

ES3024 48-Bay Network Storage

Product Description

The ES3000 series is a new generation of cost-effective mid-to-high-end dual-controller storage solutions tailored for high-reliability AIoT applications. It integrates iSCSI, FC, NFS, CIFS/SMB, FTP protocols, write cache mirroring, data permanent protection technology, and industry-leading disk management. Designed for high performance, reliability, scalability, density, and ease of use, it ensures comprehensive redundancy to safeguard user data

High Performance

- iSCSI Support: Resolves file storage fragmentation issues.
- Dedicated Cache Algorithm: Enhances disk access performance and extends disk lifespan.
- SSD Cache: Accelerates access to hotspot data.

Dual-Controller HA (High Availability)

- Automatic Failover & Recovery: Seamless takeover by the secondary controller during faults, ensuring business continuity.
- Mirrored Write Cache: PCIe-based cache mirroring between controllers guarantees data integrity post-failover.

RAID Features

- Intelligent RAID Rebuild: Adjusts rebuild speed based on system load.
- Second-Level Rebuild: Rebuilds only modified data, reducing downtime to seconds.
- Pre-Copy & Disk Health Management: Proactive data migration for at-risk disks.

Data Protection

- Snapshot & Rollback: Enables data recovery and secondary access via snapshots.
- Local/Remote Replication: Secures critical data with backup options.
- Data Vault: Ensures cached data is preserved during power failures.
- WORM (Write Once Read Many): Prevents tampering with critical data.

Hardware Design

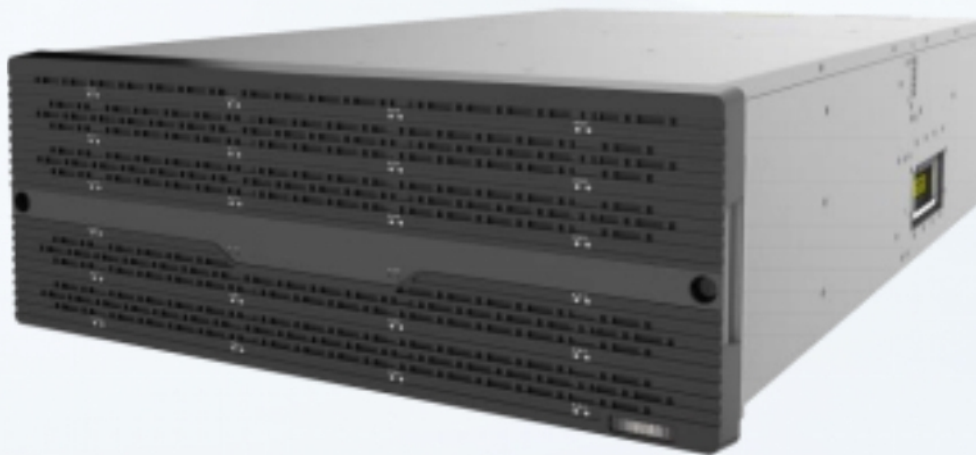
- Modular Redundancy: Hot-swappable components (power, fans, batteries) with 99.999% uptime.
- Advanced Hardware: Intel 64-bit multi-core processors, DDR5 memory, PCIe 4.0/SAS 4.0 interfaces.
- Dual BIOS & Watchdog: Ensures reliable booting and automatic fault recovery.

Cooling & Durability

- Smart Thermal Control: Adaptive fan speed adjustment for energy efficiency and longevity.
- Dust/Shock/Corrosion Resistance: Patented designs to protect disks and extend lifespan.

Ease of Management

- Comprehensive Alerts: LED, email, SMS, SNMP, and digital display notifications.
- Green Energy Features: Disk hibernation and CPU frequency scaling reduce power consumption.



Product Specifications

Item	Description
Controllers	2
Processors	2*Intel 64-bit multi-core processors (dual-controller)
Memory per Controller	32GB standard, expandable to 128GB
Network Interfaces	10*2.5GbE ports Optional 4*2.5GbE, 2*10GbE, or 4*10GbE ports
PCIe Slots	2
Backend Expansion	4*4*12Gbps Mini SAS HD interfaces
USB Ports	4
Serial Ports	4
HDMI Ports	4
Disk Types	SATA/SAS/SSD
Disk Capacity	4–20TB
Disk Channels	48
Batteries	2 (standard)
Power Supply	2 (standard)
Power Input	AC 100–127V/200–240V, 50/60Hz
Max Weight (with disks)	<75kg
Power Consumption	<1000W (full configuration)
Dimensions (H*W*D)	178mm*482mm*799mm (fits 1m-depth racks)
Certifications	CE, FCC, CB, RoHS, WEEE, CCC, CQC
Operating Temperature	5°C–40°C
Recommended Temperature	10°C–35°C
Supported Protocols	iSCSI, FC, NFS (v2/v3/v4), CIFS/SMB, FTP.
RAID Levels	JBOD, 0, 1, 10, 5, 6, 50
Max Logical Resources	2048
OS Support	Windows, Linux, AIX, HP-UX, Solaris, VMware, etc.
Comprehensive Alerts	LED, email, SMS, SNMP, and digital display notifications.