Yes	No	No
Online RAID level migration	Yes	No	No
Global Hot Spare	Yes	No	No
Auto-rebuild	Yes	No	No

* HBAs do not support key management for SEDs; third-party host software is responsible for managing the keys.
** The SSD caching feature has been phased out in the new generation of advanced RAID controllers.

For more information, see the list of Product Guides in the following categories:

- RAID adapters
  http://lenovopress.com/servers/options/raid#rt=product-guide
- Host bus adapters
  http://lenovopress.com/servers/options/hba#rt=product-guide

Fibre Channel host bus adapters

The following table lists Fibre Channel HBAs supported by the SR250 server.

Table 41. Fibre Channel HBAs

Description	Part number	Feature code	Maximum quantity	I/O slots supported
Emulex 16Gb Gen6 FC Single-port HBA	01CV830	ATZU	2	1, 2
Emulex 16Gb Gen6 FC Dual-port HBA	01CV840	ATZV	2	1, 2

Configuration note: FC HBAs are supported in the low profile and full-high PCIe slots supplied by the PCIe x8 or x16 riser card.

For more information, see the list of Product Guides in the Host bus adapters category:
http://lenovopress.com/servers/options/hba#rt=product-guide

GPU adapters

The SR250 does not support any GPUs that are currently available.

The SR250 server supports graphics processing unit (GPU) adapters listed in the following table.

Table 42. GPU adapters

Description	Part number	Feature code	Maximum quantity	I/O slots supported
ThinkSystem NVIDIA Quadro P620 2GB PCIe Active GPU (PCIe 3.0 x16)	4X67A11584	B31D	1	2

Configuration notes:

- The GPU adapters are supported only in the configurations with 450 W hot-swap power supplies.
- The GPU adapters are supported in the PCIe slot 2 supplied by the PCIe x8 or x16 riser card.

Cooling

The SR250 server ships with four non-hot-swap system fans.

Configuration note: The server performance might be impacted in case of a system fan failure.

Power supplies and cables

The SR250 server supports one fixed power supply or up to two redundant hot-swap power supplies. With two power supplies, the server is capable of N+N redundancy depending on the configuration. A second power supply can be added to the models that come with one hot-swap power supply.

The following table lists the power supply options.

Table 43. Power supplies

Description	Part number	Feature code	Maximum quantity
ThinkSystem SR250/SR150 Fixed 300W Power Supply	None*	B40Q	1
ThinkSystem 450W (230V/115V) Platinum Hot-Swap Power Supply	4P57A12649	B40R	2
ThinkSystem 450W (230V/115V) Platinum Hot-Swap Power Supply India	4P57A16264	B5LC	2

* Factory-installed only.

Configuration notes:

- Configurations with 300 W fixed power supplies (feature code B40Q) are supported only for Machine Types 7Y51, 7Y52, and 7Y73.
- Configurations with 450 W hot-swap power supplies (4P57A12649) that are available worldwide (except India) are supported only for Machine Types 7Y51 and 7Y52.
- Configurations with 450 W hot-swap power supplies for India (4P57A16264) are supported only for Machine Type 7Y72.
- To ensures that the properly sized power supply is chosen for optimal performance, it is highly recommended to validate system configuration for specific power requirements by using the latest version of the Lenovo Capacity Planner: http://datacentersupport.lenovo.com/us/en/solutions/lnvo-lcp

The SR250 server ship standard with or without a power cord (model dependent). A hot-swap power supply option ships without a power cord.

The following table lists the line cords and rack power cables that can be ordered for the SR250 server. One or two power cables can be ordered, depending on the quantity of power supplies in the server.

Table 44. Power cables

Description	Part number	Feature code
Rack power cables		
1.0m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	00Y3043	A4VP
1.5m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	39Y7937	6201
2.0m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08365	B0N4
2.0m, 13A/125V-10A/250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08369	6570
2.8m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08366	6311
2.8m, 13A/125V-10A/250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08370	6400
2.8m, 10A/100-250V, C13 to IEC 320-C20 Rack Power Cable	39Y7938	6204
4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	39Y7932	6263

Description	Part number	Feature code
4.3m, 13A/125V-10A/250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08371	6583
Line cords		
2.8m, 10A/125V, C13 to CNS 10917-3 Line Cord	23R7158	6386
2.8m, 10A/125V, C13 to NEMA 5-15P Line Cord	90Y3016	6313
2.8m, 10A/250V, C13 to AS/NZS 3112 Line Cord	39Y7924	6211
2.8m, 10A/250V, C13 to BS 1363/A Line Cord	39Y7923	6215
2.8m, 10A/250V, C13 to CEE7-VII Line Cord	39Y7917	6212
2.8m, 10A/250V, C13 to CEI 23-16 Line Cord	39Y7921	6217
2.8m, 10A/250V, C13 to CNS 10917-3 Line Cord	81Y2375	6317
2.8m, 10A/250V, C13 to DK2-5a Line Cord	39Y7918	6213
2.8m, 10A/250V, C13 to GB 2099.1 Line Cord	39Y7928	6210
2.8m, 10A/250V, C13 to IRAM 2073 Line Cord	39Y7930	6222
2.8m, 10A/250V, C13 to IS 6538 Line Cord	39Y7927	6269
2.8m, 10A/250V, C13 to NBR 14136 Line Cord	69Y1988	6532
2.8m, 10A/250V, C13 to NEMA 6-15P Line Cord	46M2592	A1RF
2.8m, 10A/250V, C13 to SABS 164 Line Cord	39Y7922	6214
2.8m, 10A/250V, C13 to SEV 1011-S24507 Line Cord	39Y7919	6216
2.8m, 10A/250V, C13 to SI 32 Line Cord	39Y7920	6218
2.8m, 12A/125V, C13 to JIS C-8303 Line cord	46M2593	A1RE
2.8m, 12A/250V, C13 to JIS C-8303 Line Cord	4L67A08357	6533
2.8m, 12A/250V, C13 to KS C8305 Line Cord	39Y7925	6219
4.3m, 10A/125V, C13 to CNS 10917-3 Line Cord	4L67A08363	AX8B
4.3m, 10A/125V, C13 to NEMA 5-15P Line Cord	4L67A08359	6370
4.3m, 10A/250V, C13 to AS/NZS 3112 Line Cord	81Y2383	6574
4.3m, 10A/250V, C13 to BS 1363/A Line Cord	81Y2377	6577
4.3m, 10A/250V, C13 to CEE7-VII Line Cord	81Y2376	6572
4.3m, 10A/250V, C13 to CEI 23-16 Line Cord	81Y2380	6493
4.3m, 10A/250V, C13 to CNS 10917-3 Line Cord	81Y2389	6531
4.3m, 10A/250V, C13 to DK2-5a Line Cord	81Y2382	6575
4.3m, 10A/250V, C13 to GB 2099.1 Line Cord	81Y2378	6580
4.3m, 10A/250V, C13 to IRAM 2073 Line Cord	81Y2384	6492
4.3m, 10A/250V, C13 to IS 6538 Line Cord	81Y2386	6567
4.3m, 10A/250V, C13 to NBR14136 Line Cord	81Y2387	6404
4.3m, 10A/250V, C13 to NEMA 6-15P Line Cord	4L67A08361	6373
4.3m, 10A/250V, C13 to SABS 164 Line Cord	81Y2379	6576
4.3m, 10A/250V, C13 to SEV 1011-S24507 Line Cord	81Y2390	6578
4.3m, 10A/250V, C13 to SI 32 Line Cord	81Y2381	6579
4.3m, 12A/125V, C13 to JIS C-8303 Line Cord	39Y7926	6335
4.3m, 12A/250V, C13 to JIS C-8303 Line Cord	4L67A08362	6495
4.3m, 12A/250V, C13 to KS C8305 Line Cord	81Y2385	6494

Systems management

The SR250 supports the following systems management tools:

- Lenovo XClarity Controller
- Lenovo XClarity Provisioning Manager
- Lenovo XClarity Essentials
- Lenovo XClarity Administrator
- Lenovo XClarity Integrators
- Lenovo XClarity Energy Manager
- Lenovo Capacity Planner

Lenovo XClarity Controller

The SR250 server contains Lenovo XClarity Controller (XCC), which provides advanced service-processor control, monitoring, and alerting functions. XClarity Controller offers three functional levels: Standard, Advanced, and Enterprise.

