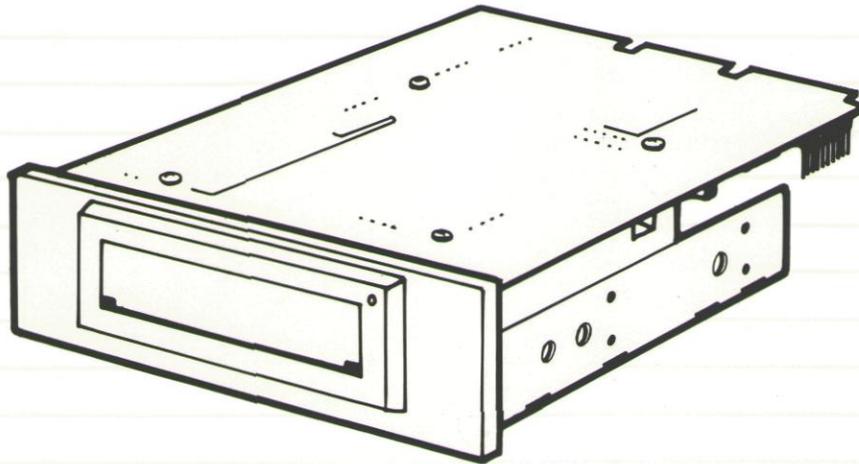


# Irwin 100 Series Tape Drive



Irwin 100 Series Models pack 10, 20 or 40 megabytes of data on a compact minicartridge for hard disk backup. Easily installed, these half-height, 5.25-inch internal models daisy chain into the existing floppy controller.

100 Series drives are designed with closed-loop embedded-servo tracking to guarantee media interchangeability. And with an MTBF of 40,000 hours, Irwin 100 Series drives are one of the most reliable backup devices on the market.

## 100 Series Specifications

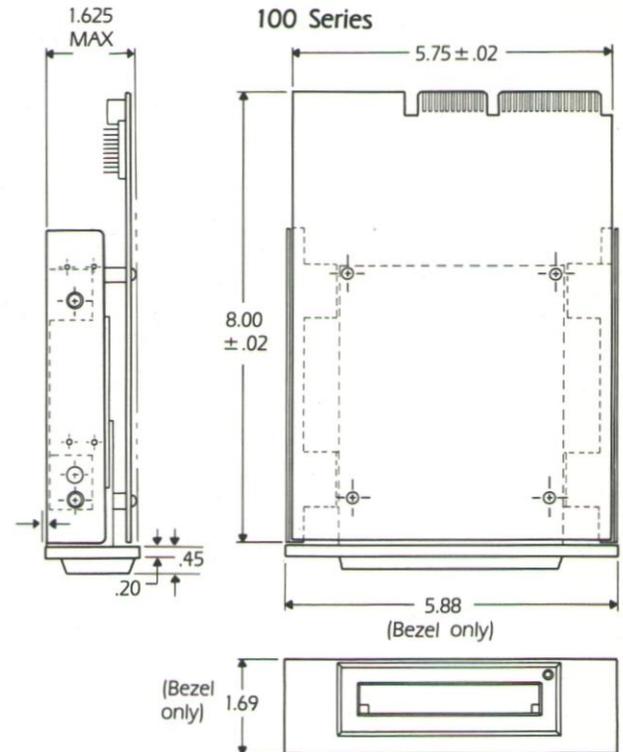
	110	120	125	145
<b>Description</b>				
Form Factor	5.25-inch, half-height			
Formatted Capacity by Tape Cartridge (MB)				
3M DC1000	10.4	10.4	21.6	21.6
3M DC2000		19.5		40.6
<b>Tape Format</b>				
Number of Tracks (Serpentine)	8	14	12	20
Number of Blocks per Track	158	85	110	124
Number of Sectors per Block	8 (1,024 bytes each)	18 (including 2 ECC)		
Recording Density (bpi)	6,400		10,000	
Data Encoding Method	MFM			
<b>Format Compatibility by Irwin Model</b>				
Writes & Reads	110,410, 710	110,120, 220,410,420, 710,720	125,225,425, 725	125,145,225, 245,425,445, 725,745
Reads Only			110,410, 710	110,120, 220,410,420, 710,720
<b>Performance Characteristics</b>				
Operating Modes	Streaming File-by-File			
Electrical Interface	Standard Floppy Disk			
Floppy Disk (FD) Controller	Western Digital 17XX, NEC 765 and other popular controllers			
Data Transfer Rate (kb/s) w/STD FD Controller	250		500	
Tape Speed (ips)	39		50	
Read/Write	39		50	
Rewind	70			
End-to-End Positioning Time				
Read/Write (sec/ips)	57/39	63/39	44/50	49/50
Rewind (sec/ips)	32/70	35/70	32/70	35/70

## Features

- Highly Reliable
- Inexpensive
- 5.25-inch, half-height form factor
- Standard minifloppy interface
- Interfaces to Western Digital 17XX, NEC 765 and other popular minifloppy controllers
- Accurate head positioning using closed-loop embedded servo
- Microprocessor-controlled brushless, direct drive DC motors
- Low power requirements—only 15.75 watts
- Uses +5VDC and +12VDC—the same voltages as a minifloppy
- Positive cartridge locking mechanism
- Fits onto a four device daisy chain
- On-board microprocessor implements high-level commands
- Supports streaming file-by-file backup mode
- Rugged, sealed media.

