

ITRENEW SDS Series Storage Solutions

Lifecycle Management for Steadfast, High-performance, Scalable, Enterprise Storage



Adaptable storage array designed for the rigorous operating realms of IT infrastructures yet performance stable for the post-production A/V editing and broadcasts applications.

Performance and High-Availability

ITRENEW SDS Series Storage Solutions offers 99.999% availability through its design reliability and failure protection mechanisms. Also unique to the SDS Series, is the performance optimization characteristics through redundant storage paths. I/O requests sent to LUNs will always use the quickest path available rather than designated preferred paths that can sometimes become periodical bottlenecks. I/O latency sensitive applications such as video streaming will take full advantage of the maximum I/O response time thresholds for when a disk drive takes longer than expected to deliver the data the controller will prioritize a data regeneration from other disk members to return to the host while a background module runs diagnostics on the underperforming drive to trigger self-healing engines. Highly adaptable on-the-fly tuning cache algorithms monitor all I/O requests for patterns and frequencies and will dynamically tune cache blocks and prefetching algorithms. The system can simultaneously handle incoming small block random transactions while also handling large block sequential streaming without any performance loss making the SDS Series a clear choice for serving multiple application profiles with a single system.

Environmentally Conscious

From migration to redeployment, ITRENEW has a decade-long commitment to environmental responsibility. Hardware components are vigilantly selected to comply with latest energy and environmental standards. Furthermore, when you migrate to or are ready to upgrade, ITRENEW takes full responsibility for the storage arrays life span by redeploying or decommissioning the enclosures, fully guarantees data destruction for the drives back, and electronic waste disposal, all adhering to EPA and ISO 14001 standards.

IT and Datacenter Integration

Through leading surveys and discussions with many IT administrators, the SDS Series has several useful features and tools that allow the systems to be seamlessly deployed and managed. The SDS Series supports the VMware VAAI storage API for consolidated management and through VMware management interfaces. Configured Storage Arrays can be fully configured with the ability to export the configurations to a file and imported into other unconfirmed Storage Arrays to reduce the deployment times for large-scale datacenters.

Data Protection

The SDS Series offers additional defense against data corruption and silent data corruption that is becoming a greater concern of faster architectures and greater disc densities. Traditional arrays use 512byte disk sectors while the NEC Storage Array uses 520byte disk sectors for additional CRC based on the T10-DIF Protection Information standard.

Storage Availability and Business Continuity

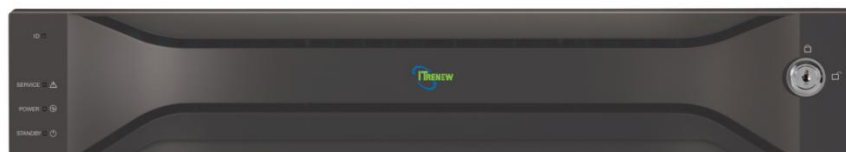
- ✦ High Availability Architecture to support 99.999% uptime
- ✦ Dual-Redundant Controllers
- ✦ Guaranteed Maximum Response Time Thresholds
- ✦ In-Line Self-Healing of Physical Disks
- ✦ Quick Path Technology based on ALUA
- ✦ Non-Disruptive Firmware Updates for ZERO Downtime

Storage Virtualization

- ✦ Thin-Provisioning
- ✦ Dynamic Pool Expansion
- ✦ Automated Volume Tiering (Q1 2012)

Disaster Recovery

- ✦ Storage Volume Snapshots
- ✦ Local and Remote Volume Replication
- ✦ SQL and Filesystem Replication





SDS 1200 and 2400 Series Storage Arrays		
Storage Controllers		Single or dual controllers (active-active)
Host Ports	8Gbps Fibre Channel	4 or 8 ports (2 or 4 per controller)
Chassis Configuration		2U 12-bay (3.5" LFF slots)
		2U 24-bay (2.5" SFF slots)
Cache Memory	Capacity	8GB (4GB per controller)
	Backup	Unlimited hold time with backup to flash
Supported RAID Levels		1, 5, 6, 10, 50, 60, and TM (Triple Mirror)
Supported Operating Systems	Open OS	Windows 2008, Windows 2008 R2, RedHat 5.5, RedHat 6, SuSE 10.3, SuSE 11, Mac OS X 10.6 and 10.7
	Hypervisor	Hyper-V, VMware ESX 4.1, VMware ESXi 5.0, and KVM (RHEL 6)
Disk Drives	2U/24 2.5" SFF Drives	1TB 7.2K RPM NLSAS - SED Encryption
		1TB 7.2K RPM NLSAS
		900GB 10K RPM SAS*
		600GB 10K RPM SAS - SED Encryption
		600GB 10K RPM SAS
		100GB SLC SSD SAS
	2U/12 3.5" LFF Drives	3TB 7.2K RPM NLSAS*
		2TB 7.2K RPM NLSAS
400GB SLC SSD SAS		
Power Requirements		AC 100 – 240V single phase 50/50Hz
Power Consumption	2U/12 - Max.	480W
	2U/12 - Idle Eco Mode	310W
Disk Array Controller	2U/24 - Max.	480W
	2U/24 - Idle Eco Mode	320W
Power Consumption	2U/12 - Max.	310W
	2U/12 - Idle Eco Mode	160W
Disk Expansion	2U/24 - Max.	300W
	2U/24 - Idle Eco Mode	170W
Dimensions	W x D x H (mm)	480 x 540 x 86.5
Weight	With 12 x 3.5" HDDs	33kg
Temperature/Humidity	Operating	5-40°C 10-80%
	Non-Operating	5-45°C 8-80%

* 3TB 3.5" and 900GB 2.5" disk models available Q1 2012.