



## ISC-S Series of IP SAN Appliances





### Integrated Storage Concentrators (ISC-S)



These easy-to-use, Integrated Storage Concentrator Product Family (ISC-S) offers a cost-effective IP SAN for small offices, remote sites, branch offices and first-time IP SAN deployments. With RAID protection and redundant components, ISC-S series of IP SANs offer an ideal platform for applications ranging from Storage Consolidation, Virtual Server Storage, Disaster Recovery, Disk-based backups and more. The ISC-S family of IP SAN products offer large storage capacities at a low price and are available in SATA II, SAS or SSD combinations of 4, 8, 16, or 24 drives.

Additionally the ISC-S IP SAN products offer the industry's most cost-effective expansion via Expansion Units.

### Virtual storage for Virtualized environments

- VMWare Certified
- Xen Certified
- Microsoft HyperV
- Virtual Iron

ISC-S Series	ISC-401S	ISC-802S	ISC-1602S	ISC-2402S
				
<b>iSCSI Ports</b>	Standard: 3x1Gb Optional: 5x1Gb or 1 or 2x10Gb	Standard: 6x1Gb Optional: 1 or 2x10Gb	Standard: 6x1Gb Optional: 1 or 2x10Gb	Standard: 6x1Gb Optional: 1 or 2x10Gb
<b>Hot Swap Power Supplies</b>	Dual 650W	Dual 700W	Dual 800W	Dual 900W
<b># of Hot Swap Drives (SATAII/SAS/SSD)</b>	4	½ Full: 4 Full: 8	½ Full: 8 Full: 16	½ Full: 12 Full: 24
<b>Expansion Unit supported</b>	No	No	Yes	Yes
<b>Max # Drives including Expansion Units</b>	4	8	88: 16 Base Unit + 3x24 Expansion Units	96: 24 Base Unit + 3x24 Expansion Units
<b>SATAII Capacity (Raw)(TB) Per Unit</b>	4, 8	½ Full: 4, 8 Full: 8, 16	½ Full: 8, 16 Full: 16, 32	½ Full: 12, 24 Full: 24, 48
<b>SAS(15K) Capacity (Raw)(TB) Per Unit</b>	0.58, 1.2, 1.8, 2.4	½ full: 0.58,1.2,1.8,2.4 Full: 1.2, 2.4, 3.6, 4.8	½ full: 1.2,2.4,3.6,4.8 Full: 2.3, 4.8, 7.2, 9.6	½ full: 1.7,3.6,5.4,7.2 Full: 3.5,7.2,10.8,14.4
<b>SSD Capacity (Raw)(GB) Per Unit</b>	256	½ full: 256 Full: 512	½ full: 512 Full: 1024	½ full: 768 Full: 1536
<b>HW RAID Levels</b>	0,1,5,10,50	0,1,5,6,10,50,60	0,1,5,6,10,50,60	0,1,5,6,10,50,60
<b>Rack Space</b>	1U	2U	3U	4U

<b>ISC-1602E Expansion Unit (For ISC-1602S, or ISC-2402S)</b>		<b>3U Rackmount</b> , Quad-SAS Interface with per unit capacities of: <b>SATAII</b> : ½ populated: 8,16TB, Full: 16, 32TB <b>SAS(15k)</b> : ½ populated: 1.2, 2.4, 3.6,4.8TB, Full:2.3, 4.8, 7.2,9.6TB <b>SSD</b> : ½ populated: 512GB, Full: 1024GB
<b>ISC-2402E Expansion Unit (For ISC-1602S, or ISC-2402S)</b>		<b>4U Rackmount</b> , Quad-SAS Interface with per unit capacities of: <b>SATAII</b> : ½ populated: 12,24TB, Full: 24,48TB <b>SAS(15k)</b> : ½ populated: 1.7,3.6,5.4,7.2TB, Full: 3.5,7.2,10.8,14.4TB <b>SSD</b> : ½ populated: 768GB, Full: 1536GB



## Integrated IP SAN Appliance with redundancy

- iSCSI Based Storage Provisioning Appliance (Utilizes existing Ethernet network infrastructure)
- Gigabit or 10Gb (copper or optical) iSCSI port teaming, failover, and load balancing
- Single integrated unit plus optional expansion units
- 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 for Exchange, SharePoint, SQL, backup SW, etc
- Synchronous mirroring
- Campus mirroring (iSCSI mirroring)
- Optional Asynchronous Replication/Mirroring (CDP) with delta transfer and schedules
- Optional Volume based Encryption (AES256 block level encryption)
- Comprehensive IPSAN volume performance reporting and statistics

### Tiered Storage

SSD	SAS	SATA	SATA
SSD	SAS	SATA	SATA
SSD	SAS	SATA	SATA
SSD	SAS	SATA	SATA

## Scalability





- ISC can be scaled up to higher capacities by simply adding expansion units to the main ISC
- Horizontal or vertical scalability

## High Performance

- StoneFusion utilizing up to 8 virtualization processing cores with 2GB or 4GB of DATA Packet and command queuing cache (Patented)
- Jumbo frame support

## Ease of use

- Web based Intuitive User Interface
- Simple, on-demand, no downtime volume or storage expansion

	ISC-401S	ISC-802S	ISC-1602S / 1602E	ISC-2402S / 2402E
<b>Physical specification</b>				
<b>Form Factor</b>	1U Rackmount	2U Rackmount	3U Rackmount	4U Rackmount
<b>Dimensions (HxWxD)</b>	1.7"x17.2"x25.6" (43x437x650mm)	3.5"x17.2"x25.5" (89x437x648mm)	5.2"x17.2"x25.5" (132x437x648mm)	7"x17.2"x26" (178x437x660mm)
<b>Gross Weight</b>	52lbs (23.5kg)	½ Full: 49lbs (26.2Kg) Full: 55lbs (29.5Kg)	½ Full: 87lbs (39.5Kg) Full: 99lbs (44.9Kg)	½ Full: 96lbs (43.5Kg) Full: 114lbs (51.7kg)
<b>Power requirements</b>	Dual 650W Power Supplies Dual Power Cords 100V-8A, 240V-4A, 60-50Hz	Dual 700W Power Supplies Dual Power Cords 100V-10A, 240V-4A, 60- 50Hz	Dual 800W Power Supplies Dual Power Cords 100V-10A, 240V-4A, 60- 50Hz	Dual 900W Power Supplies Dual Power Cords 100V-11A, 240V-4.5A, 60- 50Hz
<b>Operating Temperature</b>	10° to 35°C (50°F to 95°F)			
<b>Relative Humidity</b>	8 to 90%, non-condensing			

StoneFly, Inc.  
[www.StoneFly.com](http://www.StoneFly.com)  
[www.iSCSI.com](http://www.iSCSI.com)

Toll Free: 888.786.6335  
 Phone: 510.265.1616  
 Fax: 510.265.1565

**Headquarters**  
 21353 Cabot Blvd  
 Hayward, CA 94545

**San Diego Office**  
 6191 Cornerstone Court, #105  
 San Diego, CA 92121