## 100 Series Specifications

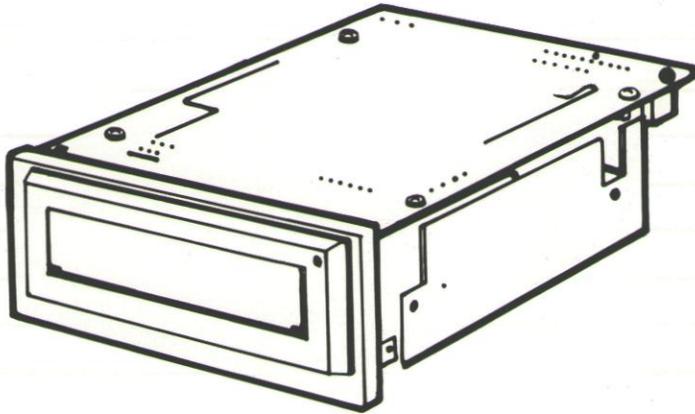
	110	120	125	145
<b>Reliability</b>				
Error Rate Corrected Bit		1 in 10 <sup>14</sup> bits read		
Soft	1 in 10 <sup>9</sup> bits read			
Hard	1 in 10 <sup>11</sup> bits read			
Error Detection Technique	CRC			
Error Correction Technique	Reed-Solomon ECC			
Mean Time Between Failure <sup>1</sup>	40,000 hours			
Mean Time to Repair	30 minutes			
Service Life	5 years: 3,000 hr. tape motion			
Preventive Maintenance	Clean R/W head			
<b>Power Requirements</b>				
+ 12 VDC (+ 5%) Average	1A			
Surge (peak 400 msec)	3.5A	2.7A	3.5A	2.7A
+ 5 VDC (± 5%)	0.75A			
Total Power Dissipation (watts)	15.75			
<b>Acoustics</b>				
Sound Power Output (Streaming at 50 ips)	54 dBA			
<b>Environmental Tolerances</b>				
<b>Ambient Temperature Operating</b>				
Non-Operating	-45 to 60°C			
<b>Humidity (Non Condensing) Operating</b>				
Non-Operating	20 to 80%			
<b>Wet Bulb Operating</b>				
Non-Operating	5 to 95%			
<b>Wet Bulb Operating</b>				
Non-Operating	26°C			
<b>Vibration (3 axis) Operating</b>				
Non-Operating	1.0g, 5 to 1,000 Hz except Z axis, 0.5g 100 to 200 Hz			
<b>Mechanical Shock (3 axis) Operating</b>				
Non-Operating	5.0g, 5 to 1,000 Hz			
<b>Mechanical Shock (3 axis) Operating</b>				
Non-Operating	11ms, 1/2 Sine Wave Pulse			
<b>Altitude Operating</b>				
Non-Operating	5.0g			
<b>Altitude Operating</b>				
Non-Operating	60g, 3 blows each axis			
<b>Altitude Non-Operating</b>				
Operating	0-3,000 m			
Non-Operating	0-6,000 m			
<b>Approvals</b>				
<b>Safety</b>				
U.L. (Recognized Component File No.)	E93214(N)			
CSA (Certified Component File No.)	LR60279			
TUV Rheinland (License No.)	R50256			
<b>Flammability Front Panel</b>				
Other Material	94V-0			
<b>Electromagnetic Compatibility FCC</b>				
Other Material	94V-1 or better			
<b>Electromagnetic Compatibility FCC</b>				
Other Material	Class B Identifier E4A5M2 100 Series			



Tolerances:  
 XXX ± .010"  
 XXXX ± .005"

Weight: 1.9 pounds  
 Dimensions in inches

<sup>1</sup>100% duty cycle, 60% confidence level.



# Irwin 200 Series Tape Drives

Irwin 200 Series Models pack 20, 40 or 64 megabytes of data on a compact minicartridge for hard disk backup. Easily installed, these half-height, 3.5-inch internal models daisy chain into the existing floppy controller.

200 Series drives are designed with closed-loop embedded-servo tracking to guarantee media interchangeability. And with an MTBF of 50,000 hours, Irwin 200 Series drives are one of the most reliable backup devices on the market.

## 200 Series Specifications

	220	225	245	265
<b>Description</b>				
Form Factor	3.5-inch, half-height			
Formatted Capacity by Tape Cartridge (MB)				
3M DC1000	10.4	21.6	21.6	
3M DC2000	19.5		40.6	64.5
<b>Tape Format</b>				
Number of Tracks (Serpentine)	14	12	20	24
Number of Blocks per Track	85	110	124	164
Number of Sectors per Block	18 (including 2 ECC)			
Recording Density (bpi)	6,400	10,000		13,200
Data Encoding Method	MFM			
<b>Format Compatibility by Irwin Model</b>				
Reads/Writes	110,120, 220,410,420, 710,720	125,225,425, 725	125,145,225, 245,425,445, 725,745	265,465,765,
Reads Only		110,210,410, 710	110,120, 220,410,420, 710,720	110,120,125, 145,220, 225,245,410, 420,425,445, 710,720,725, 745
<b>Performance Characteristics</b>				
Operating Modes	Streaming File-by-File			
Electrical Interface Standard (STD)	Standard Floppy Disk			
Floppy Disk (FD) Controller	Western Digital 17XX, NEC 765 and other popular controllers			
Data Transfer Rate (kb/s) w/STD FD Controller	250	500		
Tape Speed (ips) Read/Write w/STD FD Controller	39	50		37.88
Rewind		70		63
End-to-End Positioning Time Read/Write (sec/ips)	63/39	44/50	49/50	65/37.88
Rewind (sec/ips)	35/70	32/70	35/70	39/63

