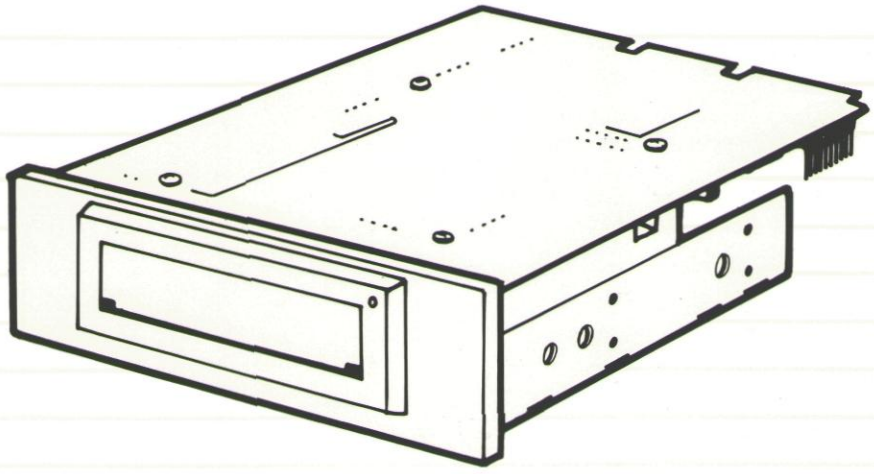
Irwin 100 Series Tape Drive



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
Description				
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
Tape Format				
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			
Format Compatibility by Irwin Model				
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
Performance Characteristics				
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) 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.

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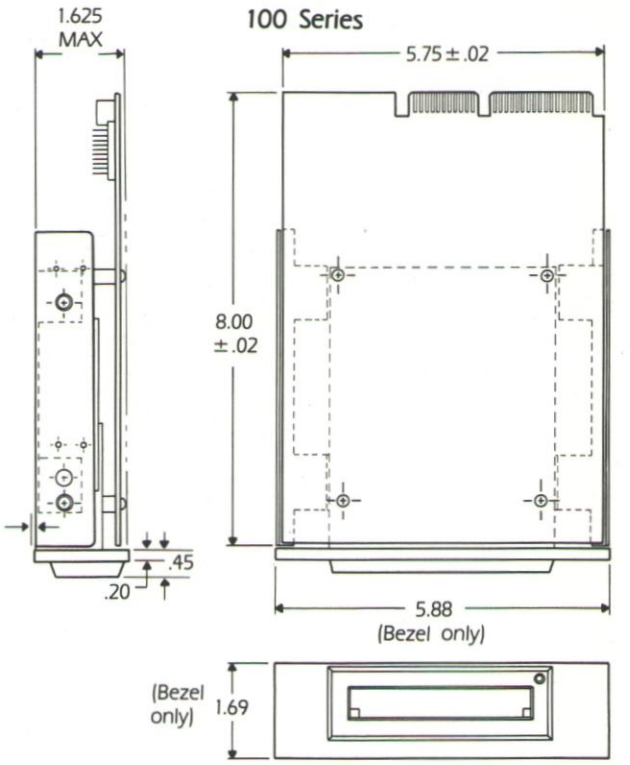
IRWIN® MAGNETICS

100 Series Specifications

	110	120	125	145
Reliability				
Error Rate Corrected Bit		1 in 10^{14} bits read		
Soft	1 in 10^{9} bits read			
Hard	1 in 10^{11} bits read			
Error Detection Technique	CRC			
Error Correction Technique		Reed-Solomon ECC		
Mean Time Between Failure[1]	40,000 hours			
Mean Time to Repair	30 minutes			
Service Life	5 years: 3,000 hr. tape motion			
Preventive Maintenance	Clean R/W head			
Power Requirements				
+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			
Acoustics				
Sound Power Output (Streaming at 50 ips)	54 dBA			
Environmental Tolerances				
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 except Z axis, 0.5g 100 to 200 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			
Approvals				
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 100 Series			

[1]100% duty cycle, 60% confidence level.



