



## Lenovo ThinkSystem SR630 Server (Xeon SP Gen 1) Product Guide

Lenovo ThinkSystem SR630 is an ideal 2-socket 1U rack server for small businesses up to large enterprises that need industry-leading reliability, management, and security, as well as maximizing performance and flexibility for future growth. The SR630 server is designed to handle a wide range of workloads, such as databases, virtualization and cloud computing, virtual desktop infrastructure (VDI), infrastructure security, systems management, enterprise applications, collaboration/email, streaming media, web, and HPC.

Featuring the Intel Xeon Processor Scalable Family, the SR630 server offers scalable performance and storage capacity. The SR630 server supports up to two processors, up to 3 TB of 2666 MHz TruDDR4 memory, up to 12x 2.5-inch or 4x 3.5-inch drive bays with an extensive choice of NVMe PCIe SSDs, SAS/SATA SSDs, and SAS/SATA HDDs, and flexible I/O expansion options with the LOM slot, the dedicated storage controller slot, and up to 3x PCIe slots.

The SR630 server offers basic or advanced hardware RAID protection and a wide range of networking options, including selectable LOM, ML2, and PCIe network adapters. The next-generation Lenovo XClarity Controller, which is built into the SR630 server, provides advanced service processor control, monitoring, and alerting functions.

The following figure shows the Lenovo ThinkSystem SR630.



Figure 1 Lenovo ThinkSystem SR630

### Did you know?

The SR630 server features a unique AnyBay design that allows a choice of drive interface types in the same drive bay: SAS drives, SATA drives, or U.2 NVMe PCIe drives.

The SR630 server offers onboard NVMe PCIe ports that allow direct connections to the U.2 NVMe PCIe SSDs, which frees up I/O slots and helps lower NVMe solution acquisition costs.

The SR630 server delivers impressive compute power per watt, featuring 80 PLUS Titanium and Platinum redundant power supplies that can deliver 96% (Titanium) or 94% (Platinum) efficiency at 50% load when connected to a 200 - 240 V AC power source.

The SR630 server is designed to meet ASHRAE A4 standards (up to 45 °C [113 °F]) in select configurations, which enable customers to lower energy costs, while still maintaining world-class reliability.

## Key features

Combining performance and flexibility, the SR630 server is a great choice for small and medium businesses up to the large enterprise. It can provide outstanding uptime to keep business-critical applications and cloud deployments running safely. Ease of use and comprehensive systems management tools help make deployment easier. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design improve your business environment and help save operational costs.

### Scalability and performance

The SR630 server offers numerous features to boost performance, improve scalability, and reduce costs:

- Improves productivity by offering superior system performance with the Intel Xeon Processor Scalable Family with up to 28-core processors, up to 38.5 MB of last level cache (LLC), up to 2666 MHz memory speeds, and up to 10.4 GT/s Ultra Path Interconnect (UPI) links.
  - Support for up to two processors, 56 cores, and 112 threads allows to maximize the concurrent execution 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 512 (AVX-512) enable acceleration of enterprise-class and high performance computing (HPC) workloads.
- Helps maximize system performance for data intensive applications with up to 2666 MHz memory speeds and up to 3 TB of memory capacity (with the processors that support 1.5 TB per socket).
- Offers flexible and scalable internal storage in a 1U rack form factor with up to 12x 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 flexibility to use SAS, SATA, or NVMe PCIe drives in the same drive bays with a unique AnyBay design.
- Provides I/O scalability with the LOM slot, PCIe 3.0 slot for an internal storage controller, 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 Xeon Processor Scalable Family.

### Availability and serviceability

The SR630 server provides many features to simplify serviceability and increase system uptime:

- Offers protection in the event of a non-correctable memory failure with Single Device Data Correction (SDDC, also known as Chipkill, requires x4-based DIMMs), Adaptive Double Device Data Correction (ADDDC, also known as Redundant Bit Steering [RBS], requires x4-based DIMMs and Intel Xeon Gold or Platinum processors), memory mirroring, and memory rank sparing.
- Provides easy access to upgrades and serviceable parts (such as processors, memory DIMMs, and adapter cards) with tool-less cover removal.
- Offers data protection and greater system uptime with hot-swap drives supporting basic or advanced RAID redundancy.
- Provides availability for business-critical applications with redundant hot-swap power supplies and redundant hot-swap fans.
- Simplifies servicing, speeds up problem resolution, and helps improve system availability with light path diagnostics.

- 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 processors, voltage regulators, memory, internal storage (SAS/SATA HDDs and SSDs, NVMe SSDs, M.2 storage, flash storage adapters), fans, power supplies, 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 SR630 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 you 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 Trusted Cryptographic Module (TCM) or Nationz TPM (available only in PRC).
- Keeps user data safe with Lenovo Business Vantage, a security software tool suite designed to work with the Trusted Cryptographic Module (available only in PRC).
- 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.

## Energy efficiency

The SR630 server offers the following energy-efficiency features to save energy, reduce operational costs, increase energy availability, and contribute to the green environment:

- Delivers impressive compute power per watt, featuring 80 PLUS Titanium and Platinum redundant power supplies.
- Enables customers to lower energy costs with design to meet ASHRAE A4 standards in select configurations.
- 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 SR630 server with four 3.5-inch drive bays.

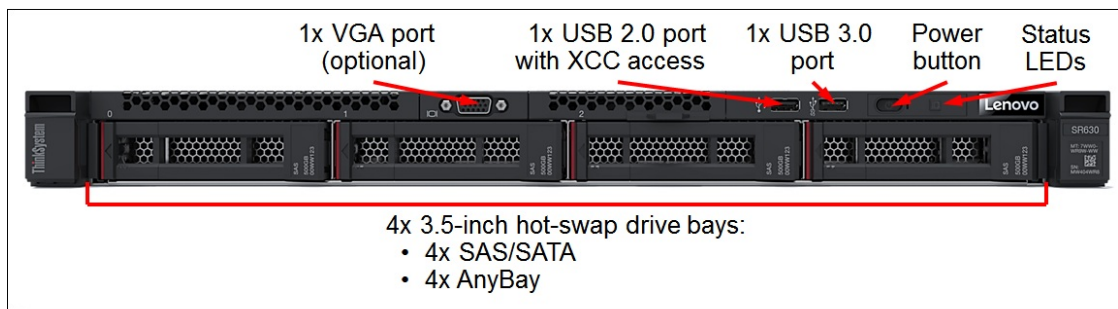


Figure 2. Front view of the SR630: 4x 3.5-inch drive bays

The following figure shows the front of the SR630 server with eight 2.5-inch drive bays.

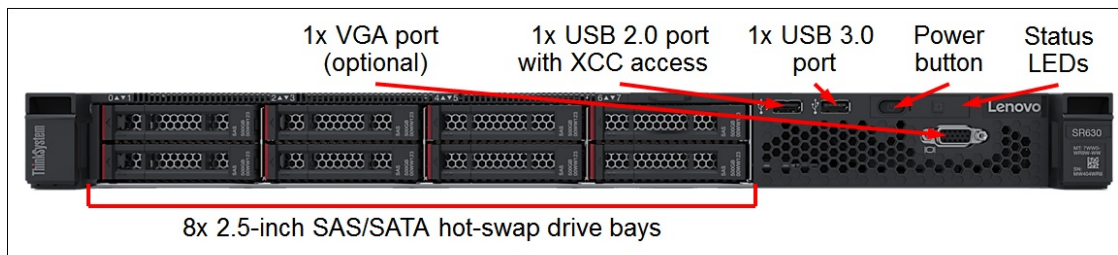


Figure 3. Front view of the SR630: 8x 2.5-inch drive bays

The following figure shows the front of the SR630 server with ten 2.5-inch drive bays.

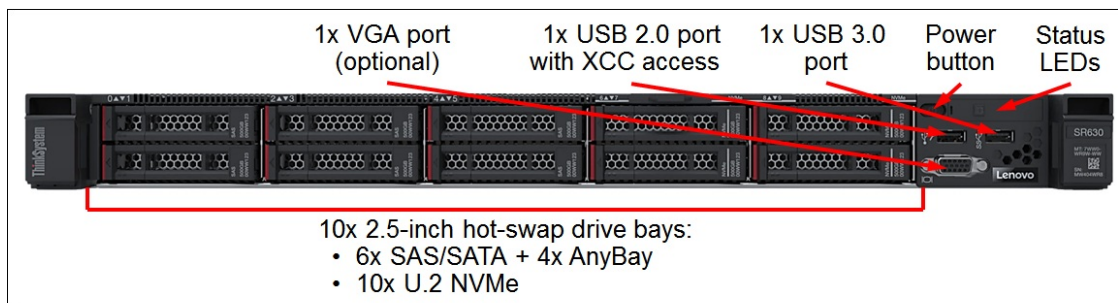


Figure 4. Front view of the SR630: 10x 2.5-inch drive bays

The front of the SR630 server includes the following components:

- 4x 3.5-inch, or 8x 2.5-inch, or 10x 2.5-inch hot-swap drive bays.
- One VGA port (optional).
- One USB 3.0 port.
- One USB 2.0 port with XClarity Controller access.
- Power button.
- Status LEDs.

The following figure shows the rear of the SR630 server with three PCIe low profile slots.

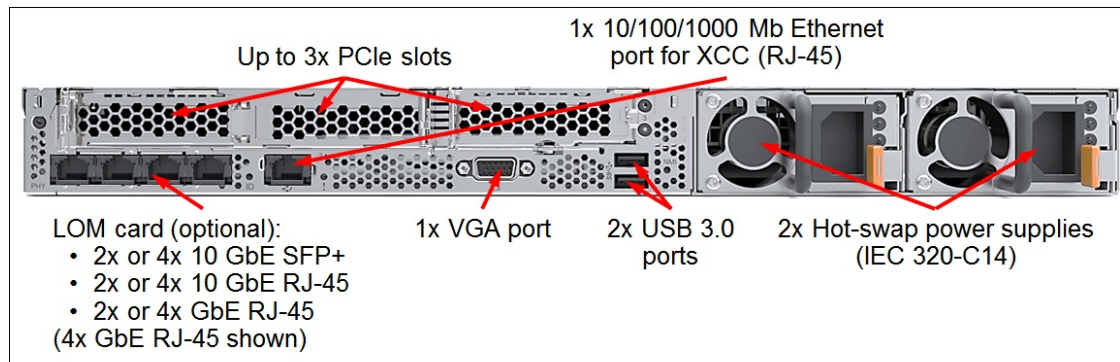


Figure 5. Rear view of the SR630

The rear of the SR630 server includes the following components:

- Up to three PCIe expansion slots (depending on the riser cards selected).
- One LOM card slot.
- One 1 GbE port for XClarity Controller.
- One VGA port.
- Two USB 3.0 ports.
- Up to two hot-swap power supplies.

The following figure shows the locations of key components inside the SR630 server.

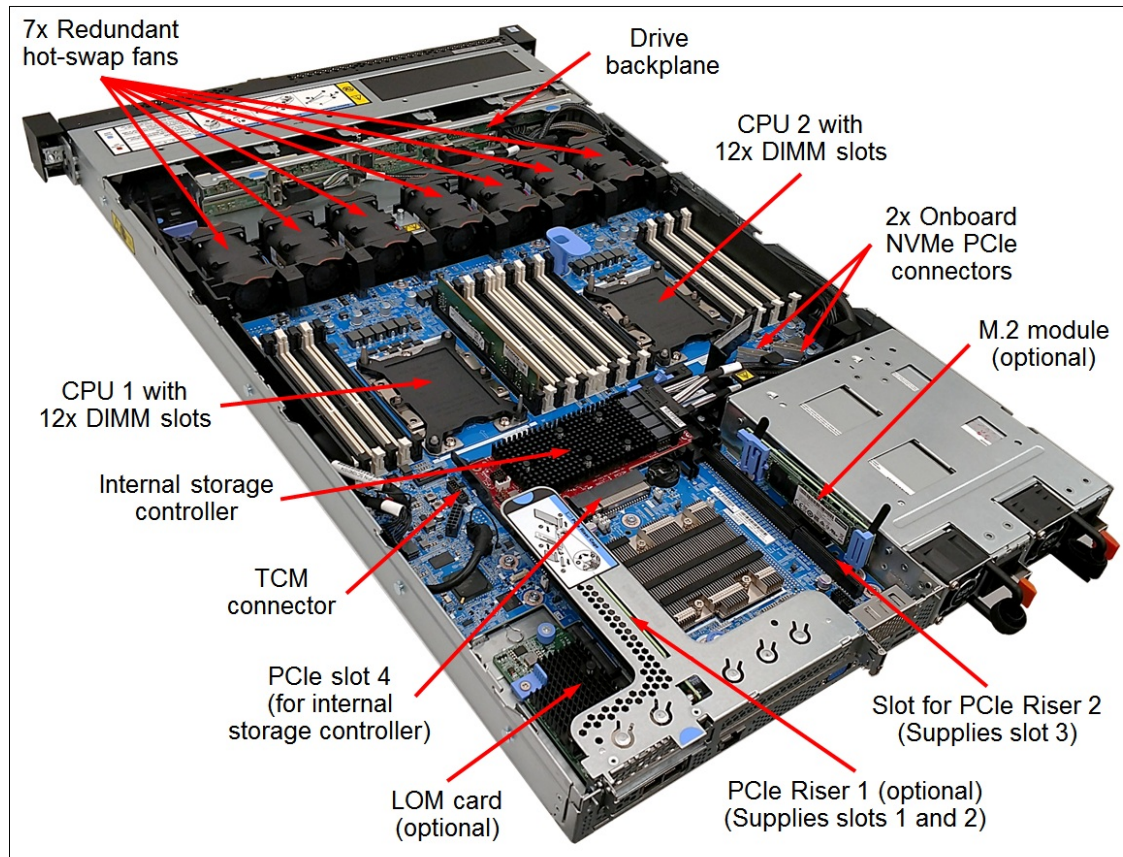


Figure 6. Internal view of the SR630

The following key components are located inside the SR630 server:

- Up to two processors.
- 24 DIMM slots (12 DIMM slots per processor).
- Drive backplanes.
- Two onboard NVMe PCIe connectors.
- One M.2 module connector.
- One LOM card connector.
- One onboard PCIe slot 4.
- Two slots for PCIe riser cards.
- One TCM connector.
- Five (one processor) or seven (two processors) hot-swap system fans.

## System specifications

The following table lists the system specifications for the SR630 server.

Table 1. SR630 system specifications

Attribute	Specification
Form factor	1U rack-mount.
Processor	Up to two Intel Xeon Bronze, Silver, Gold, or Platinum processors: <ul style="list-style-type: none"> <li>• Up to 28 cores (2.8 GHz core speeds)</li> <li>• Up to 3.6 GHz core speeds (4 cores)</li> <li>• Two UPI links up to 10.4 GT/s each</li> <li>• Up to 38.5 MB cache</li> <li>• Up to 2666 MHz memory speed</li> </ul>
Chipset	Intel C624.
Memory	Up to 24 DIMM sockets (12 DIMMs per processor; six memory channels per processor with two DIMMs per channel). Support for RDIMMs, LRDIMMs, or 3DS RDIMMs. Memory types cannot be intermixed. Memory speed up to 2666 MHz.
Memory capacity	<ul style="list-style-type: none"> <li>• With RDIMMs: Up to 768 GB with 24x 32 GB RDIMMs and two processors.</li> <li>• With LRDIMMs: Up to 1.5 TB with 24x 64 GB LRDIMMs and two processors.</li> <li>• With 3DS RDIMMs: Up to 3 TB with 128 GB 3DS RDIMMs and two processors. (requires processors that support 1.5 TB of memory per socket).</li> </ul>
Memory protection	Error correction code (ECC), SDDC (for x4-based memory DIMMs), ADDDC (for x4-based memory DIMMs, requires Intel Xeon Gold or Platinum processors), memory mirroring, memory rank sparing, patrol scrubbing, and demand scrubbing.
Drive bays	<ul style="list-style-type: none"> <li>• Up to 6 SAS/SATA hot-swap drive bays: 4x 3.5" (front) + 2x 2.5" (rear)</li> <li>• 4 LFF AnyBay hot-swap drive bays: 4x 3.5" (front)</li> <li>• Up to 10 SFF SAS/SATA hot-swap drive bays: 8x 2.5" (front) + 2x 2.5" (rear)</li> <li>• Up to 12 SFF hot-swap drive bays: 6x 2.5" SAS/SATA &amp; 4x 2.5" AnyBay (front) + 2x 2.5" SAS/SATA (rear)</li> <li>• 10 SFF U.2 NVMe PCIe SSD hot-swap drive bays</li> </ul>

Attribute	Specification
Drive types	<p>2.5-inch hot-swap drives:</p> <ul style="list-style-type: none"> <li>• 12 Gbps SAS HDDs up to 2.4 TB</li> <li>• 12 Gbps Nearline (NL) SAS HDDs up to 2 TB</li> <li>• 12 Gbps SAS HDD SEDs up to 2.4 TB</li> <li>• 12 Gbps NL SAS HDD SEDs up to 2 TB</li> <li>• 12 Gbps SAS SSDs up to 15.36 TB</li> <li>• 12 Gbps SAS SSD SEDs up to 1.6 TB</li> <li>• 6 Gbps NL SATA HDDs up to 2 TB</li> <li>• 6 Gbps SATA SSDs up to 7.68 TB</li> <li>• 6 Gbps SATA SSD SEDs up to 7.68 TB</li> <li>• U.2 NVMe PCIe 3.0 x4 SSDs up to 8 TB</li> </ul> <p>3.5-inch hot-swap drives:</p> <ul style="list-style-type: none"> <li>• 12 Gbps SAS HDDs up to 900 GB (2.5" HDD in a 3.5" tray)</li> <li>• 12 Gbps NL SAS HDDs up to 16 TB</li> <li>• 12 Gbps NL SAS HDD SEDs up to 8 TB</li> <li>• 12 Gbps SAS SSDs up to 7.68 TB (2.5" SSD in a 3.5" tray)</li> <li>• 12 Gbps SAS SSD SEDs up to 1.6 TB (2.5" SSD in a 3.5" tray)</li> <li>• 6 Gbps NL SATA HDDs up to 16 TB</li> <li>• 6 Gbps SATA SSDs up to 7.68 TB (2.5" SSD in a 3.5" tray)</li> <li>• NVMe PCIe 3.0 x4 SSDs up to 7.68 TB</li> </ul> <p>Internal M.2 SSDs:</p> <ul style="list-style-type: none"> <li>• 6 Gbps SATA up to 480 GB</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Intermix of SAS, SATA, and NVMe PCIe drives is supported within a system, but not within a RAID array.</li> <li>• NVMe PCIe SSDs do not support hardware RAID controllers.</li> <li>• NVMe PCIe SSDs are supported in the AnyBay or U.2 NVMe drive bays.</li> </ul>
Internal storage capacity	<ul style="list-style-type: none"> <li>• 2.5-inch models: Up to 184 TB with 12x 15.36 TB 2.5" SSDs.</li> <li>• 3.5-inch models: Up to 94.7 TB with 4x 16 TB 3.5" HDDs and 2x 15.36 TB 2.5" SSDs.</li> </ul>
Storage controller	<p>12 Gbps SAS/6 Gbps SATA RAID</p> <ul style="list-style-type: none"> <li>• RAID 0/1/10: RAID 530-16i</li> <li>• RAID 0/1/10/5/50: <ul style="list-style-type: none"> <li>◦ RAID 530-8i</li> <li>◦ RAID 730-8i 1GB Cache</li> </ul> </li> <li>• RAID 0/1/10/5/50/6/60: <ul style="list-style-type: none"> <li>◦ RAID 730-8i 2GB Flash</li> <li>◦ RAID 930-8i 2GB Flash</li> <li>◦ RAID 930-16i 4GB or 8GB Flash</li> </ul> </li> </ul> <p>12 Gbps SAS/6 Gbps SATA non-RAID: 430-8i or 16i HBA</p> <p>NVMe PCIe non-RAID</p> <ul style="list-style-type: none"> <li>• Onboard NVMe</li> <li>• 1610-4P NVMe Switch Adapter</li> <li>• 810-4P NVMe Switch Adapter</li> </ul>
Optical drive bays	None. Support for an external USB DVD RW Optical Disk Drive (See <a href="#">Optical drives</a> ).