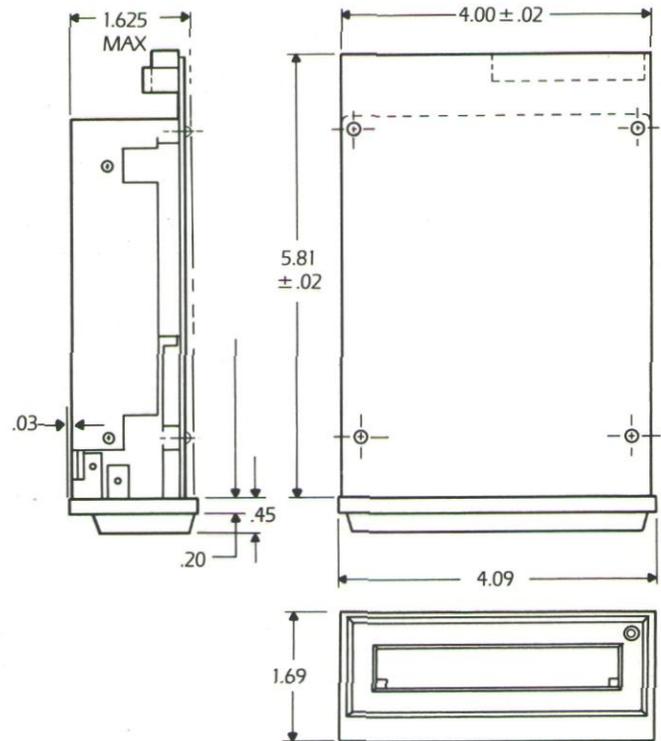
## Features

- Highly Reliable
- Inexpensive
- 3.5-inch, half-height form factor
- Standard minifloppy interface
- Interfaces to Western Digital 17XX, NEC 765 and other popular minifloppy controllers
- Accurate head positioning using closed-loop embedded servo
- Microprocessor-controlled brushless, direct drive DC motors
- Low power requirements—only 15.75 watts
- Uses +5VDC and +12VDC—the same voltages as a minifloppy
- Positive cartridge locking mechanism
- Fits onto a four device daisy chain
- On-board microprocessor implements high-level commands
- Supports streaming file-by-file backup mode
- Rugged, sealed media.

## 200 Series Specifications

	220	225	245	265
<b>Reliability</b>				
Error Rate Corrected	less than $1 \times 10^{-14}$			
Error Detection Technique	CRC			
Error Correction Technique	Reed-Solomon ECC			
Mean Time Between Failure <sup>2</sup>	50,000 hours			
Mean Time to Repair	30 minutes			
Service Life	5 years: 3,000 hr. tape motion			
Preventive Maintenance	Clean R/W head			
<b>Power Requirements</b>				
+ 12 VDC (+ 5%) Average	1A			
Surge (peak 400 msec)	1.8A			
+ 5 VDC ( $\pm 5\%$ )	0.75A			
Total Power Dissipation (watts)	15.75			
<b>Acoustics</b>				
Sound Power Output (dBA/Streaming ips)	54/50		52/37.88	
<b>Environmental Tolerances</b>				
Ambient Temperature Operating	5 to 45°C			
Non-Operating	-45 to 60°C			
Humidity (Non Condensing) Operating	20 to 80%			
Non-Operating	5 to 95%			
Wet Bulb Operating	26°C			
Non-Operating	26°C			
Vibration (3 axis) Operating	1.0g, 5 to 1,000 Hz			
Non-Operating	5.0g, 5 to 1,000 Hz			
Mechanical Shock (3 axis) 11ms, 1/2 Sine Wave Pulse Operating	5.0g			
Non-Operating	60g, 3 blows each axis			
Altitude Operating	0-3,000 m			
Non-Operating	0-6,000 m			
<b>Approvals</b>				
Safety U.L. (Recognized Component File No.)	E93214(N)			
CSA (Certified Component File No.)	LR60279			
TUV Rheinland (License No.)	R50256			
Flammability Front Panel	94V-0			
Other Material	94V-1 or better			
Electromagnetic Compatability FCC	Class B Identifier E4A5M2 200 Series			

## 200 Series



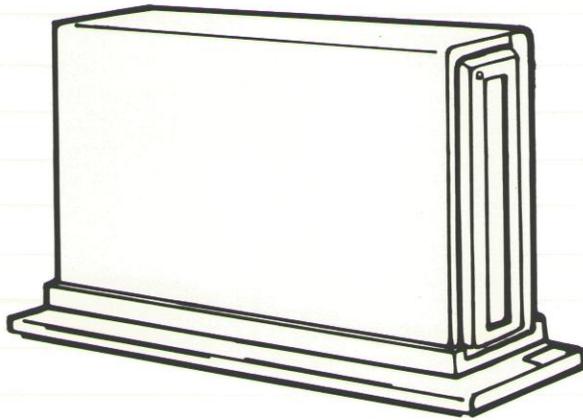
Tolerances  
 X.XX  $\pm .010''$   
 X.XXX  $\pm .005$

Weight: 1.4 pounds  
 Dimensions in inches

<sup>1</sup>Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

<sup>2</sup>100% duty cycle, 60% confidence level.

