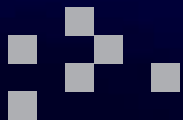


DUAL AIT TAPE SUBSYSTEM

SafeDR™



DUAL AIT TAPE SUBSYSTEM

SafeDR™



THE BIG PICTURE

- Dual AIT drives in external, modular, stackable enclosures.
- Capacity: AIT-4 is 200GB native (520GB compressed)
- Speed: AIT-4 is 86GB/hour native (224GB/hour compressed).
- Mirrored backup provides disaster recovery support.
- Added functions: off-line copy plus cascading.
- Original investment retained after field upgrade.
- LCD display panel improves backup efficiency.
- Supports AIT-1, AIT-2, AIT-3 and AIT-4.
- Roadmap to AIT-5 and AIT-6.
- AIT range: single drive to enterprise-wide libraries.
- Supports LVD, HVD, and FC connections.
- WORM enabled

The Dual AIT Tape Subsystem is part of GST's SafeDR® family. All GST tape subsystems in this family are housed in upgradeable modular enclosures. Dual AIT Tape Subsystems generate identical sets of backup cartridges so that one set can be safeguarded remotely for disaster recovery while the other set is retained onsite for faster restores; other tape functions add off-line copy and cascading capabilities. An LCD panel provides an advanced operator interface for visibility over the backup operation.

The Dual AIT Tape Subsystem can backup a wide variety of servers. They connect natively with LVD (low voltage differential), HVD (high voltage differential), and FC (Fibre Channel) interfaces.

MODEL OVERVIEW

GST's Dual AIT Tape Subsystem is available in a variety of models. Each AIT technology (AIT-1, AIT-2, AIT-3, AIT-4) is available in two server-to-SCSI Adapter interfaces and one fibre interface:

Low Voltage Differential (LVD). Maximum SCSI negotiation of 160MB/s; the total server-to-storage peripheral connectivity is 12 meters.

High Voltage Differential (HVD). Maximum SCSI negotiation of 40MB/s; the total server-to-storage peripheral connectivity is 25 meters.

Fibre Channel (FC). 2 Gbit fibre interface.



AIT TECHNOLOGY

AIT tape technology has evolved through four generations: AIT-1, AIT-2, AIT-3, and AIT-4 and provides outstanding capacity and performance with a highly stable technology roadmap. AIT cartridges utilize MIC architecture, providing rapid time-to-data and multiple load points for partitioning data.

Native cartridge capacities for AIT-1, AIT-2, AIT-3, and AIT-4 are 35GB, 50GB, 100GB and 200GB (91GB, 130GB, 260GB, 520GB compressed) with speeds of 14GB/hour, 22GB/hour, 43GB/hour, and 86GB/hr (37GB/hour, 56GB/hour, 112GB/hour, and 224GB/hr compressed). Scalability is planned to a 6th generation product with native capacity of 800GB (2 TB compressed) and a speed of 345GB/hour (900GB/hour compressed). A 2.6-to-1 compression ratio is achieved with Adaptive Lossless Data Compression (ALDC) technology.

KEY BENEFITS

Improved DR – Mirrored backup capability produces simultaneous sets of identical backup cartridges with no performance penalty; this permits storage of one set off-site for better disaster recovery and storage of the other set on-site for rapid restore.

WORM Enabled – AIT2 and AIT3 drives are available with Write Once Read Many (WORM) technology. WORM provides tamper-proof data protection with non-rewriteable and non-erasable data storage.

Fault-Tolerant Backup and Restore – Dual-drive configurations ensure against drive failure since the second drive continues to operate.

Added Tape Functions – For dual-drive subsystems, key added tape functions include: dual-drive mirroring for mirrored backups, off-line copying/verifying with no processor penalty, and cascading to extend unattended backup capacity by switching from one drive to the other (doubles capacity).

Space Saver – The small dimensions and light weight of the modular configurations facilitate the optimum use of datacenter space.

Media Investment Protection – For IT sites with an investment in AIT-1 media and drives, the newer AIT-2 and AIT-3 are backward-read compatible, and forward-read compatible to future generations.

Serviceability – Modularity of design permits individual drives and GST's Dual Drive Controller to be easily replaced in building-block fashion by the user.

KEY FEATURES

Stackable Enclosures – Individual modular enclosures enable each drive and controller to be handled as separate building blocks; field upgrades from single to dual drives are simple.

Dual Drive Controller – Manages mirroring, off-line copying, cascading, and the LCD Display Panel.