By default, the SR250 server includes XClarity Controller Standard features, and it can be upgraded to Advanced or Enterprise functionality by using the Features on Demand (FoD) upgrades.

XClarity Controller Standard offers the following capabilities:

- Gathering and viewing system information and inventory
- Monitoring system status and health
- Alerting and notifications
- Event logging
- Configuring network connectivity
- Configuring security
- Updating system firmware
- Configuring server settings and devices
- Real-time power usage monitoring
- Remotely controlling server power (Power on, Power off, Restart)
- Managing FoD activation keys
- Redirecting serial console via IPMI
- Capturing the video display contents when an operating system hang condition is detected

XClarity Controller Advanced Upgrade adds the following functionality to the Standard features:

- Remotely viewing video with the following graphics resolutions:
  - Up to 1600x1200 with up to 23 bits per pixel; or
  - Up to 1920x1200 with up to 15 bits per pixel
- Remotely accessing the server using the keyboard and mouse from a remote client
- Remotely deploying an operating system
- Syslog alerting
- Redirecting serial console via SSH
- Displaying graphics for real-time and historical power usage data and temperature

XClarity Controller Enterprise Upgrade adds the following functionality to the Advanced features:

- Capping power usage
- Mapping the ISO and image files located on the local client as virtual drives for use by the server
- Mounting the remote ISO and image files via HTTPS, SFTP, CIFS, and NFS
- Collaborating across up to six users of the virtual console
- Controlling quality and bandwidth usage

The XClarity Controller provides remote server management through industry-standard interfaces:

- Intelligent Platform Management Interface (IPMI) Version 2.0
- Simple Network Management Protocol (SNMP) Version 3
- Common Information Model (CIM)
- Data Center Manageability Interface (DCMI) Version 1.5
- Redfish REpresentational State Transfer (REST) API
- Web browser with HTML5 support
- Command-line interface
- Virtual Operator Panel with XClarity Mobile App via the front USB port with XClarity Controller access

Virtual Operator Panel provides quick access to system status, firmware, network, health, and alerts information. With proper authentication, it also allows to configure systems management and network settings and to control system power (Power on, Power off, Restart). The Virtual Operator Panel can be accessed from the XClarity Mobile App running on the Android or iOS mobile device that is connected to the front USB port with XClarity Controller access (See Components and connectors).

Note: Depending on the system settings, the front USB port can be assigned to XClarity Controller for management functions, or to the system as a regular USB 2.0 port, or switched between two functions by using the system ID button.

IPMI via the Ethernet port (IPMI over LAN) is supported, however it is disabled by default. For CTO orders you can specify whether you want to the feature enabled or disabled in the factory, using the feature codes listed in the following table.

Table 45. IPMI-over-LAN settings

Part number	Feature code	Description
CTO only	B7XZ	Disable IPMI-over-LAN (default)
CTO only	B7Y0	Enable IPMI-over-LAN

The following table lists the XClarity Controller FoD upgrades.

Table 46. XClarity Controller FoD upgrades

Description	Part number	Feature code	Maximum quantity
ThinkSystem XClarity Controller Standard to Advanced Upgrade	4L47A09132	AVUT	1
ThinkSystem XClarity Controller Standard to Enterprise Upgrade	None*	AUPW	1
ThinkSystem XClarity Controller Advanced to Enterprise Upgrade	4L47A09133	None**	1

* Factory-installed only.
** Field-upgrade only.

Configuration notes:

- For factory-installed upgrades, either Standard to Advanced Upgrade (feature AVUT) or Standard to Enterprise Upgrade (feature AUPW) can be selected, but not both.
- For field upgrades, the Advanced to Enterprise Upgrade (4L47A09133) requires the Standard to Advanced Upgrade to be activated on the server previously with either the factory-installed feature AVUT or field upgrade 4L47A09132.

Lenovo XClarity Provisioning Manager

Lenovo XClarity Provisioning Manager (LXPM) is a UEFI-based application embedded in ThinkSystem servers and accessible via the F1 key during system boot.

LXPM provides the following functions:

- Graphical UEFI Setup
- System inventory information and VPD update
- System firmware updates (UEFI and XCC)
- RAID setup wizard
- OS installation wizard (including unattended OS installation)
- Diagnostics functions

Lenovo XClarity Essentials

Lenovo offers the following XClarity Essentials software tools that can help you set up, use, and maintain the server at no additional cost:

- Lenovo Essentials OneCLI

  OneCLI is a collection of server management tools that uses a command line interface program to manage firmware, hardware, and operating systems. It provides functions to collect full system health information (including health status), configure system settings, and update system firmware and drivers.

- Lenovo Essentials UpdateXpress

  The UpdateXpress tool is a standalone GUI application for firmware and device driver updates that enables you to maintain your server firmware and device drivers up-to-date and help you avoid unnecessary server outages. The tool acquires and deploys individual updates and UpdateXpress System Packs (UXSPs) which are integration-tested bundles.

- Lenovo Essentials Bootable Media Creator

  The Bootable Media Creator (BOMC) tool is used to create bootable media for offline firmware update.

For more information and downloads, visit the Lenovo XClarity Essentials web page:
http://support.lenovo.com/us/en/documents/LNVO-center

Lenovo XClarity Administrator

Lenovo XClarity Administrator is a centralized resource management solution designed to reduce complexity, speed response, and enhance the availability of Lenovo systems and solutions. It provides agent-free hardware management for ThinkSystem servers, in addition to ThinkServer, System x, and Flex System servers. The administration dashboard is based on HTML 5 and allows fast location of resources so tasks can be run quickly.

Because Lenovo XClarity Administrator does not require any agent software to be installed on the managed endpoints, there are no CPU cycles spent on agent execution, and no memory is used, which means that up to 1GB of RAM and 1 - 2% CPU usage is saved, compared to a typical managed system where an agent is required.

Lenovo XClarity Administrator is an optional software component for the SR250. The software can be downloaded and used at no charge to discover and monitor the SR250 and to manage firmware upgrades.

If software support is required for Lenovo XClarity Administrator, or premium features such as configuration management and operating system deployment are required, Lenovo XClarity Pro software subscription should be ordered. Lenovo XClarity Pro is licensed on a per managed system basis, that is, each managed Lenovo system requires a license.

The following table lists the Lenovo XClarity software license options.

Table 47. Lenovo XClarity Pro ordering information

Part number	Feature code	Description
00MT201	1339	Lenovo XClarity Pro, per Managed Endpoint w/1 Yr SW S&S
00MT202	1340	Lenovo XClarity Pro, per Managed Endpoint w/3 Yr SW S&S
00MT203	1341	Lenovo XClarity Pro, per Managed Endpoint w/5 Yr SW S&S
7S0X000HWW	SAYV	Lenovo XClarity Pro, per Managed Endpoint w/6 Yr SW S&S
7S0X000JWW	SAYW	Lenovo XClarity Pro, per Managed Endpoint w/7 Yr SW S&S

Lenovo XClarity Administrator offers the following standard features that are available at no charge:

- Auto-discovery and monitoring of Lenovo systems
- Firmware updates and compliance enforcement
- External alerts and notifications via SNMP traps, syslog remote logging, and e-mail
- Secure connections to managed endpoints
- NIST 800-131A or FIPS 140-2 compliant cryptographic standards between the management solution and managed endpoints
- Integration into existing higher-level management systems such as cloud automation and orchestration tools through REST APIs, providing extensive external visibility and control over hardware resources
- An intuitive, easy-to-use GUI
- Scripting with Windows PowerShell, providing command-line visibility and control over hardware resources

Lenovo XClarity Administrator offers the following premium features that require an optional Pro license:

- Pattern-based configuration management that allows to define configurations once and apply repeatedly without errors when deploying new servers or redeploying existing servers without disrupting the fabric
- Bare-metal deployment of operating systems and hypervisors to streamline infrastructure provisioning

For more information, refer to the Lenovo XClarity Administrator Product Guide:
http://lenovopress.com/tips1200

Lenovo XClarity Integrators

Lenovo also offers software plug-in modules, Lenovo XClarity Integrators, to manage physical infrastructure from leading external virtualization management software tools including those from Microsoft and VMware.