# Irwin 400 Series Tape Drives



**400 Series Specifications**

	410	420	425	445	465
<b>Description</b>	External System-Powered				
Form Factor	External System-Powered				
Formatted Capacity by Tape Cartridge (MB)	10.4		21.6		
3M DC1000	10.4		21.6		
3M DC2000		19.5		40.6	64.5
<b>Tape Format</b>					
Number of Tracks (Serpentine)	8	14	12	20	24
Number of Blocks per Track	158	85	110	124	164
Number of Sectors per Block	8 (1,024 bytes each)	18 (including 2 ECC)			
Recording Density (bpi)	6,400		10,000		13,200
Data Encoding Method	MFM				
<b>Format Compatibility by Irwin Model</b>					
Reads/Writes	110,410, 710	110,120, 220,410,420, 710,720	125,225,425, 725	125,145,225, 245,425,445, 725,745	265,465,765
Reads Only			110,410, 710	110,120, 220,410,420, 710,720	110,120,125, 145,220, 225,245,410, 420,425,445, 710,720,725, 745
<b>Performance Characteristics</b>					
Operating Modes	Streaming File-by-File				
Electrical Interface Standard (STD)	Standard Floppy Disk				
Optional (HS) <sup>1</sup>					High Speed Floppy Disk Controller
Floppy Disk (FD) Controller	Western Digital 17XX, NEC 765 and other popular controllers				
Data Transfer Rate (kb/s)	250		500		
w/STD FD Controller	250		500		
w/HS FD Controller					750
Tape Speed (ips)	39		50		37.88
Read/Write	39		50		37.88
W/STD FD Controller	39		50		37.88
W/HS FD Controller					56.82
Rewind	70				63
End-to-End Positioning Time	57/39		44/50		65/37.88
Read/Write (sec/ips)	57/39		44/50		65/37.88
Rewind (sec/ips)	32/70		32/70		39/63

Irwin 400 Series Models pack 10, 20, 40 or 64 megabytes of data on a compact minicartridge for hard disk backup. These system-powered external drives are compact in size (just a 24 square inch footprint). And simple plug-in installation allows a 400 to be moved from one microcomputer to another.

400 Series drives are designed with closed-loop embedded-servo tracking to guarantee media interchangeability. And with an MTBF of 40,000 hours, Irwin 400 Series drives are one of the most reliable backup devices on the market.

## Features

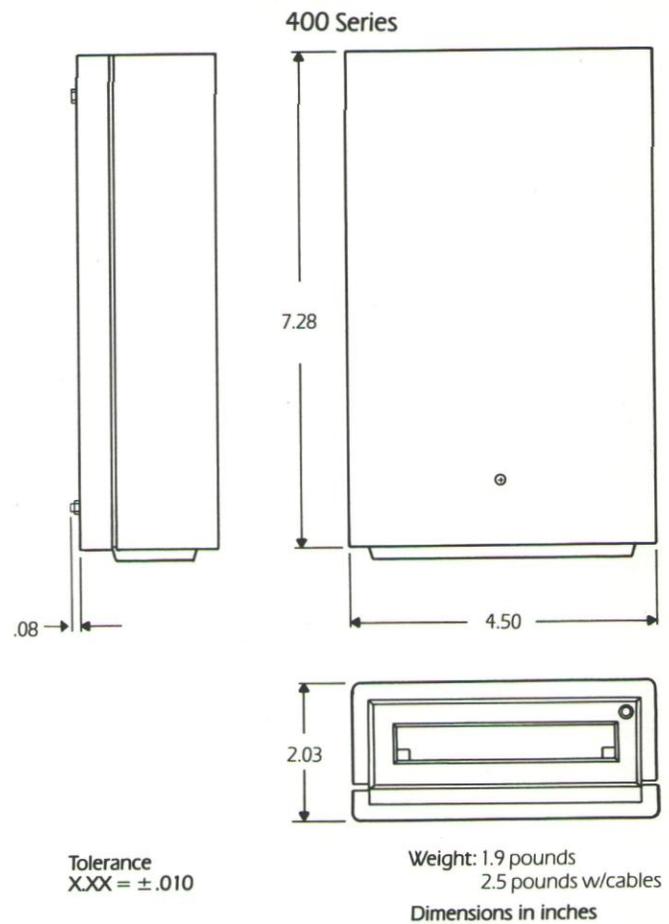
- Highly Reliable
- Inexpensive
- External, system powered
- Standard minifloppy interface
- Interfaces to Western Digital 17XX, NEC 765 and other popular minifloppy controllers
- Accurate head positioning using closed-loop embedded servo
- Microprocessor-controlled brushless, direct drive DC motors
- Low power requirements—only 15.75 watts
- Uses +5VDC and +12VDC—the same voltages as a minifloppy
- Positive cartridge locking mechanism
- On-board microprocessor implements high-level commands
- Supports streaming file-by-file backup mode
- Rugged, sealed media.

