

SGI® InfiniteStorage 6700

Storage Array for High-performance Computing and Media Applications

Features

- Guaranteed latency
- Industry leading performance
- Balanced capability on reads and writes
- Robust data protection
- Unmatched scalability



The SGI® InfiniteStorage 6700 delivers industry leading performance for throughput intensive data applications. Combining 4 GB Fibre Channel RAID architecture with isochronous data delivery, the SGI InfiniteStorage 6700 delivers high performance, low latency, and guaranteed delivery. Environments that benefit from these attributes include: broadcast, post-production, film mastering, high performance computing, design automation and manufacturing.

Guaranteed Latency

The SGI InfiniteStorage 6700 is designed to optimize real-time throughput, even in the event of media errors, drive failures, or controller failover. Through a specialized isochronous design, the system inherently protects against dropped frames, ensuring the reliable delivery of real-time data. This is an essential requirement for environments like Digital Cinema mastering facilities where re-scanning a film reel due to dropped 2K or 4K resolution frames would cause a major delay in a project, or a Television Network where any interruption in content to air would result in lost revenue from advertisers.

Industry Leading Performance

Post production professionals who are currently working on multiple HD projects, 2K resolution film mastering now have a platform that will support their transition to additional projects or higher resolution 4K workflows. The ability to stream data at up to 3GB per second enables true real-time 2K scanning, resolution independent grading, finishing and playout. The SGI InfiniteStorage 6700 is capable of delivering two 4K streams, a level of performance that could, until now, only be attained aggregating multiple storage systems. The SGI InfiniteStorage 6700 not only increases workflow productivity, it also reduces management overhead by decreasing the number of systems to be managed.

Ideal for High Performance Computing Environments

Scientists researching weather and climatology are demanding the ability to load and unload data sets of a Terabyte or more into a supercomputer's system memory in as little time as possible. The SGI InfiniteStorage 6700 with its 3GB per second data transfer rate, is an ideal complement to a High Performance Computing environment because of its ability to support a large scale system as it reads, processes, and writes very large data.

Robust Data Protection

As capacities expand and individual drive sizes grow to 500GB and beyond, the time to recover from an individual drive failure increases. This makes the protection of data within a storage system more and more critical. The InfiniteStorage 6700 ensures data availability and protection by providing a dual parity (8+2) data protection capability for SATA and Fibre Channel drives.

Unmatched Scalability

The SGI InfiniteStorage 6700 can scale in capacity to over 1000 disk drives, providing hundreds of terabytes of virtualized capacity from a single, easily managed storage system. As a platform for storage consolidation, particularly when utilizing a shared file system, hierarchical storage system or information lifecycle management solution in a real-time environment the SGI InfiniteStorage 6700 is unmatched.



