

In the box

- Server
- Rail kit*
- Cable management arm*
- Material box, including items such as accessory kit, power cords* and documentation

Note: Items marked with asterisk (*) are available on some models only.

If any item is missing or damaged, contact your place of purchase. Ensure that you retain your proof of purchase. They might be required to receive warranty service.

First glance

Front view:

Note: Your server might look different from the following illustrations.

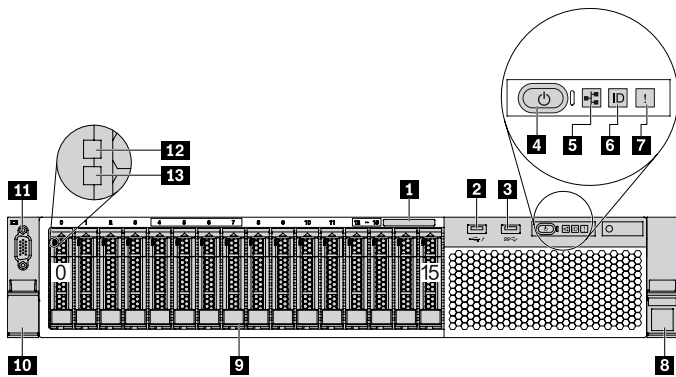


Figure 1. Server models with sixteen 2.5-inch drive bays (0-15)

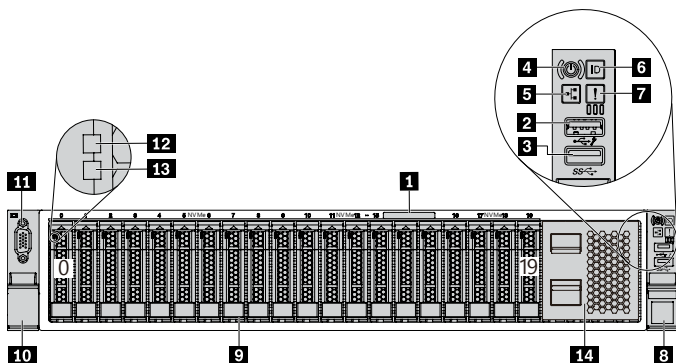


Figure 2. Server models with twenty 2.5-inch drive bays (0-19)

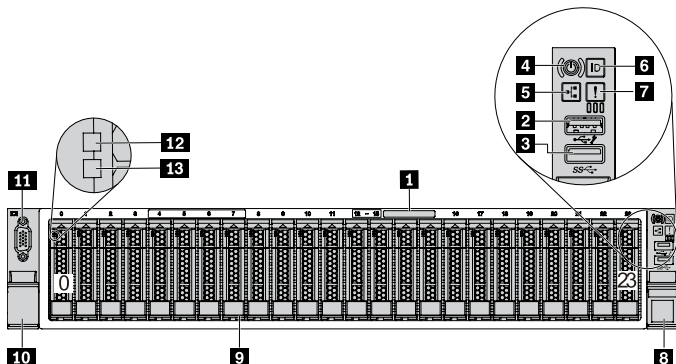


Figure 3. Server models with twenty-four 2.5-inch drive bays (0-23)

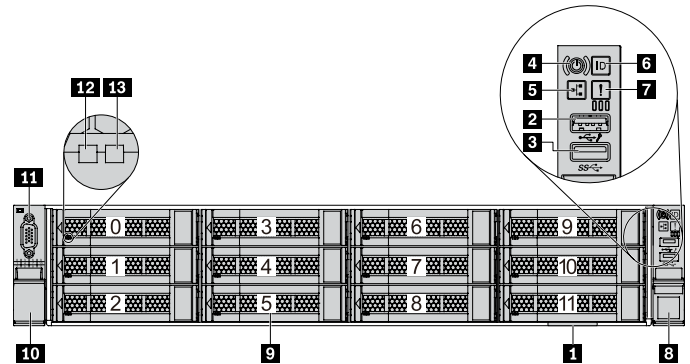


Figure 4. Server models with twelve 3.5-inch drive bays (0-11)

1 Pull-out information tab	2 XClarity Controller USB connector
3 USB 3.0 connector	4 Power button with power status LED
5 Network activity LED	6 System ID button with system ID LED
7 System error LED	8 Rack latch (right)
9 Drive bays	10 Rack latch (left)
11 VGA connector (available on some models)	12 Drive activity LED
13 Drive status LED	14 Drive bay filler

Rear view:

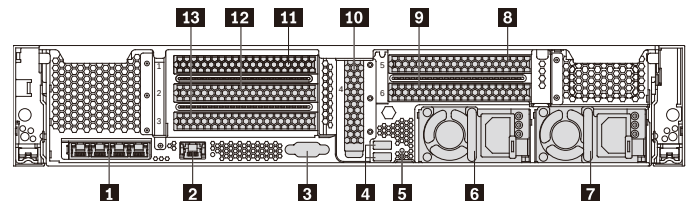


Figure 5. Server models with six PCIe slots

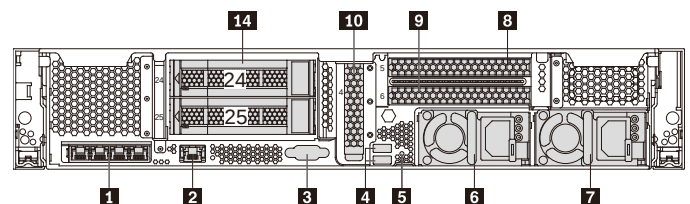


Figure 6. Server models with two rear 3.5-inch drive bays (24/25) and three PCIe slots