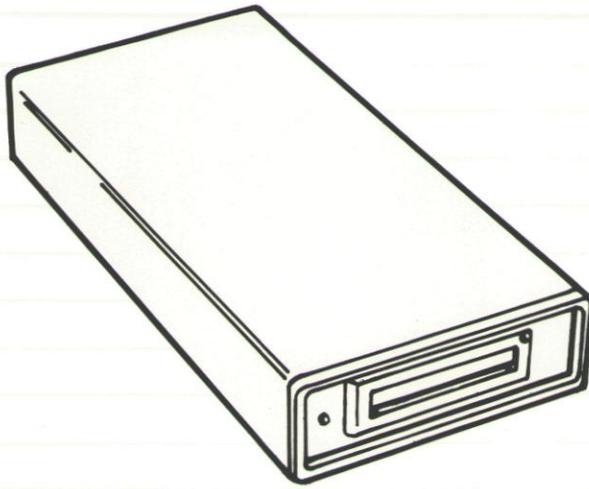
## 400 Series Specifications

	410	420	425	445	465
<b>Reliability</b>					
Error Rate Corrected		1 in 10 <sup>14</sup> bits read			
Soft	1 in 10 <sup>9</sup> bits read				
Hard	1 in 10 <sup>11</sup> bits read				
Error Detection Technique		CRC			
Error Correction Technique		Reed-Solomon ECC			
Mean Time Between Failure <sup>2</sup>		40,000 hours			
Mean Time to Repair		30 minutes			
Service Life		5 years: 3,000 hr. tape motion			
Preventive Maintenance		Clean R/W head			
<b>Power Requirements</b>					
+ 12 VDC (± 5%) Average		1A			
Surge (peak 400 msec)		1.8A			
+ 5 VDC (± 5%)		0.75A			
Total Power Dissipation (watts)		15.75			
<b>Environmental Tolerances</b>					
Ambient Temperature Operating		5 to 45°C			
Non-Operating		- 45 to 60°C			
Humidity (Non Condensing) Operating		20 to 80%			
Non-Operating		5 to 95%			
Wet Bulb Operating		26°C			
Non-Operating		26°C			
Vibration (3 axis) Operating		1.0g, 5 to 1,000 Hz			
Non-Operating		5.0g, 5 to 1,000 Hz			
Mechanical Shock (3 axis) 11ms, 1/2 Sine Wave Pulse Operating		5.0g			
Non-Operating		40g, 3 blows each axis			
Altitude Operating		0-3,000 m			
Non-Operating		0-6,000 m			
<b>Approvals</b>					
Safety U.L. (Recognized Component File No.)		E93214(N)			
TUV Rheinland (License No.)		R50256			
Flammability Front Panel		94V-0			
Other Material		94V-1 or better			
Electromagnetic Compatibility FCC		Class B Identifier E4A5M2 400 Series			

<sup>1</sup>Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

<sup>2</sup>100% duty cycle, 60% confidence level.





# Irwin 700 Series Tape Drives

Irwin 700 Series Models pack 10, 20, 40 or 64 megabytes of data on a compact minicartridge for hard disk backup. These self-powered external drives can easily be added to existing systems. And simple plug-in installation allows a 700 to be moved from one micro-computer to another.

700 Series drives are designed with closed-loop embedded-servo tracking to guarantee media interchangeability.

## Features

- Highly Reliable
- Inexpensive
- External, self powered
- Standard minifloppy interface
- Interfaces to Western Digital 17XX, NEC 765 and other popular minifloppy controllers
- Accurate head positioning using closed-loop embedded servo
- Microprocessor-controlled brushless, direct drive DC motors
- Positive cartridge locking mechanism
- On-board microprocessor implements high-level commands
- Supports streaming file-by-file backup mode
- Rugged, sealed media.

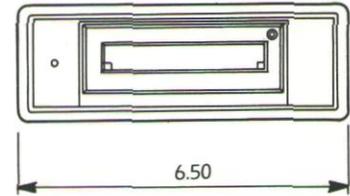
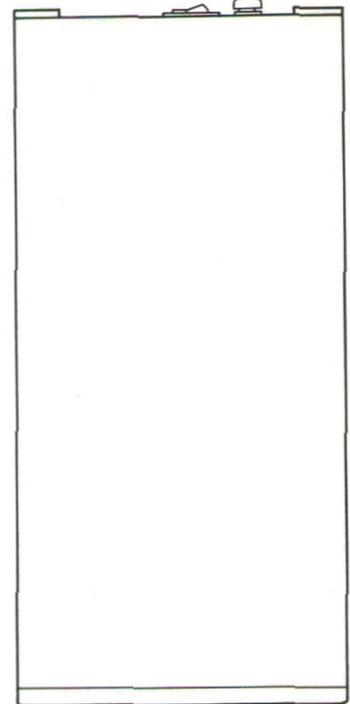
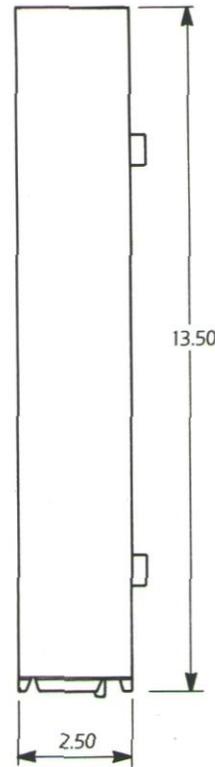
## 700 Series Specifications

	710	720	725	745	765
<b>Description</b>					
Form Factor	External Self-Powered				
Formatted Capacity by Tape Cartridge (MB)					
3M DC1000	10.4		21.6		
3M DC2000		19.5		40.6	64.5
<b>Tape Format</b>					
Number of Tracks (Serpentine)	8	14	12	20	24
Number of Blocks per Track	158	85	110	124	164
Number of Sectors per Block	8 (1,024 bytes each)	18 (including 2 ECC)			
Recording Density (bpi)	6,400		10,000		13,200
Data Encoding Method	MFM				
<b>Format Compatibility by Irwin Model</b>					
Reads/Writes	110,410, 710	110,120, 220,410,420, 710,720	125,225,425, 725	125,145,225, 245,425,445, 725,745	265,465,765
Reads Only			110,410, 710	110,120, 220,410,420, 710,720	110,120,125, 145,220, 225,245,410, 420,425,445, 710,720,725, 745
<b>Performance Characteristics</b>					
Operating Modes	Streaming File-by-File				
Electrical Interface Standard (STD)	Standard Floppy Disk				
Optional (HS) <sup>1</sup>					High Speed Floppy Disk Controller
Floppy Disk (FD) Controller	Western Digital 17XX, NEC 765 and other popular controllers				
Data Transfer Rate (kb/s) w/STD FD Controller	250		500		
w/HS FD Controller					750
Tape Speed (ips) Read/Write					
W/STD FD Controller	39		50		37.88
W/HS FD Controller					56.82
Rewind	70				63
End-to-End Positioning Time Read/Write (sec/ips)	57/39	63/39	44/50	49/50	65/37.88 43/56.82
Rewind (sec/ips)	32/70	35/70	32/70	35/70	39/63

