

ELS300

oRAID 288 magnetic-optical hybrid storage appliance

Rack-mount optical storage for high-density, long-retention archive workloads.



Second-response access with optical-grade preservation

- Standard S3 service for application-friendly integration
- High-speed disk layer for everyday access
- Blu-ray optical layer for long-term, tamper-resistant retention

28.8 TB

Maximum system capacity

288

Optical media slots

Up to 4

Blu-ray drives

80 MB/s

Concurrent optical throughput

Why it matters

- Designed for data that must remain available, authentic, and defensible over long retention periods.
- Keeps active access on disk while anchoring original data on write-once optical media.
- Reduces dependence on recurring disk-array refresh cycles for cold and long-term archive workloads.

Best-fit workloads

- Government records and official document retention
- Medical images and regulated evidence archives
- Remote-sensing and scientific data repositories
- Enterprise backup, disaster recovery, and compliance retention

Technical Overview & Salient Facts

Hybrid architecture

Business Access Layer

Standard S3 interface and user-transparent scheduling.

High-Speed Disk Layer

Direct reads, independent single-disk mounting, XFS file system, intelligent sleep/power-off.

Permanent Optical Layer

Original data on write-once Blu-ray, optical RAID 11+1, long-term physical preservation.

Core specifications

Optical disc configuration	24 standard disc cassettes; up to 288 discs
Disc capacity	Up to 100GB per disc; 28.8TB maximum system capacity
Optical drives	Up to 4 Blu-ray drives; 80MB/s concurrent throughput
Disk configuration	4x 3.5 in drive bays; independent single-disk mounting; XFS file system
Redundancy	Optical RAID 11+1; automatic rebuild from Blu-ray on disk failure
External interfaces	Gigabit LAN; SAS expansion support; standard S3 protocol
Power consumption	550W maximum; reduced with intelligent disk sleep
Dimensions & weight	448 x 310 x 930 mm (7U standard rack-mount); 80 kg
Reliability	Electronics MTBF >100,000 hours; robotic arm >2,000,000 cycles

Data protection

- Disk copy supports everyday high-speed access.
- Original copy is written to Blu-ray for tamper-resistant retention.
- Parity protection: one parity disc per 12 discs.

Services & support

- On-site installation and commissioning service.
- 3-year full-system warranty on core hardware.
- 7x24 technical support and custom integration support.