These integrators are offered at no charge, however if software support is required, a Lenovo XClarity Pro software subscription license should be ordered.

Lenovo XClarity Integrators offer the following additional features:

- Ability to discover, manage, and monitor Lenovo server hardware from VMware vCenter or Microsoft System Center
- Deployment of firmware updates and configuration patterns to Lenovo x86 rack servers and Flex System from the virtualization management tool
- Non-disruptive server maintenance in clustered environments that reduces workload downtime by dynamically migrating workloads from affected hosts during rolling server updates or reboots
- Greater service level uptime and assurance in clustered environments during unplanned hardware events by dynamically triggering workload migration from impacted hosts when impending hardware failures are predicted

For more information about all the available Lenovo XClarity Integrators, see the Lenovo XClarity Administrator Product Guide: https://lenovopress.com/tips1200-lenovo-xclarity-administrator

Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager (LXEM) is a power and temperature management solution for data centers. It is an agent-free, web-based console that enables you to monitor and manage power consumption and temperature in your data center through the management console. It enables server density and data center capacity to be increased through the use of power capping.

LXEM is a licensed product. A single-node LXEM license is included with the XClarity Controller Enterprise upgrade as described in the Remote Management section. If your server does not have the XCC Enterprise upgrade, Energy Manager licenses can be ordered as shown in the following table.

Table 48. Lenovo XClarity Energy Manager

Part number	Description
4L40E51621	Lenovo XClarity Energy Manager Node License (1 license needed per server)

For more information about XClarity Energy Manager, see the following resources:

- Lenovo Support page:
  https://datacentersupport.lenovo.com/us/en/solutions/lnvo-lxem
- User Guide for XClarity Energy Manager:
  https://pubs.lenovo.com/lxem/

Lenovo Capacity Planner

Lenovo Capacity Planner is a power consumption evaluation tool that enhances data center planning by enabling IT administrators and pre-sales professionals to understand various power characteristics of racks, servers, and other devices. Capacity Planner can dynamically calculate the power consumption, current, British Thermal Unit (BTU), and volt-ampere (VA) rating at the rack level, improving the planning efficiency for large scale deployments.

For more information, refer to the Capacity Planner web page:
http://datacentersupport.lenovo.com/us/en/solutions/lnvo-lcp

Security

The SR250 server offers the following security features:

- Power-on password
- Administrator's password
- Secure firmware updates
- Onboard Trusted Platform Module (TPM) version 1.2 or 2.0 (configurable UEFI system setting)
- Nationz Trusted Platform Module v2.0 (optional; PRC only)
- Lockable front bezel (optional)
- Self-encrypting drives (SEDs) with support for enterprise key managers - see the SED encryption key management section

The following table lists the security options that are available for the SR250 server.

Table 49. Security options

Description	Part number	Feature code	Maximum quantity
Lockable front bezel			
ThinkSystem 1U Security Bezel	7Z17A02581	AUWR	1
Trusted Platform Module (PRC only)			
ThinkSystem Nationz Trusted Platform Module v2.0	None*	B22N	1

* Factory-installed only; no field upgrade.

Intel Transparent Supply Chain

Add a layer of protection in your data center and have peace of mind that the server hardware you bring into it is safe authentic and with documented, testable, and provable origin.

Lenovo has one of the world's best supply chains, as ranked by Gartner Group, backed by extensive and mature supply chain security programs that exceed industry norms and US Government standards. Now we are the first Tier 1 manufacturer to offer Intel® Transparent Supply Chain in partnership with Intel, offering you an unprecedented degree of supply chain transparency and assurance.

To enable Intel Transparent Supply Chain for the Intel-based servers in your order, add the following feature code in the DCSC configurator, under the Security tab.

Table 50. Intel Transparent Supply Chain ordering information

Feature code	Description
BB0P	Intel Transparent Supply Chain

For more information on this offering, see the paper *Introduction to Intel Transparent Supply Chain on Lenovo ThinkSystem Servers*, available from https://lenovopress.com/lp1434-introduction-to-intel-transparent-supply-chain-on-thinksystem-servers.

Rack installation

The following table lists the rack installation options that are available for the SR250 server.

Table 51. Rack installation options

Part number	Feature code	Description	Maximum quantity
4-post rail kits			
4M17A13564	B42B	ThinkSystem Tool-less Friction Rail v2	1
4M17A37605	B7L3	ThinkSystem Short Rack Rail Kit	1
2-post rail kits			
4M17A37105	B6H2	ThinkSystem Friction 2-Post Screw-in Rail Kit	1
Front VGA port			
4Z57A80508	BMQ0	ThinkSystem SR250/SR150/SR250 V2 Front VGA Connector Kit v2	1
4Z57A12653	B419	ThinkSystem SR250/SR150 Front VGA Connector Kit	1

The following table summarizes the rail kit features and specifications.

Table 52. Rail kit features and specifications summary

Feature	4-Post Tool-less Rail Kit	4-Post Short Rail Kit	2-Post Screw-in Rail Kit
Part number	4M17A13564	4M17A37605	4M17A37105
CMA	None	None	None
Rail length	751.2 mm (29.6 in.)	484.0 mm (19.1 in.)	486.2 mm (19.2 in.)
Rail type	Half-out slide (friction)	Half-out slide (friction)	Half-out slide (friction)
Tool-less installation	Yes	Yes	No
In-rack server maintenance	No	No	No
1U PDU support	Yes	Yes	Yes
0U PDU support	Limited*	Yes	Not applicable
Rack type	IBM or Lenovo 4-post, EIA standard-compliant	4-post, EIA standard-compliant	2-post, EIA standard-compliant
Mounting holes	Square or round	Square or round	Square, round, or threaded
Mounting flange thickness	2 mm (0.08 in.) – 3.3 mm (0.13 in.)	2 mm (0.08 in.) – 3.3 mm (0.13 in.)	2 mm (0.08 in.) – 3.3 mm (0.13 in.)
Distance between front and rear mounting flanges^	609.6 mm (24 in.) – 863.6 mm (34 in.)	355.6 mm (14 in.) – 609.6 mm (24 in.)	Not applicable

* If a 0U PDU used, the rack cabinet must be at least 1000 mm (39.37 in.) deep.
^ Measured when mounted on the rack cabinet, from the front surface of the front mounting flange to the rear most point of the rail.

Operating system support

The server supports the following operating systems:

- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022
- Red Hat Enterprise Linux 7.5
- Red Hat Enterprise Linux 7.7
- Red Hat Enterprise Linux 7.8
- Red Hat Enterprise Linux 7.9
- Red Hat Enterprise Linux 8.0
- Red Hat Enterprise Linux 8.1
- Red Hat Enterprise Linux 8.2
- Red Hat Enterprise Linux 8.3
- Red Hat Enterprise Linux 8.4
- Red Hat Enterprise Linux 8.5
- Red Hat Enterprise Linux 8.6
- Red Hat Enterprise Linux 8.7
- Red Hat Enterprise Linux 8.8
- Red Hat Enterprise Linux 8.9
- Red Hat Enterprise Linux 9.0
- Red Hat Enterprise Linux 9.1
- Red Hat Enterprise Linux 9.2
- Red Hat Enterprise Linux 9.3
- SUSE Linux Enterprise Server 12 SP3
- SUSE Linux Enterprise Server 12 SP5
- SUSE Linux Enterprise Server 12 Xen SP3
- SUSE Linux Enterprise Server 12 Xen SP5
- SUSE Linux Enterprise Server 15
- SUSE Linux Enterprise Server 15 SP1
- SUSE Linux Enterprise Server 15 SP2
- SUSE Linux Enterprise Server 15 SP3

- SUSE Linux Enterprise Server 15 SP4
- SUSE Linux Enterprise Server 15 SP5
- SUSE Linux Enterprise Server 15 Xen
- SUSE Linux Enterprise Server 15 Xen SP1
- SUSE Linux Enterprise Server 15 Xen SP2
- SUSE Linux Enterprise Server 15 Xen SP3
- SUSE Linux Enterprise Server 15 Xen SP4
- SUSE Linux Enterprise Server 15 Xen SP5
- Ubuntu 22.04 LTS 64-bit
- VMware ESXi 6.5 U2
- VMware ESXi 6.5 U3
- VMware ESXi 6.7
- VMware ESXi 6.7 U2
- VMware ESXi 6.7 U3
- VMware ESXi 7.0
- VMware ESXi 7.0 U1
- VMware ESXi 7.0 U2
- VMware ESXi 7.0 U3
- VMware ESXi 8.0
- VMware ESXi 8.0 U1
- VMware ESXi 8.0 U2

For a complete list of supported, certified and tested operating systems, plus additional details and links to relevant web sites, see the Operating System Interoperability Guide:
https://lenovopress.com/osig#servers=sr250-7y51-7y52

For configure-to-order configurations, the server can be preloaded with VMware ESXi. Ordering information is listed in the following table.