## 700 Series Specifications

	710	720	725	745	765
<b>Reliability</b>					
Error Rate Corrected		1 in 10 <sup>14</sup> bits read			
Soft	1 in 10 <sup>9</sup> bits read				
Hard	1 in 10 <sup>11</sup> bits read				
Error Detection Technique	CRC				
Error Correction Technique	Reed-Solomon ECC				
Mean Time Between Failure <sup>2</sup>	20,000 hours				
Mean Time to Repair	30 minutes				
Preventive Maintenance	Clean RAW head				
<b>Power Requirements</b>					
Peak Power Requirement (watts)	50				
Nominal Line Voltage (volts)	110/210; 220/240				
<b>Environmental Tolerances</b>					
Ambient Temperature Operating	5 to 45°C				
Non-Operating	-45 to 60°C				
Humidity (Non Condensing) Operating	20 to 80%				
Non-Operating	5 to 95%				
Wet Bulb Operating	26°C				
Non-Operating	26°C				
Altitude Operating	0-3,000 m				
Non-Operating	0-6,000 m				
<b>Approvals</b>					
<b>Safety</b>					
U.L. (Recognized Component File No.)	E93214(N)				
CSA (Certified Component File No.)	LR60279				
TUV Rheinland (License No.)	577093				
<b>Flammability</b>					
Front Panel	94V-0				
Other Material	94V-1 or better				
<b>Electromagnetic Compatability</b>					
FCC	Class B Identifier E4A5M2 700 Series				

## 700 Series

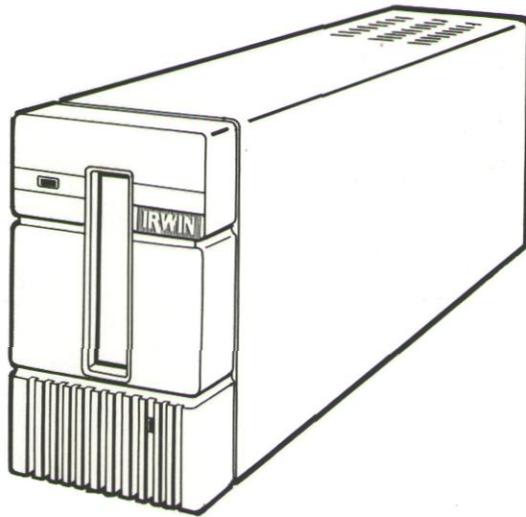


Tolerances  
X.XX = ± .030

Weight: 6.2 pounds  
Dimensions in inches

<sup>1</sup>Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

<sup>2</sup>100% duty cycle, 60% confidence level.



# Irwin BACKUP™ Tape Drives for Macintosh

Irwin's new tape drives pack 40 or 80 megabytes of data on a compact minicartridge for Apple® Macintosh™ hard disk backup. These self-powered external drives can easily be added to existing systems. Simple, plug-in installation allows the tape drive to be moved from one Mac to another.

Irwin's patented tracking technology and new EzTape software let you reliably share data between Macs and IBM® PCs, PS/2s™ and compatibles—*no other tape drive offers you this unique capability!*

## Specifications

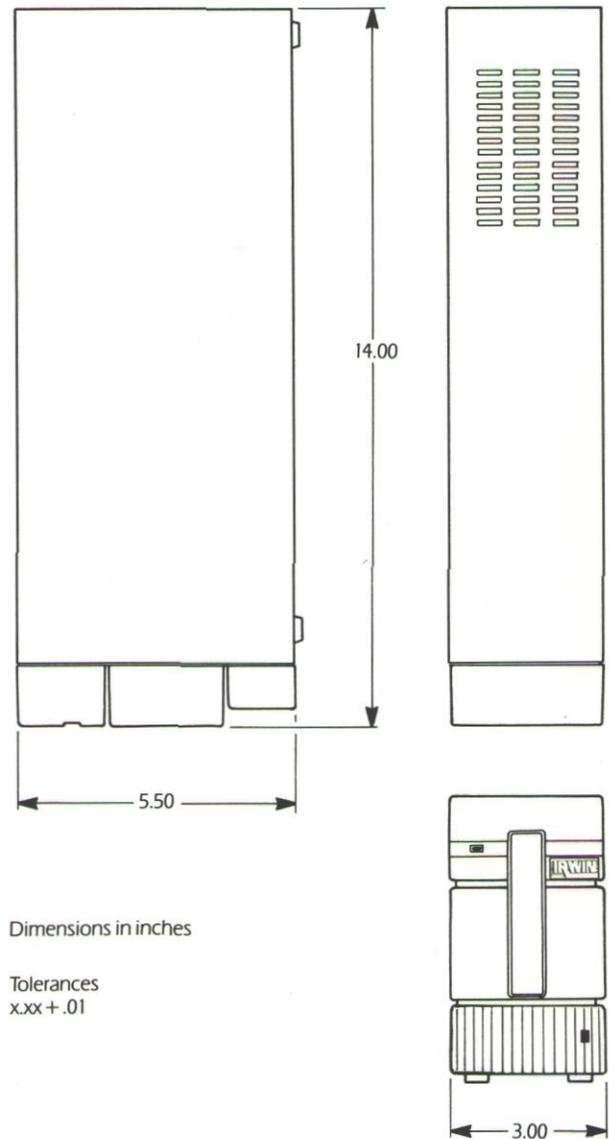
	5040	5080
<b>Description</b>	External Self-Powered	
Form Factor	External Self-Powered	
Formatted Capacity (3M DC2000)	40.6 MB	81.7 MB
<b>Tape Format</b>		
Number of Tracks (Serpentine)	20	32
Number of Blocks per Track	124	86
Number of Sectors per Block	32 (29 data, 3 ECC)	
Recording Density (bpi)	10,000	11,600
Data Encoding Method	MFM	
<b>Format Compatibility by Irwin Model</b>	145, 245, 445, 745	5080
Reads/Writes		
Reads Only (Irwin tapes written on IBM PC XT, AT or PS/2 or compatible computers using EzTape 2.0 or later software.)	Irwin 110, 120, 125, 220, 225, 410, 420, 425, 710, 720, 725	Irwin 110, 120, 125, 145, 165, 220, 225, 265, 410, 420, 425, 445, 465, 710, 720, 725, 745, 765
<b>Performance Characteristics</b>	Streaming File-by-File	
Operating Modes	Streaming File-by-File	
Electrical Interface	SCSI	
Data Transfer Rate (kb/s)	500	
Tape Speed (ips) Read/Write	50	37.88
Rewind	70	63
End-to-End Positioning Time (sec/ips)	49/50	65/37.88
	35/70	39/63
Time to Back Up or Restore 40 MB	20 min.	

