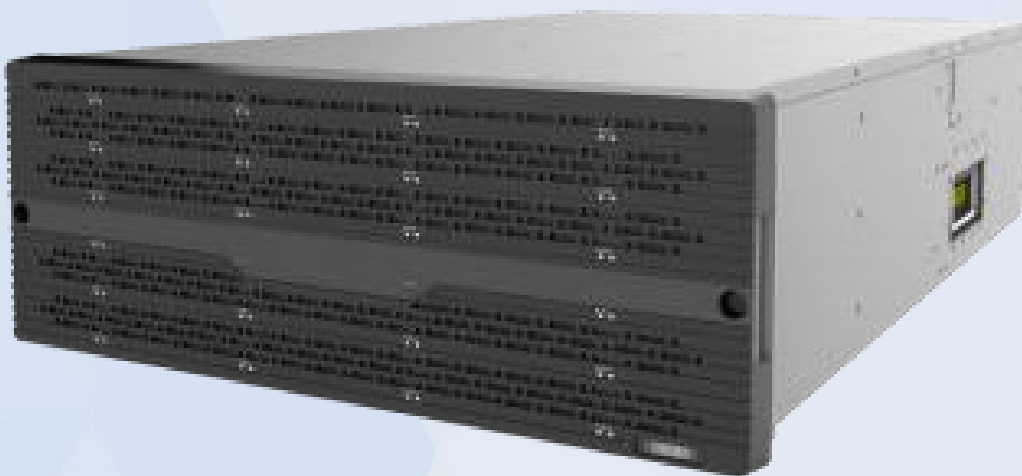


ZRJ ES3048 48-Bay Network Storage

Product Overview

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 protocols such as iSCSI, FC, NFS, CIFS/SMB, and FTP, along with 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.





Main Features

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.

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*4x12Gbps 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.