Table 53. VMware ESXi preload

Part number	Feature code	Description
CTO only	B3VW	VMware ESXi 6.5 U2 (Factory Installed)
CTO only	B6U0	VMware ESXi 6.5 U3 (factory installed)
CTO only	B3VX	VMware ESXi 6.7 (Factory Installed)
CTO only	B6U1	VMware ESXi 6.7 U2 (factory installed)
CTO only	B88T	VMware ESXi 6.7 U3 (factory installed)
CTO only	BBZG	VMware ESXi 7.0 (Factory Installed)
CTO only	BE5E	VMware ESXi 7.0 U1 (Factory Installed)
CTO only	BHSR	VMware ESXi 7.0 U2 (Factory Installed)
CTO only	BMEY	VMware ESXi 7.0 U3 (Factory Installed)
CTO only	BMT5	VMware ESXi 8.0 (Factory Installed)

Physical specifications

The SR250 has the following overall physical dimensions, excluding components that extend outside the standard chassis, such as EIA flanges, front security bezel (if any), and power supply handles:

- Width: 435 mm (17.1 inches)
- Height: 43 mm (1.7 inches)
- Depth: 545 mm (21.5 inches)

The following table lists the detailed dimensions. See the figure below for the definition of each dimension.

Table 54. Detailed dimensions

Dimension	Description
482 mm	X_a = Width, to the outsides of the front EIA flanges
435 mm	X_b = Width, to the rack rail mating surfaces
435 mm	X_c = Width, to the outer most chassis body feature
43 mm	Y_a = Height, from the bottom of chassis to the top of the chassis
501 mm	Z_a = Depth, from the rack flange mating surface to the rearmost I/O port surface
509 mm	Z_b = Depth, from the rack flange mating surface to the rearmost feature of the chassis body
523 mm	Z_c = Depth, from the rack flange mating surface to the rearmost feature such as power supply handle
36 mm	Z_d = Depth, from the forwardmost feature on front of EIA flange to the rack flange mating surface
47 mm	Z_e = Depth, from the front of security bezel (if applicable) or forwardmost feature to the rack flange mating surface

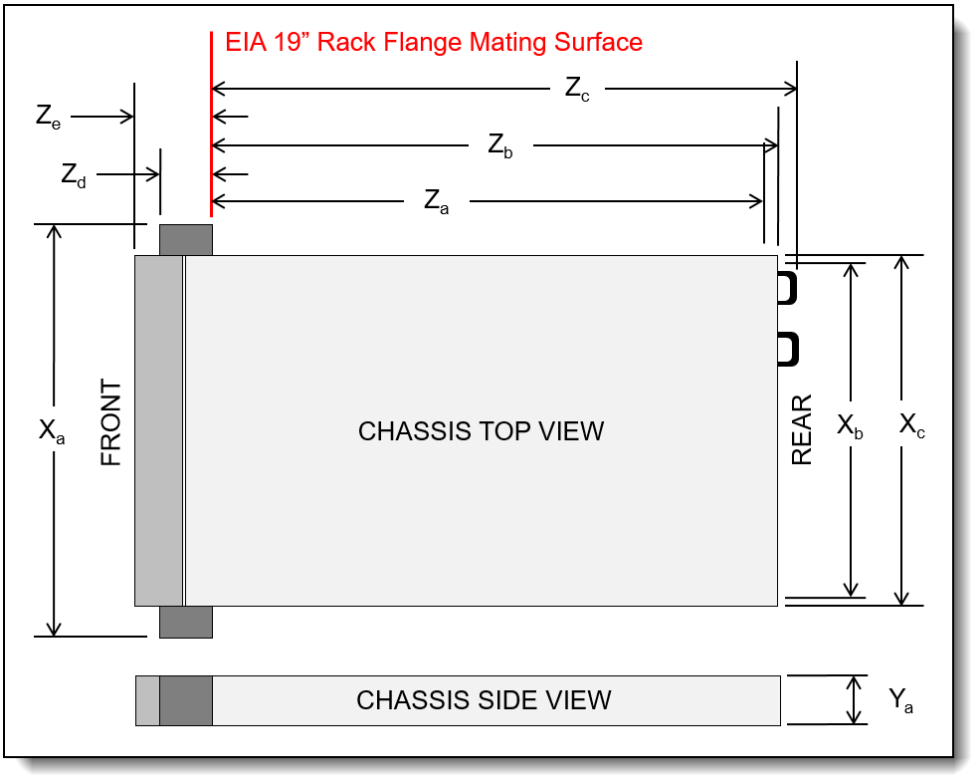

Figure 9. Server dimensions

The shipping dimensions (cardboard packaging) of the SR250 are as follows:

- Width: 186 mm (7.3 inches)
- Height: 879 mm (34.6 inches)
- Depth: 600 mm (23.6 inches)

The SR250 server has the following weight:

- Base configuration: 9.1 kg (20.1 lb)
- Maximum configuration: 12.3 kg (27.1 lb)

Operating environment

The SR250 server complies with ASHRAE class A2 specifications. The server performance might be impacted when the operating temperature is outside the ASHRAE A2 specifications or in case of a system fan failure. Depending on the hardware configuration, some server models comply with ASHRAE class A3 specifications. To comply with ASHRAE class A3 specifications, the SR250 server models must be configured with 8x 2.5-inch hot-swap drive bays and a processor with up to 80 W TDP.

The SR250 server is supported in the following environment:

- Air temperature:
  - Operating:
    - ASHRAE Class A3: 5 °C - 40 °C (41 °F - 104 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 175-m (574-ft) increase in altitude
    - ASHRAE Class A2: 10 °C - 35 °C (50 °F - 95 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 300-m (984-ft) increase in altitude
  - Non-operating: 5 °C - 45 °C (41 °F - 113 °F)
  - Storage: -40 °C - +60 °C (-40 °F - 140 °F)
- Maximum altitude: 3050 m (10,000 ft)
- Humidity:
  - Operating:
    - ASHRAE Class A3: 8% - 85% (non-condensing); maximum dew point: 24 °C (75 °F)
    - ASHRAE Class A2: 8% - 80% (non-condensing); maximum dew point: 21 °C (70 °F)
  - Storage: 8% - 90% (non-condensing)
- Electrical:
  - 100 - 127 (nominal) V AC; 50 Hz / 60 Hz
  - 200 - 240 (nominal) V AC; 50 Hz / 60 Hz
- Acoustics:
  - Minimum configuration:
    - Operating: 5.3 bels
    - Idle: 4.9 bels
  - Maximum configuration:
    - Operating: 5.7 bels
    - Idle: 5.4 bels
- Vibration:
  - Operating: 0.21 G rms at 5 Hz to 500 Hz for 15 minutes across 3 axes
  - Non-operating: 1.04 G rms at 2 Hz to 200 Hz for 15 minutes across 6 surfaces
- Shock:
  - Operating: 15 G for 3 milliseconds in each direction (positive and negative X, Y, and Z axes)
  - Non-operating: 50 G for 152 in./sec velocity change across 6 surfaces

The following table lists the maximum system power load, rated inlet current, and system heat output based on the power supply and source voltage.