Compliance Ready – WORM technology supports compliance with new government data storage regulations that apply to the tamper-proof safeguarding of data.

LCD Display Panel – Multi-function LCD Display Panel continuously displays key drive and backup job conditions.

Convenient Drive Interface – RS232 interface for updating firmware and optimizing drive performance.

Service and Support – A variety of support programs provide installation and onsite service; includes GST's Accelerated Ship Program (GASP) to get replacement units on the scene rapidly.

Warranty – Purchase price includes a built-in manufacturer's warranty of three years.



DUAL AIT TAPE SUBSYSTEM



SPECIFICATIONS	AIT-1	AIT-2	AIT-3	AIT-4
Capacity - Mirrored Mode				
Native	35 GB	50 GB	100 GB	200 GB
Compressed	91 GB	130 GB	260 GB	520 GB
Capacity - Cascade Mode				
Native	70 GB	100 GB	200 GB	400 GB
Compressed	182 GB	260 GB	520 GB	1 TB
Sustained Transfer Rate - MB/s				
Native	4 MB/s	6 MB/s	12 MB/s	24 MB/s
Compressed	10 MB/s	16 MB/s	31 MB/s	62 MB/s
Sustained Transfer Rate - GB/hr				
Native	14 GB/hr	22 GB/hr	43 GB/hr	86 GB/hr
Compressed	37 GB/hr	56 GB/hr	112 GB/hr	224 GB/hr
Buffer Size	10 MB	10 MB	18 MB	96 MB
Drum Rotational Speed	6,400 rpm	6,400 rpm	6,000 rpm	8,506 rpm
Interface	LVD, HVD, Fibre	LVD, HVD, Fibre	LVD, HVD, Fibre	LVD, HVD, Fibre
Data Compression	ALDC	ALDC	ALDC	ALDC
Linear Recording Density	116,000 bpi	167,000 bpi	155,000 bpi	203,000 bpi
Average Media Load Time	10 seconds	10 seconds	10 seconds	14 seconds
Average Access Time	27 seconds	27 seconds	27 seconds	52 seconds
Search Speed	122 inches/s	130 inches/s	122 inches/s	122 inches/s
Rewind Speed	122 inches/s	160 inches/s	122 inches/s	122 inches/s
Uncorrectable Error Rate	10 ¹⁷ bits	10 ¹⁷ bits	10 ¹⁷ bits	10 ¹⁷ bits
MTBF	300,000 hours	300,000 hours	400,000 hours	400,000 hours
Average R/W Head Life	50,000 hours	50,000 hours	50,000 hours	50,000 hours
Average Media Uses	30,000 passes	30,000 passes	30,000 passes	30,000 passes
Vibration (Operating)	.25 G peak	.25 G peak	.25 G peak	.25 G peak
Shock (Operating)	5.0 G peak	5.0 G peak	5.0 G peak	5.0 G peak
Altitude	10,000 feet	10,000 feet	10,000 feet	10,000 feet
Maximum Web Bulb Temperature	26° C	26° C	26° C	26° C
Operating Temperature	40° C to 104° F	40° C to 104° F	40° C to 104° F	40° C to 104° F
Storage Temperature	-40° C to 158° F	-40° C to 158° F	-40° C to 158° F	-40° C to 158° F
Operating Humidity	20% to 80%	20% to 80%	20% to 80%	20% to 80%
Power Consumption	120 watts	120 watts	120 watts	22 watts
Dimensions (H x W x D), Desk	10.25" x 9" x 11.25"	10.25" x 9" x 11.25"	10.25" x 9" x 11.25"	3.5" x 9" x 11.25"
Weight, Desk	9 lbs	9 lbs	9 lbs	3 lbs
Dimensions (H x W x D x U), Rack	4" x 18" x 20" x 2U	4" x 18" x 20" x 2U	4" x 18" x 20" x 2U	4" x 18" x 20" x 2U
Weight (unpopulated), Rack	30 lbs	30 lbs	30 lbs	30 lbs
Media	SDX1-35C	SDX2-50C	SDX3-100C	SDX4-200C
Warranty	3 Years	3 Years	3 Years	3 Years

*Compressed Capacity & Transfer Rate Assumes 2.6:1 Ratio.



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GST, Inc. engineers, manufactures, markets and sells a full line of innovative storage backup and restore products to meet today's need for high-performance, fail-safe reliability and cost-effective data storage. Products include single and dual tape subsystems, autoloaders, midrange tape libraries and modular enterprise-wide libraries. Complete information about the company, its products and support can be found at: www.gstinc.com