

Specifications

Product features, technical specifications

Lenovo

SR850 V3 specifications

Components	Specification
Form factor	2U rack
Processor	Two or four 4 th Generation Intel Xeon Scalable processors (Gold or Platinum level)
Chipset	Intel C741
Memory	Up to 64 DIMM slots (16 DIMMs per processor) – each processor has eight memory channels, with two DIMMs per channel. Lenovo TruDDR5 RDIMMs and 3DS RDIMMs are supported. DIMMs operate at up to 4800 MHz at 1 DPC and 4400 MHz at 2 DPC.
Memory maximum	Up to 16 TB with sixty-four 256 GB 3DS RDIMMs and four processors (4.0 TB per processor)
Disk drive bays	Up to 24 2.5-inch hot-swap drive bays at the front: <ul style="list-style-type: none">• Up to 24 SAS/SATA drive bays• Up to 24 AnyBay drive bays (support for SAS, SATA, Gen4 NVMe, or Gen5 NVMe drives) Two optional 7 mm hot-swap SSD drive bays at the rear of the server, either SATA or NVMe for OS boot or storage
Network interfaces	Two dedicated OCP 3.0 SFF slots with a PCIe 5.0 x16 host interface Support for a variety of two-port and four-port adapters with network connectivity of up to 100 GbE
PCIe slots	Up to 12 PCIe slots, plus two Gen5 OCP 3.0 slots
GPU support	Support for up to four single-width GPUs or up to two double-width GPUs
Fans	Six hot swap fans and support for N+1 redundancy
Power	Two hot swap redundant AC power supplies

SR850 V3 specifications

Components	Specification
Chipset	Intel C741
Memory	Up to 64 DIMM slots (16 DIMMs per processor) – each processor has eight memory channels, with two DIMMs per channel. Lenovo TruDDR5 RDIMMs and 3DS RDIMMs are supported. DIMMs operate at up to 4800 MHz at 1 DPC and 4400 MHz at 2 DPC.
Memory maximum	Up to 16 TB with sixty-four 256 GB 3DS RDIMMs and four processors (4.0 TB per processor)
Disk drive bays	Up to 24 2.5-inch hot-swap drive bays at the front: <ul style="list-style-type: none">• Up to 24 SAS/SATA drive bays• Up to 24 AnyBay drive bays (support for SAS, SATA, Gen4 NVMe, or Gen5 NVMe drives) Two optional 7 mm hot-swap SSD drive bays at the rear of the server, either SATA or NVMe for OS boot or storage
Network interfaces	Two dedicated OCP 3.0 SFF slots with a PCIe 5.0 x16 host interface Support for a variety of two-port and four-port adapters with network connectivity of up to 100 GbE
PCIe slots	Up to 12 PCIe slots, plus two Gen5 OCP 3.0 slots
GPU support	Support for up to four single-width GPUs or up to two double-width GPUs
Fans	Six hot swap fans and support for N+1 redundancy
Power	Two hot swap redundant AC power supplies
Management	Standard XClarity management tools for ThinkSystem V3 servers

Limitations

Two-processor only configuration

With only two processors, the SR850 V3 has the following capabilities:

- DIMMs: It supports up to 32 DIMMs for an 8 TB maximum
- NVMe drives: It supports up to eight NVMe drives
- PCIe adapters: It supports up to five FHHL adapters or six HHL adapters
- GPUs: It supports up to four single-width GPUs – double-width GPUs are not supported

Full-length PCIe adapter:

Systems with full-length PCIe adapters (for example, double-width GPUs) require the use of 1U heat sinks for the rear processors. With these heat sinks, processors are limited to a maximum TDP of 165 W.

Boot drive

M.2 drives and rear 7 mm drives are not supported in the same configuration.

PSU types

The SR850 V3 supports the following types of PSU:

CFFv4 PSUs

- Available worldwide (including China)
- No support for zero output mode
- Support for over subscription (OVS) mode
- Support for 2+0 (selected models only) or 1+1 redundancy modes

CRPS PSUs:

- Only available in China
- Support for 1+1 redundancy mode only
- No support for OVS or zero output mode on CRPS PSUs