1 Ethernet connectors on the LOM adapter (available on some models)	2 XClarity Controller network connector
3 VGA connector	4 USB 3.0 connectors (2)
5 NMI button	6 Power supply 1
7 Power supply 2 (available on some models)	8 PCIe slot 5 on riser 2 assembly
9 PCIe slot 6 on riser 2 assembly	10 PCIe slot 4 (with a serial port module installed on some models)
11 PCIe slot 1 on riser 1 assembly	12 PCIe slot 2 on riser 1 assembly
13 PCIe slot 3 on riser 1 assembly	14 Rear 3.5-inch drive bays (2)

Setting up the system

1. Install the required server components.
2. Install the server into the rack.
3. Connect the server to power.
4. Connect the server to the network.
5. Turn on the server.
6. Configure the server.

For detailed information about installing hardware options and configuring the server, see the following Web site:
http://thinksystem.lenovofiles.com/help/topic/7X05/pdf_files.html



Technical specifications

Dimensions and weight

- 2U
- Height: 86.5 mm (3.4 inches)
- Width:
 - With rack latches: 482.0 mm (19.0 inches)
 - Without rack latches: 444.6 mm (17.5 inches)
- Depth: 763.7 mm (30.1 inches)
Note: The depth is measured with rack latches installed, but without the security bezel installed.
- Weight: up to 32.0 kg (70.6 lb)

Processor

Supports (depending on the model):

- Up to two Intel® Xeon® processors
- Designed for Land Grid Array (LGA) 3647 socket
- Scalable up to 28 cores

For a list of supported processors, see the Lenovo ServerProven Web site: <https://static.lenovo.com/us/en/serverproven/index.shtml>

Memory

For Intel Xeon Skylake processors:

- Slots: 24 DIMM slots
- Minimum: 8 GB
- Maximum:
 - 768 GB using registered DIMMs (RDIMMs)
 - 1.5 TB using load-reduced DIMMs (LRDIMMs)
 - 3 TB using three-dimensional stack registered DIMMs (3DS RDIMMs)
- Type (depending on the model):
 - TruDDR4 2666, single-rank or dual-rank, 8 GB/16 GB/32 GB RDIMM
 - TruDDR4 2666, quad-rank, 64 GB LRDIMM
 - TruDDR4 2666, octa-rank, 128 GB 3DS RDIMM

For Intel Xeon Cascade Lake processors:

- Slots: 24 DIMM slots
- Minimum: 8 GB
- Maximum:
 - 1.5 TB using RDIMMs
 - 3 TB using 3DS RDIMMs
 - 6 TB using Intel Optane™ DC Persistent Memory (DCPMMs) and RDIMMs/3DS RDIMMs in Memory Mode

- Type (depending on the model):
 - TruDDR4 2666, single-rank or dual-rank, 16 GB/32 GB RDIMM
 - TruDDR4 2933, single-rank or dual-rank, 8 GB/16 GB/32 GB/64 GB RDIMM
 - TruDDR4 2666, quad-rank, 64 GB 3DS RDIMM
 - TruDDR4 2933, quad-rank, 128 GB 3DS RDIMM
 - 128 GB/256 GB/512 GB DCPMM

Note: Operating speed and total memory capacity depend on the processor model and UEFI settings.

For a list of supported memory, see the Lenovo ServerProven Web site:

<https://static.lenovo.com/us/en/serverproven/index.shtml>

Storage

Supports the following drives:

- Up to eight 3.5-inch hot-swap SAS/SATA drives
- Up to eight 2.5-inch hot-swap SAS/SATA/NVMe drives
- Up to twelve 3.5-inch hot-swap SAS/SATA/NVMe drives
- Up to sixteen 2.5-inch hot-swap SAS/SATA/NVMe drives
- Up to twenty 2.5-inch NVMe drives
- Up to twenty-four 2.5-inch hot-swap SAS/SATA/NVMe drives
- Up to two 3.5-inch hot-swap SAS/SATA drives in the rear
- Up to two internal M.2 drives

Note: NVMe drives are supported by specified drive bays on some models. For more information, see:

http://thinksystem.lenovofiles.com/help/topic/7X05/server_specifications.html

Networking

- One XClarity Controller network connector
- Two or four Ethernet connectors on the LOM adapter (available on some models)

Where to go for support

Link	QR Code
 Lenovo Press (Product guides and white papers) https://lenovopress.com/	
 Lenovo ThinkSystem forum https://forums.lenovo.com/t5/Datacenter-Systems/ct-p/sv_eg	
 Lenovo Support – SR650 (including drivers and software) http://datacentersupport.lenovo.com/us/en/products/servers/thinksystem/sr650/7X05	
 Lenovo Product Security Advisories https://support.lenovo.com/us/en/product_security/home	
 Lenovo ServerProven (Compatibility information) http://www.lenovo.com/us/en/serverproven/	

Reduce | Reuse | Recycle



Sixth Edition (February 2020)

© Copyright Lenovo 2017, 2019.

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant to a General Services Administration (GSA) contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.