Table 55. Rated system power, inlet current, and system heat output

Power supply	Source voltage	Maximum power load per system	Rated current per inlet	System heat output
300 W Gold (One power supply)	100 - 127 V AC	334 W	4 A	1139 BTU/hour
	200 - 240 V AC	326 W	2 A	1111 BTU/hour
450 W Platinum (Two power supplies)	100 - 127 V AC	503 W	5.8 A	1717 BTU/hour
	200 - 240 V AC	484 W	2.9 A	1650 BTU/hour

Warranty and support

The SR250 server comes with a three-year (Machine Type 7Y51) or one-year (Machine Type 7Y52) customer-replaceable unit (CRU) and onsite limited (for field-replaceable units [FRUs] only) warranty with standard call center support during normal business hours and 9x5 Next Business Day Parts Delivered.

Lenovo's additional support services provide a sophisticated, unified support structure for a customer's data center, with an experience consistently ranked number one in customer satisfaction worldwide. The following Lenovo support services are available:

- **Premier Support** provides a Lenovo-owned customer experience and delivers direct access to technicians skilled in hardware, software, and advanced troubleshooting, in addition to the following capabilities:
  - Direct technician-to-technician access through a dedicated phone line.
  - 24x7x365 remote support.
  - Single point of contact service.
  - End to end case management.
  - 3rd Party collaborative software support.
  - Online case tools and live chat support.
  - On-demand remote system analysis.
- **Warranty Upgrades (Preconfigured Support)** are available to meet the on-site response time targets that match the criticality of customer's systems:
  - 3, 4, or 5 years of service coverage.
  - 1-year or 2-year post-warranty extensions.
  - **Foundation Service:** 9x5 service coverage with next business day onsite response, with optional YourDrive YourData.
  - **Essential Service:** 24x7 service coverage with 4-hour onsite response or 24-hour committed repair (available only in select regions), bundled with YourDrive YourData.
  - **Advanced Service:** 24x7 service coverage with 2-hour onsite response or 6-hour committed repair (available only in select regions), bundled with YourDrive YourData.
- **Managed Services**
  Lenovo Managed Services provide continuous 24x7 remote monitoring (plus 24x7 call center availability) and proactive management of a customer's data center using state of the art tools, systems, and practices by a team of highly skilled and experienced Lenovo services professionals.

  Quarterly reviews check error logs, verify firmware and operating system device driver levels, and software as needed. Lenovo will also maintain records of latest patches, critical updates, and firmware levels, to ensure customer's systems are providing business value through optimized performance.
- **Technical Account Management (TAM)**
  A Lenovo Technical Account Manager helps customers optimize operations of their data centers based on a deep understanding of customer's business. Customers gain direct access to a Lenovo TAM, who serves as their single point of contact to expedite service requests, provide status updates, and furnish reports to track incidents over time. Also, a TAM helps proactively make service recommendations and manage service relationship with Lenovo to make certain that customer's needs are met.
- **Enterprise Software Support**
  Lenovo Enterprise Software Support is an additional support service that provides customers with software support on Microsoft, Red Hat, SUSE, and VMWare applications and systems. Around the clock availability for critical problems plus unlimited calls and incidents helps customers address challenges fast, without incremental costs. Support staff can answer troubleshooting and diagnostic questions, address product compatibility and interoperability issues, isolate causes of problems, report defects to software vendors, and more.

- **YourDrive YourData**
  Lenovo's YourDrive YourData service is a multi-drive retention offering that ensures that customer's data is always under their control, regardless of the number of drives that are installed in their Lenovo server. In the unlikely event of a drive failure, customers retain possession of their drive while Lenovo replaces the failed drive part. Customer's data stays safely on customer premises, in their hands. The YourDrive YourData service can be purchased in convenient bundles with Foundation, Essential, or Advanced Service upgrades and extensions.

- **Health Check**
  Having a trusted partner who can perform regular and detailed health checks is central to maintaining efficiency and ensuring that customer systems and business are always running at their best. Health Check supports Lenovo-branded server, storage, and networking devices, as well as select Lenovo-supported products from other vendors that are sold by Lenovo or a Lenovo-Authorized Reseller.

Some regions might have different warranty terms and conditions than the standard warranty. This is due to local business practices or laws in the specific region. Local service teams can assist in explaining region-specific terms when needed. Examples of region-specific warranty terms are second or longer business day parts delivery or parts-only base warranty.

If warranty terms and conditions include onsite labor for repair or replacement of parts, Lenovo will dispatch a service technician to the customer site to perform the replacement. Onsite labor under base warranty is limited to labor for replacement of parts that have been determined to be field-replaceable units (FRUs). Parts that are determined to be customer-replaceable units (CRUs) do not include onsite labor under base warranty.

If warranty terms include parts-only base warranty, Lenovo is responsible for delivering only replacement parts that are under base warranty (including FRUs) that will be sent to a requested location for self-service. Parts-only service does not include a service technician being dispatched onsite. Parts must be changed at customer's own cost and labor and defective parts must be returned following the instructions supplied with the spare parts.

Lenovo support services are region-specific. Not all support services are available in every region. For information about Lenovo support services that are available in a specific region, refer to the following resources:

- Service part numbers in Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com/#/services
- Lenovo Services Availability Locator
  https://lenovolocator.com/

For service definitions, region-specific details, and service limitations, refer to the following documents:

- Lenovo Statement of Limited Warranty for Infrastructure Solutions Group (ISG) Servers and System Storage
  http://pcsupport.lenovo.com/us/en/solutions/ht503310
- Lenovo Data Center Services Agreement
  http://support.lenovo.com/us/en/solutions/ht116628

Services

Lenovo Services is a dedicated partner to customer success. Lenovo's goal for customers is to reduce capital outlays, mitigate IT risks, and accelerate time to productivity.

Here is a more in-depth look at what Lenovo can do for their customers:

- **Asset Recovery Services**
  Asset Recovery Services (ARS) helps customers recover the maximum value from their end-of-life equipment in a cost-effective and secure way. On top of simplifying the transition from old to new equipment, ARS mitigates environmental and data security risks associated with data center equipment disposal. Lenovo ARS is a cash-back solution for equipment based on its remaining market value, yielding maximum value from aging assets and lowering total cost of ownership for customers. For more information, see the ARS page, http://lenovopress.com/lp1266.

- **Assessment Services**
  An assessment helps solve customer IT challenges through an onsite, multi-day session with a Lenovo technology expert. Lenovo performs a tools-based assessment which provides a comprehensive and thorough review of a company's environment and technology systems. In addition to the technology-based functional requirements, the consultant also discusses and records the non-functional business requirements, challenges, and constraints. Assessments help organizations, no matter how large or small, get a better return on their IT investment and overcome challenges in the ever-changing technology landscape.
- **Design Services**
  Professional Services consultants perform infrastructure design and implementation planning to support customer's strategy. The high-level architectures provided by the assessment service are turned into low level designs and wiring diagrams, which are reviewed and approved prior to implementation. The implementation plan will demonstrate an outcome-based proposal to provide business capabilities through infrastructure with a risk-mitigated project plan.
- **Basic Hardware Installation**
  Lenovo experts can seamlessly manage the physical installation of customer's server, storage, or networking hardware. Working at a time convenient for the customer (business hours or off shift), the technician will unpack and inspect the systems on customer site, install options, mount in a rack cabinet, connect to power and network, check and update firmware to the latest levels, verify operation, and dispose of the packaging, allowing customers to focus on other priorities.
- **Deployment Services**
  When investing in new IT infrastructures, customers need to ensure that their business will see quick time to value with little to no disruption. Lenovo deployments are designed by development and engineering teams who know Lenovo products and solutions better than anyone else, and Lenovo technicians own the process from delivery to completion. Lenovo will conduct remote preparation and planning, configure and integrate systems, validate systems, verify and update appliance firmware, train on administrative tasks, and provide post-deployment documentation. Customer’s IT teams leverage Lenovo skills to enable IT staff to transform with higher level roles and tasks.
- **Integration, Migration, and Expansion Services**
  Integration, Migration, and Expansion Services allow to move existing physical and virtual workloads easily, or to determine technical requirements to support increased workloads while maximizing performance. These services include tuning, validation, and documenting ongoing run processes, and they leverage migration assessment planning documents to perform necessary migrations.

Some service options may not be available in every region. For more information about Lenovo service offerings that are available in a specific region, contact a local Lenovo sales representative or business partner.