Attribute	Specification
Network interfaces	<ul style="list-style-type: none"> <li>• Onboard LOM slot for up to 4x 1/10 Gb Ethernet ports: <ul style="list-style-type: none"> <li>◦ 2x or 4x 1 GbE RJ-45 ports (no 10/100 Mb support)</li> <li>◦ 2x or 4x 10 GbE RJ-45 ports (no 10/100 Mb support)</li> <li>◦ 2x or 4x 10 GbE SFP+ ports (no 10/100 Mb support)</li> </ul> </li> <li>• Optional Mezzanine LOM (ML2) slot for dual-port 10 GbE cards with SFP+ or RJ-45 connectors or single- or dual-port 25 GbE cards with SFP28 connectors.</li> <li>• 1x RJ-45 10/100/1000 Mb Ethernet systems management port.</li> </ul>
I/O expansion slots	<p>Up to four slots. Slot 4 is the fixed slot on the system planar, and the remaining slots depend on the riser cards installed. The slots are as follows:</p> <ul style="list-style-type: none"> <li>• Slot 1: PCIe 3.0 x8, ML2 x8, or ML2 x16; low profile</li> <li>• Slot 2: PCIe 3.0 x16 or x8; low profile or full-height, half-length</li> <li>• Slot 3: PCIe 3.0 x16; low profile</li> <li>• Slot 4: PCIe 3.0 x8 (dedicated to an internal storage controller)</li> </ul> <p>Slot 3 requires the second processor to be installed.</p>
Ports	<ul style="list-style-type: none"> <li>• Front: <ul style="list-style-type: none"> <li>◦ 1x USB 2.0 port with XClarity Controller access.</li> <li>◦ 1x USB 3.0 port.</li> <li>◦ 1x VGA port (optional).</li> </ul> </li> <li>• Rear: 2x USB 3.0 ports and 1x VGA port. Optional 1x DB-9 serial port.</li> </ul>
Cooling	Five (one processor) or seven (two processors) hot-swap system fans with N+1 redundancy.
Power supply	Up to two redundant hot-swap 550 W, 750 W, or 1100 W (100 - 240 V) High Efficiency Platinum, or 750 W (200 - 240 V) High Efficiency Titanium AC power supplies. HVDC support (PRC only).
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, power supplies, and fans.
Systems management	XClarity Controller (XCC) Standard, Advanced, or Enterprise (Pilot 4 chip), proactive platform alerts, light path diagnostics, 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 Trusted Cryptographic Module (TCM) or Nationz TPM (available only in PRC). Optional Lenovo Business Vantage security software (available only in PRC).
Operating systems	Microsoft Windows Server 2012 R2, 2016, and 2019; Red Hat Enterprise Linux 6 (x64), 7, and 8; SUSE Linux Enterprise Server 11 (x64), 12, and 15; VMware vSphere (ESXi) 6.0, 6.5, 6.7, and 7.0.
Warranty	One-year (Machine Type 7X01) or three-year (Machine Type 7X02) 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, warranty extension up to 5 years, 1-year or 2-year post-warranty extensions, YourDrive Your Data, Enterprise Software Support, and Basic Hardware Installation Services.
Dimensions	Height: 43 mm (1.7 in), width: 434 mm (17.1 in), depth: 715 mm (28.1 in)
Weight	Minimum configuration: 11.9 kg (26.2 lb), maximum: 18.8 kg (41.4 lb)

## Models

ThinkSystem SR630 server models can be configured by using the Lenovo Data Center Solution Configurator (DCSC):

<http://dcsc.lenovo.com>

ThinkSystem SR630 server models are region-specific; that is, each region may define their own server models, and not all server models are available in every region. For a complete list of the SR630 models, contact a Lenovo or Lenovo Business Partner representative in your region. Information on the SR630 models is also available on the PSREF website:

[http://psref.lenovo.com/Product/ThinkSystem/ThinkSystem\\_SR630](http://psref.lenovo.com/Product/ThinkSystem/ThinkSystem_SR630)

The preconfigured and factory-integrated custom models and their components and options, which are all described in this product guide, use the ThinkSystem SR630 Configure-to-Order (CTO) base models that are listed in the following table.

Table 2. CTO base models

Description	Machine Type/Model
ThinkSystem SR630 - 3yr Warranty	7X02CTO1WW
ThinkSystem SR630 - 1yr Warranty	7X01CTO1WW

The following table lists the base chassis for CTO models of the SR630 server.

Table 3. Base chassis for CTO models

Description	Feature code
ThinkSystem SR630 2.5" Chassis with 8 Bays	AUW0
ThinkSystem SR630 2.5" Chassis with 10 Bays	AUW1
ThinkSystem SR630 3.5" Chassis with 4 Bays	AUW2

All models of the SR630 server are shipped with the following items:

- *Rack Installation Guide*
- *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 + AnyBay drive bays.
  - SFF and LFF drive bays are hot-swap.
  - M.2 drive bays are non-hot-swap.
- XClarity Controller: "S" = Standard, "A" = Advanced, "E" = Enterprise.
- Front VGA port: "Y" = Included; "N" = Not included, optional.
- Tool-less Rail Kit: "Y" = Included; "N" = Not included, optional.
- Cable Management Arm (CMA): "Y" = Included; "N" = Not included, optional.
- Power cord:
  - "L2" = 2.8 m line cord.
  - "R1" = 1.5 m C13-C14 rack power cable.
  - "R2" = 2.8 m C13-C14 rack power cable.
  - "N" = Not included; see [Power supplies and cables](#) for the ordering information.

The following tables list the models of the SR630 server for the following regions:

- [Latin America](#)
- [Japan](#)

**Product availability:** The ThinkSystem SR630 server models described in this section that use the first generation of the Intel Xeon Processor Scalable Family have been withdrawn and are no longer available for ordering (except some models for Latin America and Japan). For currently available models, refer to the Models section of the Lenovo ThinkSystem SR630 Server (Xeon SP Gen 2) product guide: <http://lenovopress.com/LP1049#models>

Table 4. SR630 server models: Latin America

Model number	Intel Xeon processor* (2 max)	Memory RDIMM (24 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots (4 max)^	Power supply (2 max)	XClarity Controller	Front VGA port	Tool-less Rail Kit	CMA	Power cord
Relationship models (SAP Business One workload-optimized [no software included]) - Latin America													
7X02A0DDLA	2x 4114 10C 85W 2.2GHz	8x 8GB (1Rx8)	1x RAID 930-16i 4GB	10 / 10 SFF	3x 960GB S4610	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	2x 750W Platinum	E	Y	Y	N	R2
7X02A0DBLA	2x 4114 10C 85W 2.2GHz	12x 16GB (1Rx4)	1x RAID 930-16i 4GB	10 / 10 SFF	3x 960GB S4610	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	2x 750W Platinum	E	Y	Y	N	R2
7X02A0DCLA	2x 4114 10C 85W 2.2GHz	12x 8GB (1Rx8) 12x 16GB (1Rx4)	1x RAID 930-16i 4GB	10 / 10 SFF	3x 960GB S4610	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	2x 750W Platinum	E	Y	Y	N	R2
7X02A0DELA	2x 4114 10C 85W 2.2GHz	24x 16GB (1Rx4)	1x RAID 930-16i 4GB	10 / 10 SFF	3x 960GB S4610	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	2x 750W Platinum	E	Y	Y	N	R2

\* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.

^ The server supports one onboard PCIe slot 4 and up to three I/O slots on the riser cards. An internal storage controller occupies the PCIe slot 4.

Table 5. SR630 server models: Japan

Model number	Intel Xeon processor* (2 max)	Memory RDIMM (24 max)	Storage controller	Drive bays (std / max)	Drives	Eth. LOM	I/O slots (4 max)^	Power supply (2 max)	XClarity Controller	Front VGA port	Tool-less Rail Kit	CMA	Power cord
Relationship models - Japan													
7X02A06MJP	1x 4108 8C 85W 1.8GHz	1x 16GB (2Rx8)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	A	N	Y	N	N
7X02A05ZJP	1x 4114 10C 85W 2.2GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 10Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	A	N	Y	N	N
7X02A06KJP	1x 5118 12C 105W 2.3GHz	1x 16GB (2Rx8)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	A	N	Y	N	N
7X02A02NJP	1x 5122 4C 105W 3.6GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 10Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	S	N	Y	N	N
7X02A06JJP	1x 6130 16C 125W 2.1GHz	1x 16GB (2Rx8)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	A	N	Y	N	N
7X02A012JP	1x 6134 8C 130W 3.2GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 10Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	S	N	Y	N	N
7X02A06LJP	1x 6136 12C 150W 3.0GHz	1x 16GB (2Rx8)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	A	N	Y	N	N
7X02A06NJP	1x 6142 16C 150W 2.6GHz	1x 16GB (2Rx8)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	A	N	Y	N	N
7X02A05KJP	1x 6148 20C 150W 2.4GHz	1x 16GB (2Rx8)	None	None	None	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	S	N	Y	N	N
7X02A05DJP	2x 6150 18C 165W 2.7GHz	2x 16GB (2Rx8)	None	None	None	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	S	N	Y	N	N
7X02A024JP	1x 8160 24C 150W 2.1GHz	1x 16GB (1Rx4)	1x RAID 930-16i 4GB	6+4 / 12 SFF	Open bay	4x 10Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 1100W	S	Y	Y	N	N
7X02A05EJP	1x 8160 24C 150W 2.1GHz	1x 16GB (2Rx8)	None	None	None	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 750W Platinum	S	N	Y	N	N
TopSeller models - Japan													
7X02A01WJP	1x 3104 6C 85W 1.7GHz	1x 16GB (1Rx4)	1x RAID 530-8i	4 / 4‡ LFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	S	N	Y	N	N
7X02A02CJP	1x 3104 6C 85W 1.7GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	S	N	Y	N	N
7X02A02RJP	1x 3106 8C 85W 1.7GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	S	N	Y	N	N
7X02A02SJP	1x 4110 8C 85W 2.1GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	S	N	Y	N	N
7X02A02TJP	1x 4112 4C 85W 2.6GHz	1x 16GB (1Rx4)	1x RAID 930-8i	8 / 10 SFF	Open bay	4x 1Gb RJ-45	2x PCIe x8 1x PCIe x16	1x 550W	S	N	Y	N	N

\* Processor details: Processor quantity and model, cores, thermal design power (TDP), and core speed.

^ The server supports one onboard PCIe slot 4 and up to three I/O slots on the riser cards. An internal storage controller occupies the PCIe slot 4.

‡ Models with 4x LFF SAS/SATA drive bays can be upgraded with 2x additional SFF rear drive bays (See [Internal storage](#) for details) that are not included in the maximum quantity shown.

## Processors

The SR630 server supports one or two Intel Xeon Bronze, Silver, Gold, or Platinum processors. The following table lists the specifications of the processors for the SR630 server.

Table 6. 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 per socket	UPI speed	TDP	HT	TB	VT-x	VT-d
<b>Intel Xeon Bronze processors</b>											
3104	1.7 / 1.7 GHz	6 / 6	8.25 MB	2133 MHz	768 GB	9.6 GT/s	85 W	No	No	Yes	Yes
3106	1.7 / 1.7 GHz	8 / 8	11 MB	2133 MHz	768 GB	9.6 GT/s	85 W	No	No	Yes	Yes
<b>Intel Xeon Silver processors</b>											
4108	1.8 / 3.0 GHz	8 / 16	11 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4109T	2.0 / 3.0 GHz	8 / 16	11 MB	2400 MHz	768 GB	9.6 GT/s	70 W	Yes	Yes	Yes	Yes
4110	2.1 / 3.0 GHz	8 / 16	11 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4112	2.6 / 3.0 GHz	4 / 8	8.25 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4114	2.2 / 3.0 GHz	10 / 20	13.75 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4114T	2.2 / 3.0 GHz	10 / 20	13.75 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4116	2.1 / 3.0 GHz	12 / 24	16.5 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
4116T	2.1 / 3.0 GHz	12 / 24	16.5 MB	2400 MHz	768 GB	9.6 GT/s	85 W	Yes	Yes	Yes	Yes
<b>Intel Xeon Gold processors</b>											
5115	2.4 / 3.2 GHz	10 / 20	13.75 MB	2400 MHz	768 GB	10.4 GT/s	85 W	Yes	Yes	Yes	Yes
5117	2.0 / 2.8 GHz	14 / 28	19.25 MB	2400 MHz	768 GB	10.4 GT/s	105W	Yes	Yes	Yes	Yes
5118	2.3 / 3.2 GHz	12 / 24	16.5 MB	2400 MHz	768 GB	10.4 GT/s	105 W	Yes	Yes	Yes	Yes
5119T	1.9 / 3.2 GHz	14 / 28	19.25 MB	2400 MHz	768 GB	10.4 GT/s	85 W	Yes	Yes	Yes	Yes
5120	2.2 / 3.2 GHz	14 / 28	19.25 MB	2400 MHz	768 GB	10.4 GT/s	105 W	Yes	Yes	Yes	Yes
5120T	2.2 / 3.2 GHz	14 / 28	19.25 MB	2400 MHz	768 GB	10.4 GT/s	105 W	Yes	Yes	Yes	Yes
5122	3.6 / 3.7 GHz	4 / 8	16.5 MB	2666 MHz	768 GB	10.4 GT/s	105 W	Yes	Yes	Yes	Yes
6126	2.6 / 3.7 GHz	12 / 24	19.25 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6126T	2.6 / 3.7 GHz	12 / 24	19.25 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6128	3.4 / 3.7 GHz	6 / 12	19.25 MB	2666 MHz	768 GB	10.4 GT/s	115 W	Yes	Yes	Yes	Yes
6130	2.1 / 3.7 GHz	16 / 32	22 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6130T	2.1 / 3.7 GHz	16 / 32	22 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6132	2.6 / 3.7 GHz	14 / 28	19.25 MB	2666 MHz	768 GB	10.4 GT/s	140 W	Yes	Yes	Yes	Yes
6134	3.2 / 3.7 GHz	8 / 16	24.75 MB	2666 MHz	768 GB	10.4 GT/s	130 W	Yes	Yes	Yes	Yes
6134M	3.2 / 3.7 GHz	8 / 16	24.75 MB	2666 MHz	1.5 TB	10.4 GT/s	130 W	Yes	Yes	Yes	Yes
6136	3.0 / 3.7 GHz	12 / 24	24.75 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
6138	2.0 / 3.7 GHz	20 / 40	27.5 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6138T	2.0 / 3.7 GHz	20 / 40	27.5 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
6140	2.3 / 3.7 GHz	18 / 36	24.75 MB	2666 MHz	768 GB	10.4 GT/s	140 W	Yes	Yes	Yes	Yes
6140M	2.3 / 3.7 GHz	18 / 36	24.75 MB	2666 MHz	1.5 TB	10.4 GT/s	140 W	Yes	Yes	Yes	Yes
6142	2.6 / 3.7 GHz	16 / 32	22 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
6142M	2.6 / 3.7 GHz	16 / 32	22 MB	2666 MHz	1.5 TB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
6144	3.5 / 4.2 GHz	8 / 16	24.75 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
6146	3.2 / 4.2 GHz	12 / 24	24.75 MB	2666 MHz	768 GB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes

CPU model	Core frequency (Base / TB Max)	Number of cores / threads	Cache	Max DDR4 frequency	Max memory per socket	UPI speed	TDP	HT	TB	VT-x	VT-d
6148	2.4 / 3.7 GHz	20 / 40	27.5 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
6150	2.7 / 3.7 GHz	18 / 36	24.75 MB	2666 MHz	768 GB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes
6152	2.1 / 3.7 GHz	22 / 44	30.25 MB	2666 MHz	768 GB	10.4 GT/s	140 W	Yes	Yes	Yes	Yes
6154	3.0 / 3.7 GHz	18 / 36	24.75 MB	2666 MHz	768 GB	10.4 GT/s	200 W	Yes	Yes	Yes	Yes
<b>Intel Xeon Platinum processors</b>											
8153	2.0 / 2.8 GHz	16 / 32	22 MB	2666 MHz	768 GB	10.4 GT/s	125 W	Yes	Yes	Yes	Yes
8156	3.6 / 3.7 GHz	4 / 8	16.5 MB	2666 MHz	768 GB	10.4 GT/s	105 W	Yes	Yes	Yes	Yes
8158	3.0 / 3.7 GHz	12 / 24	24.75 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
8160	2.1 / 3.7 GHz	24 / 48	33 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
8160M	2.1 / 3.7 GHz	24 / 48	33 MB	2666 MHz	1.5 TB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
8160T	2.1 / 3.7 GHz	24 / 48	33 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
8164	2.0 / 3.7 GHz	26 / 52	35.75 MB	2666 MHz	768 GB	10.4 GT/s	150 W	Yes	Yes	Yes	Yes
8168	2.7 / 3.7 GHz	24 / 48	33 MB	2666 MHz	768 GB	10.4 GT/s	205 W	Yes	Yes	Yes	Yes
8170	2.1 / 3.7 GHz	26 / 52	35.75 MB	2666 MHz	768 GB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes
8170M	2.1 / 3.7 GHz	26 / 52	35.75 MB	2666 MHz	1.5 TB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes
8176	2.1 / 3.8 GHz	28 / 56	38.5 MB	2666 MHz	768 GB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes
8176M	2.1 / 3.8 GHz	28 / 56	38.5 MB	2666 MHz	1.5 TB	10.4 GT/s	165 W	Yes	Yes	Yes	Yes
8180	2.5 / 3.8 GHz	28 / 56	38.5 MB	2666 MHz	768 GB	10.4 GT/s	205 W	Yes	Yes	Yes	Yes
8180M	2.5 / 3.8 GHz	28 / 56	38.5 MB	2666 MHz	1.5 TB	10.4 GT/s	205 W	Yes	Yes	Yes	Yes

For the SR630 server models that come standard with one processor, the second processor can be ordered, if required (see the following table for ordering information). The second processor must be of the same model as the first processor. The second processor option includes a processor, a heatsink, and two additional system fans.

Table 7. Processor options

Description	Part number	Feature code*
<b>Intel Xeon Bronze processors</b>		
ThinkSystem SR630 Intel Xeon Bronze 3104 6C 85W 1.7GHz Processor Option Kit	7XG7A05528	AWEJ
ThinkSystem SR630 Intel Xeon Bronze 3106 8C 85W 1.7GHz Processor Option Kit	7XG7A05526	AWEH
<b>Intel Xeon Silver processors</b>		
ThinkSystem SR630 Intel Xeon Silver 4108 8C 85W 1.8GHz Processor Option Kit	7XG7A05527	AWEG
ThinkSystem SR630 Intel Xeon Silver 4109T 8C 70W 2.0GHz Processor Option Kit	7XG7A05530	AWET
ThinkSystem SR630 Intel Xeon Silver 4110 8C 85W 2.1GHz Processor Option Kit	7XG7A05531	AWEE
ThinkSystem SR630 Intel Xeon Silver 4112 4C 85W 2.6GHz Processor Option Kit	7XG7A05533	AWEF
ThinkSystem SR630 Intel Xeon Silver 4114 10C 85W 2.2GHz Processor Option Kit	7XG7A05534	AWEC
ThinkSystem SR630 Intel Xeon Silver 4114T 10C 85W 2.2GHz Processor Option Kit	7XG7A05535	AWES
ThinkSystem SR630 Intel Xeon Silver 4116 12C 85W 2.1GHz Processor Option Kit	7XG7A05532	AWER
ThinkSystem SR630 Intel Xeon Silver 4116T 12C 85W 2.1GHz Processor Option Kit	7XG7A05529	AWEA
<b>Intel Xeon Gold processors</b>		
ThinkSystem SR630 Intel Xeon Gold 5115 10C 85W 2.4GHz Processor Option Kit	7XG7A05551	AWDU
ThinkSystem SR630 Intel Xeon Gold 5117 14C 105W 2.0GHz Processor Option Kit	4XG7A09083	B137

Description	Part number	Feature code*
ThinkSystem SR630 Intel Xeon Gold 5118 12C 105W 2.3GHz Processor Option Kit	7XG7A05536	AWEP
ThinkSystem SR630 Intel Xeon Gold 5119T 14C 85W 1.9GHz Processor Option Kit	7XG7A05537	AWEQ
ThinkSystem SR630 Intel Xeon Gold 5120 14C 105W 2.2GHz Processor Option Kit	7XG7A05539	AWE6
ThinkSystem SR630 Intel Xeon Gold 5120T 14C 105W 2.2GHz Processor Option Kit	7XG7A05538	AWE8
ThinkSystem SR630 Intel Xeon Gold 5122 4C 105W 3.6GHz Processor Option Kit	7XG7A05547	AWED
ThinkSystem SR630 Intel Xeon Gold 6126 12C 125W 2.6GHz Processor Option Kit	7XG7A05546	AWEL
ThinkSystem SR630 Intel Xeon Gold 6126T 12C 125W 2.6GHz Processor Option Kit	7XG7A05545	AWE5
ThinkSystem SR630 Intel Xeon Gold 6128 6C 115W 3.4GHz Processor Option Kit	7XG7A05544	AWEB
ThinkSystem SR630 Intel Xeon Gold 6130 16C 125W 2.1GHz Processor Option Kit	7XG7A05543	AWEN
ThinkSystem SR630 Intel Xeon Gold 6130T 16C 125W 2.1GHz Processor Option Kit	7XG7A05542	AWE4
ThinkSystem SR630 Intel Xeon Gold 6132 14C 140W 2.6GHz Processor Option Kit	7XG7A05561	AWDY
ThinkSystem SR630 Intel Xeon Gold 6134 8C 130W 3.2GHz Processor Option Kit	7XG7A05560	AWE9
ThinkSystem SR630 Intel Xeon Gold 6134M 8C 130W 3.2GHz Processor Option Kit	4XG7A09070	B0X4
ThinkSystem SR630 Intel Xeon Gold 6136 12C 150W 3.0GHz Processor Option Kit	7XG7A05559	AWE3
ThinkSystem SR630 Intel Xeon Gold 6138 20C 125W 2.0GHz Processor Option Kit	7XG7A05541	AWDZ
ThinkSystem SR630 Intel Xeon Gold 6138T 20C 125W 2.0GHz Processor Option Kit	7XG7A05540	AWEM
ThinkSystem SR630 Intel Xeon Gold 6140 18C 140W 2.3GHz Processor Option Kit	7XG7A05558	AWE1
ThinkSystem SR630 Intel Xeon Gold 6140M 18C 140W 2.3GHz Processor Option Kit	7XG7A05557	AWE2
ThinkSystem SR630 Intel Xeon Gold 6142 16C 150W 2.6GHz Processor Option Kit	7XG7A05556	AWDW
ThinkSystem SR630 Intel Xeon Gold 6142M 16C 150W 2.6GHz Processor Option Kit	4XG7A09069	B0X3
ThinkSystem SR630 Intel Xeon Gold 6144 8C 150W 3.5GHz Processor Option Kit	7XG7A05555	AWE7
ThinkSystem SR630 Intel Xeon Gold 6146 12C 165W 3.2GHz Processor Option Kit	7XG7A05554	AWE0
ThinkSystem SR630 Intel Xeon Gold 6148 20C 150W 2.4GHz Processor Option Kit	7XG7A05553	AWDX
ThinkSystem SR630 Intel Xeon Gold 6150 18C 165W 2.7GHz Processor Option Kit	7XG7A05552	AWDT
ThinkSystem SR630 Intel Xeon Gold 6152 22C 140W 2.1GHz Processor Option Kit	7XG7A05550	AWDV
ThinkSystem SR630 Intel Xeon Gold 6154 18C 200W 3.0GHz Processor Option Kit	4XG7A09414	AWDN
<b>Intel Xeon Platinum processors</b>		
ThinkSystem SR630 Intel Xeon Platinum 8153 16C 125W 2.0GHz Processor Option Kit	7XG7A05549	AWDR
ThinkSystem SR630 Intel Xeon Platinum 8156 4C 105W 3.6GHz Processor Option Kit	7XG7A05548	AWDL
ThinkSystem SR630 Intel Xeon Platinum 8158 12C 150W 3.0GHz Processor Option Kit	7XG7A05569	AWDS
ThinkSystem SR630 Intel Xeon Platinum 8160 24C 150W 2.1GHz Processor Option Kit	7XG7A05568	AWDP
ThinkSystem SR630 Intel Xeon Platinum 8160M 24C 150W 2.1GHz Processor Option Kit	7XG7A05567	AWDQ
ThinkSystem SR630 Intel Xeon Platinum 8160T 24C 150W 2.1GHz Processor Option Kit	7XG7A05566	AWEK
ThinkSystem SR630 Intel Xeon Platinum 8164 26C 150W 2.0GHz Processor Option Kit	7XG7A05565	AWDM
ThinkSystem SR630 Intel Xeon Platinum 8168 24C 205W 2.7GHz Processor Option Kit	4XG7A09413	AWDJ
ThinkSystem SR630 Intel Xeon Platinum 8170 26C 165W 2.1GHz Processor Option Kit	7XG7A05564	AWDK
ThinkSystem SR630 Intel Xeon Platinum 8170M 26C 165W 2.1GHz Processor Option Kit	4XG7A09068	B0X2
ThinkSystem SR630 Intel Xeon Platinum 8176 28C 165W 2.1GHz Processor Option Kit	7XG7A05563	AWDH
ThinkSystem SR630 Intel Xeon Platinum 8176M 28C 165W 2.1GHz Processor Option Kit	7XG7A05562	AWDG
ThinkSystem SR630 Intel Xeon Platinum 8180 28C 205W 2.5GHz Processor Option Kit	4XG7A09412	AWDF
ThinkSystem SR630 Intel Xeon Platinum 8180M 28C 205W 2.5GHz Processor Option Kit	4XG7A09411	AWDE

\* For CTO configurations, the feature code represents a processor, and fans and heatsinks are derived by the configuration tool.