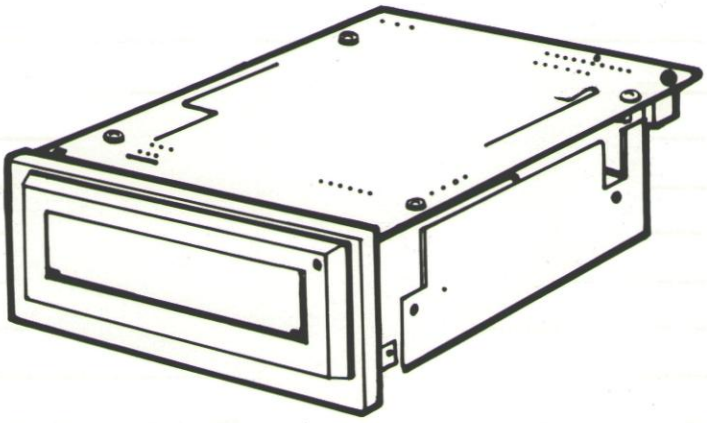
Tolerances:
X.XX ± .010"
X.XXX ± .005"

Weight: 1.9 pounds
Dimensions in inches

IRWIN® MAGNETICS

Document No. 25072341B

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
Description				
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
Tape Format				
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			
Format Compatibility by Irwin Model				
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
Performance Characteristics				
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.

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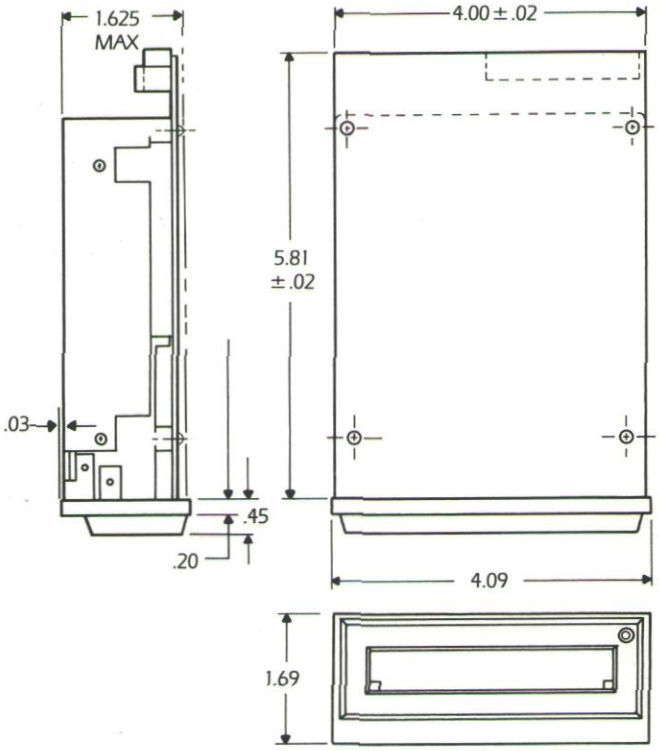
200 Series Specifications

	220	225	245	265
Reliability				
Error Rate Corrected	less than $1x10^{-14}$			
Error Detection Technique	CRC			
Error Correction Technique	Reed-Solomon ECC			
Mean Time Between Failure[2]	50,000 hours			
Mean Time to Repair	30 minutes			
Service Life	5 years: 3,000 hr. tape motion			
Preventive Maintenance	Clean R/W head			
Power Requirements				
+12 VDC (+5%) Average	1A			
Surge (peak 400 msec)	1.8A			
+5 VDC (±5%)	0.75A			
Total Power Dissipation (watts)	15.75			
Acoustics				
Sound Power Output (dBA/Streaming ips)	54/50		52/37.88	
Environmental Tolerances				
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			
Approvals				
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			

[1]Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

[2]100% duty cycle, 60% confidence level.

