

SGI InfiniteStorage 6120

An Advanced, Extremely Dense Storage System for Demanding Workloads

KEY FEATURES

Superior Density
Performance and Scalability
Robust Data Integrity and Availability
Simple Management



In today's dynamic environment, applications, such as video surveillance, data gathering and seismic imaging for the Energy industry, engineering analysis and science research are pushing the capabilities of traditional storage systems. The SGI InfiniteStorage 6120 is a compact, ultra-dense storage system which delivers the highest quality data services and eliminates the need for multiple systems, thereby minimizing floor space, power consumption, complexity and management overhead. This system is uniquely designed to deliver the enhanced quality of critical information required to reduce assessment time and ensure quality decision making. Historically, this type of data storage was only available from highly specialized and high cost storage systems. The SGI InfiniteStorage 6120 delivers high performance and large capacity without the increase complexity, footprint and high cost of previous generation systems.

Superior Density

With industry leading density, the SGI InfiniteStorage 6120 houses up to 60 drives in a single 4U enclosure which easily scales up to 120 drives with an additional expansion unit. Intermixing high-performance SAS and high-capacity SATA drives in the same enclosure allows customers to realize the promised cost savings of tiered storage. These features reduce complexity and footprint, both of which reduce bottom line acquisition and management costs.

Performance and Capacity Scalability

The InfiniteStorage 6120 scales to a maximum of 360TB using 3TB drives. It delivers up to 30,000 disk IOPS, and over 2 GB/s of throughput to keep pace with the most demanding mixed-workload.

Robust Data Integrity and Availability

Active-active failover and extreme IOPS and bandwidth performance provide the highest reliability and quality of service your applications demand. Unique, field-proven features, such as SATAssure™ and Partial Rebuild increase data reliability and availability. Data integrity is verified on every read operation with SATAssure taking the risk out of large deployments of SATA drives. Silent data corruption is detected and corrected automatically and transparently. Intelligent drive diagnostics and repair mechanisms minimize full drive rebuilds by correction only the portion of the drive requiring repair – ensuring that your data remains available and minimizing performance degradation.

Simple Management

The InfiniteStorage 6120 has an easy-to-use management interface which enables a flexible system configuration. Intelligent background formatting is revolutionary. This enables you to use the array immediately, eliminating the long wait times associated with deploying new storage or adding capacity. CLI, SSH and Telnet are provided to use for local and remote administration. Upgrading to new features or improving performance is simple and easy, as firmware and storage management features are field upgradeable.



Configuration Specifications

Controller	
Raid Controllers	• Dual, active
Maximum Disk Throughput	• 2GB/s
Maximum Cache IOPS	• 335,000
Maximum Disk IOPS	• 30,000
Protection Level	• RAID1, RAID5 (4+1, 8+1), RAID6 (4+2,8+2)
Number of Drives	• 3–120 (base + expansion)
Number of Storage Pools	• 256
Number of Host Initiators	• 512
Cache	• 12GB — mirrored and battery backed
Power and Cooling Modules	• 2 (redundant hot pluggable)
Drives per Enclosure	• 60
Expansion Enclosure	• 1
Drive Types	• SSD, SAS and SATA
Host Connections	• 4 x 8Gb Fibre Channel
Maximum LUNs	• 1024
	• Dual redundant, hot-pluggable power and cooling modules

Optional Advanced Features	<ul style="list-style-type: none"> • SATAAssure • RAID 6
Enclosure Dimensions	
Rack Height	• 4U
Height	• 7.0", 17.8 cm
Width	• 17.56", 44.6 cm
Depth	• 42", 106.7 cm
Weight Empty	• 120 lbs., 54.5 kg
Environmental	
Operating Temperature	<ul style="list-style-type: none"> • Minimum: 50° F (10 C) • Maximum: 95° F (35 C)
Voltage Range	• 200 – 240 VAC
Frequency	• 47-63 Hz, 400Hz
Average Power (SATA)	• 1,098 W — Base Unit (Drives and Storage Managers)
Average Cooling (SATA)	• 3,704 BTU/hr — Base Unit (Drives and Storage Managers)
Average Power (SAS)	• 1,454 W — Base Unit (Drives and Storage Managers)
Average Cooling (SAS)	• 4,960 BTU/hr — Base Unit (Drives and Storage Managers)



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