**Configuration note:** For Gold 6144, 6146, and 6154 processors and Platinum 8168, 8180, and 8180M processors, the following conditions must be met:

- No rear HDD kit installed
- No U.2 NVMe 10-bay backplane installed
- No PCIe flash adapters installed
- No GPUs installed
- A maximum of one supercapacitor module installed
- ASHRAE A2 (35°C [95 °F]) only
- The server performance might be impacted in case of a fan failure
- For Gold 6154 processor only: No backplanes installed, or 2.5" 10-bay AnyBay backplane with up to 4 drives installed

## Memory

The SR630 server supports up to 12 TruDDR4 memory DIMMs with one processor and up to 24 DIMMs when two processors are installed. Each processor has six memory channels, and there are 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 RDIMMs, LRDIMMs, or 3DS RDIMMs.
- Mixing different types of memory (RDIMMs, LRDIMMs, and 3DS RDIMMs) is not supported.
- Mixing x4 and x8 RDIMMs and RDIMMs of different capacity is 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.  
**Note:** Maximum memory speed can be achieved when Max performance mode is enabled in UEFI.
- The following maximum memory capacities supported by the server:
  - RDIMMs: 768 GB (384 GB per processor).
  - LRDIMMs: 1.5 TB (768 GB per processor).
  - 3DS RDIMMs: 3 TB (1.5 GB per processor) (requires processors that support 1.5 TB of memory per socket).

The following memory protection technologies are supported:

- ECC
- SDDC (for x4-based memory DIMMs)
- ADDDC (for x4-based memory DIMMs; Gold and Platinum processors only)
- Memory mirroring
- Memory rank sparing
- Patrol scrubbing
- Demand scrubbing

Single Device Data Correction (SDDC) works only in the independent channel mode (the default operational mode) and supports only x4-based memory DIMMs.

Adaptive Double Device Data Correction (ADDDC) works with x4-based memory DIMMs and requires two DIMM ranks per channel, Intel Xeon Gold or Platinum processors, and the Closed Page memory access mode.

If memory mirroring is used, then DIMMs must be installed in pairs (a minimum of one pair per each processor), and both DIMMs in a pair must be identical in type and size.



If memory rank sparing is used, then a minimum of one quad-rank DIMM or two single-rank or dual-rank DIMMs must be installed per populated channel (the DIMMs do not need being identical). In rank sparing mode, one rank of a DIMM in each populated channel is reserved as spare memory. The size of a rank varies depending on the DIMMs installed.

SDDC, memory mirroring, and memory rank sparing modes are mutually exclusive. Only one operational memory mode can be enabled on the server, and it is a system-wide setting.

The following table lists memory options available for the SR630 server.

Table 8. Memory options

Description	Part number	Feature code	Maximum quantity*
<b>RDIMMs - 2666 MHz</b>			
ThinkSystem 8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	7X77A01301	AUU1	12 / 24
ThinkSystem 16GB TruDDR4 2666 MHz (1Rx4 1.2V) RDIMM	7X77A01302	AUNB	12 / 24
ThinkSystem 16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	7X77A01303	AUNC	12 / 24
ThinkSystem 32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	7X77A01304	AUND	12 / 24
<b>LRDIMMs - 2666 MHz</b>			
ThinkSystem 64GB TruDDR4 2666 MHz (4Rx4 1.2V) LRDIMM	7X77A01305	AUNE	12 / 24
<b>3DS RDIMMs - 2666 MHz</b>			
ThinkSystem 128GB TruDDR4 2666 MHz (8Rx4 1.2V) 3DS RDIMM	7X77A01307	AUNF	12 / 24

\* The maximum quantity shown is with one processor / two processors

## Internal storage

The SR630 server supports the following internal drive bay configurations:

1. Up to 6 SAS/SATA hot-swap drive bays: 4x 3.5" (front) + 2x 2.5" (rear)
2. 4 LFF AnyBay hot-swap drive bays: 4x 3.5" (front)
3. Up to 10 SFF SAS/SATA hot-swap drive bays: 8x 2.5" (front) + 2x 2.5" (rear)
4. Up to 12 SFF hot-swap drive bays:  
6x 2.5" SAS/SATA & 4x 2.5" AnyBay (front) + 2x 2.5" SAS/SATA (rear)
5. 10 SFF U.2 NVMe PCIe SSD hot-swap drive bays

In addition, the SR630 server models can be configured with one or two internal M.2 SATA SSDs. The server also supports configurations without drive bays.

The following figure shows the internal drive bay configurations.

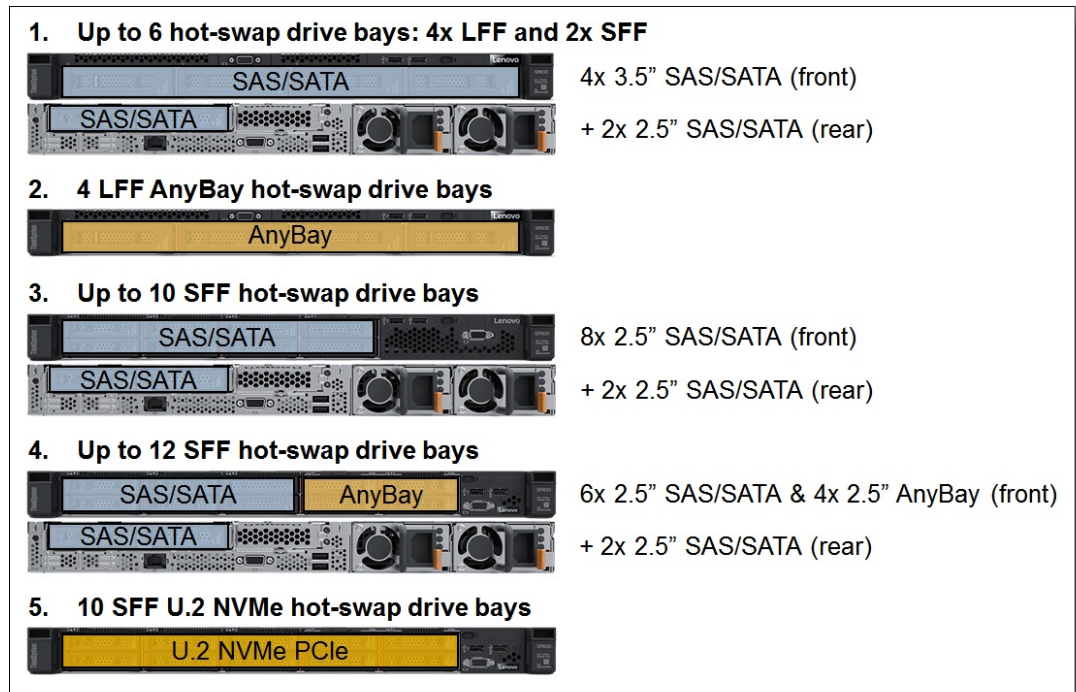


Figure 7. Internal drive bay configurations

The following table lists the internal storage options for the SR630 server.

Table 9. Internal storage options

Description	Part number	Feature code	Maximum quantity
Factory-installed backplane kits			
ThinkSystem 1U 3.5" SATA/SAS 4-Bay Backplane	None*	AUW8	1
ThinkSystem SR630 3.5" AnyBay 4-Bay Backplane	None*	B0WJ	1
ThinkSystem 1U 2.5" SATA/SAS 8-Bay Backplane	None*	AUWB	1
ThinkSystem 1U 2.5" AnyBay 10-Bay Backplane	None*	AUW9	1
ThinkSystem SR630 2.5" U.2 10-Bay Backplane Kit	None*	AVKF	1
ThinkSystem SR630 Rear HDD Kit	7XH7A06252	AUWJ	1
Backplane kit field upgrade options			
ThinkSystem SR530/SR630 2.5" SATA/SAS 8-Bay Backplane Upgrade Kit	7XH7A05896	None**	1
ThinkSystem SR570/SR630 2.5" AnyBay 10-Bay Backplane Upgrade Kit	4XH7A08768	None**	1
ThinkSystem SR630 2.5" U.2 10-Bay Backplane Upgrade Kit	4XH7A08766	None**	1
ThinkSystem SR630 Rear HDD Kit	7XH7A06252	AUWJ	1
M.2 enablement kits			
ThinkSystem M.2 Enablement Kit	7Y37A01092	AUMU	1
ThinkSystem M.2 with Mirroring Enablement Kit	7Y37A01093	AUMV	1

\* These backplane kits can be factory-installed in standard or custom (CTO or Special Bid) models, and they might not have an option part number assigned.

\*\* Field upgrade only.

**Configuration notes:**

- Models without any drive bays that are based on the 8x 2.5" chassis (feature code AUW0) support adding drive bays by using the 2.5" 8-drive backplane kit (7XH7A05896).
- Models without any drive bays that are based on the 10x 2.5" chassis (feature code AUW1) support adding drive bays by using the 2.5" 10-bay AnyBay backplane kit (4XH7A08768) or 2.5" U.2 10-bay backplane kit (4XH7A08766).
- Models with 10x 2.5-inch drive bays (6x SAS/SATA + 4x AnyBay) can be upgraded to all NVMe configuration by using the 2.5" U.2 10-Bay Backplane Kit (4XH7A08766). The kit includes a backplane, cables, and drive fillers.  
**Note:** NVMe Switch Adapters are *not* included in the kit; two NVMe Switch Adapters are required for the 10x 2.5" U.2 NVMe configuration.
- The backplane upgrade kits include drive backplanes and required signal cables, power cables, and drive bay fillers; storage controllers are not included.
- The 2.5" Rear HDD Kit is installed in place of the PCIe Riser Card 1; PCIe slots 1 and 2 are not present.
- The 2.5" Rear HDD Kit is supported only with the processors of up to 125 W TDP.
- Lenovo AnyBay allows a choice of drive interface types in the same drive bay: SAS drives, SATA drives, or U.2 NVMe PCIe drives.
- U.2 NVMe PCIe SSDs in the *AnyBay drive bays* require either the second processor (enables the onboard NVMe controller) or the 1610-4P NVMe Switch Adapter to be installed.  
**Note:** The 1610-4P NVMe Switch Adapter connected to the *AnyBay drive bays* is supported only in the configurations with one processor.
- Models with 10x 2.5-inch drive bays (6x SAS/SATA + 4x AnyBay) and an 8-port SAS RAID controller or HBA support only NVMe drives in the AnyBay drive bays.
- The M.2 Enablement Kit (7Y37A01092) supports up to one M.2 SATA SSD which is connected to the SATA port on the Intel Platform Controller Hub (PCH).
- The M.2 with Mirroring Enablement Kit (7Y37A01093) is connected to the Intel PCH via the PCIe link, and the kit supports up to two M.2 SATA SSDs that can be configured in a RAID-1 or RAID-0 drive group, or they can operate as separate drives.

The following tables list supported internal storage configurations with the SAS/SATA and AnyBay backplanes.

Table 10. Internal storage configurations: 3.5-inch front drive bays

Drive bay configuration	Backplane kit type and quantity			Storage controller type and quantity*
	4x 3.5" SATA/SAS	4x 3.5" AnyBay	2x 2.5" Rear HDD	
4x 3.5" chassis (Feature code AUW2)				
4x 3.5-in. SAS/SATA hot-swap (front)	1	0	0	1x RAID 530/730/930-8i (4) 1x 430-8i HBA (4)
4x 3.5-in. SAS/SATA hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	1	0	1	1x RAID 530/730/930-8i (6) 1x 430-8i HBA (6)
4x 3.5-in. AnyBay hot-swap (front)	0	1	0	1x RAID 530/730/930-8i (4) + NVMe (4)** 1x 430-8i HBA (4) + NVMe (4)**

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

\*\* The 1610-4P NVMe Switch Adapter in the configurations with one processor, or the onboard NVMe controller in the configurations with two processors.

Table 11. Internal storage configurations: 2.5-inch front drive bays

Drive bay configuration	Backplane kit type and quantity				Storage controller type and quantity*
	8x 2.5" SATA/SAS	10x 2.5" AnyBay	10x U.2 NVMe	2x 2.5" Rear HDD	
<b>8x 2.5" chassis (Feature code AUW0)</b>					
8x 2.5-in. SAS/SATA hot-swap (front)	1	0	0	0	1x RAID 530/730/930-8i (8)
					1x RAID 930-16i (8)
					1x 430-8i HBA (8)
8x 2.5-in. SAS/SATA hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	1	0	0	1	1x RAID 530/930-16i (10)
					1x 430-16i HBA (10)
<b>10x 2.5" chassis (Feature code AUW1)</b>					
4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	1	0	0	Onboard NVMe (4)**
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay hot-swap (front)	0	1	0	0	1x RAID 530/930-16i (10) + Onboard NVMe (4)**
					1x 430-16i HBA (10) + Onboard NVMe (4)**
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay (NVMe only) hot-swap (front)	0	1	0	0	1x RAID 530/730/930-8i (6) + Onboard NVMe (4)**
					1x RAID 530/730/930-8i (6) + 1x 1610-4P NVMe (4)^
					1x RAID 530/930-16i (6) + 1x 1610-4P NVMe (4)^
					1x 430-8i HBA (6) + Onboard NVMe (4)**
					1x 430-8i/16i HBA (6) + 1x 1610-4P NVMe (4)^
6x 2.5-in. SAS/SATA + 4x 2.5-in. AnyBay hot-swap (front) + 2x 2.5-in. SAS/SATA hot-swap (rear)	0	1	0	1	1x RAID 530/930-16i (12) + Onboard NVMe (4)**
					1x 430-16i HBA (12) + Onboard NVMe (4)**
10x 2.5-in. U.2 NVMe (8x NVMe drives only) hot-swap (front)	0	0	1	0	Onboard NVMe (4)** + 1x 1610-4P/810-4P (4)
					Onboard NVMe (4)** + 2x 810-4P (2+2)
10x 2.5-in. U.2 NVMe hot-swap (front)	0	0	1	0	Onboard NVMe (4)** + 1x 1610-4P (4) + 1x 810-4P (2)
					Onboard NVMe (4)** + 2x 1610-4P (4+2)

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

\*\* The onboard NVMe controller requires the second processors to be installed.

^ The 1610-4P NVMe Switch Adapter connected to the AnyBay drive bays is supported only in the configurations with one processor.

## Controllers for internal storage

The following table lists the storage controllers and options for internal storage of the SR630 server.

Table 12. RAID controllers and HBAs for internal storage

Description	Part number	Feature code	Maximum quantity	I/O slots supported
<b>12 Gb SAS/SATA RAID controllers</b>				
ThinkSystem RAID 530-8i PCIe 12Gb Adapter	7Y37A01082	AUNG	1	4, 1
ThinkSystem RAID 530-16i PCIe 12Gb Adapter	4Y37A09727	B6CE	1	4, 1
ThinkSystem RAID 730-8i 1GB Cache PCIe 12Gb Adapter	7Y37A01083	AUNH	1	4, 1
ThinkSystem RAID 730-8i 2GB Flash PCIe 12Gb Adapter	4Y37A09722	B4RQ	1	4, 1
ThinkSystem RAID 930-8i 2GB Flash PCIe 12Gb Adapter	7Y37A01084	AUNJ	1	4, 1
ThinkSystem RAID 930-16i 4GB Flash PCIe 12Gb Adapter	7Y37A01085	AUNK	1	4, 1
ThinkSystem RAID 930-16i 8GB Flash PCIe 12Gb Adapter	4Y37A09721	B31E	1	4, 1
<b>12 Gb SAS/SATA non-RAID HBAs</b>				
ThinkSystem 430-8i SAS/SATA 12Gb HBA	7Y37A01088	AUNL	1	4, 1
ThinkSystem 430-16i SAS/SATA 12Gb HBA	7Y37A01089	AUNM	1	4, 1
<b>NVMe PCIe interfaces (non-RAID)</b>				
Onboard NVMe interface (4-port)	None	None	1	-
ThinkSystem 1610-4P NVMe Switch Adapter	7Y37A01081	AUV2	2	2, 3*
ThinkSystem 810-4P NVMe Switch Adapter	4Y37A09719	B22D	2	4, 1

\* Requires a PCIe x16 riser card.

### Configuration notes:

- Low profile SAS RAID controllers and HBAs for internal storage are supported in the dedicated PCIe x8 slot 4 on the system board. If a full-height GPU adapter is installed, the internal slot for a storage controller cannot be used; the storage controller should be installed in the PCIe slot 1.
- The 1610-4P NVMe Switch Adapters are supported in the low-profile PCIe x16 slots supplied by the PCIe Riser Cards 1 and 2.
- The 810-4P NVMe Switch Adapters are supported in the dedicated PCIe x8 slot 4 on the system board and a low-profile PCIe x8 slot supplied by the PCIe Riser Card 1.
- The total quantity of the 1610-4P and 810-4P NVMe Switch Adapters in the server must not exceed 2.
- The onboard NVMe interface provides 4x PCIe 3.0 x4 ports for JBOD (non-RAID) connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it requires the second processor to be installed.
- In the configurations with one processor, the 1610-4P NVMe Switch Adapter provides 4x PCIe 3.0 x4 ports for JBOD (non-RAID) connectivity to U.2 NVMe PCIe SSDs in the AnyBay drive bays, and it is supported in the PCIe x16 slot 2 supplied by the x8/x16 Riser Card 1.
- In the configurations without GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i, RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 2 (up to 2 supercapacitors can be mounted in the server).
- In the configurations with GPU installed, the total quantity of the RAID 730-8i 2GB, RAID 930-8i, RAID 930-16i, and RAID 930-8e controllers in the server must not exceed 1 (the storage controller can be installed only in the PCIe slot 1; the PCIe slots 3 and 4 cannot be used if the GPU adapter is installed).
- If the configurations with the RAID 730-8i 2GB controller, the RAID 930-8e controller cannot be used.

For 10x U.2 NVMe configurations, the onboard NVMe interface and two NVMe Switch Adapters provide JBOD (non-RAID) connectivity with PCIe 3.0 x4 links to each of the U.2 NVMe PCIe SSDs. The 1610-4P NVMe Switch Adapter has a PCIe 3.0 x16 host interface, and the 810-4P NVMe Switch Adapter has a PCIe 3.0 x8 host interface.

The following table summarizes features of supported SAS/SATA storage controllers.

Table 13. Storage controller features and specifications (LP = Low profile)

Feature	RAID 530-8i	RAID 530-16i	RAID 730-8i 1GB	RAID 730-8i 2GB	RAID 930-8i	RAID 930-16i	430-8i HBA	430-16i HBA
Form factor	PCIe LP		PCIe LP	PCIe LP			PCIe LP	
SAS controller	SAS3408	SAS3416	SAS3108	SAS3108	SAS3508	SAS3516	SAS3408	SAS3416
SAS expander	None	None	None	None			None	
Host interface	PCIe 3.0 x8		PCIe 3.0 x8	PCIe 3.0 x8			PCIe 3.0 x8	
Port interface	12 Gb SAS		12 Gb SAS	12 Gb SAS			12 Gb SAS	
Number of ports	8	16	8	8	8	16	8	16
Connector type	SFF-8643 x4		SFF-8643 x4	SFF-8643 x4			SFF-8643 x4	
Number of connectors	2	4	2	2	2	4	2	4
Drive interface	SAS, SATA		SAS, SATA	SAS, SATA			SAS, SATA	
Drive type	HDD, SSD, SED		HDD, SSD	HDD, SSD, SED			HDD, SSD, SED*	
Hot-swap drive support	Yes		Yes	Yes			Yes	
Number of drives	8	16	8	8	8	16	8	16
RAID levels	0/1/10/5/50	0/1/10	0/1/10/5/50	0/1/10/5/50/6/60			None	
JBOD mode	Yes		Yes	Yes			Yes	
Cache	None		1 GB	2 GB	2 GB	4 GB; 8 GB	None	
Cache protection	None		None	Flash backup (Included)			None	
SED key management (SafeStore)	Yes		No	Yes			No	
SSD I/O acceleration (FastPath)	Yes		No	Yes			No	
SSD Caching (CacheCade Pro 2.0)	No		No	No			No	
Consistency check	Yes		Yes	Yes			No	
Patrol read	Yes		Yes	Yes			No	
Online capacity expansion	Yes		Yes	Yes			No	
Online RAID level migration	Yes		Yes	Yes			No	
Global Hot Spare	Yes		Yes	Yes			No	
Auto-rebuild	Yes		Yes	Yes			No	

\* HBAs do not support key management for SEDs; third-party host software is responsible for managing the keys.

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>

## Drives for internal storage

The following tables list drive options for the SR630 server.