200 Series



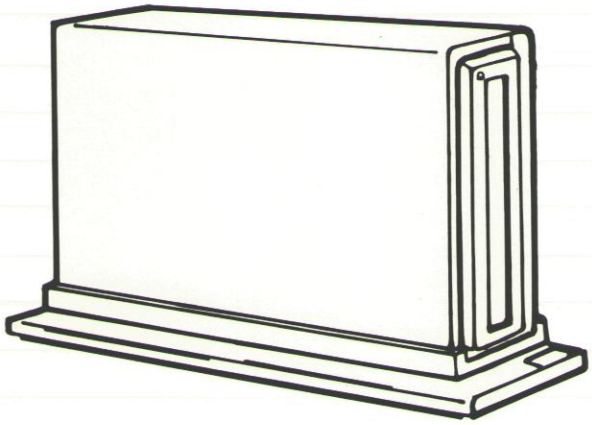
Tolerances
X.XX ± .010"
X.XXX ± .005

Weight: 1.4 pounds
Dimensions in inches

IRWIN® MAGNETICS

Document No. 2507235B

Irwin 400 Series Tape Drives



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
Description					
Form Factor	External System-Powered				
Formatted Capacity by Tape Cartridge (MB)					
3M DC1000	10.4		21.6		
3M DC2000		19.5		40.6	64.5
Tape Format					
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				
Format Compatibility by Irwin Model					
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
Performance Characteristics					
Operating Modes	Streaming File-by-File				
Electrical Interface					
Standard (STD)	Standard Floppy Disk				
Optional (HS)[1]					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

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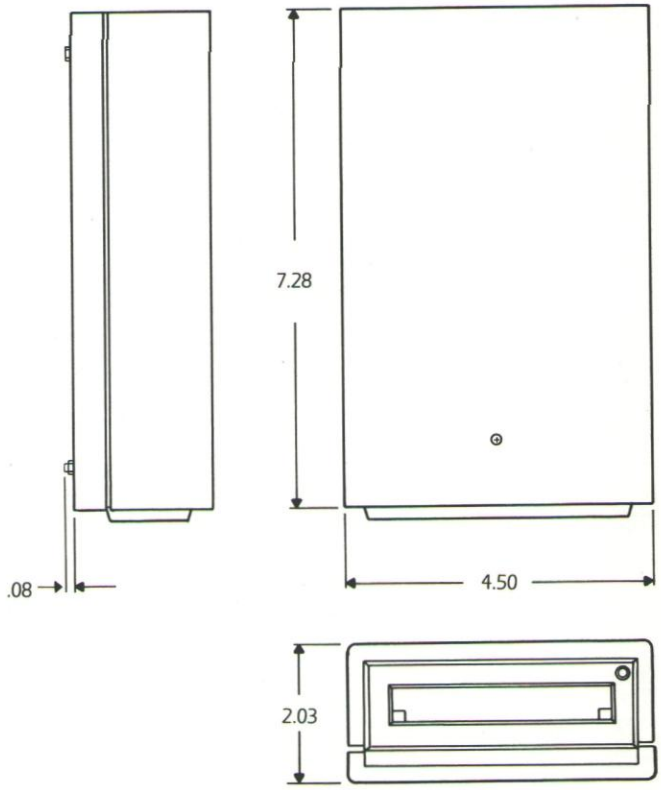
400 Series Specifications

	410	420	425	445	465
Reliability					
Error Rate Corrected		1 in 10^{14} bits read			
Soft	1 in 10^{9} bits read				
Hard	1 in 10^{11} bits read				
Error Detection Technique	CRC				
Error Correction Technique		Reed-Solomon ECC			
Mean Time Between Failure[2]	40,000 hours				
Mean Time to Repair	30 minutes				
Service Life	5 years: 3,000 hr. tape motion				
Preventive Maintenance	Clean R/W head				
Power Requirements					
+12 VDC (±5%) Average	1A				
Surge (peak 400 msec)	1.8A				
+5 VDC (±5%)	0.75A				
Total Power Dissipation (watts)	15.75				
Environmental Tolerances					
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				
Approvals					
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 Compatability FCC	Class B Identifier E4A5M2 400 Series				

[1]Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

[2]100% duty cycle, 60% confidence level.

