

*High-performance, high-reliability tape storage for midrange and server-based environments*



# Magstar MP Fast Access Linear Tape Cartridge

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## Highlights

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**Almost instantaneous head/tape contact at load time shortens the data retrieval process**

**Rugged case withstands repetitive handling**

**Self-contained tape path improves data reliability and extends tape life**

**Enhanced capacity and reliability**

### Revolutionary design

IBM Magstar\* MP Fast Access Linear Tape cartridges are the functional heart of the IBM Magstar MP Tape Subsystem. Designed for use in midrange and server-based multi-user environments, Magstar MP tape offers much faster data access times while improving cartridge handling reliability and data integrity over traditional tape technologies.

### Midpoint loading for fast data access

Magstar MP tape revolutionizes how applications can use tape storage. Traditionally, tape has been used primarily for write-intensive operations such as backup, archive, and data interchange—operations that do not require frequent reading of stored information. Today, however, applications that require both write- and read-intensive operations can take advantage of lower cost tape storage.



With an industry-leading design that enables exceptionally fast data access, Magstar MP tape cartridges can be used as an alternative to direct access storage for some types of near-online applications that require high-performance data access.

To facilitate fast data access, the Magstar MP tape cartridge contains two tape spools with the tape positioned at its midpoint. Because of this design, the system, on average, has to search only one quarter the length of a tape to access data—significantly reducing search times. After data has been located and processed, the cartridge then spools the tape back to the midpoint in preparation for unload. In this way, the midpoint load feature halves average access times to data.

### A rugged design and self-contained tape path to improve reliability

Compared to traditional tape technologies, the Magstar MP tape cartridge is designed to provide outstanding

reliability under heavy use. The extremely durable cartridge case can withstand repetitive handling by automated pickers or human operators, thus protecting the tape from the physical environment.

In addition to increasing tape life, the completely self-contained tape path eliminates tape thread time. Because the tape never leaves the cartridge, it is never touched by human hands. Likewise, the tape's only contact is at the read/write heads, which also helps to extend tape life. The absence of a tape threading mechanism enables faster load times that, combined with the midpoint load feature, provide unparalleled time-to-data levels and reliability.

### Magstar MP Fast Access Linear Tape family

The Magstar MP Fast Access Linear Tape family consists of a B-format data cartridge, a C-format data cartridge, a C-format XL data

## Magstar MP Fast Access Linear Tape Cartridge at a glance

### Characteristics

Data capacity	C-format XL: 7 GB (up to 21 GB compressed) B- and C-format: 5 GB (up to 15 GB compressed)
Data transfer rates	"C" cartridges: 70 MB/sec (up to 15.0 MB/sec compressed) "B" cartridges: 2.2 MB/sec (up to 6.6 MB/sec compressed)

### Physical dimensions

Magazine	76" W x 3.0" H x 5.5" D 193.9 mm W x 78.3 mm H x 139.6 mm D
Magazine weight	9.0 oz./254 grams
Data cartridge/cleaner cartridge	2.3" W x .64" H x 5.4" D 58.8 mm W x 16.2 mm H x 137.1 mm D
Cartridge weight	4.9 oz./124.5 grams (data cartridge) 5.0 oz./126.5 grams (cleaner cartridge)

### Physical characteristics

Substrate	Balanced polyethylene naphthalene (PEN)
Total thickness	C-format XL: 0.295 mils (7.5 microns) B- and C-format: 0.370 mils nominal (9.4 microns)
Length	C-format XL: 745 ft. (227 meters) B- and C-format: 548 ft. nominal (167 meters)

### Magnetic characteristics

Intrinsic coercivity (Hci)	1625 Oersteds (130 kA/m) +/- 75 Oe using VSM with a time constant of 0.3 seconds
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### Digital/system error characteristics

Permanent errors	0
Temporary (recoverable) errors	5 maximum per cartridge

### Safety characteristics

Toxicity	Nonhazardous to human health in anticipated use
Flammability	Self-extinguishing per UL94

### Environmental requirements

Operating conditions	50-104° F (10-40° C); 8-80% RH; 84° F (29° C) wet bulb max.
Storage conditions <sup>1</sup>	40-104° F (4.4-40° C); 5-80% RH; 84° F (29° C) wet bulb max.
Transportation conditions <sup>2</sup>	-10 to 120° F (-23 - 49° C); 5-80% RH; 80° F (27° C) wet bulb max. <sup>3</sup>

### Part numbers

C-format XL Data Cartridge	08L6663
C-format Data Cartridge	08L6187
B-format Data Cartridge	05H2462
Cleaner Cartridge	05H2463
Magazine	49G6598
Warranty	5 year limited

<sup>1</sup> Maximum of four weeks; <sup>2</sup> Maximum of ten days; <sup>3</sup> Maximum with no condensation

cartridge, a cleaner cartridge, and a cartridge magazine. The B-format data cartridge can be used in C-format and C-format XL drives at the B-format data transfer rate or better.

### Quality data storage products from IBM

IBM offers a complete line of quality data storage products to support applications ranging from PC desktops to enterprise-wide mainframe libraries. Some of the available products are:

- 3570 Magstar MP tape cartridges
- 3590E, 3590, 3490E and 3480 tape cartridges
- M/O optical discs and DVD-RAM Discs
- 4mm and 8mm data cartridges
- 1/4" (QIC) MLR/SLR data cartridges
- DLTtape™ IV and Super DLT data cartridges
- Cleaning cartridges in all popular formats

### To obtain more information

To order or get more information on any IBM data storage products call 1-888-IBM-MEDIA toll free in the U.S. and Canada

For locations outside the U.S. and Canada, you can obtain more information at [www.ibm.com/storage/media](http://www.ibm.com/storage/media)



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