Regulatory compliance

The ThinkSystem SR250 server conforms to the following regulations:

- Energy Star 3.0
- FCC Title 47 CFR Part 15 Subpart B
- ICES-003/NMB-03, Class A
- UL62368-1
- NOM-019
- VCCI, Class A
- AS/NZS CISPR 32, Class A
- CCC GB4943.1, GB9254 Class A, GB17625.1, CECP, CELP
- BSMI CNS13438, Class A; CNS14336-1; CNS15663
- KN32, Class A; KN35
- BIS
- TR CU 020/2011; TR CU 004/2011
- IEC60950-1, IEC62368-1 (CB Certificate and CB Test Report)
- CE Mark (EN55032 Class A, EN60950-1, EN55024, EN50581, EN61000-3-2, EN61000-3-3, EN62368-1)
- CISPR 32, Class A
- TUV-GS (EK1-ITB2000, EN62368-1)
- Reduction of Hazardous Substances (ROHS)

External drive enclosures

The server supports attachment to external drive enclosures using a RAID controller with external ports or a SAS host bus adapter. Adapters supported by the server are listed in the SAS adapters for external storage section.

Note: Information provided in this section is for ordering reference purposes only. For the operating system and adapter support details, refer to the interoperability matrix for a particular storage enclosure that can be found on the Lenovo Data Center Support web site:
http://datacentersupport.lenovo.com

Table 56. External drive enclosures

Model	Description
4587HC1	Lenovo Storage D1212 Disk Expansion Enclosure (2U enclosure with 12x LFF drive bays)
4587HC2	Lenovo Storage D1224 Disk Expansion Enclosure (2U enclosure with 24x SFF drive bays)
6413HC1	Lenovo Storage D3284 High Density Expansion Enclosure (5U enclosure with 84x LFF drive bays)
7DAHCTO1WW	Lenovo ThinkSystem D4390 Direct Attached Storage (4U enclosure with 90x LFF drive bays)

For details about supported drives, adapters, and cables, see the following Lenovo Press Product Guides:

- Lenovo Storage D1212 and D1224
  http://lenovopress.lenovo.com/lp0512
- Lenovo Storage D3284
  http://lenovopress.lenovo.com/lp0513
- Lenovo ThinkSystem D4390
  https://lenovopress.lenovo.com/lp1681

External storage systems

Lenovo offers the ThinkSystem DE Series and ThinkSystem DM Series external storage systems for high-performance storage. See the DE Series and DM Series product guides for specific controller models, expansion enclosures and configuration options:

- ThinkSystem DE Series Storage
  https://lenovopress.com/storage/thinksystem/de-series#rt=product-guide
- ThinkSystem DM Series Storage
  https://lenovopress.com/storage/thinksystem/dm-series#rt=product-guide
- ThinkSystem DG Series Storage
  https://lenovopress.com/storage/thinksystem/dg-series#rt=product-guide

External backup units

The following table lists the external backup options that are offered by Lenovo.

Table 57. External backup options

Part number	Description
External RDX USB drives	
4T27A10725	ThinkSystem RDX External USB 3.0 Dock
External SAS tape backup drives	
6160S7E	IBM TS2270 Tape Drive Model H7S
6160S8E	IBM TS2280 Tape Drive Model H8S
6160S9E	IBM TS2290 Tape Drive Model H9S
External SAS tape backup autoloaders	
6171S7R	IBM TS2900 Tape Autoloader w/LTO7 HH SAS
6171S8R	IBM TS2900 Tape Autoloader w/LTO8 HH SAS
6171S9R	IBM TS2900 Tape Autoloader w/LTO9 HH SAS
External tape backup libraries	
6741A1F	IBM TS4300 3U Tape Library-Base Unit
6741A3F	IBM TS4300 3U Tape Library-Expansion Unit
Full High 8 Gb Fibre Channel for TS4300	
01KP938	LTO 7 FH Fibre Channel Drive
01KP954	LTO 8 FH Fibre Channel Drive
02JH837	LTO 9 FH Fibre Channel Drive
Half High 8 Gb Fibre Channel for TS4300	
01KP936	LTO 7 HH Fibre Channel Drive
01KP952	LTO 8 HH Fibre Channel Drive
02JH835	LTO 9 HH Fibre Channel Drive
Half High 6 Gb SAS for TS4300	
01KP937	LTO 7 HH SAS Drive
01KP953	LTO 8 HH SAS Drive
02JH836	LTO 9 HH SAS Drive

For more information, see the list of Product Guides in the Backup units category:
https://lenovopress.com/servers/options/backup

Ethernet LAN switches

The following table lists the Ethernet LAN switches that are offered by Lenovo.

Table 58. Ethernet LAN switches

Part number	Description
1 Gb Ethernet Rack switches	
7Y810011WW	Lenovo ThinkSystem NE0152T RackSwitch (Rear to Front)
7Z320O11WW	Lenovo ThinkSystem NE0152TO RackSwitch (Rear to Front, ONIE)
7159BAX	Lenovo RackSwitch G7028 (Rear to Front)
7159CAX	Lenovo RackSwitch G7052 (Rear to Front)
7159G52	Lenovo RackSwitch G8052 (Rear to Front)
7165H1X	Juniper EX2300-C PoE Switch
7165H2X	Juniper EX2300-24p PoE Switch
1 Gb Ethernet Campus switches	
7Z340011WW	Lenovo CE0128TB Switch (3-Year Warranty)
7Z360011WW	Lenovo CE0128TB Switch (Limited Lifetime Warranty)
7Z340012WW	Lenovo CE0128PB Switch (3-Year Warranty)
7Z360012WW	Lenovo CE0128PB Switch (Limited Lifetime Warranty)
7Z350021WW	Lenovo CE0152TB Switch (3-Year Warranty)
7Z370021WW	Lenovo CE0152TB Switch (Limited Lifetime Warranty)
7Z350022WW	Lenovo CE0152PB Switch (3-Year Warranty)
7Z370022WW	Lenovo CE0152PB Switch (Limited Lifetime Warranty)
10 Gb Ethernet switches	
7159A1X	Lenovo ThinkSystem NE1032 RackSwitch (Rear to Front)
7159B1X	Lenovo ThinkSystem NE1032T RackSwitch (Rear to Front)
7Z330O11WW	Lenovo ThinkSystem NE1064TO RackSwitch (Rear to Front, ONIE)
7159C1X	Lenovo ThinkSystem NE1072T RackSwitch (Rear to Front)
7159CRW	Lenovo RackSwitch G8272 (Rear to Front)
7159GR6	Lenovo RackSwitch G8296 (Rear to Front)
7159BR6	Lenovo RackSwitch G8124E (Rear to Front)
25 Gb Ethernet switches	
7159E1X	Lenovo ThinkSystem NE2572 RackSwitch (Rear to Front)
7Z210O21WW	Lenovo ThinkSystem NE2572O RackSwitch (Rear to Front, ONIE)
7Z330O21WW	Lenovo ThinkSystem NE2580O RackSwitch (Rear to Front, ONIE)
100 Gb Ethernet switches	
7159D1X	Lenovo ThinkSystem NE10032 RackSwitch (Rear to Front)
7Z210O11WW	Lenovo ThinkSystem NE10032O RackSwitch (Rear to Front, ONIE)

For more information, see the list of Product Guides in the following switch categories:

- 1 Gb Ethernet switches: http://lenovopress.com/networking/tor/1gb?rt=product-guide
- 10 Gb Ethernet switches: http://lenovopress.com/networking/tor/10gb?rt=product-guide
- 25 Gb Ethernet switches: http://lenovopress.com/networking/tor/25gb?rt=product-guide
- 40 Gb Ethernet switches: http://lenovopress.com/networking/tor/40gb?rt=product-guide
- 100 Gb Ethernet switches: https://lenovopress.com/networking/tor/100Gb?rt=product-guide

Fibre Channel SAN switches

Lenovo offers the ThinkSystem DB Series of Fibre Channel SAN switches for high-performance storage expansion. See the DB Series product guides for models and configuration options:

- ThinkSystem DB Series SAN Switches: https://lenovopress.com/storage/switches/rack#rt=product-guide

Rack cabinets

The following table lists the supported rack cabinets.

