

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.

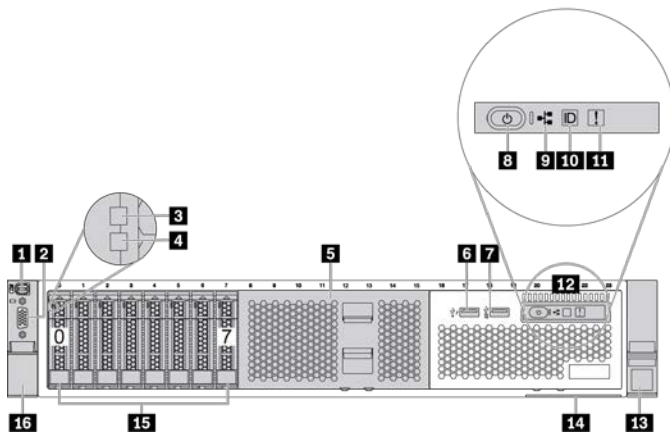


Figure 1. Front view with 8 x 2.5-inch drive bays and LCD diagnostics panel

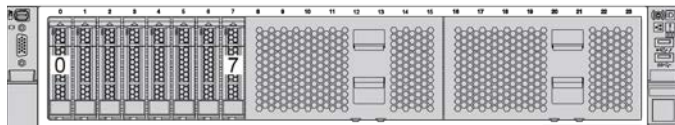


Figure 2. Front view with 8 x 2.5-inch drive bays

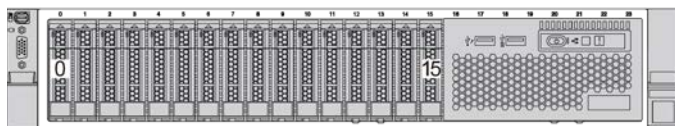


Figure 3. Front view with 16 x 2.5-inch drive bays and LCD diagnostics panel

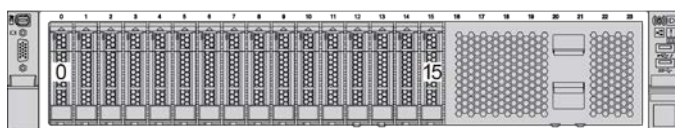


Figure 4. Front view with 16 x 2.5-inch drive bays

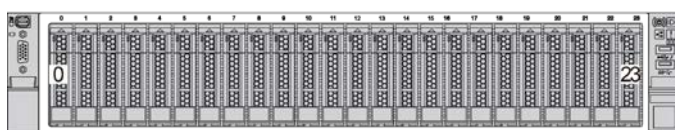


Figure 5. Front view with 24 x 2.5-inch drive bays

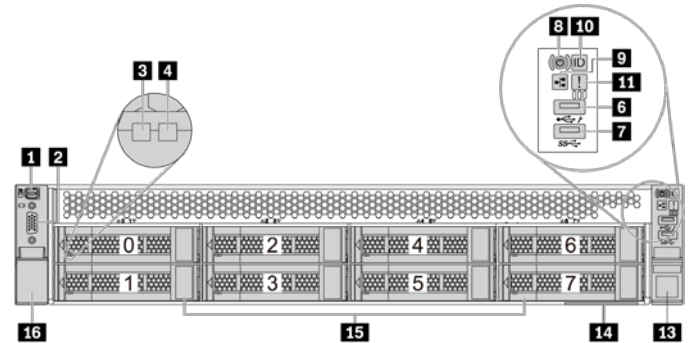


Figure 6 Front view with 8 x 3.5-inch drive bays

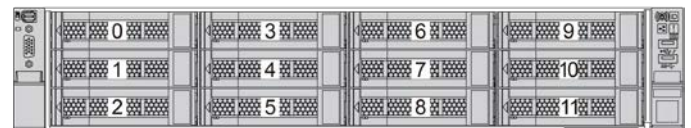


Figure 7. Front view with 12 x 3.5-inch drive bays

| | |
|--|--|
| 1 External diagnostics connector | 2 VGA connector (optional) |
| 3 Drive activity LED | 4 Drive status LED |
| 5 Drive bay filler | 6 USB 2.0 connector with XClarity Controller management |
| 7 USB 3 (5 Gbps) connector | 8 Power button with power status LED |
| 9 Network activity LED (for OCP 3.0 Ethernet adapter) | 10 System ID button with system ID LED |
| 11 System error LED | 12 LCD diagnostics panel |
| 13 Rack latch (right) | 14 Pull-out information tab |
| 15 Drive bays | 16 Rack latch (left) |

Rear view:

