



OptiSAN Scalable IP SAN appliance



Fault-tolerance and Scalability

StoneFly's OptiSAN Virtualized IP SAN Appliance offers enhanced redundancy, scalability, availability and performance. OptiSAN's Scalable architecture brings the flexibility to start small, and scale up to 100s of TeraBytes of Tiered (SATA, SAS, and SSD) storage. The OptiSAN is designed for enterprise environments looking for a versatile IP SAN for HIGH AVAILABILITY storage applications. The OptiSAN supports SAS and SATA drives for online transaction processing, database, email, disk based archives, disk to disk backup, and other core applications. The cornerstone of the OptiSAN is the latest StoneFly Storage Concentrator with multi core parallel processing power, dedicated iSCSI cache, and the award winning StoneFusion IP SAN operating system. The OptiSAN's high-performance storage subsystem offers redundant, active/active connectivity for appliance redundancy and increased system performance. Additionally the OptiSAN offers cost-effective expansion via optional Expansion Units.

<p style="text-align: center;">Stonefly OptiSAN Appliance</p>		
	Base Unit	Expansion Unit
Host Interface (iSCSI)	Standard: 6x1Gb Optional: 10x1Gb, 2x, 4x 10Gb (Copper, Optical, CX4, SFP+)	
# of Hot Swap Drives SATA, SAS, SSD	½ Populated: 8 Full: 16	½ populated: 8, Full: 16 Scale up to 448 drives
SATA-3/6G Capacity (Raw-Terabytes)	½ populated: 8, 16 Full: 16, 32	½ populated: 8, 16 Full: 16, 32
SAS-6G-15K Capacity (Raw-Terabytes)	½ populated: 2.4, 3.6, 4.8 Full: 4.8, 7.2, 9.6	½ populated: 2.4, 3.6, 4.8 Full: 4.8, 7.2, 9.6
SSD Capacity (Raw-Gigabytes)	½ populated: 512, 1024 Full: 1920, 3840	½ populated: 512, 1024 Full: 1920, 3840
Raid Levels	0,1,5,6,10,50,60 with battery	

Scalable / Redundant IP SAN Appliance

- iSCSI Based Storage Provisioning Appliance
- Active/Active IP Storage (High availability multi-node cluster)
- Scalable up to 448 drives
- Horizontal or vertical scalability
- Host or volume load balancing
- Gigabit and 10Gb iSCSI port teaming, failover, and load balancing
- HW Raid 0,1,5,6,10,50,60 with Battery backup

Advanced Features

- Advanced Copy-on-write, delta based Snapshot technology with:
 - Read/Write snapshots
 - Scheduling and Rollback
 - Stonefly VSS agents
- Campus Cluster Mirror
- Synchronous mirroring
- Campus mirroring (iSCSI mirroring)

- Optional Asynchronous Replication/Mirroring (CDP) with delta transfer and schedules
- Optional Volume based encryption (AES 256)
- Comprehensive performance reporting and statistics
- Online, no downtime software upgrade

High Performance

- 6G Drive technology
- Active-Active block level access to storage utilizing multiple virtualization processing cores with 8GB of DATA Packet and command queuing cache (Patented)
- Jumbo frame support
- SAS/SATA/SSD Storage Tiering (Select your volumes from SAS, SATA, or SSD pools)

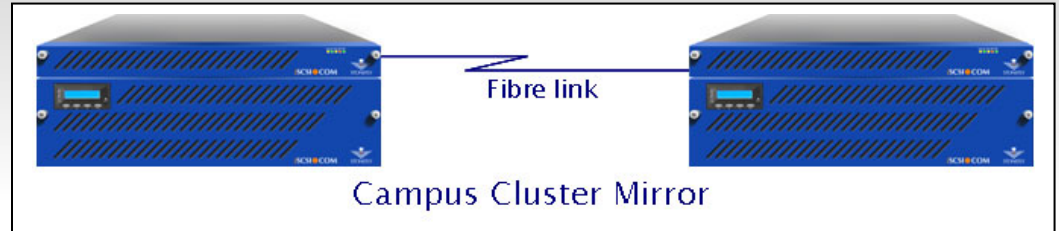
Ease of use

- Web based Intuitive User Interface
- No downtime volume or storage expansion



Virtual storage for Virtualized environments

- VMWare Certified
- Xen Certified
- Microsoft HyperV
- KVM



Unique OptiSAN feature

	Base OptiSAN	Expansion Unit
Physical specification		
Form Factor	5U, 19-inch Rackmountable	3U, 19-inch Rackmountable
Dimensions (HxWxD)	8.6" x 19" x 25.6" (217mm x 485mm x 650mm)	5.2" x 19" x 19.8" (131mm x 482.6mm x 504.3mm)
Package Dimensions (HxWxD)	Two (7.75" x 23" x 32.5") (197mm x 586mm x 828mm) One (16.7" x 22.3" x 30.4") (423mm x 567mm x 772mm)	16.7" x 22.3" x 30.4" 423mm x 567mm x 772mm
Package Weight	Fully populated : 204.7lbs (92.8Kg) ½ populated : 190.7lbs (86.5Kg)	Fully populated : 93lbs (42.18kg) ½ populated: 79lbs (35.8kg)
Power requirements	6 Power supplies/cords 100VAC@25A, 240VAC@12.5A, 50-60Hz	2 Power supplies/cords 100VAC@ 9A, 240VAC@ 4.5A, 47-63Hz
Temperature	Operating: 10° to 35°C (50°F to 95°F), Non-operating: 40° to 60°C (-40°F to 149°F)	
Relative Humidity	8 to 90%, non-condensing	

THE STONEFLY ADVANTAGE

StoneFly is one of the earliest vendors in the iSCSI space, designing its products during the first wave of iSCSI. As a result, StoneFly customers have been deploying StoneFly's since 2002. StoneFly's cost-effective IP SANs offer key features including active/active components for high availability, patented storage virtualization, snapshots, encryption, and asynchronous replication, and synchronous mirroring.

SOLUTIONS

StoneFly's IP SANs are integral to storage consolidation efforts, tiered storage installations, server virtualization implementations, email archiving initiatives, layered disaster recovery, and business continuity planning.

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