Table 59. Rack cabinets

Part number	Description
7D3F0001WW / 7D3G0001WW	6U 800mm Deep Micro Datacenter Rack
7D3H0001WW / 7D3J0001WW	6U 1200mm Deep Micro Datacenter Rack
7D2A0001WW / 7D2M0001WW	6U Acoustic 1200mm Deep Micro Datacenter Rack
7D2B0001WW / 7D2N0001WW	12U 1200mm Deep Micro Datacenter Rack
7D2C0001WW / 7D2P0001WW	18U 1200mm Deep Micro Datacenter Rack
93072RX	25U Standard Rack (1000mm)
93072PX	25U Static S2 Standard Rack (1000mm)
7D6DA007WW	ThinkSystem 42U Onyx Primary Heavy Duty Rack Cabinet (1200mm)
7D6DA008WW	ThinkSystem 42U Pearl Primary Heavy Duty Rack Cabinet (1200mm)
1410-O42	Lenovo EveryScale 42U Onyx Heavy Duty Rack Cabinet
1410-P42	Lenovo EveryScale 42U Pearl Heavy Duty Rack Cabinet
93604PX	42U 1200mm Deep Dynamic Rack
93614PX	42U 1200mm Deep Static Rack
93634PX	42U 1100mm Dynamic Rack
93634EX	42U 1100mm Dynamic Expansion Rack
93074RX	42U Standard Rack (1000mm)
7D6EA009WW	ThinkSystem 48U Onyx Primary Heavy Duty Rack Cabinet (1200mm)
7D6EA00AWW	ThinkSystem 48U Pearl Primary Heavy Duty Rack Cabinet (1200mm)
1410-O48	Lenovo EveryScale 48U Onyx Heavy Duty Rack Cabinet
1410-P48	Lenovo EveryScale 48U Pearl Heavy Duty Rack Cabinet

For specifications about these racks, see the Lenovo Rack Cabinet Reference, available from: https://lenovopress.com/lp1287-lenovo-rack-cabinet-reference

For more information, see the list of Product Guides in the Rack cabinets category: https://lenovopress.com/servers/options/racks

KVM switches and consoles

The following table lists the supported KVM consoles.

Table 60. KVM console

Part number	Description
Consoles	
4XF7A84188	ThinkSystem 18.5" LCD Console (with US English keyboard)
4XF7A73009	ThinkSystem 18.5" LCD console (with US English keyboard)
17238BX	1U 18.5" Standard Console (without keyboard - see the next table)

The following table lists the keyboards supported with the 1U 18.5" Standard Console (now withdrawn).

Note: These keyboards are not supported with the ThinkSystem 18.5" LCD Console.

Table 61. Keyboards for 1U 18.5" Standard Console

Part number	Description
7ZB7A05469	ThinkSystem Keyboard w/ Int.Pointing Device USB - Arabic 253 RoHS v2
7ZB7A05468	ThinkSystem Keyboard w/ Int. Pointing Device USB - Belg/UK 120 RoHS v2
7ZB7A05206	ThinkSystem Keyboard w/ Int. Pointing Device USB - Czech 489 RoHS v2
7ZB7A05207	ThinkSystem Keyboard w/ Int. Pointing Device USB - Danish 159 RoHS v2
7ZB7A05208	ThinkSystem Keyboard w/ Int. Pointing Device USB - Dutch 143 RoHS v2
7ZB7A05210	ThinkSystem Keyboard w/ Int. Pointing Device USB - Fr/Canada 445 RoHS v2
7ZB7A05209	ThinkSystem Keyboard w/ Int. Pointing Device USB - French 189 RoHS v2
7ZB7A05211	ThinkSystem Keyboard w/ Int. Pointing Device USB - German 129 RoHS v2
7ZB7A05212	ThinkSystem Keyboard w/ Int. Pointing Device USB - Greek 219 RoHS v2
7ZB7A05213	ThinkSystem Keyboard w/ Int. Pointing Device USB - Hebrew 212 RoHS v2
7ZB7A05214	ThinkSystem Keyboard w/ Int. Pointing Device USB - Hungarian 208 RoHS v2
7ZB7A05215	ThinkSystem Keyboard w/ Int. Pointing Device USB - Italian 141 RoHS v2
7ZB7A05216	ThinkSystem Keyboard w/ Int. Pointing Device USB - Japanese 194 RoHS v2
7ZB7A05217	ThinkSystem Keyboard w/ Int. Pointing Device USB - Korean 413 RoHS v2
7ZB7A05218	ThinkSystem Keyboard w/ Int. Pointing Device USB - LA Span 171 RoHS v2
7ZB7A05219	ThinkSystem Keyboard w/ Int. Pointing Device USB - Norwegian 155 RoHS v2
7ZB7A05220	ThinkSystem Keyboard w/ Int. Pointing Device USB - Polish 214 RoHS v2
7ZB7A05221	ThinkSystem Keyboard w/ Int. Pointing Device USB - Portugese 163 RoHS v2
7ZB7A05222	ThinkSystem Keyboard w/ Int. Pointing Device USB - Russian 441 RoHS v2
7ZB7A05223	ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovak 245 RoHS v2
7ZB7A05231	ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovenian 234 RoHS v2
7ZB7A05224	ThinkSystem Keyboard w/ Int. Pointing Device USB - Spanish 172 RoHS v2
7ZB7A05225	ThinkSystem Keyboard w/ Int. Pointing Device USB - Swed/Finn 153 RoHS v2
7ZB7A05226	ThinkSystem Keyboard w/ Int. Pointing Device USB - Swiss F/G 150 RoHS v2
7ZB7A05227	ThinkSystem Keyboard w/ Int. Pointing Device USB - Thai 191 RoHS v2
7ZB7A05467	ThinkSystem Keyboard with Int. Pointing Device USB - Trad Chinese/US 467 RoHS v2
7ZB7A05228	ThinkSystem Keyboard w/ Int. Pointing Device USB - Turkish 179 RoHS v2
7ZB7A05229	ThinkSystem Keyboard w/ Int. Pointing Device USB - UK Eng 166 RoHS v2
7ZB7A05470	ThinkSystem Keyboard w/ Int. Pointing Device USB - US Eng 103P RoHS v2
7ZB7A05230	ThinkSystem Keyboard w/ Int. Pointing Device USB - US Euro 103P RoHS v2

The following table lists the available KVM switches and the options that are supported with them.

Table 62. KVM switches and options

Part number	Description
KVM Console switches	
1754D1T	ThinkSystem Digital 2x1x16 KVM Switch (DVI video output port)
1754A1T	ThinkSystem Analog 1x8 KVM Switch (DVI video output port)
1754D2X	Global 4x2x32 Console Manager (GCM32)
1754D1X	Global 2x2x16 Console Manager (GCM16)
1754A2X	Local 2x16 Console Manager (LCM16)
1754A1X	Local 1x8 Console Manager (LCM8)
Cables for ThinkSystem Digital and Analog KVM Console switches	
4X97A11108	ThinkSystem VGA to DVI Conversion Cable
4X97A11109	ThinkSystem Single-USB Conversion Cable for Digital KVM
4X97A11107	ThinkSystem Dual-USB Conversion Cable for Digital KVM
4X97A11106	ThinkSystem USB Conversion Cable for Analog KVM
Cables for GCM and LCM Console switches	
43V6147	Single Cable USB Conversion Option (UCO)
39M2895	USB Conversion Option Pack
46M5383	Virtual Media Conversion Option Gen2 (VCO2)
46M5382	Serial Conversion Option (SCO)

For more information, see the list of Product Guides in the KVM Switches and Consoles category: http://lenovopress.com/servers/options/kvm

Power distribution units

The following table lists the power distribution units (PDUs) that are offered by Lenovo.

