SONY

S-AIT

Super Advanced Intelligent Tape



Ideal for automation systems requiring extraordinary capacity and performance.

Highest capacity tape media on the data storage market.

S-AIT has been developed to meet the ever-increasing storage needs of data intensive networks. It's the world's first tape technology to break the 1TB per cartridge barrier by offering a massive 1.3TB of capacity compressed for SAIT-1 and an **impressive 2TB of capacity compressed for SAIT-2**!



Key features and benefits

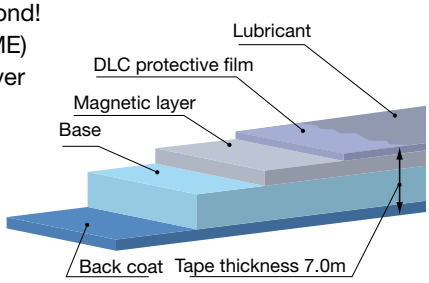
- **Maximum storage, minimum space**
  Using the industry standard Half-Inch compact cartridge and based on proven AIT recording technology, S-AIT offers the highest capacity available - **from 1.3TB to 2TB compressed** (from 500GB to 800GB native) for superior data storage. That's at least **20% more native capacity** than any other tape cartridge!
- **Ultra fast data transfer**
  With advanced Helical Scan technology on board, S-AIT is lightning fast with transfer rates of **up to 45 MB/s native and 117MB/s compressed**.
- **Rugged, reliable and durable**
  S-AIT features Advanced Metal Evaporated (AME) tape technology for outstanding durability and a reduced need for periodic cleaning. The unique Sony Diamond-Like Carbon coating provides a smooth, hard protective surface to the media, maximising reliability and enabling **secure storage of data for over 30 years***. **Lifetime Guaranteed****.
- **Rapid access to your data**
  S-AIT cartridges include **Remote Memory-In-Cassette** (R-MIC), an integrated 64Kb flash memory chip that stores file directories, operational parameters and specific user-defined information. R-MIC simplifies media management and speeds up file access and data search.
- **WORM available for safe archiving*****
  Write-Once Read-Many (WORM) media is ideal for protecting valuable data against accidental erasure and prevents alteration of archives – a key advantage when managing compliance plans for large corporate customers!
- **Customised pre-labelled service**
  Want to easily identify your media in automated systems and access your files quicker? Sony offers a labelling service for S-AIT tapes – perfect for saving time, enhancing the efficiency of your backups and making data even more secure!

* Environmental conditions: 23°C, 15-50% relative humidity.
** Terms and conditions apply.
*** Sony offers WORM functionality in S-AIT WORM media and S-AIT WORM drive firmware. However, application software also needs to support the S-AIT WORM capability for full solution functionality. Please check that your software supports S-AIT WORM. WORM functionality available for SAIT-1 media only.

S-AIT

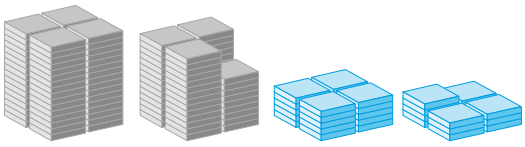
Proven AME Technology: a key to high density recording and reliability

S-AIT is based on advanced AIT recording technology. The tape surface is protected by a hard carbon layer made of DLC, Sony's Diamond Like Carbon film. This is almost as hard as a diamond! With Advanced Metal Evaporated (AME) technology, a pure metal magnetic layer is deposited directly on the base film without adhesives or binder, maximising tape output, recording density and durability.



The 10TB Tape Check

The extremely high density of S-AIT tapes shines through when comparing the quantity of tape needed to store 10TB of native data - 64 SDLT320 cartridges, 50 LTO-2 cartridges, just 20 SAIT-1 cartridges or less than 13 SAIT-2 cartridges.
Simply more capacity in less space!



SDLT 320	LTO2	SAIT-1	SAIT-2
64 cartridges	50 cartridges	20 cartridges	13 cartridges

Based on cost per GB at time of press

Specifications

General Characteristics	SAIT1-500	SAIT1-500W	SAIT2-800
Format	SAIT-1	SAIT1-Worm	SAIT-2
Storage Capacity Compressed (Native)*	1.3TB (500GB)		2TB (800GB)
Transfer Rates Compressed (Native)*	78MB/s (30MB/s)		117MB/s (45MB/s)
Magnetic type	AME		AME
Physical Characteristics			
Tape Width (mm)	12.65		12.65
Tape Thickness (µm)	8.6		8.6
Tape Length (m)	600		640
Environmental Requirements			
Operating Conditions (°f (°c); %rh**)	50~113 (10~45); 20~80		41~113 (5~45); 20~80
Storage Conditions (°f (°c); %rh**)	61~90 (16~32); 20~60		60.8~89.6 (16~32); 20~60
Tape Dimensions (nominal)			
Cartridge Dimensions (mm)	102x105.4x21.5		102x105.4x21.5
Weight (g)	195 (w/o case)		200 (w/o case)

* Compression ratio: 2.6:1 ** Maximum wet bulb temperature: No condensation at 26°C (79°F).

Logistics

Sub carton	SAIT1-500	SAIT1-500W	SAIT2-800
External Dimensions (mm)		152x127x126	
Weight (kg)		1.38	
Quantity		5	
Master carton	**SAIT1-500**	**SAIT1-500W**	**SAIT2-800**
External Dimensions (mm)		331x287x167	
Weight (kg)		6.19	
Quantity		20	



High Performance S-AIT Drives

SAIT-1 is available as an internal or external drive model; offering exceptional capacity, high storage density and superb reliability. The internal drive can be fitted into some server chassies (check website for compatibility) or racked in a 19" cabinet by using the StorCase Technology DS352 data silo. The external drive can be mounted on the desktop or rack mounted into a 19" cabinet by using the shelf accessory option. For customers requiring an S-AIT autoloader, the CSM20 provides up to two SAIT-1 drives in 5U rack mount library capable of storing up to 10TB of native data.
For further information, please visit the website : http://www.sonyisstorage.com/sait



S-AIT Cleaning Tapes

Keeping drive heads clean is essential if you want to maintain performance. The Sony SAIT1-CL cleaning tape is designed exclusively for S-AIT 1 drives while the SAIT2-CL cleaning tape is exclusively for use with S-AIT 2 drives. The tapes automatically detect head conditions to ensure optimum cleaning cycles and provide around 50 cleanings.

About Sony storage media

Sony has spent more than 50 years driving innovation and this pioneering spirit has led us to develop many popular storage standards. Today, Sony manufactures media for many different formats – including AIT and half-inch tape formats such as S-AIT, LTO and DLT, as well as optical discs like MO, DVD and CD – all to the same demanding standards for absolute performance and reliability. Businesses and consumers get the widest choice of storage solutions from a single supplier. And with the backing of Sony technical support and time-saving services like pre-labelling, the answer is clear: whether you need archival, backup or file transfer, trust Sony with your data.

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