Lenovo Storage E1012

Powerful storage JBOD/expansion unit: 3.5-inch

Flexible, High-Capacity DAS

The Lenovo Storage E1012 has the flexibility and capacity to handle many different types of workloads. You can start with one E1012 enclosure as a simple JBOD, and later daisy-chain up to 7 more on a single SAS port. This provides support for up to 96 hot-swap SAS drives per HBA port. With up to 8 total enclosures supported per HBA (using multiple ports), the E1012 supports a maximum of 96 drives.

Supported drives include 10,000rpm and 7,200rpm HDDs, secure self-encrypting HDDs (SEDs), and SSDs for read-intensive workloads. The E1012 supports RAID 0, 1, 5, 6, 10, 50 and 60, using a variety of RAID HBAs. A single daisy chain of E1012 units can contain a combination of HDDs and SSDs, with different speeds and capacities. Moreover, if 15,000rpm and 2.5-inch HDDs are required, E1024 expansion units may be included in the daisy chain.

Cost-effective

The E1012 is optimized to provide great performance at an affordable price. High-capacity 3.5-inch NL drives offer up to 96TB of "cold" or archive storage in only 2U, and 768TB per HBA port in 16U. On the other hand, 10,000rpm 6Gbps SAS drives offer the speed needed for many performance-intensive workloads and SSDs provide the extreme throughput necessary for the most read-intensive jobs.

The E1012 shares common parts with E1024 DAS enclosures, as well as Lenovo Storage 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 768TB 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 the entry cost, with optional upgrade capability.

Easy to Deploy and Highly Available

Designed with simplicity in mind, the E1012 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 E1012 uses ruggedized components that are designed for 99.999 percent availability, along with hot-swap drives, power supplies, fans, and I/O modules for both ease of use and maximum uptime.
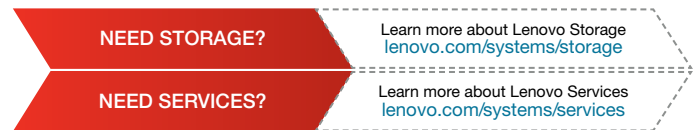
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Specifications

Single/Dual Expansion Modules	Dual 6Gb SAS (standard); Single 6Gb SAS (via custom model), upgradeable to dual
Supported Drives	12 hot-swap SAS 3.5-inch drives: 600GB or 900GB 10,000rpm HDDs (2.5-inch drive in 3.5-inch bay); 2TB, 4TB, 6TB, or 8TB 7,200rpm NL HDDs; 4TB 7,200rpm NL SED HDDs; 400GB, 800GB, 1.2TB SSDs (2.5-inch drive in 3.5-inch bay)
Storage Capacity *(per E1012 enclosure—up to 8 enclosures supported per HBA port)*	Up to 10.8TB – 10,000rp HDDs; Up to 96TB – 7,200rpm NL HDDs; Up to 48TB – 7,200rpm NL HDDs (SED); Up to 14.4TB – SSDs
Expandability (via Daisy-Chain)	Up to 8 E1012 units per HBA port
HBAs Supported	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)
RAID Support	RAID 0, 1, 5, 6, 10, 50, 60 (HBA-dependent)
Power Supplies and Fans	Two 436W hot-swap power supplies; two hot-swap system fan modules
Back Panel Connectors	Each expansion module (x2) includes: 1 SAS (SFF 8088) IN/INGRESS connector; 1 SAS (SFF 8088) OUT/EGRESS connector; 1 RJ11 serial (management) port
Form Factor / Dimensions / Weight	2U / Height: 87mm (3.4 in.); Width: 447mm (17.6 in.); Depth: 523mm (20.6 in.) / Weight: min. 16.8kg (37.0 lbs); max. 26.6kg (58.6lbs)
Limited Warranty	3-year Limited Warranty, 9x5 Next Business Day (upgradeable)

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

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