

Reliable backup/  
restore solution

# SGI® COPAN™ Virtual Tape Library - 300T/TX

## HIGHLIGHTS

Significant power and  
cooling savings

Ultra high density

Faster backups, and  
more reliable restores

Seamless integration  
with backup software

Operates with existing  
data protection hard-  
ware infrastructure

### More Reliable Data Protection

SGI COPAN Virtual Tape Library - 300 T/TX provides a robust backup/restore solution that gives you more reliable backups and faster restores than automated tape libraries. Your data is better protected than with tape, and you have complete online access to all your critical data. The 300T/TX delivers up to an industry-leading throughput of 6.1TB/hour, which is ideal for customers with massive amounts of data who require higher performance levels. This enables IT organizations to meet increasing Recovery Time Objectives and Recovery Point Objectives.

### Patented Data Protection Advantages

The 300T/TX is based on SGI COPAN Enterprise MAID (Massive Array of Idle Disks) platform, which is purpose-built to cost effectively address the long-term data storage requirements of persistent data.

With COPAN Enterprise MAID, only those disks that contain requested data by a specific application are powered on, and then are powered off when they are not needed. This makes SGI COPAN storage extremely “energy efficient,” significantly reducing the power consumption of the storage system by up to 80%. Coupled with economical packaging, the 896TB\* data center chassis fits into 10 ft.<sup>2</sup> of floor space.

### Patented DISK AEROBICS® Software

Provides ongoing and continuous data verification by periodically exercising all disks and detecting potential drive failures before they occur.

### Patented POWER MANAGED RAID® Software

Provides full RAID 5 protection for all the data and manages the power budget (maintaining the maximum of 25% of disks spinning at any one time.)

### Features that Simplify Storage Management

COPAN 300T/TX allows you to simplify the daunting task of managing massive quantities of persistent data - with features that make data management a breeze.

### Tape Caching

The Tape Caching option enhances the functionality of the VTL by acting as a cache to your physical tape library, providing transparent access to data regardless of its location. Backups can be dramatically accelerated, while enabling tapes to be moved to a physical library based on user supplied policies. Data can then be removed from the VTL, freeing up additional space for high speed backups. In the event of a restore, data no longer on the VTL is automatically routed to the backup server upon request to the VTL, simplifying the overall management process.

### Compression

The 300T/TX features VTL compression, effectively doubling the amount of data that can be stored onto a single footprint. With average compression results, up to 1.24PBs can be stored onto a single footprint. The actual increase in capacity is directly related to the compressibility of the data. Compression can also be used with replication and tape export to reduce bandwidth requirements.

\*Based on raw, uncompressed capacity



### Active Failover

Two application servers may be deployed into the optional active failover configuration. In the event that an application server should fail, the traffic from the failing server can be re-routed through the remaining server, ensuring that critical backup jobs can be completed.

### Secure Data Movement

Data encryption for replication and tape export protects data in flight from unauthorized access.

### Flexible Existence with Tape

The 300T/TX also seamlessly coexists with physical tape. Tape export or your backup application's tape copy function enables data to be moved to physical tape if desired.

### Seamless Integration into Existing Environments

SGI COPAN Virtual Tape Library (VTL) products integrate seamlessly with your current backup/restore software, so there's no need to change or disrupt your storage infrastructure. The 300T/TX enables disk to emulate leading tape libraries, delivering the speed, reliability, and availability benefits of disk-based backup while allowing users to continue using existing tape backup software and procedures.

The 300 series of products are compatible with leading backup software providers such as HP, IBM, Legato, Oracle, Symantec and more.

### Included Features - 300T/TX

- Revolution Management Console
- POWER MANAGED RAID® Software
- DISC AEROBICS® Software
- Virtual Tape Library Interface
- Compression

### 300T - Base Configuration

SGI COPAN 300T basic configuration offers all the benefits of Enterprise MAID, DISK AEROBICS software, and POWER MANAGED RAID for simplified management and advanced data protection of persistent data.

### 300TX - MAX Performance VTL

SGI COPAN 300TX builds upon all the features of the 300T system and adds a second application server, doubling the system throughput and the number of Virtual Tape Cartridges supported.

### Optional Features - Revolution 300T/TX

- Export to Tape with Encryption
- Electronic Data Replication with Encryption
- ACSLS Support
- NDMP Support
- Active Failover
- Tape Caching
- Dual Path

### Optional Performance Features

#### High-Performance Caching Module (HPCM)

The optional High Performance Caching Module provides a specialized landing zone for data. The HPCM has a 50% higher throughput than a standard 300T/TX shelf to further slash backup time requirements. Up to 64 Virtual Tape Drives are supported per shelf. The HPCM offers 27TBs of caching capacity per HPCM unit.

### Advantages

#### Superior Performance and Faster, More Reliable Backups and Restores

More reliable backups and faster restores than automated tape libraries. Your data is better protected than with tape, with complete online access to all your critical data.