400 Series



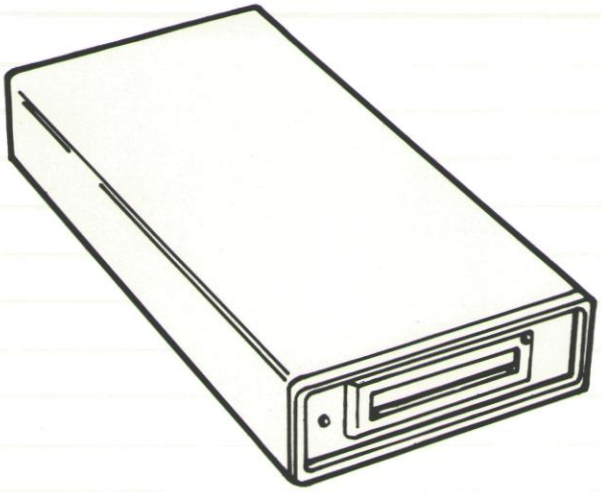
Tolerance
X.XX = ±.010

Weight: 1.9 pounds
2.5 pounds w/cables

Dimensions in inches

IRWIN® MAGNETICS

Document No. 2507236B



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 microcomputer 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
Description					
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
Tape Format					
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				
Format Compatibility by Irwin Model					
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
Performance Characteristics					
Operating Modes	Streaming File-by-File				
Electrical Interface Standard (STD)	Standard Floppy Disk				
Optional (HS)[1]					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

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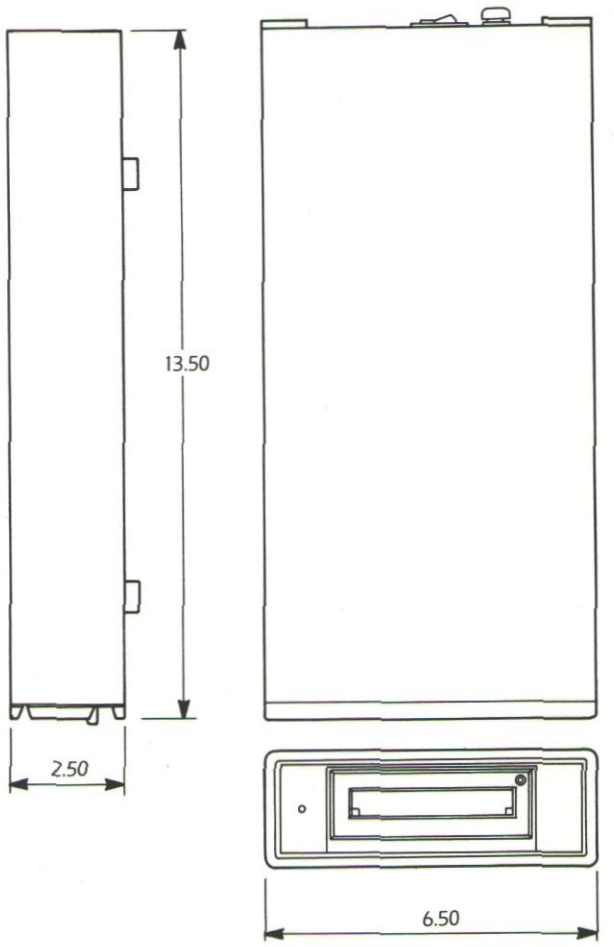
700 Series Specifications