Table 14. Drive options for internal storage: 2.5-inch hot-swap drives

Description	Part number	Feature code	Maximum quantity
2.5-inch hot-swap HDDs - 12 Gbps SAS			
ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	7XB7A00024	AULY	12
ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	7XB7A00021	AULV	12

Description	Part number	Feature code	Maximum quantity
ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	7XB7A00025	AULZ	12
ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	7XB7A00022	AULW	12
ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	7XB7A00026	AUM0	12
ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	7XB7A00023	AULX	12
ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	7XB7A00027	AUM1	12
ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	7XB7A00028	AUM2	12
ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	7XB7A00069	B0YS	12
2.5-inch hot-swap HDDs - 12 Gbps NL SAS			
ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	7XB7A00034	AUM6	12
ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	7XB7A00035	AUM7	12
2.5-inch hot-swap HDDs - 6 Gbps NL SATA			
ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	7XB7A00036	AUUE	12
ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00037	AUUJ	12
2.5-inch hot-swap HDD SEDs - 12 Gbps SAS			
ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD SED	7XB7A00030	AUM4	12
ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	7XB7A00031	AUM5	12
ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD SED	7XB7A00033	B0YX	12
ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD FIPS	7XB7A00070	B0YV	12
2.5-inch hot-swap HDD SEDs - 12 Gbps NL SAS			
ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	7XB7A00064	B0YM	12
2.5-inch hot-swap SSDs - SS530 Performance 12 Gbps SAS			
ThinkSystem 2.5" SS530 400GB Performance SAS 12Gb Hot Swap SSD	4XB7A10219	B4Y4	12
ThinkSystem 2.5" SS530 800GB Performance SAS 12Gb Hot Swap SSD	4XB7A10230	B4Y5	12
ThinkSystem 2.5" SS530 1.6TB Performance SAS 12Gb Hot Swap SSD	4XB7A10231	B4Y6	12
ThinkSystem 2.5" SS530 3.2TB Performance SAS 12Gb Hot Swap SSD	4XB7A10232	B4Y7	12
2.5-inch hot-swap SSDs - PM1645 Mainstream 12 Gbps SAS			
ThinkSystem 2.5" PM1645 800GB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13653	B4A0	12
ThinkSystem 2.5" PM1645 1.6TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13654	B4A1	12
ThinkSystem 2.5" PM1645 3.2TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13655	B4A2	12
2.5-inch hot-swap SSDs - PM1645a Mainstream 12 Gbps SAS			
ThinkSystem 2.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17062	B8HU	12
ThinkSystem 2.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17063	B8J4	12
ThinkSystem 2.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17064	B8JD	12
2.5-inch hot-swap SSDs - 5100 Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5100 3.84TB Mainstream SATA 6Gb Hot Swap SSD	7SD7A05761	B110	12
2.5-inch hot-swap SSDs - 5200 Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5200 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10237	B488	12
ThinkSystem 2.5" 5200 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10238	B489	12
ThinkSystem 2.5" 5200 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10239	B48A	12
ThinkSystem 2.5" 5200 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10240	B48B	12
ThinkSystem 2.5" 5200 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10241	B48C	12
2.5-inch hot-swap SSDs - 5300 Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17087	B8J1	12

Description	Part number	Feature code	Maximum quantity
ThinkSystem 2.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17088	B8HY	12
ThinkSystem 2.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17089	B8J6	12
ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17090	B8JE	12
ThinkSystem 2.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17091	B8J7	12
<b>2.5-inch hot-swap SSDs - S4610 Mainstream 6 Gbps SATA</b>			
ThinkSystem 2.5" Intel S4610 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13633	B49L	12
ThinkSystem 2.5" Intel S4610 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13634	B49M	12
ThinkSystem 2.5" Intel S4610 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13635	B49N	12
ThinkSystem 2.5" Intel S4610 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13636	B49P	12
ThinkSystem 2.5" Intel S4610 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13637	B49Q	12
<b>2.5-inch hot-swap SSDs - PM1643 Capacity 12 Gbps SAS</b>			
ThinkSystem 2.5" PM1643 960GB Capacity SAS 12Gb Hot Swap SSD	4XB7A17168	B6TL	12
ThinkSystem 2.5" PM1643 3.84TB Capacity SAS 12Gb Hot Swap SSD	4XB7A13645	B4A7	12
ThinkSystem 2.5" PM1643 7.68TB Capacity SAS 12Gb Hot Swap SSD	4XB7A13646	B4A6	12
<b>2.5-inch hot-swap SSDs - PM1643a Entry 12 Gbps SAS</b>			
ThinkSystem 2.5" PM1643a 960GB Entry SAS 12Gb Hot Swap SSD	4XB7A38175	B91A	12
ThinkSystem 2.5" PM1643a 1.92TB Entry SAS 12Gb Hot Swap SSD	4XB7A38176	B91B	12
ThinkSystem 2.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD	4XB7A17054	B91C	12
ThinkSystem 2.5" PM1643a 7.68TB Entry SAS 12Gb Hot Swap SSD	4XB7A17055	B91D	12
ThinkSystem 2.5" PM1643a 15.36TB Entry SAS 12Gb Hot Swap SSD	4XB7A17056	BC4R	12
<b>2.5-inch hot-swap SSDs - Multi Vendor Entry 6 Gbps SATA</b>			
ThinkSystem 2.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A38271	BCTC	12
ThinkSystem 2.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A38272	BCTD	12
ThinkSystem 2.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A38273	BCTE	12
ThinkSystem 2.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A38274	BCTF	12
ThinkSystem 2.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A38275	BCTG	12
<b>2.5-inch hot-swap SSDs - 5200 Entry 6 Gbps SATA</b>			
ThinkSystem 2.5" 5200 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A10153	B2X2	12
ThinkSystem 2.5" 5200 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A10154	B2X3	12
ThinkSystem 2.5" 5200 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A10155	B2X4	12
ThinkSystem 2.5" 5200 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A10156	B2X5	12
ThinkSystem 2.5" 5200 7.68TB Entry SATA 6Gb Hot Swap SSD	4XB7A10157	B2X6	12
<b>2.5-inch hot-swap SSDs - 5210 Entry 6 Gbps SATA</b>			
ThinkSystem 2.5" 5210 960GB Entry SATA 6Gb Hot Swap QLC SSD	4XB7A38185	B9AC	12
ThinkSystem 2.5" 5210 1.92TB Entry SATA 6Gb Hot Swap QLC SSD	4XB7A38144	B7EW	12
ThinkSystem 2.5" 5210 3.84TB Entry SATA 6Gb Hot Swap QLC SSD	4XB7A38145	B7EX	12
ThinkSystem 2.5" 5210 7.68TB Entry SATA 6Gb Hot Swap QLC SSD	4XB7A38146	B7EY	12
<b>2.5-inch hot-swap SSDs - 5300 Entry 6 Gbps SATA</b>			
ThinkSystem 2.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A17075	B8HV	12
ThinkSystem 2.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A17076	B8JM	12
ThinkSystem 2.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A17077	B8HP	12
ThinkSystem 2.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A17078	B8J5	12
ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A17079	B8JP	12



Description	Part number	Feature code	Maximum quantity
ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	4XB7A17080	B8J2	12
2.5-inch hot-swap SSDs - PM883 Entry 6 Gbps SATA			
ThinkSystem 2.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A10195	B34H	12
ThinkSystem 2.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A10196	B34J	12
ThinkSystem 2.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A10197	B34K	12
ThinkSystem 2.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A10198	B34L	12
ThinkSystem 2.5" PM883 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A10199	B34M	12
ThinkSystem 2.5" PM883 7.68TB Entry SATA 6Gb Hot Swap SSD	4XB7A10200	B4D2	12
2.5-inch hot-swap SSDs - S4500 Entry 6 Gbps SATA			
ThinkSystem 2.5" Intel S4500 960GB Entry SATA 6Gb Hot Swap SSD	7SD7A05740	B0Z0	12
2.5-inch hot-swap SSDs - S4510 Entry 6 Gbps SATA			
ThinkSystem 2.5" Intel S4510 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A10247	B498	12
ThinkSystem 2.5" Intel S4510 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A10248	B499	12
ThinkSystem 2.5" Intel S4510 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A10249	B49A	12
ThinkSystem 2.5" Intel S4510 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A13622	B49B	12
ThinkSystem 2.5" Intel S4510 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A13623	B49C	12
2.5-inch hot-swap SSDs - CM5-V Mainstream U.2 NVMe PCIe*			
ThinkSystem U.2 CM5-V 800GB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A08516	B21W	10
ThinkSystem U.2 CM5-V 1.6TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A08517	B21X	10
ThinkSystem U.2 CM5-V 3.2TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A08518	B21Y	10
ThinkSystem U.2 CM5-V 6.4TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A08519	B2XJ	10
2.5-inch hot-swap SSDs - Optane P4800X Performance U.2 NVMe PCIe*			
ThinkSystem U.2 Intel P4800X 375GB Performance NVMe PCIe 3.0 x4 HS SSD	7N47A00081	AUMJ	10
ThinkSystem U.2 Intel P4800X 750GB Performance NVMe PCIe 3.0 x4 HS SSD	7N47A00083	B2ZJ	10
2.5-inch hot-swap SSDs - P4610 Mainstream U.2 NVMe PCIe*			
ThinkSystem U.2 Intel P4610 1.6TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13936	B589	10
ThinkSystem U.2 Intel P4610 3.2TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13937	B58A	10
ThinkSystem U.2 Intel P4610 6.4TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13938	B58B	10
2.5-inch hot-swap SSDs - P4500 Entry U.2 NVMe PCIe*			
ThinkSystem U.2 Intel P4500 4.0TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	7SD7A05777	B11E	10
2.5-inch hot-swap SSDs - P4510 Entry U.2 NVMe PCIe*			
ThinkSystem U.2 Intel P4510 1.0TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10202	B58F	10
ThinkSystem U.2 Intel P4510 2.0TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10204	B58G	10
ThinkSystem U.2 Intel P4510 4.0TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10205	B58H	10
ThinkSystem U.2 Intel P4510 8.0TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A08513	B58J	10
2.5-inch hot-swap SSDs - PM983 Entry U.2 NVMe PCIe*			
ThinkSystem U.2 PM983 1.92TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10175	B34N	10
ThinkSystem U.2 PM983 3.84TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10176	B34P	10
ThinkSystem U.2 PM983 7.68TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10177	B4D3	10
2.5-inch hot-swap SSD SEDs - 5200 Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5200 960GB Mainstream SATA 6Gb Hot Swap SSD SED	4XB7A14062	B6K1	12
ThinkSystem 2.5" 5200 1.92TB Mainstream SATA 6Gb Hot Swap SSD SED	4XB7A14063	B6K0	12
ThinkSystem 2.5" 5200 3.84TB Mainstream SATA 6Gb Hot Swap SSD SED	4XB7A13982	B81X	12

Description	Part number	Feature code	Maximum quantity
2.5-inch hot-swap SSD SEDs - 5200 MAX Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5200 MAX 1.92TB Mainstream SATA 6Gb Hot Swap SSD SED	4XB7A13981	B93J	12
2.5-inch hot-swap SSD SEDs - 5300 Mainstream 6 Gbps SATA			
ThinkSystem 2.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD SED	4XB7A38193	B93K	12
2.5-inch hot-swap SSD SEDs - 5200 Entry 6 Gbps SATA			
ThinkSystem 2.5" 5200 480GB Entry SATA 6Gb Hot Swap SSD SED	4XB7A13966	B4G8	12
2.5-inch hot-swap SSD SEDs - 5300 Entry 6 Gbps SATA			
ThinkSystem 2.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD SED	4XB7A38191	B93L	12
ThinkSystem 2.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD SED	4XB7A38192	B93M	12

\* NVMe PCIe SSDs support informed hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 15. Drive options for internal storage: 3.5-inch hot-swap drives

Description	Part number	Feature code	Maximum quantity
3.5-inch hot-swap HDDs - 12 Gbps SAS			
ThinkSystem 3.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	7XB7A00063	B1JJ	4
ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	7XB7A00038	AUU2	4
ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	7XB7A00039	AUU3	4
ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	7XB7A00040	AUUC	4
3.5-inch hot-swap HDDs - 12 Gbps NL SAS			
ThinkSystem 3.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	7XB7A00041	AUU4	4
ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	7XB7A00042	AUU5	4
ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	7XB7A00043	AUU6	4
ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	7XB7A00044	AUU7	4
ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	7XB7A00045	B0YR	4
ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD	7XB7A00046	AUUG	4
ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	7XB7A00067	B117	4
ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	4XB7A13906	B496	4
ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	4XB7A13911	B7EZ	4
3.5-inch hot-swap HDDs - 6 Gbps NL SATA			
ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	7XB7A00049	AUUF	4
ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	7XB7A00050	AUUD	4
ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	7XB7A00051	AUU8	4
ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00052	AUUA	4
ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00053	AUU9	4
ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00054	AUUB	4
ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	7XB7A00068	B118	4
ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	4XB7A13907	B497	4
ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	4XB7A13914	B7F0	4
3.5-inch hot-swap HDD SEDs - 12 Gbps NL SAS			
ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	7XB7A00065	B0YN	4
ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	7XB7A00047	AUUH	4
ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	7XB7A00048	B0YP	4

Description	Part number	Feature code	Maximum quantity
ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	7XB7A00066	B0YQ	4
3.5-inch hot-swap SSDs - SS530 Performance 12 Gbps SAS			
ThinkSystem 3.5" SS530 800GB Performance SAS 12Gb Hot Swap SSD	4XB7A10234	B4Y8	4
ThinkSystem 3.5" SS530 1.6TB Performance SAS 12Gb Hot Swap SSD	4XB7A10235	B4Y9	4
ThinkSystem 3.5" SS530 3.2TB Performance SAS 12Gb Hot Swap SSD	4XB7A10236	B4YA	4
3.5-inch hot-swap SSDs - PM1645 Mainstream 12 Gbps SAS			
ThinkSystem 3.5" PM1645 800GB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13657	B4A3	4
ThinkSystem 3.5" PM1645 1.6TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13658	B4A4	4
ThinkSystem 3.5" PM1645 3.2TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A13659	B4A5	4
3.5-inch hot-swap SSDs - PM1645a Mainstream 12 Gbps SAS			
ThinkSystem 3.5" PM1645a 800GB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17066	B8HT	4
ThinkSystem 3.5" PM1645a 1.6TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17043	B8JN	4
ThinkSystem 3.5" PM1645a 3.2TB Mainstream SAS 12Gb Hot Swap SSD	4XB7A17067	B8JK	4
3.5-inch hot-swap SSDs - 5100 Mainstream 6 Gbps SATA			
ThinkSystem 3.5" 5100 3.84TB Mainstream SATA 6Gb Hot Swap SSD	7SD7A05756	B115	4
3.5-inch hot-swap SSDs - 5200 Mainstream 6 Gbps SATA			
ThinkSystem 3.5" 5200 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10242	B48D	4
ThinkSystem 3.5" 5200 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10243	B48E	4
ThinkSystem 3.5" 5200 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10244	B48F	4
ThinkSystem 3.5" 5200 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10245	B48G	4
ThinkSystem 3.5" 5200 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A10246	B48H	4
3.5-inch hot-swap SSDs - 5300 Mainstream 6 Gbps SATA			
ThinkSystem 3.5" 5300 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17096	B8JL	4
ThinkSystem 3.5" 5300 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17097	B8JF	4
ThinkSystem 3.5" 5300 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17098	B8JO	4
ThinkSystem 3.5" 5300 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17099	B8HR	4
ThinkSystem 3.5" 5300 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A17100	B8HX	4
3.5-inch hot-swap SSDs - S4610 Mainstream 6 Gbps SATA			
ThinkSystem 3.5" Intel S4610 240GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13639	B49R	4
ThinkSystem 3.5" Intel S4610 480GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13640	B49S	4
ThinkSystem 3.5" Intel S4610 960GB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13641	B49T	4
ThinkSystem 3.5" Intel S4610 1.92TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13642	B49U	4
ThinkSystem 3.5" Intel S4610 3.84TB Mainstream SATA 6Gb Hot Swap SSD	4XB7A13643	B49V	4
3.5-inch hot-swap SSDs - PM1643 Capacity 12 Gbps SAS			
ThinkSystem 3.5" PM1643 3.84TB Capacity SAS 12Gb Hot Swap SSD	4XB7A13649	B4A8	4
3.5-inch hot-swap SSDs - PM1643a Entry 12 Gbps SAS			
ThinkSystem 3.5" PM1643a 3.84TB Entry SAS 12Gb Hot Swap SSD	4XB7A17058	B91E	4
3.5-inch hot-swap SSDs - Multi Vendor Entry 6 Gbps SATA			
ThinkSystem 3.5" Multi Vendor 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A38276	BCTH	4
ThinkSystem 3.5" Multi Vendor 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A38277	BCTJ	4
ThinkSystem 3.5" Multi Vendor 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A38278	BCTK	4
ThinkSystem 3.5" Multi Vendor 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A38279	BCTL	4
ThinkSystem 3.5" Multi Vendor 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A38281	BCTM	4

Description	Part number	Feature code	Maximum quantity
<b>3.5-inch hot-swap SSDs - 5200 Entry 6 Gbps SATA</b>			
ThinkSystem 3.5" 5200 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A10158	B2X7	4
ThinkSystem 3.5" 5200 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A10159	B2X8	4
ThinkSystem 3.5" 5200 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A10160	B2X9	4
ThinkSystem 3.5" 5200 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A10161	B2XA	4
ThinkSystem 3.5" 5200 7.68TB Entry SATA 6Gb Hot Swap SSD	4XB7A10162	B2XB	4
<b>3.5-inch hot-swap SSDs - 5300 Entry 6 Gbps SATA</b>			
ThinkSystem 3.5" 5300 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A17081	B8JB	4
ThinkSystem 3.5" 5300 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A17082	B8J9	4
ThinkSystem 3.5" 5300 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A17083	B8JC	4
ThinkSystem 3.5" 5300 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A17084	B8HZ	4
ThinkSystem 3.5" 5300 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A17085	B8HQ	4
ThinkSystem 3.5" 5300 7.68TB Entry SATA 6Gb Hot Swap SSD	4XB7A17086	B8J3	4
<b>3.5-inch hot-swap SSDs - PM883 Entry 6 Gbps SATA</b>			
ThinkSystem 3.5" PM883 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A17176	B6TM	4
ThinkSystem 3.5" PM883 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A17177	B6TN	4
ThinkSystem 3.5" PM883 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A17178	B6TP	4
ThinkSystem 3.5" PM883 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A17179	B6JY	4
ThinkSystem 3.5" PM883 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A17180	B6JZ	4
<b>3.5-inch hot-swap SSDs - S4500 Entry 6 Gbps SATA</b>			
ThinkSystem 3.5" Intel S4500 960GB Entry SATA 6Gb Hot Swap SSD	7SD7A05735	B0Z5	4
<b>3.5-inch hot-swap SSDs - S4510 Entry 6 Gbps SATA</b>			
ThinkSystem 3.5" Intel S4510 240GB Entry SATA 6Gb Hot Swap SSD	4XB7A13625	B49D	4
ThinkSystem 3.5" Intel S4510 480GB Entry SATA 6Gb Hot Swap SSD	4XB7A13626	B49E	4
ThinkSystem 3.5" Intel S4510 960GB Entry SATA 6Gb Hot Swap SSD	4XB7A13627	B49F	4
ThinkSystem 3.5" Intel S4510 1.92TB Entry SATA 6Gb Hot Swap SSD	4XB7A13628	B49G	4
ThinkSystem 3.5" Intel S4510 3.84TB Entry SATA 6Gb Hot Swap SSD	4XB7A13629	B49H	4
<b>3.5-inch hot-swap SSDs - CM5-V Mainstream NVMe PCIe*</b>			
ThinkSystem 3.5" CM5-V 800GB Mainstream NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A08532	B21Z	4
ThinkSystem 3.5" CM5-V 1.6TB Mainstream NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A08533	B220	4
ThinkSystem 3.5" CM5-V 3.2TB Mainstream NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A08534	B221	4
ThinkSystem 3.5" CM5-V 6.4TB Mainstream NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A08535	B2XK	4
<b>3.5-inch hot-swap SSDs - P4610 Mainstream NVMe PCIe*</b>			
ThinkSystem 3.5" Intel P4610 1.6TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13944	B58C	4
ThinkSystem 3.5" Intel P4610 3.2TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13945	B58D	4
ThinkSystem 3.5" Intel P4610 6.4TB Mainstream NVMe PCIe 3.0 x4 HS SSD	4XB7A13946	B58E	4
<b>3.5-inch hot-swap SSDs - PM983 Entry NVMe PCIe*</b>			
ThinkSystem 3.5" PM983 1.92TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10178	B34Q	4
ThinkSystem 3.5" PM983 3.84TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10179	B34R	4
ThinkSystem 3.5" PM983 7.68TB Entry NVMe PCIe 3.0 x4 Hot Swap SSD	4XB7A10180	B4D4	4

\* NVMe PCIe SSDs support informed hot removal and hot insertion, provided the operating system supports PCIe SSD hot-swap.

Table 16. Drive options for internal storage: M.2 non-hot-swap drives

Description	Part number	Feature code	Maximum quantity
ThinkSystem M.2 32GB SATA 6Gbps Non-Hot-Swap SSD	7N47A00129	AUUL	2
ThinkSystem M.2 128GB SATA 6Gbps Non-Hot-Swap SSD	7N47A00130	AUUV	2
ThinkSystem M.2 5100 240GB SATA 6Gbps Non-Hot Swap SSD	4XB7A14049	B5S4	2
ThinkSystem M.2 5300 240GB SATA 6Gbps Non-Hot Swap SSD	4XB7A17071	B8HS	2
ThinkSystem M.2 5100 480GB SATA 6Gbps Non-Hot-Swap SSD	7SD7A05703	B11V	2
ThinkSystem M.2 5300 480GB SATA 6Gbps Non-Hot Swap SSD	4XB7A17073	B919	2

For general portable storage needs, the SR630 server also supports the USB memory key option that is listed in the following table.

Table 17. USB memory key

Description	Part number	Feature code	Maximum quantity
32GB Enterprise Value USB Memory Key	00ML200	None*	1

\* Field upgrade only.

## Optical drives

The SR630 server supports the external USB optical drive option listed in the following table.