SGI® InfiniteStorage 6700

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| <p>Single Controller</p> <ul style="list-style-type: none"> FC Host Ports 4 x 4Gbit FC Back End Loops 10 Cache Size 2.5GB cache standard, upgrade available 2U enclosure | <p>Environmental</p> <p>Operating temperature</p> <ul style="list-style-type: none"> Minimum 41°F (5°C) Maximum 95°F (35°C) <p>Non-operating temperature</p> <ul style="list-style-type: none"> Minimum 14°F (10°C) Maximum 122°F (50°C) <p>Operating relative humidity</p> <ul style="list-style-type: none"> 20% to 80% (noncondensing) <p>Thermal rating (single-/dual-controller)</p> <ul style="list-style-type: none"> 1500 BTU / 3000 BTU <p>Certification</p> <ul style="list-style-type: none"> UL, CE, CUL, C-Tick, FCC |
| <p>Dual Controller</p> <ul style="list-style-type: none"> FC Host Ports 8 x 4Gbit Back-end channels 20 FC-AL Cache Size 5.0GB cache, upgrade available Active active controller with multi-pathing and load balancing 4U for dual enclosures | <p>Software Management</p> <ul style="list-style-type: none"> SGI InfiniteStorage RSM host management software (Windows, Linux®, or IRIX) |
| <p>Controller Enclosure Dimensions (each)</p> <ul style="list-style-type: none"> Height 3.5", 8.9cm, 2 EIA units Width 19.0" 48.3cm Depth 25.0", 63.5cm Weight 40 lb (18 kg) | <p>Optional Host Software</p> <p>XVM</p> <ul style="list-style-type: none"> Volume Manager for SGI systems is a virtualization technology to organize logical data structures for high performance and ease of management <p>XVM Plexing</p> <ul style="list-style-type: none"> Provides disk striping, mirroring, concatenation and advanced recovery features <p>XFS®</p> <ul style="list-style-type: none"> High-performance, 64-bit journaled file system for SGI IRIX and Linux system platforms <p>CXFS</p> <ul style="list-style-type: none"> Heterogeneous shared file system for storage area networks; eliminates the need for replication of data across a network by allowing multiple users to share one version of content at Fibre Channel speeds <p>DMF</p> <ul style="list-style-type: none"> Data Lifecycle Management (Archive) policy automation software virtualizes storage devices and automates the migration and archive of studio content throughout the virtual storage pool based upon business policies <p>High-Availability Clustering</p> <ul style="list-style-type: none"> Cluster two or more systems for application high-availability. SGI InfiniteStorage high-availability clustering software (Cluster Manager for Linux) fail over file-system mounts and user applications in case of system failure |
| <p>Storage Capacity</p> <ul style="list-style-type: none"> Fibre Channel Drives 146GB and 300GB 10,000 RPM Serial ATA drives 250GB and 500GB 7,200 RPM Min. drive capacity 2 tiers (18 drives) Max. drive capacity Up to 1120 total drives, 1000 data drives Drive expansion 2016, 4016 Max. Expansion 70 Drive Enclosures Drives / enclosure Up to 16 Max. drives / rack 160 LUN Configuration segments Up to 128 LUNs, divisible into 8,192 LUN Fibre Channel loop for parity Independent Fibre Channel loop for parity Global Sparing & Fast Rebuilds Independent Fibre Channel loop for global spares for fast rebuilds Global Sparing Up to 112 global spare drives Management Connectivity One ethernet port per controller for remote management One RS-232 port per controller for system monitoring Temperature & Cooling Temperature monitoring 4 redundant hot-swappable power supplies 2 redundant hot-swappable cooling fans | <p>Warranty</p> <ul style="list-style-type: none"> 2 year, 5X9 hardware parts and labor warranty, on-site, NBD response; upgradeable to multi-year, 7X24, 2-hour response |
| <p>Controller Power Specifications</p> <ul style="list-style-type: none"> Average / Maximum Current, Single Controller 3.0A@ 110VAC, 1.5A@ 230VAC / 4.0A@ 110VAC, 1.9A@ 230VAC Average / Maximum Current, Dual Controller 6.0A@ 110VAC, 3.0A @ 230VAC / 8.0A@ 110VAC, 3.8A @ 230VAC | <p>Rack</p> <ul style="list-style-type: none"> 79", 201cm, 42 EIA units 24", 61.0cm 30", 76.0cm 330 lbs (136.1kg) empty US: NEMA L6-30P locking plug, 250 VAC, 30A (qty 2) International: IEC 309 locking plug, 230 VAC 32A (qty 2) Dual internal rack power distribution to enclosures, single phase, 250 VAC (180 min. to 257 max.), 50/60 Hz, 16A (25A circuit breakers) |
| <p>Drive Enclosures</p> <ul style="list-style-type: none"> Height 5.25", 13.34cm, 3 EIA units Width 17.5", 44.45cm Depth 19.68", 50.0cm Weight 77 lbs (<35 kg) fully loaded, 19 lbs (<9kg) empty Cord type/Connections IEC 320, C-14, 250V, 10A socket; 250V,10A plug Distribution N/A Weight and dimensions apply to each enclosure model: 2016, 4016 | |



Corporate Office
1500 Crittenden Lane
Mountain View, CA 94043
(650) 960-1980
www.sgi.com

North America +1 800.800.7441
Latin America +55 11.5509.1455
Europe +44 118.912.7500
Japan +81 3.5488.1811
Asia Pacific +1 650.933.3000