

### 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.

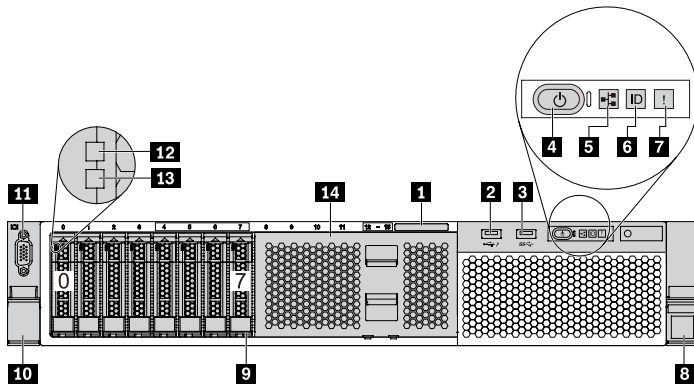


Figure 1. Server models with eight 2.5-inch drive bays (0-7)

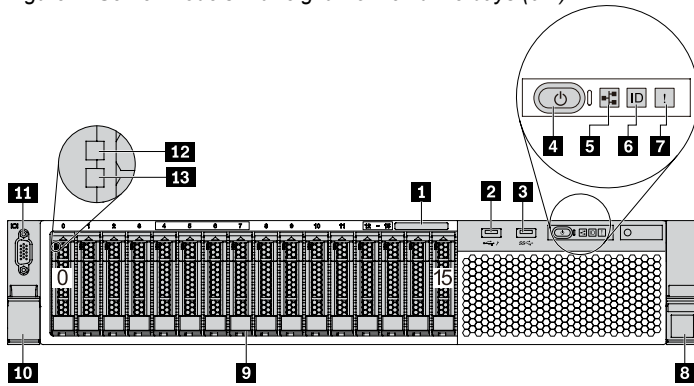


Figure 2. Server models with sixteen 2.5-inch drive bays (0-15)

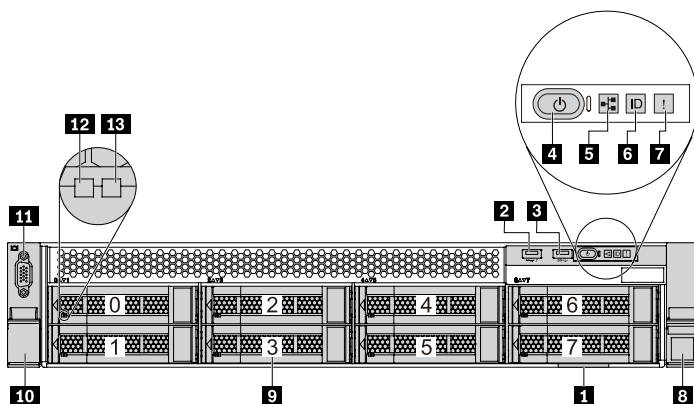


Figure 3. Server models with eight 3.5-inch drive bays (0-7)

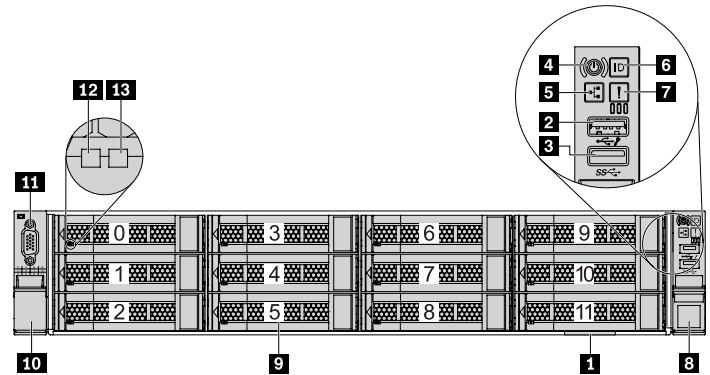


Figure 4. Server models with twelve 3.5-inch drive bays (0-11)

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 (optional)	12 Drive activity LED
13 Drive status LED	14 Drive filler