Table 18. Optical drive

Description	Part number	Feature code	Maximum quantity
ThinkSystem External USB DVD RW Optical Disk Drive	7XA7A05926	AVV8	1

The External USB DVD RW Optical Disk Drive supports the following types of media: CD-ROM, CD-R, CD-RW, DVD-R, DVD+R, DVD-ROM, DVD-RW, and DVD+RW.

## I/O expansion

The SR630 server supports one LOM card slot and up to four PCIe slots: one slot on the system planar that is dedicated to an internal storage controller and up to three PCIe slots with different riser cards installed into two riser sockets on the system planar (one riser socket supports installation of one riser card).

The slot form factors are as follows:

- LOM card slot
- Slot 1: PCIe 3.0 x8, ML2 x8, or ML2 x16; low profile
- Slot 2: PCIe 3.0 x16 or x8; low profile or full-height, half-length
- Slot 3: PCIe 3.0 x16; low profile
- Slot 4: PCIe 3.0 x8 (dedicated to an internal storage controller)

### Configuration notes:

- Slot 3 requires the second processor to be installed.
- Slots 1 and 2 are not present if the Rear HDD Kit is installed.
- The COM Port Upgrade Kit is installed in place of one of the PCIe slots 1, 2, or 3.

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

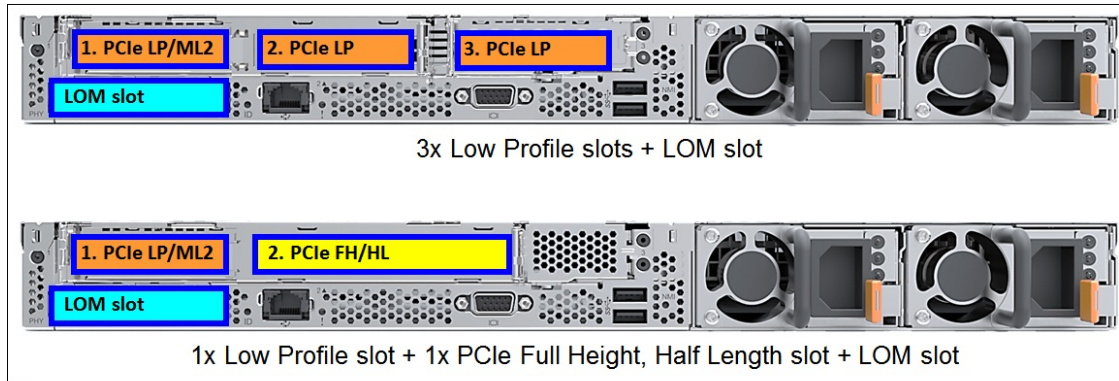


Figure 8. Slot locations

Riser 1 supplies slots 1 and 2, and Riser 2 supplies slot 3. The slots that are available for use depend on the number of riser cards that are installed and whether the second processor is installed, as shown in the following table.

Table 19. Slots available for use

Riser Card 1	Riser Card 2	Slots available for use	
		Processor 1	Processor 2
None	None	LOM, 4	-
None	PCIe x16	LOM, 4	3
PCIe x8/x16, PCIe x8ML2/x16, or PCIe x16ML2/x8	None	LOM, 1, 2, 4	-
PCIe x8/x16, PCIe x8ML2/x16, or PCIe x16ML2/x8	PCIe x16	LOM, 1, 2, 4	3

The following table lists available PCIe riser card options.

Table 20. PCIe riser cards and miscellaneous options

Description	Part number	Feature code	Maximum quantity
x8 Riser Card 1 options (Riser card 1 supplies slots 1 and 2)			
ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+LP Riser 1 Kit	7XH7A02682	AUWC	1
ThinkSystem SR530/SR570/SR630 x8/x16 PCIe LP+FH Riser 1 Kit	7XH7A05893	None*	1
ThinkSystem SR630 x8ML2/x16 PCIe LP+LP Riser 1 Kit	7XH7A02683	AUWE	1
ThinkSystem SR630 x8ML2/x16 PCIe LP+FH Riser 1 Kit	7XH7A05894	None*	1
ThinkSystem SR630 x16ML2/x8 PCIe LP+LP Riser 1 Kit	7XH7A02684	AUWD	1
ThinkSystem SR630 x16ML2/x8 PCIe LP+FH Riser 1 Kit	7XH7A05895	None*	1
Riser Card 2 option (Riser card 2 supplies slot 3)			
ThinkSystem SR530/SR570/SR630 x16 PCIe LP Riser 2 Kit	7XH7A02685	AUWA	1
Serial port upgrade kit			
ThinkSystem COM Port Upgrade Kit	7Z17A02577	AUSL	1

\* The LP+FH Riser 1 can be factory-installed by selecting the feature codes of the LP+LP Riser 1 (AUWC, AUWD, or AUWE) and LP+FH Bracket (AUWS).

The COM Port Upgrade Kit, part number 7Z17A02577, is used for mounting the external serial port on the rear of the SR630. This option includes the bracket and the cable. The COM Port option is mounted in place of one of the PCIe slots 1, 2, or 3.

## Network adapters

The SR630 server supports up to four onboard network ports with optional LOM cards that use the Intel Ethernet Connection X722 1/10 GbE technology integrated into the Intel C624 Platform Controller Hub (PCH). The server also supports ML2 adapters that are installed in the custom ML2 slot provided by an ML2 riser card. The LOM cards and ML2 network adapters support direct connectivity to the XClarity Controller via the Network Controller Sideband Interface (NSCI) for out-of-band systems management.

The integrated Intel Ethernet Connection X722 has the following features:

- Four 1/10 Gb Ethernet capable ports (no 10/100 Mb Ethernet support)
- NIC Teaming (load balancing and failover)
- Data Center Bridging
- iWARP (RDMA over IP)
- VMDq and SR-IOV virtualization (10 Gb speeds only, 4 PFs, 128 VFs per device)
- IEEE 802.1q Virtual Local Area Networks (VLANs)
- NVGRE, VXLAN, IPinGRE, and MACinUDP network virtualization
- IEEE 802.1Qbg Edge Virtual Bridging
- TCP, IP, and UDP checksum offload
- Large Send Offload (LSO) and Generic Send Offload (GSO)
- Receive Side Scaling (RSS) for TCP and UDP traffic
- Jumbo frames up to 9.5 Kbytes

The following table lists the network adapters that are supported with the SR630 server.

Table 21. Network adapters

Description	Part number	Feature code	Max qty#	I/O slots supported
<b>LOM cards - 1 Gb Ethernet</b>				
ThinkSystem 1Gb 2-port RJ45 LOM	7ZT7A00544	AUKG	1	LOM slot
ThinkSystem 1Gb 4-port RJ45 LOM	7ZT7A00545	AUKH	1	LOM slot
<b>LOM cards - 10 Gb Ethernet</b>				
ThinkSystem 10Gb 2-port Base-T LOM	7ZT7A00548	AUKL	1	LOM slot
ThinkSystem 10Gb 2-port SFP+ LOM	7ZT7A00546	AUKJ	1*	LOM slot
ThinkSystem 10Gb 4-port Base-T LOM	7ZT7A00549	AUKM	1	LOM slot
ThinkSystem 10Gb 4-port SFP+ LOM	7ZT7A00547	AUKK	1*	LOM slot
<b>ML2 adapters - 10 Gb Ethernet</b>				
Broadcom NX-E ML2 10Gb 2-Port Base-T Ethernet Adapter	7ZT7A00497	AUKQ	1	1 (ML2)
Emulex VFA5.2 ML2 Dual Port 10GbE SFP+ Adapter	00AG560	AT7U	1*	1 (ML2)
Emulex VFA5.2 ML2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	01CV770	AU7Z	1*	1 (ML2)
Intel X710-DA2 ML2 2x10GbE SFP+ Adapter	00JY940	ATRH	1*	1 (ML2)
<b>ML2 adapters - 25 Gb Ethernet</b>				
Mellanox ConnectX-4 Lx 10/25GbE SFP28 1-port ML2 Ethernet Adapter	00MN990	ATZR	1*	1 (ML2)
Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-port ML2 Ethernet Adapter	7ZT7A00507	AUKU	1*	1 (ML2)
<b>PCIe Low Profile adapters - 1 Gb Ethernet</b>				
Broadcom 5720 1GbE RJ45 2-Port PCIe Ethernet Adapter	7ZT7A00482	AUZX	2 / 3	2, 3, 1
Broadcom 5719 1GbE RJ45 4-Port PCIe Ethernet Adapter	7ZT7A00484	AUZV	2 / 3	2, 3, 1
ThinkSystem I350-F1 PCIe 1Gb 1-Port SFP Ethernet Adapter	7ZT7A00533	AUZZ	2 / 3	2, 3, 1
ThinkSystem I350-T2 PCIe 1Gb 2-Port RJ45 Ethernet Adapter	7ZT7A00534	AUZY	2 / 3	2, 3, 1
ThinkSystem I350-T4 PCIe 1Gb 4-Port RJ45 Ethernet Adapter	7ZT7A00535	AUZW	2 / 3	2, 3, 1
<b>PCIe Low Profile adapters - 10 Gb Ethernet</b>				
Broadcom 57416 10GBASE-T 2-Port PCIe Ethernet Adapter	7ZT7A00496	AUKP	2 / 3	2, 3, 1

Description	Part number	Feature code	Max qty#	I/O slots supported
Emulex VFA5.2 2x10 GbE SFP+ PCIe Adapter	00AG570	AT7S	2 / 3*	2, 3, 1
Emulex VFA5.2 2x10 GbE SFP+ Adapter and FCoE/iSCSI SW	00AG580	AT7T	2 / 3*	2, 3, 1
Intel X550-T2 Dual Port 10GBase-T Adapter	00MM860	ATPX	2 / 3	2, 3, 1
Intel X710-DA2 PCIe 10Gb 2-Port SFP+ Ethernet Adapter	7ZT7A00537	AUKX	2 / 3*	2, 3, 1
QLogic QL41134 PCIe 10Gb 4-Port Base-T Ethernet Adapter	4XC7A08225	B31G	2 / 3	2, 3, 1
PCIe Full Height adapters - 10 Gb Ethernet				
Emulex OCe14104B-NX PCIe 10Gb 4-Port SFP+ Ethernet Adapter	7ZT7A00493	AUKN	1 / 1*	2
PCIe Low Profile adapters - 25 Gb Ethernet				
Broadcom 57412 10/25GbE SFP28 1-Port PCIe Ethernet Adapter	7ZT7A00505	AUKS	2 / 3*	2, 3, 1
Broadcom 57414 10/25GbE SFP28 2-port PCIe Ethernet Adapter	4XC7A08238	B5T0	2 / 3*	2, 3, 1
Intel XXV710-DA2 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	7XC7A05523	B0WY	2 / 3*	2, 3, 1
Mellanox ConnectX-4 Lx 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	01GR250	AUAJ	2 / 3*	2, 3, 1
Mellanox Innova-2 ConnectX-5 FPGA 25GbE 2-port Adapter	4XC7A16683	B5XZ	1 / 2*	2, 3†
QLogic QL41262 10/25GbE SFP28 2-Port PCIe Ethernet Adapter	4XC7A08228	B21R	2 / 3*	2, 3, 1
PCIe Low Profile adapters - 40 Gb Ethernet				
Mellanox ConnectX-4 Lx 1x40GbE QSFP+ Adapter	00MM950	ATRN	2 / 3*	2, 3, 1
Mellanox ConnectX-5 Ex 25/40GbE 2-port Low-Latency Adapter	4XC7A08229	B31C	1 / 2*^	2, 3†
PCIe x16 Low Profile adapters - 100 Gb Ethernet / EDR InfiniBand				
Mellanox ConnectX-4 2x100GbE/EDR IB QSFP28 VPI Adapter	00MM960	ATRP	1 / 2*	2, 3†

# The maximum quantity shown is with one processor / two processors (this does not apply to LOM cards and ML2 adapters).

\* The adapter comes without transceivers or cables; for ordering transceivers or cables, see the configuration notes below the table.

† The adapter is supported in the PCIe x16 slots supplied by the riser cards 1 and 2.

^ The 25 GbE connectivity requires the optional Mellanox QSA 100G to 25G Cable Adapter (4G17A10853) (one per port); the supported cables include 25 GbE passive DAC and active optical cables (25 GbE transceivers not supported) (see [Transceivers and cables for 25 GbE SFP28 adapters](#) for details).



**Configuration notes:**

- ML2 network adapters are supported in the ML2 x8 slot 1 supplied by the x8ML2/x16 Riser Card 1 (7XH7A02683 or 7XH7A05894).
- PCIe full-height network adapters are supported in the full-height PCIe x8 or x16 slot 2 supplied by the riser card 1.
- PCIe x16 Low Profile network adapters and Omni-Path adapters are supported in the full-height and low profile PCIe x16 slots supplied by the riser cards 1 and 2.
- PCIe Low Profile network adapters (except PCIe x16 adapters and Omni-Path adapters) are supported in the full-height and low profile PCIe x8 and x16 slots supplied by the riser cards 1 and 2.
- Supported transceivers or DAC cables should be purchased for the SFP+, SFP28, QSFP+, and QSFP28 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.  
The following transceiver and cables can be purchased:

- [UTP cables for 10 GbE and 1 GbE RJ-45 adapters](#)
- [Transceivers and cables for 10 GbE SFP+ adapters](#)
- [Transceivers and cables for 25 GbE SFP28 adapters](#)
- [Transceivers and cables for 40 GbE QSFP+ adapters](#)
- [Transceivers and cables for 100 GbE QSFP28 network adapters](#)

The following table lists cables for the 10 GbE and 1 GbE RJ-45 adapters.

Table 22. Cables for 10 GbE and 1 GbE RJ-45 adapters

Description	Part number	Feature code
UTP Category 6 cables (Green) for 10 GbE and 1 GbE RJ-45 adapters		
0.75m Cat6 Green Cable	00WE123	AVFW
1.0m Cat6 Green Cable	00WE127	AVFX
1.25m Cat6 Green Cable	00WE131	AVFY
1.5m Cat6 Green Cable	00WE135	AVFZ
3m Cat6 Green Cable	00WE139	AVG0
10m Cat6 Green Cable	90Y3718	A1MT
25m Cat6 Green Cable	90Y3727	A1MW
UTP Category 5e cables (Blue) for 1 GbE RJ-45 adapters		
0.75m Blue Cat5e Cable	00WE111	AVFT
1.0m Blue Cat5e Cable	00WE115	AVFU
1.25m Blue Cat5e Cable	00WE119	AVFV
3m Blue Cat5e Cable	40K5581	3803
10m Blue Cat5e Cable	40K8927	3804
25m Blue Cat5e Cable	40K8930	3805
UTP Category 5e cables (Green) for 1 GbE RJ-45 adapters		
0.75m Green Cat5e Cable	00WE099	AVFQ
1.0m Green Cat5e Cable	00WE103	AVFR
1.25m Green Cat5e Cable	00WE107	AVFS
1.5m Green Cat5e Cable	40K5643	3797
3m Green Cat5e Cable	40K5793	3798
10m Green Cat5e Cable	40K5794	3799

Description	Part number	Feature code
25m Green Cat5e Cable	40K8869	3800

The following table lists transceivers and cables for the 10 GbE SFP+ adapters.

Table 23. Transceivers and cables for 10 GbE SFP+ adapters

Description	Part number	Feature code
<b>10 GbE SFP+ SR transceivers for 10 GbE SFP+ adapters</b>		
Lenovo 10GBASE-SR SFP+ Transceiver	46C3447	5053
Lenovo 10GBASE-LR SFP+ Transceiver	00FE331	B0RJ
<b>Optical cables for 10 GbE SFP+ SR transceivers</b>		
Lenovo 0.5m LC-LC OM3 MMF Cable	00MN499	ASR5
Lenovo 1m LC-LC OM3 MMF Cable	00MN502	ASR6
Lenovo 3m LC-LC OM3 MMF Cable	00MN505	ASR7
Lenovo 5m LC-LC OM3 MMF Cable	00MN508	ASR8
Lenovo 10m LC-LC OM3 MMF Cable	00MN511	ASR9
Lenovo 15m LC-LC OM3 MMF Cable	00MN514	ASRA
Lenovo 25m LC-LC OM3 MMF Cable	00MN517	ASRB
Lenovo 30m LC-LC OM3 MMF Cable	00MN520	ASRC
<b>Passive SFP+ DAC cables for 10 GbE SFP+ adapters</b>		
Lenovo 0.5m Passive SFP+ DAC Cable	00D6288	A3RG
Lenovo 1m Passive SFP+ DAC Cable	90Y9427	A1PH
Lenovo 1.5m Passive SFP+ DAC Cable	00AY764	A51N
Lenovo 2m Passive SFP+ DAC Cable	00AY765	A51P
Lenovo 3m Passive SFP+ DAC Cable	90Y9430	A1PJ
Lenovo 5m Passive SFP+ DAC Cable	90Y9433	A1PK
Lenovo 7m Passive SFP+ DAC Cable	00D6151	A3RH
<b>Active SFP+ DAC cables for 10 GbE SFP+ adapters*</b>		
Lenovo 1m Active DAC SFP+ Cable	00VX111	AT2R
Lenovo 3m Active DAC SFP+ Cable	00VX114	AT2S
Lenovo 5m Active DAC SFP+ Cable	00VX117	AT2T
<b>SFP+ active optical cables for 10 GbE SFP+ adapters</b>		
Lenovo 1m SFP+ to SFP+ Active Optical Cable	00YL634	ATYX
Lenovo 3m SFP+ to SFP+ Active Optical Cable	00YL637	ATYY
Lenovo 5m SFP+ to SFP+ Active Optical Cable	00YL640	ATYZ
Lenovo 7m SFP+ to SFP+ Active Optical Cable	00YL643	ATZ0
Lenovo 15m SFP+ to SFP+ Active Optical Cable	00YL646	ATZ1
Lenovo 20m SFP+ to SFP+ Active Optical Cable	00YL649	ATZ2

\* The Emulex VFA5.2 ML2 (00AG560 and 01CV770) and PCIe (00AG570 and 00AG580) network adapters do not support active SFP+ DAC cables.

The following table lists transceivers and cables for the 25 GbE SFP28 adapters.

Table 24. Transceivers and cables for 25 GbE SFP28 adapters

Description	Part number	Feature code
25 GbE SFP28 SR transceivers for 25 GbE SFP28 adapters		
Lenovo 25GBase-SR SFP28 Transceiver	7G17A03537	AV1B
Optical cables for 25 GbE SFP28 SR transceivers		
Lenovo 0.5m LC-LC OM3 MMF Cable	00MN499	ASR5
Lenovo 1m LC-LC OM3 MMF Cable	00MN502	ASR6
Lenovo 3m LC-LC OM3 MMF Cable	00MN505	ASR7
Lenovo 5m LC-LC OM3 MMF Cable	00MN508	ASR8
Lenovo 10m LC-LC OM3 MMF Cable	00MN511	ASR9
Lenovo 15m LC-LC OM3 MMF Cable	00MN514	ASRA
Lenovo 25m LC-LC OM3 MMF Cable	00MN517	ASRB
Lenovo 30m LC-LC OM3 MMF Cable	00MN520*	ASRC*
Passive copper cables for 25 GbE SFP28 network adapters		
Lenovo 1m Passive 25G SFP28 DAC Cable	7Z57A03557*	AV1W*
Lenovo 3m Passive 25G SFP28 DAC Cable	7Z57A03558	AV1X
Lenovo 5m Passive 25G SFP28 DAC Cable	7Z57A03559	AV1Y
Active optical cables for 25 GbE SFP28 network adapters*		
Lenovo 3m 25G SFP28 Active Optical Cable	7Z57A03541	AV1F
Lenovo 5m 25G SFP28 Active Optical Cable	7Z57A03542	AV1G
Lenovo 10m 25G SFP28 Active Optical Cable	7Z57A03543	AV1H
Lenovo 15m 25G SFP28 Active Optical Cable	7Z57A03544	AV1J
Lenovo 20m 25G SFP28 Active Optical Cable	7Z57A03545	AV1K

\* Not supported with the Intel XXV710-DA2 PCIe 25Gb 2-Port SFP28 Ethernet Adapter (7XC7A05523).

The following table lists transceivers and cables for the 40 GbE QSFP+ adapters.

Table 25. Transceivers and cables for 40 GbE QSFP+ adapters

Description	Part number	Feature code
40 GbE QSFP+ transceivers for 40 GbE network adapters		
Lenovo 40GBASE-SR4 QSFP+ Transceiver	49Y7884	A1DR
Optical cables for 40 GbE QSFP+ SR4 transceivers		
Lenovo 10m QSFP+ MPO-MPO OM3 MMF Cable	00VX003	AT2U
Lenovo 30m QSFP+ MPO-MPO OM3 MMF Cable	00VX005	AT2V
Passive DAC cables for 40 GbE QSFP+ network adapters		
Lenovo 1m Passive QSFP+ DAC Cable	49Y7890	A1DP
Lenovo 3m Passive QSFP+ DAC Cable	49Y7891	A1DQ
Lenovo 5m Passive QSFP+ DAC Cable	00D5810	A2X8
Lenovo 7m Passive QSFP+ DAC Cable	00D5813	A2X9
Active optical cables for 40 GbE QSFP+ network adapters		
Lenovo 1m QSFP+ to QSFP+ Active Optical Cable	7Z57A04256	AX42
Lenovo 3m QSFP+ to QSFP+ Active Optical Cable	00YL652	ATZ3

Description	Part number	Feature code
Lenovo 5m QSFP+ to QSFP+ Active Optical Cable	00YL655	ATZ4
Lenovo 7m QSFP+ to QSFP+ Active Optical Cable	00YL658	ATZ5
Lenovo 15m QSFP+ to QSFP+ Active Optical Cable	00YL661	ATZ6
Lenovo 20m QSFP+ to QSFP+ Active Optical Cable	00YL664	ATZ7
25 GbE SFP28 cable adapter for 40 GbE QSFP+ network adapters		
Mellanox 100G QSFP28 to 25G SFP28 Cable Adapter	4G17A10853	B306

The following table lists transceivers and cables for the 100 GbE QSFP28 network adapters.

