

SGI® InfiniteStorage TP9300 Storage Array

Features

- Four 2Gb Fibre Channel host ports
- Peak performance up to 400MB per second
- Supports from 4 to 112 drives with maximum capacity of over 16TB
- Multi-OS support for IRIX®, Windows®, Linux®, and other UNIX® operating environments
- Uses same comprehensive storage management as the SGI® TP9500 high-performance storage array
- Quick and simple performance upgrade to SGI TP9500 requiring no data conversion



Scalable Networked Storage Platform

SGI InfiniteStorage TP9300 (SGI® TP9300) is a native 2Gb Fibre Channel storage system designed for applications requiring a combination of business-critical storage management features and networked storage connectivity. The modular design of this midrange storage array lowers initial acquisition costs for value-based entry configurations, yet scales easily with full Fibre Channel storage area network (SAN) functionality to keep up with increased demands for capacity.

Broad Software Functionality for Business-Critical Data

SGI® TPSSM controls the TP9300 storage system, providing administrators with an intuitive GUI-based management interface for many tasks. Functions such as configuration, expansion, and online upgrades to system software are performed with no system downtime and no interruption to system I/O. SGI TP9300 provides optional background operations involving parity checking and data scrubbing to prevent data corruption. Optional software features include multi-OS partitioning for use in storage consolidation applications, as well as data protection features such as volume copy and point-in-time snap copy.

Investment Protection for the Future

Designed as an affordable mid-range storage array, SGI TP9300 shares the advanced software features and heterogeneous host support of the high-performance SGI® InfiniteStorage TP9500 (SGI® TP9500) storage array, leaving the TP9300 system well positioned for future growth and expansion. Because of the modular architecture, customers investing in TP9300 today can in the future upgrade to the capacity and high performance of TP9500 through a simple controller upgrade. And since both systems utilize the same data format, no time is wasted reformatting data in the upgrade process.

Productivity Gains Achieved by Accelerating Customer Workflow

Four independent 200MB-per-second host channels on the TP9300 system allow customers to configure multiple dual-paths to the host in a highly available bandwidth configuration (DAS) or utilize all four paths connected to a heterogeneous Fibre Channel SAN. SGI TP9300 delivers a value-based solution for data sharing across a high-performance SAN using the SGI® CXFS™ shared filesystem by removing data and I/O bottlenecks, resulting in higher productivity levels and accelerated workflows.

Modular and Configurable—Combining Economy and Scalability

SGI TP9300 can be configured with as few as 4 drives for moderate and cost-effective applications or rackmounted with as many as 112 drives for maximum scalability. Multiple TP9300 systems can be configured for a total capacity of over 24TB in a single rack. Optional deskside tower packaging is available for workgroup environments where space is limited.

Open Systems Support for Multi-OS Heterogeneous Environments

TP9300 dynamic multi-pathing failover is standard for both DAS and SAN installations using the XFS® and CXFS filesystems. Optional support for Windows, 32-bit and 64-bit Linux, and many UNIX platforms satisfies the need to fit into the typical customer IT infrastructure and most data centers.