	710	720	725	745	765
Reliability					
Error Rate Corrected		1 in 10^{14} bits read			
Soft	1 in 10^{9} bits read				
Hard	1 in 10^{11} bits read				
Error Detection Technique	CRC				
Error Correction Technique		Reed-Solomon ECC			
Mean Time Between Failure[2]	20,000 hours				
Mean Time to Repair	30 minutes				
Preventive Maintenance	Clean R/W head				
Power Requirements					
Peak Power Requirement (watts)	50				
Nominal Line Voltage (volts)	110/210; 220/240				
Environmental Tolerances					
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				
Approvals					
Safety					
U.L. (Recognized Component File No.)	E93214(N)				
CSA (Certified Component File No.)	LR60279				
TUV Rheinland (License No.)	577093				
Flammability					
Front Panel	94V-0				
Other Material	94V-1 or better				
Electromagnetic Compatability					
FCC	Class B Identifier E4A5M2 700 Series				

700 Series



Tolerances
X.XX≈ ± .030

Weight: 6.2 pounds
Dimensions in inches

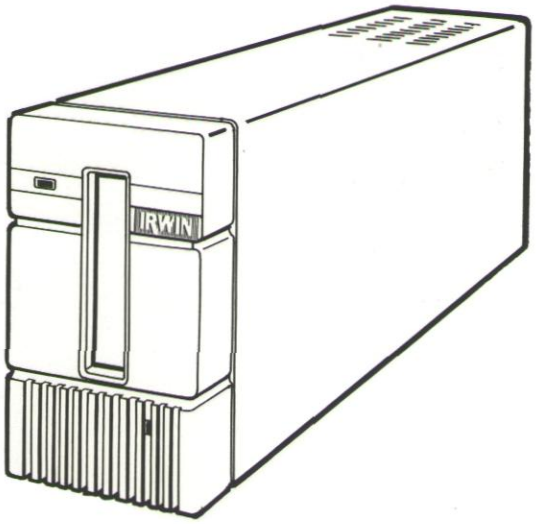
[1]Optional Irwin High Speed Disk Controller can be installed for 750 kb/s.

[2]100% duty cycle, 60% confidence level.

IRWIN® MAGNETICS

Document No. 2507237B

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!*

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
Description		
Form Factor	External Self-Powered	
Formatted Capacity (3M DC2000)	40.6 MB	81.7 MB
Tape Format		
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	
Format Compatibility by Irwin Model		
Reads/Writes	145, 245, 445, 745	5080
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
Performance Characteristics		
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.	

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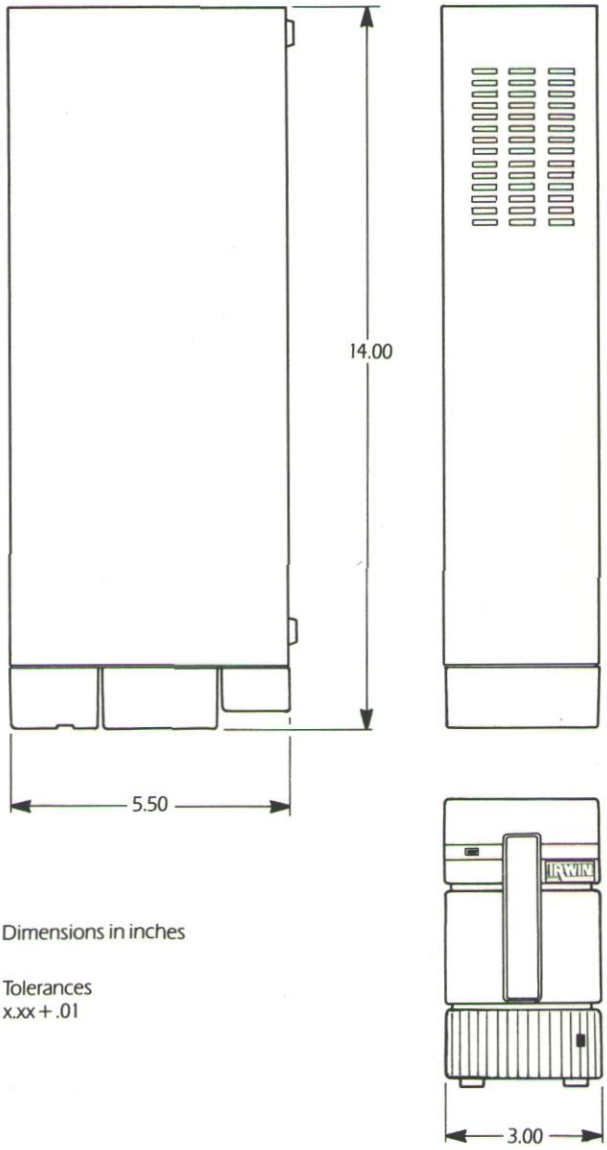
IRWIN® MAGNETICS