Table 26. Transceivers and cables for 100 GbE QSFP28 network adapters

Description	Part number	Feature code
100 GbE QSFP28 transceivers for 100 GbE QSFP28 network adapters		
Lenovo 100GBase-SR4 QSFP28 Transceiver	7G17A03539	AV1D
Optical cables for 100 GbE QSFP28 SR4 transceivers		
Lenovo 5m MPO-MPO OM4 MMF Cable	7Z57A03567	AV25
Lenovo 10m MPO-MPO OM4 MMF Cable	7Z57A03569	AV27
Lenovo 20m MPO-MPO OM4 MMF Cable	7Z57A03571	AV29
Optical breakout cables for 100 GbE QSFP28 SR4 transceivers		
Lenovo 1m MPO-MPO Breakout OM4 MMF Cable	7Z57A03573	AV2B
Lenovo 3m MPO-MPO Breakout OM4 MMF Cable	7Z57A03574	AV2C
Lenovo 5m MPO-MPO Breakout OM4 MMF Cable	7Z57A03575	AV2D
Passive copper cables for 100 GbE QSFP28 network adapters		
Lenovo 1m Passive 100G QSFP28 DAC Cable	7Z57A03561	AV1Z
Lenovo 3m Passive 100G QSFP28 DAC Cable	7Z57A03562	AV20
Lenovo 5m Passive 100G QSFP28 DAC Cable	7Z57A03563	AV21
Passive copper breakout cables for 100 GbE QSFP28 network adapters		
Lenovo 1m 100G QSFP28 to 4x25G SFP28 Breakout DAC Cable	7Z57A03564	AV22
Lenovo 3m 100G QSFP28 to 4x25G SFP28 Breakout DAC Cable	7Z57A03565	AV23
Lenovo 5m 100G QSFP28 to 4x25G SFP28 Breakout DAC Cable	7Z57A03566	AV24
Active optical cables for 100 GbE QSFP28 network adapters		
Lenovo 3m 100G QSFP28 Active Optical Cable	7Z57A03546	AV1L
Lenovo 5m 100G QSFP28 Active Optical Cable	7Z57A03547	AV1M
Lenovo 10m 100G QSFP28 Active Optical Cable	7Z57A03548	AV1N
Lenovo 15m 100G QSFP28 Active Optical Cable	7Z57A03549	AV1P
Lenovo 20m 100G QSFP28 Active Optical Cable	7Z57A03550	AV1Q

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 SR630 server.

Table 27. SAS RAID adapters and HBAs for external storage

Description	Part number	Feature code	Maximum quantity*	I/O slots supported
<b>12 Gbps SAS RAID adapters</b>				
ThinkSystem RAID 930-8e 4GB Flash PCIe 12Gb Adapter	7Y37A01087	AUNQ	2 / 2	1, 2, 3
<b>12 Gbps SAS HBAs</b>				
ThinkSystem 430-8e SAS/SATA 12Gb HBA	7Y37A01090	AUNR	2 / 2	1, 2, 3
ThinkSystem 430-16e SAS/SATA 12Gb HBA	7Y37A01091	AUNN	2 / 2	1, 2, 3

\* The maximum quantity shown is with one processor / two processors.

### Configuration notes:

- Low profile SAS RAID controllers and HBAs for external storage are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2.
- In the configurations without GPU installed, the total quantity of the RAID 930-8i, 16i, and 8e controllers in the server must not exceed 2 (up to 2 supercapacitors can be mounted in the server).
- In the configurations with GPU installed, the total quantity of the RAID 930-8i, 16i, and 8e controllers in the server must not exceed 1 (the storage controller can be installed only in the PCIe slot 1; the PCIe slots 3 and 4 cannot be used if the GPU adapter is installed).
- The RAID 930-8e controller cannot be used in the configurations with the RAID 730-8i 2GB controller.

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

Table 28. 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
SSD Caching (CacheCade Pro 2.0)	No**	No	No
Consistency check	Yes	No	No

Feature	RAID 930-8e	430-8e HBA	430-16e HBA
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 SR630 server.

Table 29. Fibre Channel HBAs

Description	Part number	Feature code	Maximum quantity*	I/O slots supported
<b>32 Gb Fibre Channel - PCIe</b>				
Emulex LPe35000 32Gb 1-port PCIe Fibre Channel Adapter	4XC7A08250	B5SX	2 / 3	2, 3, 1
Emulex LPe35002 32Gb 2-port PCIe Fibre Channel Adapter	4XC7A08251	B5SY	2 / 3	2, 3, 1
QLogic QLE2740 PCIe 32Gb 1-Port SFP+ FC HBA	7ZT7A00516	AUNS	2 / 3	2, 3, 1
QLogic QLE2742 PCIe 32Gb 2-Port SFP+ FC HBA	7ZT7A00518	AUNU	2 / 3	2, 3, 1
<b>16 Gb Fibre Channel - PCIe</b>				
Emulex 16Gb Gen6 FC Single-port HBA	01CV830	ATZU	2 / 3	2, 3, 1
Emulex 16Gb Gen6 FC Dual-port HBA	01CV840	ATZV	2 / 3	2, 3, 1
QLogic 16Gb Enhanced Gen5 FC Single-port HBA	01CV750	ATZB	2 / 3	2, 3, 1
QLogic 16Gb Enhanced Gen5 FC Dual-port HBA	01CV760	ATZC	2 / 3	2, 3, 1
<b>8 Gb Fibre Channel - PCIe (available only in PRC and Asia Pacific)</b>				
Emulex LPe12000-M8-L PCIe 8Gb 1-Port SFP+ FC HBA	4XC7A08220	B0WZ	2 / 3	2, 3, 1
Emulex LPe12002-M8-L PCIe 8Gb 2-Port SFP+ FC HBA	4XC7A08221	B0X0	2 / 3	2, 3, 1

\* The maximum quantity shown is with one processor / two processors.

**Configuration note:** FC HBAs are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2.

For more information, see the list of Product Guides in the Host bus adapters category:

<http://lenovopress.com/servers/options/hba#rt=product-guide>

## Flash storage adapters

The SR630 server supports the flash storage adapters listed in the following table.

Table 30. Flash storage adapters

Description	Part number	Feature code	Maximum quantity*	I/O slots supported
Mainstream Flash Adapters - CM5-V				
CM5-V 1.6TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	4XB7A38234	BCGJ	2 / 3	2, 3, 1
CM5-V 3.2TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	4XB7A38237	BCGK	2 / 3	2, 3, 1
CM5-V 6.4TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	4XB7A38240	BCGL	2 / 3	2, 3, 1
Mainstream Flash Adapters - P4600				
Intel P4600 2.0TB Mainstream NVMe PCIe 3.0 x4 Flash Adapter	7SD7A05769	B11X	2 / 3	2, 3, 1

\* The maximum quantity shown is with one processor / two processors.

### Configuration notes:

- Flash storage adapters are supported in the low profile and full-high PCIe x8 and x16 slots supplied by the riser cards 1 and 2.
- The Flash storage adapters are supported only in the environments with the air temperature of up to 35 °C (95 °F).

For more information, see the list of Product Guides in the Flash storage adapters category:

<http://lenovopress.com/servers/options/ssdadapter#rt=product-guide>

## GPU adapters

The SR630 server supports graphics processing units (GPUs) listed in the following table.

Table 31. GPU adapters

Description	Part number	Feature code	Maximum quantity*	I/O slots supported
Full-height, full-length PCIe 3.0 x16 single-wide GPU adapters				
NVIDIA Quadro P2000 PCIe Active GPU	7C57A02877	AUW6	1 / 1	2
ThinkSystem NVIDIA Quadro P2200 5GB PCIe Active GPU	4X67A14935	B7JW	1 / 1	2
ThinkSystem NVIDIA Quadro P4000 8GB PCIe Active GPU	4V17A10255	B225	1 / 1	2
ThinkSystem NVIDIA Quadro RTX 4000 8GB PCIe Active GPU	4X67A14934	B6CG	1 / 1	2
Low profile PCIe 3.0 x16 single-wide GPU adapters				
ThinkSystem NVIDIA Quadro P620 2GB PCIe Active GPU	4X67A11584	B31D	2 / 3	1, 2, 3
ThinkSystem NVIDIA Tesla P4 8GB PCIe Passive GPU	7C57A02892	B227	1 / 2	1, 3
ThinkSystem NVIDIA Tesla T4 16GB PCIe Passive GPU	4X67A14926	B4YB	1 / 2	1, 3
GPU upgrade kits				
ThinkSystem SR630 GPU Upgrade Kit	4XH7A08765	None**	1	-

\* The maximum quantity shown is with one processor / two processors.

\*\* Field upgrade only.

### Configuration notes:

- The full-height GPU adapters require the PCIe x16 FH riser card for the PCIe slot 2, and the PCIe slot 3 cannot be used. The low profile GPU adapters are supported in the PCIe x8 and x16 low-profile slots supplied by the riser cards 1 and 2.
- The full-height GPU adapters require the GPU Upgrade Kit (4XH7A08765).

- If the full-height GPU adapter is installed, the internal slot for a storage controller cannot be used.
- The GPU adapters are *not* supported in the following configurations:
  - Rear HDD kit installed.
  - 10x U.2 PCIe NVMe drive bays installed.
- Configurations with any one GPU adapter or two P620 GPU adapters are supported only with the 750 W or 1100 W power supplies. Configurations with two P4 or three P620 GPU adapters are supported only with the 1100 W power supplies.
- The P2000 or P2200 GPU adapters are supported with the processors of up to 140 W TDP. The GPU adapters other than P2000 or P2200 are supported with the processors of up to 165 W TDP (excluding Gold 6144 and 6146 processors).
- The RTX4000 GPU adapter is supported with the processors of up to 165 W TDP in the configurations with 8x 2.5-inch drive bays, or with the processors of up to 150 W TDP in the configurations with 4x 3.5-inch SAS/SATA or AnyBay, or 6x 2.5-inch SAS/SATA & 4x 2.5-inch AnyBay drive bays.
- The GPU adapters are supported only in the ASHRAE A2 environments (up to 35 °C [95 °F]) with the following exceptions:
  - Two P4 or T4 GPU adapters are supported at the ambient temperature of up to 30 °C [86 °F]), and the server performance might be impacted in case of a system fan failure.
  - Three P620 adapters are supported at the ambient temperature of up to 30 °C [86 °F]).

## Cooling

The SR630 server supports up to seven hot-swap system fans that provide N+1 cooling redundancy. SR630 server models with one processor include five system fans, and server models with two processors include seven system fans.

**Configuration note:** If Intel Xeon 6144, 6146, 6154, 8168, 8180, and 8180M processors are installed in the server, the server performance might be impacted in case of a system fan failure.

## Power supplies and cables

The SR630 server supports up to two redundant power supplies and is capable of N+N redundancy depending on the configuration. A second power supply can be added to the models that come with one power supply.

The following table lists the power supply options.

Table 32. Power supplies

Description	Part number	Feature code	Maximum quantity
ThinkSystem 550W (230V/115V) Platinum Hot-Swap Power Supply	7N67A00882	AVW8	2
ThinkSystem 750W (230/115V) Platinum Hot-Swap Power Supply	7N67A00883	AVWA	2
ThinkSystem 750W (230V) Titanium Hot-Swap Power Supply	7N67A00884	AVW9	2
ThinkSystem 1100W (230V/115V) Platinum Hot-Swap Power Supply	7N67A00885	AVWB	2

### Configuration notes:

- Minimum of 1 and maximum of 2 power supplies per system.
- If 2 are installed, power supplies must be identical.
- Power supplies support AC (Worldwide) and HVDC (PRC only) power sources.

**Important:** The Standalone Solution Configuration Tool (SSCT) and Lenovo Data Center Solution Configurator (DCSC) power supply selection rules allow a subset of possible configurations due to power restrictions.

Configurations that cannot be built in SSCT or DCSC due to power restrictions may still be supported. To verify support and ensure that the right power supply is chosen for optimal performance, you should always validate your server configuration using the latest version of the Lenovo Capacity Planner:

<http://datacentersupport.lenovo.com/us/en/solutions/Invo-lcp>



The SR630 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 SR630 server.

Table 33. Power cables

Description	Part number	Feature code
<b>Rack power cables</b>		
1.0m, 10A/125-250V, C13 to IEC 320-C14 Rack Power Cable	00Y3043	A4VP
1.2m, 16A/100-250V, 2 Short C13s to Short C20 Rack Power Cable	47C2491	A3SW
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
2.5m, 16A/100-250V, 2 Long C13s to Short C20 Rack Power Cable	47C2492	A3SX
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, 16A/100-250V, 2 Short C13s to Long C20 Rack Power Cable	47C2493	A3SY
4.1m, 16A/100-250V, 2 Long C13s to Long C20 Rack Power Cable	47C2494	A3SZ
4.3m, 10A/100-250V, C13 to IEC 320-C14 Rack Power Cable	39Y7932	6263
4.3m, 13A/125V-10A/250V, C13 to IEC 320-C14 Rack Power Cable	4L67A08371	6583
<b>Line cords</b>		
Argentina 2.8m, 10A/250V, C13 to IRAM 2073 Line Cord	39Y7930	6222
Argentina 4.3m, 10A/250V, C13 to IRAM 2073 Line Cord	81Y2384	6492
Australia/New Zealand 2.8m, 10A/250V, C13 to AS/NZS 3112 Line Cord	39Y7924	6211
Australia/New Zealand 4.3m, 10A/250V, C13 to AS/NZS 3112 Line Cord	81Y2383	6574
Brazil 2.8m, 10A/250V, C13 to NBR 14136 Line Cord	69Y1988	6532
Brazil 4.3m, 10A/250V, C13 to NBR14136 Line Cord	81Y2387	6404
China 2.8m, 10A/250V, C13 to GB 2099.1 Line Cord	39Y7928	6210
China 4.3m, 10A/250V, C13 to GB 2099.1 Line Cord	81Y2378	6580
Denmark 2.8m, 10A/250V, C13 to DK2-5a Line Cord	39Y7918	6213
Denmark 4.3m, 10A/250V, C13 to DK2-5a Line Cord	81Y2382	6575
Europe 2.8m, 10A/250V, C13 to CEE7-VII Line Cord	39Y7917	6212
Europe 4.3m, 10A/250V, C13 to CEE7-VII Line Cord	81Y2376	6572
India 2.8m, 10A/250V, C13 to IS 6538 Line Cord	39Y7927	6269
India 4.3m, 10A/250V, C13 to IS 6538 Line Cord	81Y2386	6567
Israel 2.8m, 10A/250V, C13 to SI 32 Line Cord	39Y7920	6218
Israel 4.3m, 10A/250V, C13 to SI 32 Line Cord	81Y2381	6579
Italy 2.8m, 10A/250V, C13 to CEI 23-16 Line Cord	39Y7921	6217
Italy 4.3m, 10A/250V, C13 to CEI 23-16 Line Cord	81Y2380	6493
Japan 2.8m, 12A/125V, C13 to JIS C-8303 Line cord	46M2593	6314
Japan 2.8m, 12A/250V, C13 to JIS C-8303 Line Cord	4L67A08357	5472
Japan 4.3m, 12A/125V, C13 to JIS C-8303 Line Cord	39Y7926	6335
Japan 4.3m, 12A/250V, C13 to JIS C-8303 Line Cord	4L67A08362	6495
Korea 2.8m, 12A/250V, C13 to KS C8305 Line Cord	39Y7925	6219
Korea 4.3m, 12A/250V, C13 to KS C8305 Line Cord	81Y2385	6494

Description	Part number	Feature code
South Africa 2.8m, 10A/250V, C13 to SABS 164 Line Cord	39Y7922	6214
South Africa 4.3m, 10A/250V, C13 to SABS 164 Line Cord	81Y2379	6576
Switzerland 2.8m, 10A/250V, C13 to SEV 1011-S24507 Line Cord	39Y7919	6216
Switzerland 4.3m, 10A/250V, C13 to SEV 1011-S24507 Line Cord	81Y2390	6578
Taiwan 2.8m, 10A/125V, C13 to CNS 10917-3 Line Cord	23R7158	6386
Taiwan 2.8m, 10A/250V, C13 to CNS 10917-3 Line Cord	81Y2375	6317
Taiwan 2.8m, 15A/125V, C13 to CNS 10917-3 Line Cord	81Y2374	6402
Taiwan 4.3m, 10A/125V, C13 to CNS 10917-3 Line Cord	4L67A08363	AX8B
Taiwan 4.3m, 10A/250V, C13 to CNS 10917-3 Line Cord	81Y2389	6531
Taiwan 4.3m, 15A/125V, C13 to CNS 10917-3 Line Cord	81Y2388	6530
United Kingdom 2.8m, 10A/250V, C13 to BS 1363/A Line Cord	39Y7923	6215
United Kingdom 4.3m, 10A/250V, C13 to BS 1363/A Line Cord	81Y2377	6577
United States 2.8m, 10A/125V, C13 to NEMA 5-15P Line Cord	90Y3016	6313
United States 2.8m, 10A/250V, C13 to NEMA 6-15P Line Cord	46M2592	A1RF
United States 2.8m, 13A/125V, C13 to NEMA 5-15P Line Cord	00WH545	6401
United States 4.3m, 10A/125V, C13 to NEMA 5-15P Line Cord	4L67A08359	6370
United States 4.3m, 10A/250V, C13 to NEMA 6-15P Line Cord	4L67A08361	6373
United States 4.3m, 13A/125V, C13 to NEMA 5-15P Line Cord	4L67A08360	AX8A

**Configuration note:** If the 1100 W AC power supplies (7N67A00885) in the SR630 server are connected to a low-voltage power source (100 - 125 V), the only supported power cables are those that are rated above 10 A; cables that are rated at 10 A are not supported.

## Systems management

The SR630 supports the following systems management tools:

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

### Lenovo XClarity Controller

The SR630 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 SR630 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.

The following table lists the XClarity Controller FoD upgrades.

Table 34. 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.

### Light path diagnostics

All SR630 server models include basic light path diagnostics, which provides the system LEDs on the front of the server (see [Components and connectors](#)) and the LEDs near the monitored components (for example, the DIMM error LEDs on the system board).

### Lenovo XClarity Provisioning Manager

Lenovo XClarity Provisioning Manager is a UEFI-embedded GUI application that combines the functions of configuring system setup settings, configuring RAID, and updating applications and firmware. It also enables you to install the supported operating systems and associated device drivers, run diagnostics, and collect service data.

Lenovo XClarity Provisioning Manager has the following features:

- Automatic hardware detection
- Collecting and viewing system inventory information
- Configuring UEFI system setup settings
- Updating the system firmware
- Configuring RAID by using the RAID Setup Wizard or Advanced mode
- Installing an operating system and device drivers automatically or manually
- Running diagnostics and collecting service data

### 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 XClarity Essentials OneCLI**  
OneCLI is a collection of server management tools that utilize 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 setting, and update system firmware and drivers.
- **Lenovo XClarity 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 XClarity 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 is a centralized systems management solution that helps administrators deliver infrastructure faster. This solution integrates easily with Lenovo x86 servers, RackSwitch switches, and DS Series storage, providing automated agent-less discovery, monitoring, firmware updates, configuration management, and bare metal deployment of operating systems and hypervisors across multiple servers.

Lenovo XClarity Administrator is an optional software component for the SR630 server which can be downloaded and used at no charge to discover and monitor the SR630 and manage firmware upgrades for them.

If software support is required for Lenovo XClarity Administrator, or Lenovo XClarity Administrator premium features (such as configuration management and operating system deployment) are required, or both, 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 geo-specific Lenovo XClarity software license options.

Table 35. Lenovo XClarity software options

Description	Part number (NA, AP, Japan)*	Part number (EMEA, LA)**	Quantity
Lenovo XClarity Pro, per Managed Endpoint w/1 Yr SW S&S	00MT201	00MT207	1
Lenovo XClarity Pro, per Managed Endpoint w/3 Yr SW S&S	00MT202	00MT208	1
Lenovo XClarity Pro, per Managed Endpoint w/5 Yr SW S&S	00MT203	00MT209	1

\* NA = North America; AP = Asia Pacific

\*\* EMEA = Europe, Middle East, Africa; LA = Latin America

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

- Auto-discovery and monitoring of Lenovo x86 servers, RackSwitch switches, Flex System chassis, and DS Series storage 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 offers at no charge (if software support is required, a Lenovo XClarity Pro software subscription license should be ordered) two software plug-in modules, Lenovo XClarity Integrators, to manage physical infrastructure from leading external virtualization management software tools from Microsoft and VMware:

- Lenovo XClarity Integrator for Microsoft System Center
- Lenovo XClarity Integrator for VMware vCenter

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, refer to the Lenovo XClarity Integrators web page:

<http://www3.lenovo.com/us/en/data-center/software/systems-management/xclarity-integrators>

### Lenovo XClarity Energy Manager

Lenovo XClarity Energy Manager provides a stand-alone, web-based agent-less power management console that provides real time data and enables you to observe, plan and manage power and cooling for Lenovo servers. Using built-in intelligence, it identifies server power consumption trends and ideal power settings and performs cooling analysis so that you can define and optimize power-saving policies.

Lenovo XClarity Energy Manager offers the following capabilities:

- Monitors room, row, rack, and device levels in the data center
- Reports vital server information, such as power, temperature and resource utilization
- Monitors inlet temperature to locate hot spots, reducing the risk of data or device damage
- Provides finely-grained controls to limit platform power in compliance with IT policy
- Generates alerts when a user-defined threshold is reached

Lenovo XClarity Energy Manager is an optional software component for the SR630 server that is licensed on a per managed node basis, that is, each managed server requires a license. The 1-node Energy Manager license is included in the XClarity Controller Enterprise upgrade.

To manage systems without XClarity Controller Enterprise licenses, a node license pack should be purchased. The following table lists the geo-specific Lenovo XClarity Energy Manager software license options.

Table 36. Lenovo XClarity Energy Manager software options

Description	Part number (NA, AP, Japan)*	Part number (EMEA, LA)**	Quantity
Lenovo XClarity Energy Manager, 1 Node w/ 1 Yr S&S	01DA225	01DA228	1

\* NA = North America; AP = Asia Pacific.

\*\* EMEA = Europe, Middle East, Africa; LA = Latin America.