#### Rear view

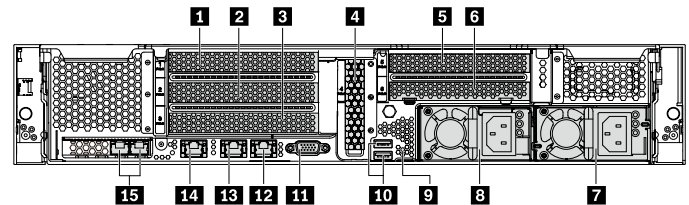


Figure 5. Server models with six PCIe slots

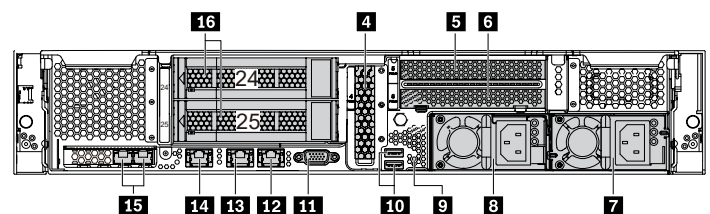


Figure 6. Server models with two rear drive bays (24-25) and three PCIe slots

1 PCIe slot 1	2 PCIe slot 2
3 PCIe slot 3	4 PCIe slot 4
5 PCIe slot 5	6 PCIe slot 6
7 Power supply 2 (optional)	8 Power supply 1
9 NMI button	10 USB 3.0 connectors
11 VGA connector	12 1Gb Ethernet connector 2 (RJ-45)
13 1Gb Ethernet connector 1 (RJ-45)	14 XClarity Controller network connector
15 Ethernet connectors on LOM adapter (optional)	16 Rear hot-swap drive bays

## 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/7X98/introduction.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 security bezel installed.
- Weight: up to 28.0 kg (61.7 lb)

### Processor

Supports (depending on the model):

- Up to two Intel® Xeon® processors
- Scalable up to 26 cores
- Designed for Land Grid Array (LGA) 3647 socket

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

- Minimum: 8 GB
- Maximum:
  - 512 GB using registered DIMMs (RDIMMs)
  - 1 TB using load-reduced DIMMs (LRDIMMs)
- Type (depending on the model):
  - TruDDR4 2666, single-rank or dual-rank, 8 GB/16 GB/32 GB RDIMMs
  - TruDDR4 2666, quad-rank, 64 GB LRDIMMs
- Slots: 16 slots

#### For Intel Xeon Cascade Lake processors

- Minimum: 8 GB
- Maximum:
  - 1 TB using RDIMMs
  - 2 TB using Intel Optane™ DC Persistent Memory (DCPMMs) and RDIMMs in Memory Mode
- Type (depending on the model):
  - TruDDR4 2666, single-rank or dual-rank,

16 GB/32 GB RDIMMs

- TruDDR4 2933, single-rank or dual-rank, 8 GB/16 GB/32 GB/64 GB RDIMMs (available by June 2019)
  - 128 GB, 256 GB, or 512 GB DCPMMs
- Slots: 16 slots

**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 simple-swap SATA drives
- Up to eight 3.5-inch hot-swap SAS/SATA drives
- Up to twelve 3.5-inch hot-swap SAS/SATA/NVMe drives (NVMe drives supported only in drive bays 8–11 on some models)
- Up to sixteen 2.5-inch hot-swap SAS/SATA/NVMe drives (NVMe drives supported only in drive bays 4–7 on some models)
- Up to two 3.5-inch hot-swap SAS/SATA drives in the rear (only supported by server models with 12 drive bays in the front)
- Up to two internal M.2 drives

## Networking

- One XClarity Controller network connector
- Two onboard Ethernet connectors (RJ-45)
- Two Ethernet connectors on the LOM adapter (available on some models)

## Where to go for support

Link	QR Code
 <a href="https://lenovopress.com/">Lenovo Press (Product guides and white papers)  https://lenovopress.com/</a>	
 <a href="https://forums.lenovo.com/t5/Datacenter-Systems/ct-p/sv_eg">Lenovo ThinkSystem forum  https://forums.lenovo.com/t5/ Datacenter-Systems/ct- p/sv_eg</a>	
 <a href="https://datacentersupport.lenovo.com/us/en/products/servers/thinksystem/sr590/7X98">Lenovo Support – SR590 (including drivers and software)  https://datacentersupport.lenovo.c om/us/en/products/servers/thinksy stem/sr590/7X98</a>	
 <a href="https://support.lenovo.com/us/en/product_security/home">Lenovo Product Security Advisories  https://support.lenovo.com/us/ en/product_security/home</a>	
 <a href="http://www.lenovo.com/us/en/serverproven/">Lenovo ServerProven (Compatibility information)  http://www.lenovo.com/us/en/ serverproven/</a>	

Reduce | Reuse | Recycle



Third Edition (February 2020)

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