Table 63. Power distribution units

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
0U Basic PDUs															
00YJ776	ATZY	0U 36 C13/6 C19 24A 1 Phase PDU	N	Y	Y	N	N	N	N	N	N	Y	Y	Y	N
00YJ779	ATZX	0U 21 C13/12 C19 48A 3 Phase PDU	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N
00YJ777	ATZZ	0U 36 C13/6 C19 32A 1 Phase PDU	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
00YJ778	AU00	0U 21 C13/12 C19 32A 3 Phase PDU	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y
0U Switched and Monitored PDUs															
00YJ783	AU04	0U 12 C13/12 C19 Switched and Monitored 48A 3 Phase PDU	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N
00YJ781	AU03	0U 20 C13/4 C19 Switched and Monitored 24A 1 Phase PDU	N	N	Y	N	Y	N	Y	N	N	Y	Y	Y	N
00YJ782	AU02	0U 18 C13/6 C19 Switched and Monitored 32A 3 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
00YJ780	AU01	0U 20 C13/4 C19 Switched and Monitored 32A 1 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
1U Switched and Monitored PDUs															
4PU7A90808	C0D4	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 ETL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A81117	BNDV	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - ETL	N	N	N	N	N	N	N	N	N	N	N	Y	N
4PU7A90809	C0DE	1U 18 C19/C13 Switched and monitored 48A 3P WYE PDU V2 CE	N	N	N	N	N	Y	Y	N	N	N	N	N	N
4PU7A81118	BNDW	1U 18 C19/C13 switched and monitored 48A 3P WYE PDU - CE	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
4PU7A90810	C0DD	1U 18 C19/C13 Switched and monitored 80A 3P Delta PDU V2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4PU7A77467	BLC4	1U 18 C19/C13 Switched and Monitored 80A 3P Delta PDU	N	N	N	N	N	N	N	N	N	Y	N	Y	N
4PU7A90811	C0DC	1U 12 C19/C13 Switched and monitored 32A 3P WYE PDU V2	N	N	N	N	N	Y	Y	N	N	N	N	N	N
4PU7A77468	BLC5	1U 12 C19/C13 switched and monitored 32A 3P WYE PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
4PU7A90812	C0DB	1U 12 C19/C13 Switched and monitored 60A 3P Delta PDU V2	N	N	N	N	N	N	N	N	N	Y	N	N	N
4PU7A77469	BLC6	1U 12 C19/C13 switched and monitored 60A 3P Delta PDU	N	N	N	N	N	N	N	N	N	N	N	Y	N
46M4002	5896	1U 9 C19/3 C13 Switched and Monitored DPI PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
46M4004	5894	1U 12 C13 Switched and Monitored DPI PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
46M4003	5897	1U 9 C19/3 C13 Switched and Monitored 60A 3 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
46M4005	5895	1U 12 C13 Switched and Monitored 60A 3 Phase PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)															
71763NU	6051	Ultra Density Enterprise C19/C13 PDU 60A/208V/3PH	N	N	Y	N	N	N	N	N	N	Y	Y	Y	N
71762NX	6091	Ultra Density Enterprise C19/C13 PDU Module	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U C13 Enterprise PDUs (12x IEC 320 C13 outlets)															
39M2816	6030	DPI C13 Enterprise PDU Plus Module (WW)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8941	6010	DPI C13 Enterprise PDU Module (WW)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U C19 Enterprise PDUs (6x IEC 320 C19 outlets)															
39Y8948	6060	DPI C19 Enterprise PDU Module (WW)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8923	6061	DPI Three-phase 60A/208V C19 Enterprise PDU (US)	N	N	Y	N	N	N	Y	N	N	N	Y	Y	N
1U Front-end PDUs (3x IEC 320 C19 outlets)															
39Y8938	6002	DPI Single-phase 30A/120V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Part number	Feature code	Description	ANZ	ASEAN	Brazil	EET	MEA	RUCIS	WE	HTK	INDIA	JAPAN	LA	NA	PRC
39Y8939	6003	DPI Single-phase 30A/208V Front-end PDU (US)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8934	6005	DPI Single-phase 32A/230V Front-end PDU (International)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
39Y8940	6004	DPI Single-phase 60A/208V Front-end PDU (US)	Y	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N
39Y8935	6006	DPI Single-phase 63A/230V Front-end PDU (International)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1U NEMA PDUs (6x NEMA 5-15R outlets)															
39Y8905	5900	DPI 100-127V NEMA PDU	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Line cords for 1U PDUs that ship without a line cord															
40K9611	6504	4.3m, 32A/380-415V, EPDU/IEC 309 3P+N+G 3ph wye (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9612	6502	4.3m, 32A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9613	6503	4.3m, 63A/230V, EPDU to IEC 309 P+N+G (non-US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9614	6500	4.3m, 30A/208V, EPDU to NEMA L6-30P (US) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9615	6501	4.3m, 60A/208V, EPDU to IEC 309 2P+G (US) Line Cord	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	N
40K9617	6505	4.3m, 32A/230V, Souriau UTG Female to AS/NZ 3112 (Aus/NZ) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
40K9618	6506	4.3m, 32A/250V, Souriau UTG Female to KSC 8305 (S. Korea) Line Cord	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

For more information, see the Lenovo Press documents in the PDU category:
https://lenovopress.com/servers/options/pdu

Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are offered by Lenovo.

Table 64. Uninterruptible power supply units

Part number	Description
55941AX	RT1.5kVA 2U Rack or Tower UPS (100-125VAC)
55941KX	RT1.5kVA 2U Rack or Tower UPS (200-240VAC)
55942AX	RT2.2kVA 2U Rack or Tower UPS (100-125VAC)
55942KX	RT2.2kVA 2U Rack or Tower UPS (200-240VAC)
55943AX	RT3kVA 2U Rack or Tower UPS (100-125VAC)
55943KX	RT3kVA 2U Rack or Tower UPS (200-240VAC)
55945KX	RT5kVA 3U Rack or Tower UPS (200-240VAC)
55946KX	RT6kVA 3U Rack or Tower UPS (200-240VAC)
55948KX	RT8kVA 6U Rack or Tower UPS (200-240VAC)
55949KX	RT11kVA 6U Rack or Tower UPS (200-240VAC)
55948PX	RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)
55949PX	RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC)
55943KT†	ThinkSystem RT3kVA 2U Standard UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)
55943LT†	ThinkSystem RT3kVA 2U Long Backup UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)
55946KT†	ThinkSystem RT6kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)
5594XKT†	ThinkSystem RT10kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)

† Only available in China and the Asia Pacific market.

For more information, see the list of Product Guides in the UPS category:
https://lenovopress.com/servers/options/ups

Lenovo Financial Services

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We are dedicated to delivering a positive finance experience for customers like you who want to maximize your purchase power by obtaining the technology you need today, protect against technology obsolescence, and preserve your capital for other uses.

We work with businesses, non-profit organizations, governments and educational institutions to finance their entire technology solution. We focus on making it easy to do business with us. Our highly experienced team of finance professionals operates in a work culture that emphasizes the importance of providing outstanding customer service. Our systems, processes and flexible policies support our goal of providing customers with a positive experience.

We finance your entire solution. Unlike others, we allow you to bundle everything you need from hardware and software to service contracts, installation costs, training fees, and sales tax. If you decide weeks or months later to add to your solution, we can consolidate everything into a single invoice.

Our Premier Client services provide large accounts with special handling services to ensure these complex transactions are serviced properly. As a premier client, you have a dedicated finance specialist who manages your account through its life, from first invoice through asset return or purchase. This specialist develops an in-depth understanding of your invoice and payment requirements. For you, this dedication provides a high-quality, easy, and positive financing experience.

For your region-specific offers, please ask your Lenovo sales representative or your technology provider about the use of Lenovo Financial Services. For more information, see the following Lenovo website:

https://www.lenovo.com/us/en/landingpage/lenovo-financial-services/

Related publications and links

For more information, see these resources:

- Lenovo ThinkSystem SR250 product page
  http://www3.lenovo.com/us/en/p/77XX7SRSR25
- Lenovo Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com
- User Guides - ThinkSystem SR250
  http://thinksystem.lenovofiles.com/help/topic/7Y51/introduction.html
- Lenovo Data Center Support Downloads - ThinkSystem SR250
  http://datacentersupport.lenovo.com/products/servers/thinksystem/sr250/7y51/downloads
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  http://datacentersupport.lenovo.com/products/servers/thinksystem/sr250/7y73/downloads

Related product families

Product families related to this document are the following:

- 1-Socket Rack Servers
- ThinkSystem SR250 Server

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