For more information, refer to the Lenovo XClarity Energy Manager web page:

<http://datacentersupport.lenovo.com/us/en/solutions/Invo-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/Invo-lcp>

## Security

The SR630 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)
- Trusted Cryptographic Module (TCM) (optional; PRC only)
- Nationz Trusted Platform Module v2.0 (optional; PRC only)
- Lockable front bezel (optional)
- Security Key Lifecycle Manager (SKLM) encryption key management for SEDs - FoD upgrade (optional)
- Lenovo Business Vantage security software (optional; PRC only)

The following table lists the security options that are available for the SR630 server.

Table 37. Security options

Description	Part number	Feature code	Maximum quantity
Lockable front bezel			
ThinkSystem 1U Security Bezel	7Z17A02581	AUWR	1
Trusted Cryptographic Module (PRC only)			
ThinkSystem Trusted Cryptographic Module	None*	AVKE	1
Trusted Platform Module (PRC only)			
ThinkSystem Nationz Trusted Platform Module v2.0	None*	B22N	1
Security Key Lifecycle Manager - FoD (United States, Canada, Asia Pacific, and Japan)			
SKLM for System x/ThinkSystem w/SEDs - FoD per Install w/1Yr S&S	00D9998	A5U1	1
SKLM for System x/ThinkSystem w/SEDs - FoD per Install w/3Yr S&S	00D9999	AS6C	1
Security Key Lifecycle Manager - FoD (Latin America, Europe, Middle East, and Africa)			
SKLM for System x/ThinkSystem w/SEDs - FoD per Install w/1Yr S&S	00FP648	A5U1	1
SKLM for System x/ThinkSystem w/SEDs - FoD per Install w/3Yr S&S	00FP649	AS6C	1

\* Factory-installed only; no field upgrade.

Lenovo Business Vantage is a security software tool suite (available only in PRC) designed to work with the Trusted Cryptographic Module (TCM) adapter for enhanced security, to keep user data safe, and to erase confidential data completely from a hard disk drive.

Lenovo Business Vantage provides the following features:

- Encrypts files to ensure data safety by using the TCM.
- Erases confidential data from a hard disk.
- Prohibits unauthorized access to the USB port of devices.
- Encrypts files to ensure data security on a USB storage device.

For more information, refer to the Lenovo Business Vantage web page:

<http://support.lenovo.com.cn/lenovo/wsi/es/es.html>

## Rack installation

The following table lists the rack installation options that are available for the SR630 server.

Table 38. Rack installation options

Description	Part number	Feature code	Maximum quantity
<b>4-post rail kits</b>			
ThinkSystem Tool-less Slide Rail	7M27A05702	AXCA	1
ThinkSystem Tool-less Slide Rail Kit with 1U CMA	7M27A05701	AXCB	1
ThinkSystem Screw-in Slide Rail	4M17A07274	AXFN	1
ThinkSystem Screw-in Slide Rail Kit with 1U CMA	4M17A07281	B0TE	1
ThinkSystem Tool-less Friction Rail	4M17A07273	AXFM	1
<b>Cable management arm (CMA) upgrade</b>			
ThinkSystem 1U CMA Upgrade Kit for Tool-less Slide Rail	7M27A05699	None <sup>^</sup>	1*
ThinkSystem 1U CMA Upgrade Kit for Screw-in Slide Rail	4M17A07276	AXFP	1**
<b>Front VGA port</b>			
ThinkSystem SR530/SR630 Front VGA Connector (for 3.5" models)	None***	AUWU	1
ThinkSystem SR530/SR570/SR630 Front VGA Connector Upgrade Kit (for 2.5" models)	7Z17A02579	AUWW	1

<sup>^</sup> Field upgrade only.

\* The CMA Upgrade Kit for Tool-less Slide Rail is supported with the Tool-less Slide Rail (7M27A05702) only.

\*\* The CMA Upgrade Kit for Screw-in Slide Rail is supported with the Screw-in Slide Rail (4M17A07274) only.

\*\*\* Factory-installed only; no field upgrade.

The following table summarizes the rail kit features and specifications.

Table 39. Rail kit features and specifications summary

Feature	Tool-less Slide Rail		Screw-in Slide Rail		Tool-less Friction Rail
	Without CMA	With CMA	Without CMA	With CMA	
Part number	7M27A05702	7M27A05701	4M17A07274	4M17A07281	4M17A07273
CMA	7M27A05699	Included	4M17A07276	Included	No support
Rail length	730 mm (28.74 in.)	807 mm (31.8 in.)	836.8 mm (32.9 in.)	836.8 mm (32.9 in.)	728.1 mm (28.7 in.)
Rail type	Full-out slide (ball bearing)		Full-out slide (ball bearing)		Half-out slide (friction)
Tool-less installation	Yes		No		Yes
In-rack server maintenance	Yes		Yes		No
1U PDU support	Yes		Yes		Yes
0U PDU support	Limited*		Limited*		Limited**
Rack type	IBM and Lenovo 4-post, IEC standard-compliant		IBM and Lenovo 4-post, IEC standard-compliant		IBM and Lenovo 4-post, IEC standard-compliant
Mounting holes	Square or round		Square, round, or threaded		Square or round
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 <sup>^</sup>	609.6 mm (24 in.) – 863.6 mm (34 in.)		609.6 mm (24 in.) – 812.8 mm (32 in.)		609.6 mm (24 in.) – 863.6 mm (34 in.)

\* If a 0U PDU is used, the rack cabinet must be at least 1100 mm (43.31 in.) deep if no CMA is used, or at least 1200 mm (47.24 in.) deep if a CMA is used.

\*\* If a 0U PDU used, the rack must be at least 1000 mm (39.37 in.) deep.

<sup>^</sup> Measured when mounted on the rack, from the front surface of the front mounting flange to the rear most point of the rail.



## Operating systems

The SR630 server supports the following operating systems:

- Microsoft:
  - Microsoft Windows Server, version 1803
  - Microsoft Windows Server, version 1709
  - Microsoft Windows Server 2019
  - Microsoft Windows Server 2016
  - Microsoft Windows Server 2012 R2
- Red Hat:
  - Red Hat Enterprise Linux 8.2
  - Red Hat Enterprise Linux 8.1
  - Red Hat Enterprise Linux 8.0
  - Red Hat Enterprise Linux 7.8
  - Red Hat Enterprise Linux 7.7
  - Red Hat Enterprise Linux 7.6
  - Red Hat Enterprise Linux 7.5
  - Red Hat Enterprise Linux 7.4
  - Red Hat Enterprise Linux 7.3
  - Red Hat Enterprise Linux 6.10 Server x64 Edition
  - Red Hat Enterprise Linux 6.9 Server x64 Edition
- SUSE:
  - SUSE Linux Enterprise Server 15 SP1
  - SUSE Linux Enterprise Server 15
  - SUSE Linux Enterprise Server 12 SP5
  - SUSE Linux Enterprise Server 12 SP4
  - SUSE Linux Enterprise Server 12 SP3
  - SUSE Linux Enterprise Server 12 SP2
  - SUSE Linux Enterprise Server 11 for AMD64/EM64T SP4
- VMware:
  - VMware vSphere 7.0 (ESXi)
  - VMware vSphere 6.7 (ESXi) Update 3
  - VMware vSphere 6.7 (ESXi) Update 2
  - VMware vSphere 6.7 (ESXi) Update 1
  - VMware vSphere 6.7 (ESXi)
  - VMware vSphere 6.5 (ESXi) Update 3
  - VMware vSphere 6.5 (ESXi) Update 2
  - VMware vSphere 6.5 (ESXi) Update 1
  - VMware vSphere 6.5 (ESXi)
  - VMware vSphere 6.0 (ESXi) Update 3

For the latest information about the specific versions and service levels that are supported and any other prerequisites, see the Operating System Interoperability Guide: <http://lenovopress.com/redposig>.

## Physical specifications

The SR630 server has the following dimensions and weight (approximate):

- Height: 43 mm (1.7 in)
- Width: 434 mm (17.1 in)
- Depth: 715 mm (28.1 in)
- Weight:
  - Minimum configuration: 11.9 kg (26.2 lb)
  - Maximum configuration: 18.8 kg (41.4 lb)

## Operating environment

The SR630 server complies with ASHRAE class A2 specifications. The server performance might be impacted when the operating temperature is outside the ASHRAE A2 specifications. Depending on the hardware configuration, some server models comply with ASHRAE class A3 and class A4 specifications. To comply with ASHRAE class A3 and class A4 specifications, the server models must meet the following hardware configuration requirements at the same time:

- Two power supplies installed
- NVMe drives not installed
- NVMe PCIe flash adapters not installed
- Graphic processing units (GPUs) not installed
- Processors with TDP more than or equal to 150 W not installed
- Intel Xeon 5122, 6126, 6128, 6132, 6134, 6134M, and 8156 processors not installed
- For 8x 2.5" and 10x 2.5" chassis only: A maximum of one supercapacitor module installed

The SR630 server is supported in the following environment:

- Air temperature:
  - Operating:
    - ASHRAE Class A4: 5 °C - 45 °C (41 °F - 113 °F); for altitudes above 900 m (2,953 ft), decrease the maximum ambient temperature by 1 °C for every 125-m (410-ft) increase in altitude
    - 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: 3,050 m (10,000 ft)
- Humidity:
  - Operating:
    - ASHRAE Class A4: 8% - 90% (non-condensing); maximum dew point: 24 °C (75 °F)
    - 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
  - 180 - 300 V DC (HVDC; supported in PRC only)
- Acoustics:
  - Minimum configuration:
    - Operating: 5.3 bels
    - Idle: 4.9 bels
  - Maximum configuration:
    - Operating: 6.0 bels
    - Idle: 5.8 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:
    - 12 kg - 22 kg: 50 G for 152 in./sec velocity change across 6 surfaces
    - 23 kg - 31 kg: 35 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 40. Rated system power, inlet current, and system heat output

Power supply	Source voltage	Maximum power load per system (two power supplies)	Rated current per inlet	System heat output
550 W Platinum	100 - 127 V AC	722 W	6.2 A	2463 BTU/hour
	200 - 240 V AC	704 W	3 A	2402 BTU/hour
	180 - 300 V DC	702 W	2.5 A	2395 BTU/hour
750 W Platinum	100 - 127 V AC	984 W	8.4 A	3357 BTU/hour
	200 - 240 V AC	958 W	4.1 A	3269 BTU/hour
	180 - 300 V DC	958 W	3.5 A	3269 BTU/hour
750 W Titanium	200 - 240 V AC	949 W	4.1 A	3238 BTU/hour
	180 - 300 V DC	948 W	3.5 A	3235 BTU/hour
1100 W Platinum	100 - 127 V AC	1382 W	12 A	4715 BTU/hour
	200 - 240 V AC	1408 W	6 A	4804 BTU/hour
	180 - 300 V DC	1408 W	5.1 A	4804 BTU/hour

## Warranty and support

The SR630 server has a one-year (7X01) or three-year (Machine Type 7X02) 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 Data Center Group \(DCG\) 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 SR630 server conforms to the following regulations:

- United States FCC Part 15, Class A
- Canada ICES-003/NMB-03, Class A
- UL/CSA 60950-1
- Mexico NOM-019
- Argentina IEC60950-1
- Japan VCCI, Class A
- Australia/New Zealand AS/NZS CISPR 22, Class A
- China CCC GB4943.1, GB9254 Class A, GB17625.1
- Taiwan BSMI CNS13438, Class A; CNS14336-1
- Korea KN22, Class A; KN24
- Russia/GOST ME01; IEC-60950-1; GOST R 51318.22, 51318.24, 51317.3.2, and 51317.3.3
- IEC 60950-1 (CB Certificate and CB Test Report)
- Europe CE Mark (EN55022 Class A, EN60950-1, EN55024, EN61000-3-2, EN61000-3-3)
- CISPR 22, Class A
- Germany TUV-GS (EN60950-1/IEC60950-1, EK1-ITB2000)
- Reduction of Hazardous Substances (ROHS)
- Energy Star 3.0 (excluding configurations with Bronze 3104, Silver 4112, Gold 5122, or Platinum 8156 processors)

**Note:** For more information on the Energy Star 3.0 certification, refer to the Energy Star 3.0 Certifications for ThinkSystem Servers publication:

<http://lenovopress.com/lp1230>

## External drive enclosures

The following table lists the 12 Gbps SAS external drive enclosures that are offered by Lenovo that can be used with the SR630 for storage expansion.

**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 41. External drive enclosures

Description	Part number		
	Worldwide	Japan	PRC
Lenovo Storage D1212 LFF Disk Expansion with Dual SAS IO Modules	4587A11	4587A1J	4587A1C
Lenovo Storage D1224 SFF Disk Expansion with Dual SAS IO Modules	4587A31	4587A3J	4587A3C
Lenovo Storage D3284 4TB x 84 HD Expansion Enclosure	641311F		
Lenovo Storage D3284 6TB x 84 HD Expansion Enclosure	641312F		
Lenovo Storage D3284 8TB x 84 HD Expansion Enclosure	641313F		
Lenovo Storage D3284 10TB x 84 HD Expansion Enclosure	641314F		

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

- Lenovo Storage D1212 and D1224  
<http://lenovopress.com/lp0512>
- Lenovo Storage D3284  
<http://lenovopress.com/lp0513>

## External storage systems

The following table lists the external storage systems that are currently offered by Lenovo that can be used with the ThinkSystem SR630 server for external NAS, SAS, iSCSI, or FC storage connectivity.

**Note:** Information provided in this section is for ordering reference purposes only. End-to-end storage configuration support *must* be verified through the interoperability matrix for a particular storage system that can be found on the Lenovo Data Center Support web site:

<http://datacentersupport.lenovo.com>

Table 42. External storage systems: DE Series

Description	Part number	
	Worldwide	Japan
Lenovo ThinkSystem DE Series Storage (SAS connectivity)		
Lenovo ThinkSystem DE2000H SAS Hybrid Flash Array LFF (16 GB cache)	7Y70A000WW	7Y701003JP
Lenovo ThinkSystem DE2000H SAS Hybrid Flash Array SFF (16 GB cache)	7Y71A000WW	7Y711003JP
Lenovo ThinkSystem DE4000H SAS Hybrid Flash Array 4U60 (16 GB cache)	7Y77A002WW	7Y771000JP
Lenovo ThinkSystem DE4000H SAS Hybrid Flash Array LFF (16 GB cache)	7Y74A000WW	7Y74A000JP
Lenovo ThinkSystem DE4000H SAS Hybrid Flash Array SFF (16 GB cache)	7Y75A000WW	7Y75A000JP
Lenovo ThinkSystem DE4000F SAS All Flash Array SFF (16 GB cache)	7Y76A000WW	7Y76A000JP
Lenovo ThinkSystem DE4000F SAS All Flash Array SFF (64 GB cache)	7Y76A005WW	7Y76A008JP
Lenovo ThinkSystem DE6000H SAS Hybrid Flash Array 4U60 (32 GB cache)	7Y80A000WW	7Y801002JP
Lenovo ThinkSystem DE6000H SAS Hybrid Flash Array SFF (32 GB cache)	7Y78A000WW	7Y781002JP
Lenovo ThinkSystem DE6000F SAS All Flash Array SFF (128 GB cache)	7Y79A000WW	7Y79A000JP
Lenovo ThinkSystem DE Series Storage (iSCSI connectivity)		
Lenovo ThinkSystem DE2000H 10GBASE-T Hybrid Flash Array LFF (16 GB cache)	7Y70A003WW	7Y701001JP
Lenovo ThinkSystem DE2000H 10GBASE-T Hybrid Flash Array SFF (16 GB cache)	7Y71A002WW	7Y711005JP
Lenovo ThinkSystem DE2000H iSCSI Hybrid Flash Array LFF (16 GB cache)	7Y70A004WW	7Y701000JP
Lenovo ThinkSystem DE2000H iSCSI Hybrid Flash Array SFF (16 GB cache)	7Y71A003WW	7Y711006JP
Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array 4U60 (16 GB cache)	7Y77A000WW	7Y771002JP
Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array LFF (16 GB cache)	7Y74A002WW	7Y74A002JP
Lenovo ThinkSystem DE4000H iSCSI Hybrid Flash Array SFF (16 GB cache)	7Y75A001WW	7Y75A001JP
Lenovo ThinkSystem DE4000F iSCSI All Flash Array SFF (16 GB cache)	7Y76A002WW	7Y76A002JP
Lenovo ThinkSystem DE4000F iSCSI All Flash Array SFF (64 GB cache)	7Y76A007WW	7Y76A00AJP
Lenovo ThinkSystem DE6000H iSCSI Hybrid Flash Array 4U60 (32 GB cache)	7Y80A002WW	7Y801000JP
Lenovo ThinkSystem DE6000H iSCSI Hybrid Flash Array SFF (32 GB cache)	7Y78A002WW	7Y781000JP
Lenovo ThinkSystem DE6000F iSCSI All Flash Array SFF (128 GB cache)	7Y79A002WW	7Y79A002JP
Lenovo ThinkSystem DE Series Storage (FC connectivity)		
Lenovo ThinkSystem DE2000H FC Hybrid Flash Array LFF (16 GB cache)	7Y70A002WW	7Y701002JP
Lenovo ThinkSystem DE2000H FC Hybrid Flash Array SFF (16 GB cache)	7Y71A001WW	7Y711004JP
Lenovo ThinkSystem DE4000H FC Hybrid Flash Array 4U60 (16 GB cache)	7Y77A001WW	7Y771001JP
Lenovo ThinkSystem DE4000H FC Hybrid Flash Array LFF (16 GB cache)	7Y74A001WW	7Y74A001JP
Lenovo ThinkSystem DE4000H FC Hybrid Flash Array SFF (16 GB cache)	7Y75A002WW	7Y75A002JP
Lenovo ThinkSystem DE4000F FC All Flash Array SFF (16 GB cache)	7Y76A001WW	7Y76A001JP
Lenovo ThinkSystem DE4000F FC All Flash Array SFF (64 GB cache)	7Y76A006WW	7Y76A009JP
Lenovo ThinkSystem DE6000H FC Hybrid Flash Array 4U60 (32 GB cache)	7Y80A001WW	7Y801001JP
Lenovo ThinkSystem DE6000H FC Hybrid Flash Array SFF (32 GB cache)	7Y78A001WW	7Y781001JP

Description	Part number	
	Worldwide	Japan
Lenovo ThinkSystem DE6000F FC All Flash Array SFF (128 GB cache)	7Y79A001WW	7Y79A001JP

Table 43. External storage systems: DM Series

Description	Part number
Lenovo ThinkSystem DM Series Storage (NAS or iSCSI connectivity)	
ThinkSystem DM3000H, 48TB (12x 4TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y421003EA*
ThinkSystem DM3000H, 48TB (12x 4TB HDDs), 10GBASE-T, ONTAP 9.5	7Y421007EA*
ThinkSystem DM3000H, 96TB (12x 8TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y421005EA*
ThinkSystem DM3000H, 96TB (12x 8TB HDDs), 10GBASE-T, ONTAP 9.5	7Y421001EA*
ThinkSystem DM5000H, 11.5TB (12x 960GB SSDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y571004EA*
ThinkSystem DM5000H, 11.5TB (12x 960GB SSDs), 10GBASE-T, ONTAP 9.5	7Y57100LEA*
ThinkSystem DM5000H, 14.4TB (12x 1.2TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y57100CEA*
ThinkSystem DM5000H, 21.6TB (12x 1.8TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y57100GEA*
ThinkSystem DM5000H, 23TB (24x 960GB SSDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y571006EA*
ThinkSystem DM5000H, 23TB (24x 960GB SSDs), 10GBASE-T, ONTAP 9.5	7Y57100NEA*
ThinkSystem DM5000H, 28.8TB (24x 1.2TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y57100EEA*
ThinkSystem DM5000H, 28.8TB (24x 1.2TB HDDs), 10GBASE-T, ONTAP 9.5	7Y57100VEA*
ThinkSystem DM5000H, 43.2TB (24x 1.8TB HDDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y57100JEA*
ThinkSystem DM5000H, 43.2TB (24x 1.8TB HDDs), 10GBASE-T, ONTAP 9.5	7Y571002EA*
ThinkSystem DM5000H, 46TB (12x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y571008EA*
ThinkSystem DM5000H, 46TB (12x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5	7Y57100QEA*
ThinkSystem DM5000H, 92TB (24x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5 Fundamentals	7Y57100AEA*
ThinkSystem DM5000H, 92TB (24x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5	7Y57100REA*
ThinkSystem DM5000F, 11.5TB (12x 960GB SSDs), 10GBASE-T, ONTAP 9.5	7Y411002EA*
ThinkSystem DM5000F, 23TB (24x 960GB SSDs), 10GBASE-T, ONTAP 9.5	7Y411004EA*
ThinkSystem DM5000F, 46TB (12x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5	7Y411006EA*
ThinkSystem DM5000F, 92TB (24x 3.84TB SSDs), 10GBASE-T, ONTAP 9.5	7Y411007EA*
Lenovo ThinkSystem DM Series Storage (NAS, iSCSI, or FC connectivity)	
ThinkSystem DM3000H Hybrid Storage Array (2U12 LFF, CTO only)	7Y42CTO1WW
ThinkSystem DM3000H, 48TB (12x 4TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y421009NA*
ThinkSystem DM3000H, 48TB (12x 4TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y421002EA*
ThinkSystem DM3000H, 48TB (12x 4TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y421006EA*
ThinkSystem DM3000H, 96TB (12x 8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y421004EA*
ThinkSystem DM3000H, 96TB (12x 8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y421008EA*
ThinkSystem DM5000H Hybrid Storage Array (2U24 SFF, CTO only)	7Y57CTO1WW
ThinkSystem DM5000H, 11.5TB (12x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571011NA*
ThinkSystem DM5000H, 11.5TB (12x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571003EA*
ThinkSystem DM5000H, 11.5TB (12x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y57100KEA*
ThinkSystem DM5000H, 14.4TB (12x 1.2TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y57100BEA*
ThinkSystem DM5000H, 21.6TB (12x 1.8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y57100FEA*
ThinkSystem DM5000H, 23TB (24x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571005EA*
ThinkSystem DM5000H, 23TB (24x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y57100MEA*



Description	Part number
ThinkSystem DM5000H, 28.8TB (24x 1.2TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y57100DEA*
ThinkSystem DM5000H, 43.2TB (24x 1.8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571010NA*
ThinkSystem DM5000H, 43.2TB (24x 1.8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y57100HEA*
ThinkSystem DM5000H, 43.2TB (24x 1.8TB HDDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y57100ZEA*
ThinkSystem DM5000H, 46TB (12x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571007EA*
ThinkSystem DM5000H, 46TB (12x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y57100PEA*
ThinkSystem DM5000H, 92TB (24x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5 Fundamentals	7Y571009EA*
ThinkSystem DM5000H, 92TB (24x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y57100SEA*
ThinkSystem DM5000F Flash Storage Array (2U24 SFF, CTO only)	7Y41CTO1WW
ThinkSystem DM5000F, 11.5TB (12x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y411001EA*
ThinkSystem DM5000F, 23TB (24x 960GB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y411003EA*
ThinkSystem DM5000F, 46TB (12x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y411005EA*
ThinkSystem DM5000F, 92TB (24x 3.84TB SSDs), 16Gb FC / 10GbE SFP+, ONTAP 9.5	7Y411000EA*
ThinkSystem DM7000H Hybrid Storage Array (3U, CTO only)	7Y56CTO1WW
ThinkSystem DM7000F Flash Storage Array (3U, CTO only)	7Y40CTO1WW
ThinkSystem DM7100H Hybrid Storage Array (4U, CTO only)	7D26CTO1WW
ThinkSystem DM7100F Flash Storage Array (4U, CTO only)	7D25CTO1WW

\* Preconfigured models that are available only in North America (part numbers that have NA at the end) or EMEA (part numbers that have EA at the end) and require Preconfigured support to be purchased with the storage system (See the respective product guide for details).