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| <p>TP9300 Base Enclosure</p> <ul style="list-style-type: none"> • Model TP9300 dual controller • Controller Dual active 2Gb Fibre Channel • RAID levels 0, 1, 0+1, 3, 5 • Cache 256 MB/128 MB data per controller, or 1 GB/896 MB data per controller • Cache backup 7-day maximum • LUNs Up to 256 LUNs per partition standard • Maximum LUNs 1,024 per TP9300 (requires optional partitioning SW) • Volume group Up to 30 drives (29+1) for RAID 5 group • Global hot spares 15 maximum per TP9300 • Deskside package Tower configuration, support for 14 drives • Rack support 19", industry-standard TP9500 rack; total of 12 enclosures per 38U rack; optional rail kit for OEM rackmounting • Redundant, hot-swappable components FC drives, cooling fans, power supplies, environmental services modules (ESMs), controllers • Remote management 2 Ethernet ports • Diagnostics 2 RS-232 ports • Data integrity Background parity scan and data scrubbing • Warranty 3-Yr 5X9 parts and labor warranty, on-site, NBD response; upgradeable to multi-year, 7X24, 2-hour response | <p>Software Management</p> <ul style="list-style-type: none"> • SGI® TPSSM included at no cost • Same SW management as SGI TP9500 • Dynamic RAID level migration • Dynamic segment size migration • Dynamic defragmentation • Immediate LUN availability • Performance monitoring • Nondisruptive firmware upgrades • Enterprise management window provides comprehensive view of all TP9300 and TP9500 storage systems in the management domain | <p>TP9300 or TP9500 Rack</p> <ul style="list-style-type: none"> • Height 72", 1829 mm • Width 22.0", 559 mm • Depth 36", 914 mm • Weight 1,020 lb (464 kg) full 440 lb (215 kg) empty |
| <p>Host Interface</p> <ul style="list-style-type: none"> • Four 2Gb Fibre Channel host channels, FC-AL or FC-SW attachment, each capable of 200MB/s peak bandwidth • Four optical LC connectors, one per host channel • Command tag queuing with up to 256 tags • Aggregate peak bandwidth of 800MB/s from cache | <p>Optional Array Software</p> <ul style="list-style-type: none"> • TPSSM Partitioning Up to 64 partitions per TP9300 • TPSSM Volume copy For data copy from one volume to another for improved performance and assists with data migration and backup • TPSSM SnapCopy Creates a static point-in-time image of a volume | <p>Storage Capacity</p> <ul style="list-style-type: none"> • Disk drives available 36GB, 15K RPM drives 73GB, 15K RPM drives 146GB, 10K RPM drives • Min. drive capacity 4 per enclosure • Max. drive capacity 112 (base + 7 expansion enclosures) per TP9300 • Drive expansion TP9500 drive enclosure • Max. expansion 7 TP9500 drive enclosures per TP9300 • Drives per enclosure 4-14 • Max. drives per rack 168 (multiple TP9300 systems) • Max. enclosures/rack 12 • Input power TP9300 and TP9500 rack Dual power input lines, single phase Voltage 250 VAC (180 min. to 257 max. VAC) frequency 50/60 Hz • Power connections TP9300 and TP9500 rack AC distribution 250 VAC, 16A US: NEMA L6-30P, 250 VAC, 30A International: IEC 309, 230 VAC 32A • Input power TP9300 enclosure 120/220 VAC, 50/60 Hz, 15A • Power connections Varies by geography • Safety compliance UL 1950 CSA 22.2 No. 950 IEC 950 EN 60950 |
| <p>Media Interface</p> <ul style="list-style-type: none"> • Two redundant 2Gb Fibre Channel drive channels, each capable of 200MB/s peak bandwidth • Two optical LC connectors, one per controller • Aggregate peak bandwidth of 400MB/s to media | <p>Optional Host Software</p> <ul style="list-style-type: none"> • XVM Volume Manager for SGI systems, is a virtualization technology to organize logical data structures for high performance and ease of management • XVM plex Provides disk striping, mirroring, concatenation and advanced recovery features • XVM snapshot Creates point-in-time snapshots of data at the filesystem level; can create single snapshot of entire filesystem for customers with vast amounts of data • XFS High-performance, 64-bit journaled filesystem for SGI® IRIX® and Linux system platforms • CXFS Heterogeneous shared filesystem for storage area networks; eliminates the need for replicating data across a SAN by allowing multiple heterogeneous systems to share one scalable filesystem | <p>Environmental</p> <ul style="list-style-type: none"> • Operating temperature Minimum 50°F 10°C Maximum 104°F 40°C • Operating relative humidity 20% to 80% |
| <p>Supported Hosts</p> <ul style="list-style-type: none"> • AIX®, IRIX®, Windows® 2000, Windows® XP, Windows NT®, HP-UX®, Linux, Solaris®, NetWare® 6 | <p>Dimensions (Approximate) Base Enclosure</p> <ul style="list-style-type: none"> • Height 5.25", 133 mm (3U) • Width 19.0", 482 mm (IEC rack compliant) • Depth 22.6", 576 mm • Weight 89 lb, 40.4 kg | <p>Electromagnetic Compliance</p> <ul style="list-style-type: none"> • FCC Class A • VCCI Class 1 • EN 55022 Class A • EN 50082-1; IEC 801-2, IEC 801-3, IEC 801-4 |



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