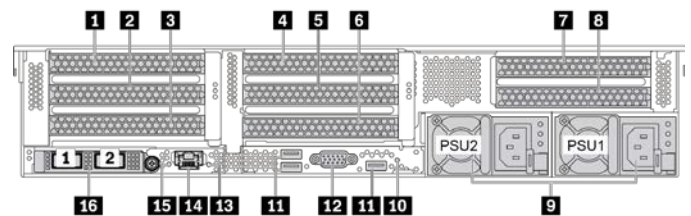


Figure 8. Rear view with eight PCIe slots

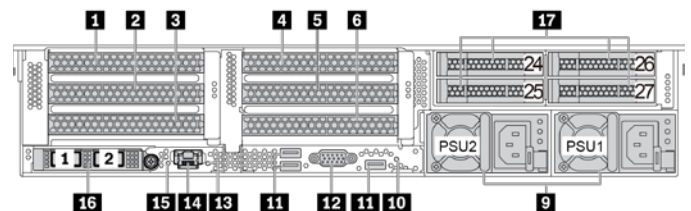


Figure 9. Rear view with six PCIe slots and four 2.5-inch drive bays



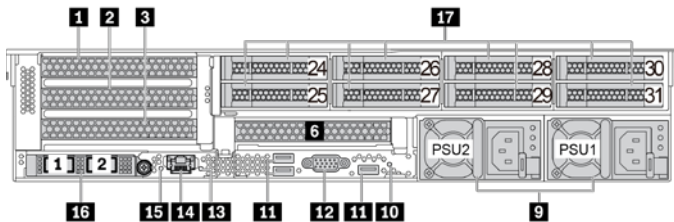


Figure 10. Rear view with four PCIe slots and eight 2.5-inch drive bays

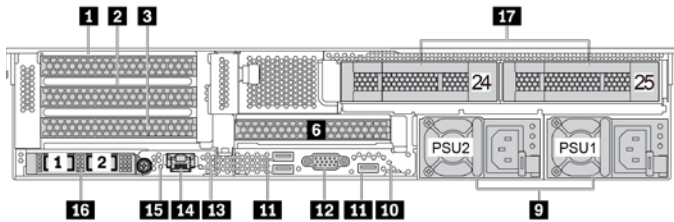


Figure 11. Rear view with four PCIe slots and two 3.5-inch drive bays

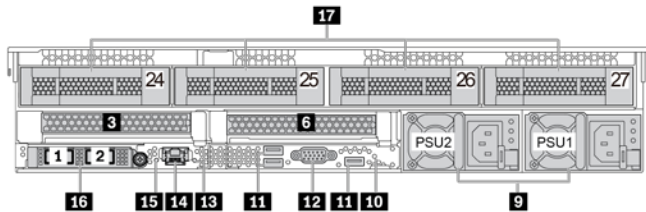


Figure 12. Rear view with two PCIe slots and four 3.5-inch drive bays

| | |
|--|-------------------------------------|
| 1...8 PCIe slots* 1, 2, 3, ...8 | 9 Power supplies |
| 10 NMI button | 11 USB 3 (5 Gbps) connectors |
| 12 VGA connector | 13 System error LED |
| 14 XClarity Controller network connector | 15 System ID LED |
| 16 Ethernet connectors on OCP 3.0 Ethernet adapter (optional) | 17 Rear drive bays |

*: PCIe slot 3 or 6 can be installed with two 7mm drives or a serial port module.

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:

<https://pubs.lenovo.com/sr650-v2/>



Technical specifications

Dimensions and weight

- Height: 86.5 mm (3.4 inches)
- Width:
 - With rack latches: 482.1 mm (19.0 inches)
 - Without rack latches: 445.0 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 38.8 kg (85.5 lb)

Processor

Supports (depending on the model):

- Two 3rd Gen Intel® Xeon® scalable processors
- Designed for Land Grid Array (LGA) 4189 socket
- Scalable up to 40 cores per socket

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

Memory

- Slots: 32 DIMM slots
- Minimum: 16 GB
- Maximum: 8 TB (system memory)
- Type (depending on the model):
 - TruDDR4 3200, dual-rank, 16 GB/32 GB/64 GB RDIMM
 - TruDDR4 3200, quad-rank, 128 GB 3DS RDIMM
 - TruDDR4 2933, octal-rank, 256 GB 3DS RDIMM
 - TruDDR4 3200, 128 GB/256 GB/512 GB PMEMs

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

Storage











Supports (depending on the installed drive backplanes):

- Front bays:
 - Up to 24 x 2.5-inch SAS/SATA/NVMe drives
 - Up to 12 x 3.5-inch SAS/SATA/NVMe drives
- Middle bays:
 - Up to 8 x 2.5-inch SAS/SATA/NVMe drives
 - Up to 4 x 3.5-inch SAS/SATA drives
- Rear bays:
 - Up to 8 x 2.5-inch SAS/SATA drives
 - Up to 4 x 3.5-inch SAS/SATA drives
 - Up to 2 x 7mm drives
- Up to two internal M.2 drives

Networking

- One XClarity Controller network connector
- Ethernet connectors on OCP 3.0 Ethernet adapter

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/Data-center-Systems/ct-p/sv_eg |  |
|  Lenovo Support – SR650 V2 (including drivers and software) https://datacentersupport.lenovo.com/products/servers/thinksystem/sr650v2 |  |
|  Lenovo Product Security Advisories https://support.lenovo.com/us/en/product_security/home |  |
|  Lenovo ServerProven (Compatibility information) https://serverproven.lenovo.com/ |  |