

# Lenovo Storage E1024

Powerful storage JBOD/expansion unit: 2.5-inch



## Flexible, High-Performance DAS

The Lenovo Storage E1024 has the flexibility and capacity to handle many different types of workloads. You can start with one E1024 enclosure as a simple JBOD, and later daisy-chain up to 7 more on a single HBA port. This provides support for up to 192 hot-swap SAS drives per array.

Supported drives include 15,000rpm, 10,000rpm, and 7,200rpm HDDs, secure self-encrypting HDDs (SEDs), and SSDs for read-intensive workloads. The E1024 supports RAID 0, 1, 5, 10, 50, 6, and 60, using a variety of RAID HBAs. A single daisy chain of E1024 units can contain a combination of HDDs and SSDs, with different speeds and capacities. Moreover, if high-capacity 3.5-inch HDDs are required, E1012 expansion units may be included in the daisy chain.

## Cost-Effective

The E1024 is optimized for price performance. 15,000rpm and 10,000rpm SAS drives offer the speed needed for most performance-intensive workloads. High-capacity, high-performance SSDs provide the extreme throughput necessary for the most read-intensive jobs, with up to 38.4TB in only 2U and as much as 307.2TB per array in 16U. 7,200rpm NL drives offer up to 24TB of “cold” or archive storage per enclosure.

The E1024 shares common parts with E1012 DAS enclosures, as well as S2200 and S3200 SAN storage units. This simplifies servicing and reduces spare parts on hand, helping to reduce costs further. You can also save money on file/storage servers, by deploying one server running virtualized environments with up to 302.7TB of DAS capacity, rather than using multiple servers with one JBOD apiece. In addition, custom models offer the choice of a single expansion module, to lower cost and provide optional upgrade capability later.

## Easy to Deploy and Highly Available

Designed with simplicity in mind, the E1024 offers easy daisy-chaining of additional enclosures—with failover capability. Simply cable-connect new units and they come online immediately (OS-dependent). Virtual machines can share these expansion chassis, as well.

And because storage is useless when it's offline, the E1024 uses ruggedized components that are designed for 99.999% availability, along with hot-swap drives, power supplies, fans, and I/O modules for both ease of use and maximum uptime.

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## Specifications

|   |  |
|---|--|
| <b>Single/Dual Expansion Modules</b>  | Dual 6Gb SAS (standard); Single 6Gb SAS (via custom model), upgradable to dual   |
| <b>Supported Drives</b>   | 24 hot-swap SAS 2.5-inch drives: 300GB or 600GB 15,000rpm HDDs; 600GB, 900GB, or 1.2TB 10,000rpm HDDs; 1.2TB 10,000rpm NL HDDs (SED); 1TB 7,200rpm NL HDDs; 400GB, 800GB, 1.6TB SSDs   |
| <b>Storage Capacity</b><br><i>(per E1024 enclosure—up to 8 enclosures supported per HBA port)</i> | Up to 14.4TB – 15,000rpm HDDs; up to 28.8TB – 10,000rpm HDDs; up to 28.8TB – 10,000rpm NL HDDs (SED); up to 24TB – 7,200rpm NL HDDs; up to 38.4TB – SSDs / Up to 302.7TB per array   |
| <b>Expandability (via Daisy-Chain)</b>  | Up to 8 E1024 enclosures / 192 drives per array  |
| <b>HBAs Supported</b>   | ThinkServer 9280-8e (6Gb; LSI SAS 2108 chipset); ThinkServer 9286CV-8e (6Gb; LSI SAS 2208); ThinkServer 9286CV-8e 8-Port External (6Gb; LSI SAS 2208); ThinkServer 93008e (12Gb; LSI SAS 3108); ThinkServer PMC 8885e (12Gb; PM8063); ServeRAID M5120 (6Gb; LSI SAS 2208); ServeRAID M5225 (12Gb; LSI SAS 3108); N2125 (6Gb; LSI SAS 2308); N2225 (12Gb; LSI SAS 3008); N2226 (12Gb; LSI SAS 3008) |
| <b>RAID Support</b>   | RAID 0, 1, 5, 6, 10, 50, 60 (HBA-dependent)  |
| <b>Power Supplies and Fans</b>  | Two 436W hot-swap power supplies; two hot-swap system fan modules  |
| <b>Back Panel Connectors</b>  | Each expansion module (x2) includes: 1 SAS (SFF 8088) IN/INGRESS connector; 1 SAS (SFF 8088) OUT/EGRESS connector; 1 RJ11 serial (management) port   |
| <b>Form Factor / Dimensions / Weight</b>  | 2U / Height: 89mm (3.5 in.); Width: 447mm (17.6 in.); Depth: 523mm (20.6 in.) / Weight: min. 16.9kg (37.2lbs); max. 23.4kg (51.6lbs)   |
| <b>Limited Warranty</b>   | 3-year Limited Warranty, 9x5 Next Business Day (upgradable)  |

## Why Lenovo

Lenovo is a \$46 billion global Fortune 500 company and a leader in providing innovative consumer, commercial, and enterprise technology. Lenovo enterprise systems deliver industry-leading performance, reliability, and security in virtualized and cloud environments for analytics, database, virtual desktop, infrastructure, and web workloads. Lenovo also offers simplified and extensible systems management tools so you can manage your infrastructure on your own terms. Consistently ranked #1 in reliability and customer satisfaction, the Lenovo enterprise server, storage, and networking portfolio provides the hardware for businesses that never stand still.

## For More Information

To learn more about the Lenovo Storage E1024, contact your Lenovo representative or Business Partner or visit [lenovo.com/systems/storage](http://lenovo.com/systems/storage) or the [E1024 Product Guide](#)



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