## Features

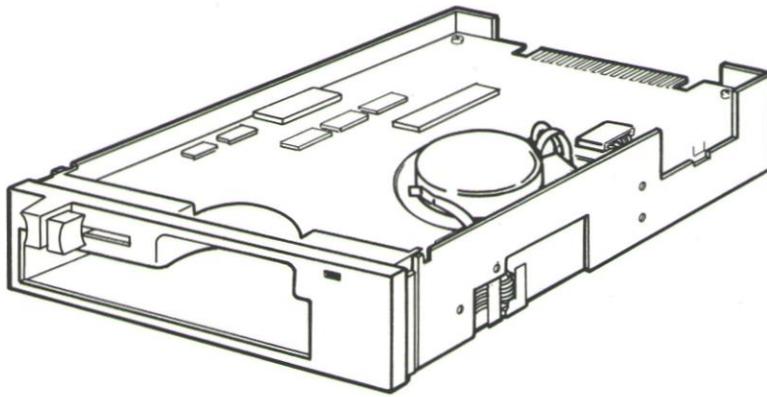
- Highly reliable—ensures portability with data integrity
- Complete media interchangeability between Macintosh and IBM PC, PS/2 (or compatible) computers
- External, self-powered
- EzTape™ software supports MacFinder, A/UX, MS DOS and other operating systems
- Network compatible (TOPS®, AppleShare™)
- SCSI interface—twin connectors for complete daisy chaining
- Accurate head positioning using closed-loop embedded servo
- EzTape Iconographic™ software supports streaming file-by-file backup mode
- 256kB buffer memory

## Specifications

	5040	5080
<b>Reliability</b>		
Corrected Bit Error Rate	1 in 10 <sup>14</sup> bits read	
Error Detection Technique	CRC	
Error Correction Technique	Reed-Solomon ECC	
Mean Time Between Failure	12,000 hours	
Mean Time to Repair	30 minutes	
Preventive Maintenance	Clean R/W head	
<b>Power Requirements</b>		
Peak Power Requirement (watts)	50	
Nominal Line Voltage (volts)	110-210; 220-240	
<b>Environmental Tolerances</b>		
Ambient Temperature Operating	5 to 35 C	
Non-Operating	-45 to 60 C	
Humidity (Non-Condensing) Operating	20 to 80%	
Non-Operating	5 to 95%	
Vibration (3 axis) Operating	1.0g, 5 to 1000 Hz	
Non-Operating	5.0g, 5 to 2000 Hz	
Mechanical Shock (3 axis) 11 ms, 1/2 Sine Wave Operating	5.0g	
Non-Operating	40g, 3 blows each axis	
Altitude Operating	0-3000 m	
Non-Operating	0-6000 m	
<b>Approvals</b>		
Safety		
UL	In process	
CSA		
TUV		
Electromagnetic Compatibility		
FCC	Class A Compliance, Class B in process	



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# Irwin Model 6150I Tape Drives

Irwin Model 6150I tape drives store up to 155 megabytes of data on a DC600XTD quarter-inch cartridge for hard disk backup. Up to 125 megabytes of data can be stored on a DC600A cartridge. These internal, 5.25-inch form factor tape drives are designed to connect to host adapters in IBM® PC XT™, AT® or PS/2™ models 60 and 80 and compatible computers.

The Model 6150I writes the QIC-150 or QIC-120 recording formats and reads QIC-150, QIC-120 and QIC-24 formats. The basic half-height 6150 drive uses the PC bus to QIC-36 host adapter. The half-height SCSI model, 6150SI, interfaces with a SCSI host adapter.

## 6150I Series Specifications

	6150I	6150SI
<b>Description</b>		
Form Factor	5.25-inch half-height	
Formatted Capacity by Tape Cartridge (MB)		
3M DC600XTD	155	
3MDC600XTD (w/ECC)	135	
3M DC600A	125	
<b>Tape Format</b>		
Number of Tracks	15 (QIC-120), 18 (QIC-150)	
Recording Density (bpi)	10,000	
Data Encoding Method	GCR	
<b>Format Compatibility by Irwin Model</b>		
Writes	QIC-120 and QIC-150	
Reads	QIC-24, QIC-120 and QIC-150	
<b>Performance Characteristics</b>		
Operating Modes	Streaming File-by-File	
Electrical Interface	QIC-36	SCSI
Data Transfer Rate (kb/s)	720	
Tape Speed (ips)		
Read/Write	72	
Rewind	90	
End-to-End Positioning Time		
Read/Write (sec/ips)	100/72	
Rewind (sec/ips)	80/90	
<b>Reliability</b>		
Error Rate		
Corrected Bit (w/ECC)	1 in 10 <sup>14</sup> bits read	
Soft (without interchange)	1 in 10 <sup>9</sup> bits read	
Hard	1 in 10 <sup>10</sup> bits read	
Error Detection Technique	CRC	
Error Correction Technique	Automatic re-read with off-track positioning/Reed-Solomon ECC	
Mean Time Between Failure <sup>1</sup>	20,000 hours	
Mean Time to Repair	30 minutes	
Service Life <sup>2</sup>	5 years	
Preventive Maintenance	Clean E/R/W head	