For more information, see the list of Product Guides in the Lenovo Storage category:  
<http://lenovopress.com/storage/san/lenovo#rt=product-guide>

## External backup units

The following table lists the external backup options that are offered by Lenovo that can be used with the ThinkSystem SR630 for backup solutions.

**Note:** Information provided in this section is for ordering reference purposes only. End-to-end LTO Ultrium configuration support for a particular tape backup unit *must* be verified through the System Storage Interoperation Center (SSIC):

<http://www.ibm.com/systems/support/storage/ssic>

Table 44. External backup options

Description	Part number
External RDX USB drives	
ThinkSystem RDX External USB 3.0 Dock	4T27A10725
External SAS tape backup drives	
IBM TS2260 Tape Drive Model H6S	6160S6E
IBM TS2270 Tape Drive Model H7S	6160S7E
IBM TS2280 Tape Drive Model H8S	6160S8E
External SAS tape backup autoloaders	
IBM TS2900 Tape Autoloader w/LTO6 HH SAS	6171S6R
IBM TS2900 Tape Autoloader w/LTO7 HH SAS	6171S7R
IBM TS2900 Tape Autoloader w/LTO8 HH SAS	6171S8R
External tape backup libraries	
IBM TS4300 3U Tape Library-Base Unit	6741A1F

Description	Part number
SAS backup drives for TS4300 Tape Library	
LTO 6 HH SAS Drive	01KP934
LTO 7 HH SAS Drive	01KP937
LTO 8 HH SAS Drive	01KP953
Fibre Channel backup drives for TS4300 Tape Library	
LTO 6 FH Fibre Channel Drive	01KP935
LTO 6 HH Fibre Channel Drive	01KP933
LTO 7 FH Fibre Channel Drive	01KP938
LTO 7 HH Fibre Channel Drive	01KP936
LTO 8 FH Fibre Channel Drive	01KP954
LTO 8 HH Fibre Channel Drive	01KP952

For more information, see the list of Product Guides in the Backup units category:  
<http://lenovopress.com/servers/options/backup#rt=product-guide>

## Ethernet LAN switches

The following table lists the Ethernet LAN switches that are offered by Lenovo that can be used with the ThinkSystem SR630 for network connectivity.

Table 45. Ethernet LAN switches

Description	Part number
1 Gb Ethernet switches	
Lenovo ThinkSystem NE0152T RackSwitch (Rear to Front)	7Y810011WW
Lenovo ThinkSystem NE0152TO RackSwitch (Rear to Front, ONIE)	7Z320011WW
Lenovo RackSwitch G7028 (Rear to Front)	7159BAX
Lenovo RackSwitch G7052 (Rear to Front)	7159CAX
Lenovo CE0128TB Switch (3-Year Warranty)	7Z340011WW
Lenovo CE0128TB Switch (Limited Lifetime Warranty)	7Z360011WW
Lenovo CE0128PB Switch (3-Year Warranty)	7Z340012WW
Lenovo CE0128PB Switch (Limited Lifetime Warranty)	7Z360012WW
Lenovo CE0152TB Switch (3-Year Warranty)	7Z350021WW
Lenovo CE0152TB Switch (Limited Lifetime Warranty)	7Z370021WW
Lenovo CE0152PB Switch (3-Year Warranty)	7Z350022WW
Lenovo CE0152PB Switch (Limited Lifetime Warranty)	7Z370022WW
10 Gb Ethernet switches	
Lenovo ThinkSystem NE1032 RackSwitch (Rear to Front)	7159A1X
Lenovo ThinkSystem NE1032T RackSwitch (Rear to Front)	7159B1X
Lenovo ThinkSystem NE1064TO RackSwitch (Rear to Front, ONIE)	7Z330011WW
Lenovo ThinkSystem NE1072T RackSwitch (Rear to Front)	7159C1X
Lenovo RackSwitch G8272 (Rear to Front)	7159CRW
25 Gb Ethernet switches	
Lenovo ThinkSystem NE2572 RackSwitch (Rear to Front)	7159E1X
Lenovo ThinkSystem NE2572O RackSwitch (Rear to Front, ONIE)	7Z210021WW
Lenovo ThinkSystem NE2580O RackSwitch (Rear to Front, ONIE)	7Z330021WW

Description	Part number
100 Gb Ethernet switches	
Lenovo ThinkSystem NE10032 RackSwitch (Rear to Front)	7159D1X
Lenovo ThinkSystem NE10032O RackSwitch (Rear to Front, ONIE)	7Z210O11WW

For more information, see the list of Product Guides in the Top-of-rack Switches category:  
<http://lenovopress.com/servers/options/switches#rt=product-guide>

## Fibre Channel SAN switches

The following table lists currently available Fibre Channel SAN switches that are offered by Lenovo that can be used with the ThinkSystem SR630 for external FC SAN storage connectivity.

Table 46. Fibre Channel SAN switches

Description	Part number
8 Gb FC	
Lenovo B300, E_Port License, 8 ports licensed, 8x 8Gb SWL SFPs, 1 PS, Rail Kit, 1Yr FW	3873AR6
16 Gb FC	
Lenovo ThinkSystem DB610S, 8 ports licensed, 8x 16Gb SWL SFPs, 1 PS, Rail Kit, 1Yr FW	6559F2A
Lenovo ThinkSystem DB610S, ENT., 24 ports licensed, 24x 16Gb SWL SFPs, 1 PS, Rail Kit, 1Yr FW	6559F1A
Lenovo ThinkSystem DB620S, 24 ports licensed, 24x 16Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	6415J1A
Lenovo B6505, 12 ports licensed, 12x 16Gb SWL SFPs, 1 PS, Rail Kit, 1Yr FW	3873ER1
Lenovo B6510, 24 ports licensed, 24x 16Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	3873IR1
32 Gb FC	
Lenovo ThinkSystem DB610S, 8 ports licensed, No SFPs, 1 PS, Rail Kit, 1Yr FW	6559F3A
Lenovo ThinkSystem DB620S, 24 ports licensed, No SFPs, 2 PS, Rail Kit, 1Yr FW	6415G3A
Lenovo ThinkSystem DB620S, 24 ports licensed, 24x 32Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	6415H11
Lenovo ThinkSystem DB620S, ENT., 48 ports licensed, 48x 32Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	6415H2A
Lenovo ThinkSystem DB630S, 48 ports licensed, No SFPs, 2 PS, Rail Kit, 1Yr FW	7D1SA001WW
Lenovo ThinkSystem DB630S, 48 ports licensed, 48x 32Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	7D1SA002WW
Lenovo ThinkSystem DB630S, ENT., 96 ports licensed, 96x 32Gb SWL SFPs, 2 PS, Rail Kit, 1Yr FW	7D1SA003WW
Lenovo ThinkSystem DB400D 32Gb FC Director, ENT., 4 Blade slots, 8U, 1Yr FW	6684D2A
Lenovo ThinkSystem DB800D 32Gb FC Director, ENT., 8 Blade slots, 14U, 1Yr FW	6682D1A

For more information, see the list of Product Guides in the Rack SAN Switches category:  
<http://lenovopress.com/storage/switches/rack#rt=product-guide>

## Rack cabinets

The following table lists the rack cabinets that are currently offered by Lenovo that can be used for mounting the ThinkSystem SR630 and other IT infrastructure building blocks.

Table 47. Rack cabinets

Description	Part number
12U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 1YR Warranty	7D2B0001WW
12U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 3YR Warranty	7D2N0001WW
18U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 1YR Warranty	7D2C0001WW
18U 1200mm Deep Micro Datacenter Rack (no sidewall compartments), 3YR Warranty	7D2P0001WW
25U S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072RX
25U Static S2 Standard Rack (1000 mm deep; 2 sidewall compartments)	93072PX
42U S2 Standard Rack (1000 mm deep; 6 sidewall compartments)	93074RX
42U 1100mm Enterprise V2 Dynamic Rack (6 sidewall compartments)	93634PX
42U 1100mm Enterprise V2 Dynamic Expansion Rack (6 sidewall compartments)	93634EX
42U 1200mm Deep Dynamic Rack (6 sidewall compartments)	93604PX
42U 1200mm Deep Static Rack (6 sidewall compartments)	93614PX
42U Enterprise Rack (1105 mm deep; 4 sidewall compartments)	93084PX
42U Enterprise Expansion Rack (1105 mm deep; 4 sidewall compartments)	93084EX

For more information, see the list of Product Guides in the Rack cabinets category:  
<http://lenovopress.com/servers/options/racks#rt=product-guide>

## KVM switches and consoles

The following table lists the KVM switches and consoles that are offered by Lenovo that can be used for providing console access to the ThinkSystem SR630.

Table 48. KVM switch and console options

Description	Part number
<b>Consoles</b>	
1U 18.5" Standard Console (without keyboard)	17238BX
<b>Console keyboards</b>	
ThinkSystem Keyboard w/ Int. Pointing Device USB - Arabic 253 RoHS v2	7ZB7A05469
ThinkSystem Keyboard w/ Int. Pointing Device USB - Belg/UK 120 RoHS v2	7ZB7A05468
ThinkSystem Keyboard w/ Int. Pointing Device USB - Czech 489 RoHS v2	7ZB7A05206
ThinkSystem Keyboard w/ Int. Pointing Device USB - Danish 159 RoHS v2	7ZB7A05207
ThinkSystem Keyboard w/ Int. Pointing Device USB - Dutch 143 RoHS v2	7ZB7A05208
ThinkSystem Keyboard w/ Int. Pointing Device USB - Fr/Canada 445 RoHS v2	7ZB7A05210
ThinkSystem Keyboard w/ Int. Pointing Device USB - French 189 RoHS v2	7ZB7A05209
ThinkSystem Keyboard w/ Int. Pointing Device USB - German 129 RoHS v2	7ZB7A05211
ThinkSystem Keyboard w/ Int. Pointing Device USB - Greek 219 RoHS v2	7ZB7A05212
ThinkSystem Keyboard w/ Int. Pointing Device USB - Hebrew 212 RoHS v2	7ZB7A05213
ThinkSystem Keyboard w/ Int. Pointing Device USB - Hungarian 208 RoHS v2	7ZB7A05214
ThinkSystem Keyboard w/ Int. Pointing Device USB - Italian 141 RoHS v2	7ZB7A05215

<b>Description</b>	<b>Part number</b>
ThinkSystem Keyboard w/ Int. Pointing Device USB - Japanese 194 RoHS v2	7ZB7A05216
ThinkSystem Keyboard w/ Int. Pointing Device USB - Korean 413 RoHS v2	7ZB7A05217
ThinkSystem Keyboard w/ Int. Pointing Device USB - LA Span 171 RoHS v2	7ZB7A05218
ThinkSystem Keyboard w/ Int. Pointing Device USB - Norwegian 155 RoHS v2	7ZB7A05219
ThinkSystem Keyboard w/ Int. Pointing Device USB - Polish 214 RoHS v2	7ZB7A05220
ThinkSystem Keyboard w/ Int. Pointing Device USB - Portugese 163 RoHS v2	7ZB7A05221
ThinkSystem Keyboard w/ Int. Pointing Device USB - Russian 441 RoHS v2	7ZB7A05222
ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovak 245 RoHS v2	7ZB7A05223
ThinkSystem Keyboard w/ Int. Pointing Device USB - Slovenian 234 RoHS v2	7ZB7A05231
ThinkSystem Keyboard w/ Int. Pointing Device USB - Spanish 172 RoHS v2	7ZB7A05224
ThinkSystem Keyboard w/ Int. Pointing Device USB - Swed/Finn 153 RoHS v2	7ZB7A05225
ThinkSystem Keyboard w/ Int. Pointing Device USB - Swiss F/G 150 RoHS v2	7ZB7A05226
ThinkSystem Keyboard w/ Int. Pointing Device USB - Thai 191 RoHS v2	7ZB7A05227
ThinkSystem Keyboard w/ Int. Pointing Device USB - Trad Chinese/US 467 RoHS v2	7ZB7A05467
ThinkSystem Keyboard w/ Int. Pointing Device USB - Turkish 179 RoHS v2	7ZB7A05228
ThinkSystem Keyboard w/ Int. Pointing Device USB - UK Eng 166 RoHS v2	7ZB7A05229
ThinkSystem Keyboard w/ Int. Pointing Device USB - US Eng 103P RoHS v2	7ZB7A05470
ThinkSystem Keyboard w/ Int. Pointing Device USB - US Euro 103P RoHS v2	7ZB7A05230
<b>Console switches and cables - ThinkSystem Digital KVM</b>	
ThinkSystem Digital 2x1x16 KVM Switch (DVI video output port)	1754D1T
ThinkSystem VGA to DVI Conversion Cable	4X97A11108
ThinkSystem Single-USB Conversion Cable for Digital KVM	4X97A11109
ThinkSystem Dual-USB Conversion Cable for Digital KVM	4X97A11107
<b>Console switches and cables - ThinkSystem Analog KVM</b>	
ThinkSystem Analog 1x8 KVM Switch (DVI video output port)	1754A1T
ThinkSystem VGA to DVI Conversion Cable	4X97A11108
ThinkSystem USB Conversion Cable for Analog KVM	4X97A11106
<b>Console switches and cables - Global Console Managers</b>	
Global 2x2x16 Console Manager (GCM16) (VGA video output port)	1754D1X
Global 4x2x32 Console Manager (GCM32) (VGA video output port)	1754D2X
Virtual Media Conversion Option Gen2 (VCO2)	46M5383
Serial Conversion Option (SCO)	46M5382
<b>Console switches and cables - Local Console Managers</b>	
Local 1x8 Console Manager (LCM8) (VGA video output port)	1754A1X
Local 2x16 Console Manager (LCM16) (VGA video output port)	1754A2X
Virtual Media Conversion Option Gen2 (VCO2)	46M5383

For more information, see the list of Product Guides in the KVM Switches and Consoles category:  
<http://lenovopress.com/servers/options/kvm#rt=product-guide>

## Power distribution units

The following table lists the power distribution units (PDUs) that are currently offered by Lenovo that can be used for distributing electrical power to the ThinkSystem SR630 and other IT infrastructure building blocks mounted in a rack cabinet.

Table 49. Power distribution units

Description	Part number
<b>0U Basic PDUs</b>	
0U 36 C13/6 C19 24A/200-240V 1 Phase PDU with NEMA L6-30P line cord	00YJ776
0U 36 C13/6 C19 32A/200-240V 1 Phase PDU with IEC60309 332P6 line cord	00YJ777
0U 21 C13/12 C19 32A/200-240V/346-415V 3 Phase PDU with IEC60309 532P6 line cord	00YJ778
0U 21 C13/12 C19 48A/200-240V 3 Phase PDU with IEC60309 460P9 line cord	00YJ779
<b>Switched and Monitored PDUs</b>	
0U 20 C13/4 C19 Switched and Monitored 24A/200-240V/1Ph PDU w/ NEMA L6-30P line cord	00YJ781
0U 20 C13/4 C19 Switched and Monitored 32A/200-240V/1Ph PDU w/ IEC60309 332P6 line cord	00YJ780
0U 18 C13/6 C19 Switched / Monitored 32A/200-240V/346-415V/3Ph PDU w/ IEC60309 532P6 cord	00YJ782
0U 12 C13/12 C19 Switched and Monitored 48A/200-240V/3Ph PDU w/ IEC60309 460P9 line cord	00YJ783
1U 9 C19/3 C13 Switched and Monitored DPI PDU (without line cord)	46M4002
1U 9 C19/3 C13 Switched and Monitored 60A 3Ph PDU with IEC 309 3P+Gnd cord	46M4003
1U 12 C13 Switched and Monitored DPI PDU (without line cord)	46M4004
1U 12 C13 Switched and Monitored 60A 3 Phase PDU with IEC 309 3P+Gnd line cord	46M4005
<b>Ultra Density Enterprise PDUs (9x IEC 320 C13 + 3x IEC 320 C19 outlets)</b>	
Ultra Density Enterprise C19/C13 PDU Module (without line cord)	71762NX
Ultra Density Enterprise C19/C13 PDU 60A/208V/3ph with IEC 309 3P+Gnd line cord	71763NU
<b>C13 Enterprise PDUs (12x IEC 320 C13 outlets)</b>	
DPI C13 Enterprise PDU+ (without line cord)	39M2816
DPI Single Phase C13 Enterprise PDU (without line cord)	39Y8941
<b>C19 Enterprise PDUs (6x IEC 320 C19 outlets)</b>	
DPI Single Phase C19 Enterprise PDU (without line cord)	39Y8948
DPI 60A 3 Phase C19 Enterprise PDU with IEC 309 3P+G (208 V) fixed line cord	39Y8923
<b>Front-end PDUs (3x IEC 320 C19 outlets)</b>	
DPI 30amp/125V Front-end PDU with NEMA L5-30P line cord	39Y8938
DPI 30amp/250V Front-end PDU with NEMA L6-30P line cord	39Y8939
DPI 32amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8934
DPI 60amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8940
DPI 63amp/250V Front-end PDU with IEC 309 2P+Gnd line cord	39Y8935
<b>Universal PDUs (7x IEC 320 C13 outlets)</b>	
DPI Universal 7 C13 PDU (with 2 m IEC 320-C19 to C20 rack power cord)	00YE443
<b>NEMA PDUs (6x NEMA 5-15R outlets)</b>	
DPI 100-127V PDU with fixed NEMA L5-15P line cord	39Y8905
<b>Line cords for PDUs that ship without a line cord</b>	
DPI 30a Line Cord (NEMA L6-30P)	40K9614
DPI 32a Line Cord (IEC 309 P+N+G)	40K9612
DPI 32a Line Cord (IEC 309 3P+N+G)	40K9611

Description	Part number
DPI 60a Cord (IEC 309 2P+G)	40K9615
DPI 63a Cord (IEC 309 P+N+G)	40K9613
DPI Australian/NZ 3112 Line Cord (32A)	40K9617
DPI Korean 8305 Line Cord (30A)	40K9618

For more information, see the list of Product Guides in the Power infrastructure category:  
<http://lenovopress.com/servers/options/pdu#rt=product-guide>

## Uninterruptible power supply units

The following table lists the uninterruptible power supply (UPS) units that are currently offered by Lenovo that can be used for providing electrical power protection to the ThinkSystem SR630 and other IT infrastructure building blocks.

Table 50. Uninterruptible power supply units

Description	Part number
<b>Worldwide models</b>	
RT1.5kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA5-15R 12A outlets)	55941AX
RT1.5kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A outlets)	55941KX
RT2.2kVA 2U Rack or Tower UPS (100-125VAC) (8x NEMA 5-20R 16A outlets)	55942AX
RT2.2kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets)	55942KX
RT3kVA 2U Rack or Tower UPS (100-125VAC) (6x NEMA 5-20R 16A, 1x NEMA L5-30R 24A outlets)	55943AX
RT3kVA 2U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 1x IEC 320 C19 16A outlets)	55943KX
RT5kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets)	55945KX
RT6kVA 3U Rack or Tower UPS (200-240VAC) (8x IEC 320 C13 10A, 2x IEC 320 C19 16A outlets)	55946KX
RT8kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets)	55948KX
RT11kVA 6U Rack or Tower UPS (200-240VAC) (4x IEC 320-C19 16A outlets)	55949KX
RT8kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets)	55948PX
RT11kVA 6U 3:1 Phase Rack or Tower UPS (380-415VAC) (4x IEC 320-C19 16A outlets)	55949PX
<b>ASEAN, HTK, INDIA, and PRC models</b>	
ThinkSystem RT3kVA 2U Standard UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)	55943KT
ThinkSystem RT3kVA 2U Long Backup UPS (200-230VAC) (2x C13 10A, 2x GB 10A, 1x C19 16A outlets)	55943LT
ThinkSystem RT6kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)	55946KT
ThinkSystem RT10kVA 5U UPS (200-230VAC) (2x C13 10A outlets, 1x Terminal Block output)	5594XKT

For more information, see the list of Product Guides in the Uninterruptible Power Supply Units category:  
<http://lenovopress.com/servers/options/ups#rt=product-guide>

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## Related publications and links

For more information, see these resources:

- Lenovo ThinkSystem SR630 product page  
<http://www3.lenovo.com/us/en/p/77XX7SR63>
- Lenovo Data Center Solution Configurator (DCSC):  
<http://dcsc.lenovo.com>
- *PSREF: Product Specifications Reference for ThinkSystem SR630*  
[http://psref.lenovo.com/Product/ThinkSystem/ThinkSystem\\_SR630](http://psref.lenovo.com/Product/ThinkSystem/ThinkSystem_SR630)
- Lenovo Data Center Support Downloads - ThinkSystem SR630  
<http://datacentersupport.lenovo.com/products/servers/thinksystem/sr630/7x01/downloads>  
<http://datacentersupport.lenovo.com/products/servers/thinksystem/sr630/7x02/downloads>

## Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [ThinkSystem SR630 Server](#)



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