#### Seamless Integration into Existing Backup Environments

Compatible with all leading software providers such as HP, IBM, Legato, Oracle, Symantec and more.

#### Breakthrough Scale and Economics

Unparalleled capacities within a single chassis at costs dramatically lower than transactional storage

#### Power and Footprint Savings

Patented Enterprise MAID saves up to 85% on power and cooling and offers up to 896TB of raw capacity.

#### Investment protection

Operates within existing backup infrastructure, extending the life of backup servers and tape hardware.

#### Multiple Personality Flexibility

The 300T/TX can coexist with the Native MAID 300M. This flexibility enables customers to deploy multiple solutions within a single cabinet, saving footprint while meeting all business objectives.

# SGI COPAN Virtual Tape Library - 300T/TX

## Configuration Specifications

Configurations	
Raw Storage Capacity - Standard Config.	28TB to 896TB per cabinet Upgrade in 28, 56, 84 or 112TB increments
Useable Capacity - Standard Config.	20 to 624TB
Number of Shelves	1-8
Connectivity	Up to eight 4-Gbps Fibre Channel ports
Number of Emulated Tape Libraries	1-8
Number of Emulated Tape Drives	1-56 standard (1-1024 with HPCM option)
Max Number Virtual Tape Cartridges	Up to 8192
Performance	
Maximum Aggregate Throughput	6.1TB per hour
Reliability	
RAID	RAID 5 with POWER MANAGED RAID® software
Alert Messaging	SMTP, SNMP
Power Supplies	N+N Redundancy, Hot Swappable
Dual Power	Redundant
Fans	Redundant
Fail Over	Hot Standby
Specifications	
Max Spinning Drives at Full Operation	25%
Spare Drives	5 per shelf for a maximum of 40
Disk Drive	1TB SATA
Dimensions	30" w x 48" d x 87" h
Clearances	Front-40", Rear-36", Side-0"
Weight	Maximum 3,193 lbs.
Power Consumption - Standby (min / max)	665 / 4,382 watts
Power Consumption - Full Operation (min / max)	1,047 / 7,867 watts
Heat Dissipation - Standby (1 / 8 shelves)	1,450 / 14,953 BTU / h
Heat Dissipation - Full Operation (1 / 8 shelves)	3,572 / 26,845 BTU / h
AC Power - Dual Cord	200-240 VAC, 30 AMP, 3-phase
Operating Temperature	50-95 °F (10-35 °C)
Regulatory Approvals	cULus, FCC class A,
Standard Product Warranty	1 year
System Management	
Revolution Management Console	GUI (local or remote), CLI



# SGI COPAN Virtual Tape Library - 300T/TX

Virtual Tape Library (VTL)

[www.sgi.com/products/storage](http://www.sgi.com/products/storage)

Supported Archive Applications		Supported Backup Applications	
ADIC®	AMASS	Atempo	Time Navigator™
FileTek	StoreHouse®	BakBone®	NetVault™
Microsoft®	Removable Storage Manager	CommVault®	Galaxy
SGI®	InfiniteStorage Data Migration Facility	Computer Associates	BrightStor® ARCserve® Backup
Sun®	SAM-FS	EMC	Networker, Retrospect
VERITAS	Enterprise Vault™	HP	Data Protector, OpenView
		IBM	Tivoli Storage Manager
		Oracle®	Secure Backup
		Symantec	Veritas NetBackup™, Backup Exec™
Emulated Tape Libraries		Supported Virtual Drives	
Exabyte	ESL9000 Series	HP	Ultrium 1-SCSI, Ultrium 2-SCSI,
FalconStor	VTL		Ultrium 3-SCSI, ULTRIUM-TD1,
IBM	3384, 3590 E11, 3590 B11, 3583		ULTRIUM-TD2, ULTRIUM-TD3,
OVERLAND	NEO Series 2000, NEO Series 4100		ULT3580-TD1, ULT3580-TD2,
QUALSTAR	TLS-4222i		ULT3580-TD3
Quantum ADC	Scalar 100, Scalar 1000, Scalar i2000	IBM	3590E11, 3590B11, 3590E1A,
Quantum ADL	P1000, P3000, P4000, P7000, ATL7100,		3590B1A, 3592J1A
	M1500, M1800	Quantum	DLT7000, DLT8000, SuperDLT1,
SONY	CSM-2000		SDLT320, SDLT220
SPECTRA	GATOR 12000, GATOR 20000, GATOR 64000	Seagate	ULTRIUM0642-XXX
STK	L20, L40, L80, L180, L700, 9710, 9714,	SONY	SDX-300C, SDX-500C, SDX-700C
	9730, SL50		SDZ-100, SDZ-130
		STK	9840A, 9840B, 9840C, 9940A,
			9940B, 9940C, 10000A

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