SGI® InfiniteStorage 5000-SP

SGI InfiniteStorage 5000-SP (IS5000-SP) is a RAID storage system that combines leading edge hardware with a choice of host interfaces and drive technologies in an affordable external storage platform. IS5000-SP provides a cost effective path to consolidated storage with next-generation 6 Gb/s SAS back-end technology and ultra-low power consumption. IS5000-SP delivers performance, flexibility and scalability without sacrificing simplicity and availability. IS5000-SP perfectly complements SGI® Altix® UV server and Rackable™ rackmount server environments.

Balanced Performance Delivers Application Flexibility

IS5000-SP delivers a balanced mix of IOPS and throughput to provide sustainable performance that is a considerable improvement over previous generation technology. With up to 4,000 Mb/s and 40,000 IOPS available through an optional High Performance Feature Key, IS5000-SP delivers impressive throughput to bandwidth-intensive and IOPS demanding applications.

Advanced Power Efficiency and Cooling Innovation

IS5000-SP drives low overall energy consumption with power supplies that meet multiple efficiency standards and a choice of SAS and solid state drives (SSDs). The IS5000-SP produces exceptional per-drive performance and IOPS per watt provide value by leveraging the fewest drives for optimum performance using the least amount of power.

IS5000-SP, with SGI's DMF, is an ideal primary or secondary tier storage solution for tiered virtualization implementations. It is also ideal as a front-end for active archive architectures using an SGI® COPAN™ MAID solution on the back-end.

Lower Costs Through Adaptability and Choice

IS5000-SP supports two native 6 Gb/s SAS host interfaces and an additional host interface card (HIC) for two additional 6 Gb/s SAS, four 1Gb/s iSCSI or four 8 Gb/s Fibre Channel (FC) host ports per controller. This flexible, multi-protocol approach allows users to choose the right configuration for their DAS or SAN deployments. IS5000-SP costeffectively satisfies an organization's complete range of data capacity requirements with high performance and near-line 6 Gb/s 3.5 and 2.5 inch SAS drives and 3.5 inch SSDs and full disk encryption (FDE) drives— all within a single storage system.

Simplified Storage Management

IS5000-SP storage management software combines the ease of use found on the previous generation InfiniteStorage products with the power and features of the InfiniteStorage 4000 series. Now all IS4000-SP and IS5000-SP series storage products can be managed from a common user interface; on-the-fly scaling, reconfigurations and firmware updates are supported.

![sgi logo]

SGI InfiniteStorage 5000-SP

System Specifications

Controller	5000-SP
RAID Controllers	Dual, active
Cache Sizes	4GB (2GB per controller)
Host Interfaces	6Gb SAS (2 standard), optional 2 additional 6Gb SAS or four 8Gb FC ports or four 1Gb/s iSCSI connections per controller
Partitions	2 Standard
Current Software Release Level	SANtricity ES Storage Manager 10.77
Controller Features	
RAID Levels	0, 1, 3, 5, 6, 10
Cache Backup	Cache destaged to Flash in case of power loss
LUNs	128 LUNs per partition, 512 total
Global Hot Spare Drives	Unlimited
Power and Cooling	Dual, redundant, hot swappable
Number of Drives Supported	192
Premium Software Features	
Partitions	2 Standard, Option upgrades to 4, 8, 16, 32, 64
SnapShot	Up to 16 point-in-time images per volume, up to 256 images per system
Volume Copy	Up to 511 clones within a system, up to 8 simulta-neous copy processes
Remote Volume Mirroring†	Supports up to 16 mirrored pairs over FC host ports
24-Bay Drive Enclosure Dimensions	
Drive Size	2.5"
Rack Height	2U
Height	3.47", 8.8 cm
Width	19", 48.3 cm
Depth	19.6", 49.8 cm
Max Weight	57.3 lbs., 26 kg
12-Bay Drive Enclosure Dimensions	
Drive Size	3.5"
Rack Height	2U
Height	3.4", 8.6 cm
Width	18.98", 48.2 cm
Depth	21.75", 55.2 cm
Max Weight	59.5 lbs., 27 kg

60-Bay Drive Enclosure Dimensions*	

Drive Size	3.5"
Rack Height	4U
Height, Width, Depth	H 7" (17.78 cm) x W 19" (48.26cm) x D 32.5" (82.55 cm)
Max Weight	232 lbs., 105.2 kg
Supported Drives	
3.5" 15K SAS	600GB, 450GB, 300GB
2.5" 10K SAS	600GB, 450GB, 300GB, 146GB
3.5" 7200 SAS	2000GB, 1000GB
3.5" SLC SSD	300GB, 150GB
Supported Operating Systems	
SLES 11.1, 10.3	VMWare ESX 3.5, 4.1
RHEL 5.6, 6.0	HP-UX** 11.31 (FC only)
Sun Solaris 10	Mac® OS X**
IBM AIX** 6.1, 7.1 (FC only)	Meets the Network Equipment Building System (NEBS) Level 3 standards
Windows Server 2003, 2008	
Power	
AC Power	
3.5" and 2.5" inch enclosures	2.06 max @ 230 VAC (100 to 240 VAC, 50/60 HZ)
48VDC power option	Meets the Network Equipment Building System (NEBS) Level 3 standards
Environment	
Operating Temperature	32°F to 104°F (10°C to 40°C) for 12 and 24 bay 32°F to 95°F (10°C to 35°C) for 60 bay
Relative Humidity	20% to 80% non-condensing
Altitude	100' below sea level (-30.5m) to 9,840' (3000m)
Optional Host Software	
DMF	Data Lifecycle Management (Archive) policy automation software virtualizes storage devices and automates the migration and archive of digital content throughout a virtual tiered storage pool based upon business policies

Air Flow and Heat Dissipation		Controller Enclosure	Drive Enclosure
IS5000-12: with (12) 3.5-in drives		1366 BTU per hour	945 BTU per hour
IS5000-24: with (24) 2.5-in drives		1127 BTU per hour	821 BTU per hour
IS5000-60: with (60) 3.5-in drives		4180 BTU per hour	2799 BTU per hour

*Can not mix 60-bay drive enclosures with 12-bay or 24-bay
**Failover support by third party suppliers
†Remote Volume Mirroring is not supported over iSCSI HICs