## Features

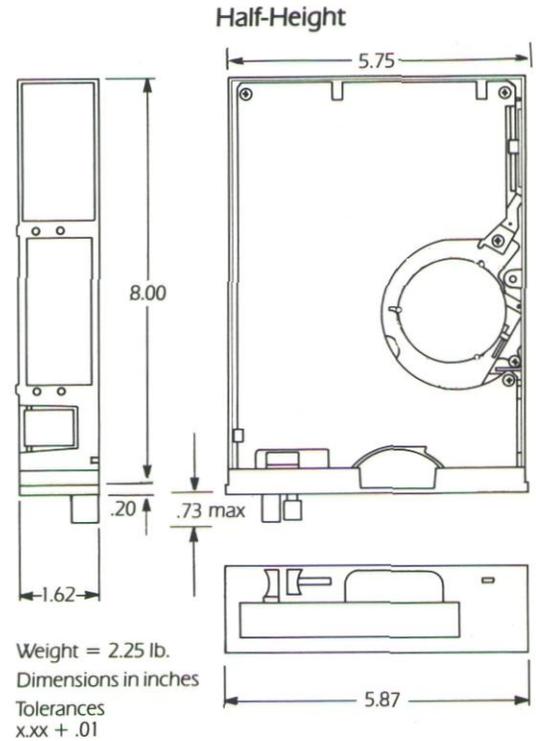
- High reliability
- Inexpensive
- Dependable direct drive motor
- Backup is fast—5 megabytes per minute
- Supports streaming even on file-by-file backup using EzTape® software
- Uses +5VDC and +12VDC—the same voltages as a minifloppy
- Host-controlled self-test capability
- Fits onto a four-device daisy chain, or an eight device chain on a SCSI bus
- Rugged, sealed media
- Performs read-after-write to ensure data integrity
- Error correction can be implemented using EzTape® software
- Direct file access capability

<sup>1</sup>@ 10% Duty Cycle, 60% Confidence Level

<sup>2</sup>@ 10% Duty Cycle

## 6150I Series Specifications

	6150I	6150SI
<b>Power Requirements</b>		
+12 VDC ( $\pm 10\%$ ) Average	1.4A	1.5A
Surge (peak 150 ms)	4.0A	
+5 VDC ( $\pm 5\%$ )	.9A	1.5A
Total Power Dissipation (watts)	25	
<b>Acoustics</b>		
Sound Pressure-Operator Position (dBA/Streaming at 72 ips)	50	
<b>Environmental Tolerances</b>		
Ambient Temperature Operating	5 to 45°C	
Non-Operating	-45 to 60°C	
Humidity (Non-Condensing) Operating	20 to 80%	
Non-Operating	5 to 95%	
Vibration (3 axis) Operating	.5g, 5 to 2000 Hz	
Non-Operating	.75g, 5 to 2000 Hz	
Mechanical Shock (3 axis) 11ms, Half-Sine Operating	5g	
Non-Operating	10g	
Altitude Operating	0 to 3,000 m	
Non-Operating	0 to 6,000 m	
<b>Approvals</b>		
Safety	In process	
U.L. (Recognized Component File No.)		
CSA (Certified Component File No.)		
TUV Rheinland (License No.)		
Flammability Front Panel	94V-0	
Other Material	94V-1 or better	
Electromagnetic Compatibility FCC Compliance	Testing in process	



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# AccuTrak™

Precision Formatted Data Cartridges



**IRWIN**<sup>®</sup>  
MAGNETICS

Formatted Minicartridges  
for Irwin BACKUP™ Systems



## Introducing AccuTrak Precision Formatted Data Cartridges

Irwin, the world leader in microcomputer tape backup systems, introduces AccuTrak Precision Formatted Data Cartridges. Specifically designed for use with Irwin tape drives, these are the most convenient and highest quality cartridges available.

AccuTrak cartridges are ready to use, saving time and making backup more convenient.

To meet Irwin's exacting quality standards each AccuTrak cartridge must be:

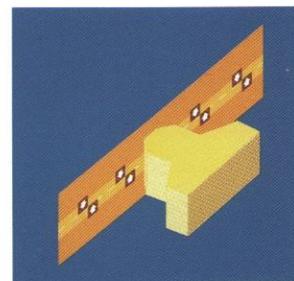
- Burnished — to polish and harden the tape surface and to prepare it for formatting.
- Servo-Written — to embed a pattern of electronic servo signals on each tape track.
- Formatted — to map the tape, identifying and preparing "blocks" where data will be stored.
- Verified — to ensure that servo-writing and formatting were performed correctly.
- Tested — to confirm that it meets Irwin's standards.

This exclusive process produces the best cartridge you can buy for your Irwin tape backup system. And each AccuTrak cartridge comes with a 2 year limited warranty.

### What is AccuTrak?

AccuTrak, Irwin's patented tracking technology, uses electronic servo signals on each tape track to keep the drive's read/write head centered.

AccuTrak technology ensures upward compatibility and data cartridge interchangeability. This makes AccuTrak cartridges ideal for exchanging large volumes of data between Irwin systems throughout an office or across the country.



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