QuickSpecs
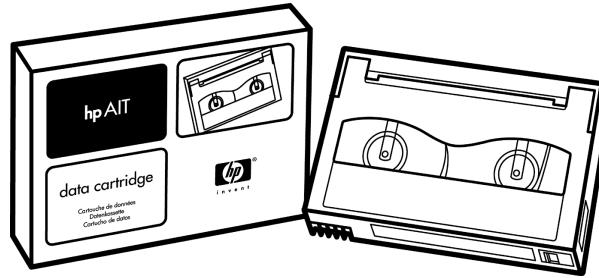
Overview

Introduction

HP AIT storage media are ideal for departmental and workgroup backups where capacity, performance and cost are critical. HP AIT offers compressed capacities from 70GB to 200GB with built in MIC technology giving faster file access and higher reliability. AIT media with Advanced Intelligent Tape technology offers fast data access and a low maintenance solution for AIT tape drive customers. Optimum compatibility with all current HP AIT and pre-merger Compaq AIT drives, autoloaders and libraries. It is 27% faster data access with built-in memory offers greater data integrity. AIT drives have self-cleaning heads to prevent an abundance of debris build-up. For extra protection, HP AIT cleaning cartridges are good for up to 70 cleans per cartridge.

Models		
	HP AIT-3 data cartridge, 200GB	Q1999A
	HP AIT-2 data cartridge, 100GB	Q1998A
	HP AIT-1 data cartridge, 70GB	Q1997A
	HP AIT cleaning cartridge	Q1996A
	HP AIT bar code label pack	Q2005A

Key Features & Benefits

- **MIC**-Memory in Cassette is a 64k memory chip embedded into the cartridge that allows for direct connection to AIT drives on-board processors to ensure quick media load, faster access to user files, multiple on-tape load and unload points and historical data on the actual media.
- **Faster Data Access**-with MIC technology, files can be accessed in as little as 27 seconds-a 50% improvement over other technologies.
- **Data Integrity**-with MIC technology, AIT media provides a line of insight to users as data is maintained directly with the media but separated from the tape itself.
- **Longer Life Cycles**-low and controlled tape tension and reduced pressure with AIT's specially-designed recording head affords longer life cycles. 1/3rd less tension vs other tape technologies.

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Product Highlights

Proven Reliability	HP ensures the highest level of quality with media specifications that far exceed industry standards. HP has 20 custom-built testing chambers that are in use 24 hours per day, 365 days per year. No other media supplier carries out such exhaustive qualification of the drive and media as HP. This is because no media supplier conducts extensive drive based tests on a daily basis and moreover, supports hardware warranty initiatives in the field with a vested interest in reducing all media-induced hardware issues. In 2002, 170,000 different media tests were performed, accounting for 1.3 million test hours. HP also conducts tests on multiple batches of media using multiple drives to ensure performance in different environmental conditions, such as variations of high/low temperature and humidity. Changes in external conditions, which can easily occur when media is moved from different locations, can have a huge impact on error rate performance. Increased error rates jeopardizes backup, and backup disruption jeopardizes business continuity. HP customers are many and varied; this is why HP specifies stringent durability and reliability metrics that the media must satisfy before it is good enough to bear the HP logo.
AIT Technology	AIT or Advanced Intelligent Tape is a proprietary technology developed by SONY. AIT is ideal for businesses that require high-capacity, high-performance storage media with limited on-site storage space. Sony introduced AIT into the market place in 1997. AME allowed 8mm technology to expand into higher capacities and tape length. With the introduction of AME technology, AIT media has been able to make the capacity jumps to enter into the mid-range and automation space. AIT-1 introduced as a migration path for DDS users to reach higher capacities and performance. Despite its increased capacities, AIT does not offer the interchangeability that other tape technologies do and can be construed as proprietary and cannot compete against the open standard technologies (Metal Partical or MP based). For example: While AIT and Mammoth share similar technologies and design, they are not compatible and should be considered proprietary. Mammoth drives will not work with AIT media and visa-versa. Drive firmware and software prevent this.

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Options

Related Hardware Options

HP AIT Tape Drives	HP AIT 70, LVD (internal)	216884-B21
	HP AIT 70, LVD (external)	216885-001
	HP AIT 70, LVD (hot plug)	216886-B21
	HP AIT 100 drive kit (internal)	157766-B21
	HP AIT 100 drive kit (external)	157767-001
	HP AIT 100 (hot plug)	215487-B21
	HP AIT 100 in 3U rack enclosure (single internal)	274333-B21
	HP AIT 200 drive kit (internal)	249189-B21
	HP AIT 200 drive kit (external)	249160-001
	HP AIT 200 (hot plug)	249161-B21
	HP 3U rack-mount kit	274338-B21

NOTE: For additional information regarding the AIT Tape Drives, please seen the following URL:
http://h18000.www1.hp.com/products/quickspecs/11850_div/11850_div.HTML
http://h18000.www1.hp.com/products/quickspecs/11850_div/11850_div.PDF

Library Models - HP SSL2020 Tape Library	HP SSL2020 tape library, 1 drive, tabletop	175195-B21
	HP SSL2020 tape library, 2 drives, tabletop	175195-B22
	HP SSL2020 tape library, 1 drive, rack-mount	175196-B21
	HP SSL2020 tape library, 2 drives, rack-mount	175196-B22

NOTE: For additional information regarding the SSL2020 Tape Library, please seen the following URL:
http://h18000.www1.hp.com/products/quickspecs/10580_div/10580_div.HTML
http://h18000.www1.hp.com/products/quickspecs/10580_div/10580_div.PDF

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Technical Specifications

General Characteristics	Format	AIT-1		AIT-2		AIT-3
	Magnetic Material	Advanced Metal Evaporated (AME)				
	Base Material	PET	Aramid	PET	Aramid	Aramid
	Recording Density	5.7 (145,000 ftpi / 116,000 bpi)		8.2 (209,000 ftpi / 167,000 bpi)		
	Recording Capacity	25GB	35GB	36GB	50GB	100GB
	EEPROM Capacity (kbits)	16	64	64		

Magnetic Characteristics	Residual Magnetic Flux Density (mT)	500 (5,000 gauss)	530 (5,300 gauss)
	Coercive Force (kA/m)	105 (1,320Oe)	110 (1,380Oe)

Physical Characteristics of Tape	Width (mm)			8.0		
	Thickness (um)	7.0	5.3	7.0	5.3	5.3
	Length (m)	170 (557ft)	230 (754ft)	170 (557ft)	230 (754ft)	230 (754ft)

Environmental Requirements	Operating Conditions (oF (oC);%RH)	41-113(5-45);20-80
	Storage Conditions (oF (oC);%RH)	41-90(5-32);20-60
	Transportation Conditions (oF (oC);%RH)	-40-113(-40-45);5-80

Dimensions	External (mm)	95.0 x 62.5 x 15.0
	Weight (g)	79 (with case)

* Values are drive dependent
**Maximum wet bulb temperature: 26°C (79°F) at no condensation