Specifications

	5040	5080
Reliability Corrected Bit Error Rate	1 in 10^{14} 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	
Power Requirements Peak Power Requirement (watts)	50	
Nominal Line Voltage (volts)	110-210; 220-240	
Environmental Tolerances 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) 11ms, 1/2 Sine Wave Operating	5.0g	
Non-Operating	40g, 3 blows each axis	
Altitude Operating	0-3000 m	
Non-Operating	0-6000 m	
Approvals Safety UL CSA TUV	In process	
Electromagnetic Compatibility FCC	Class A Compliance, Class B in process	



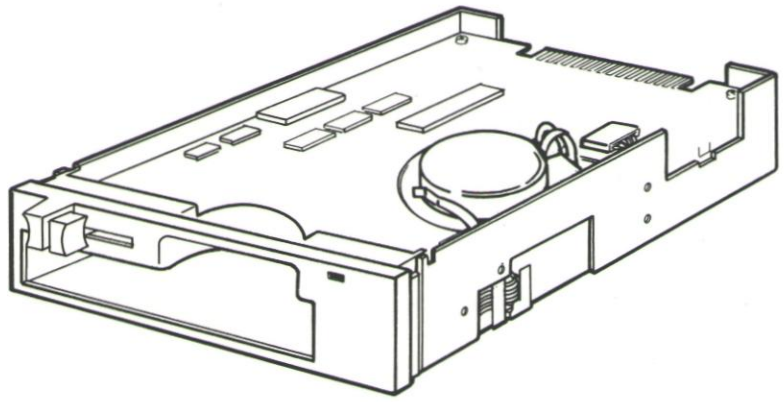
Dimensions in inches

Tolerances
x.xx + .01

IRWIN® MAGNETICS

Document No. 2507260B

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
Description		
Form Factor	5.25-inch half-height	
Formatted Capacity by Tape Cartridge (MB)		
3M DC600XTD	155	
3MDC600XTD (w/ECC)	135	
3M DC600A	125	
Tape Format		
Number of Tracks	15 (QIC-120), 18 (QIC-150)	
Recording Density (bpi)	10,000	
Data Encoding Method	GCR	
Format Compatibility by Irwin Model		
Writes	QIC-120 and QIC-150	
Reads	QIC-24, QIC-120 and QIC-150	
Performance Characteristics		
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	
Reliability		
Error Rate		
Corrected Bit (w/ECC)	1 in 10^{14} bits read	
Soft (without interchange)	1 in 10^{9} bits read	
Hard	1 in 10^{10} bits read	
Error Detection Technique	CRC	
Error Correction Technique	Automatic re-read with off-track positioning/Reed-Solomon ECC	
Mean Time Between Failure[1]	20,000 hours	
Mean Time to Repair	30 minutes	
Service Life[2]	5 years	
Preventive Maintenance	Clean E/R/W head	

[1]@ 10% Duty Cycle, 60% Confidence Level
[2]@ 10% Duty Cycle

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

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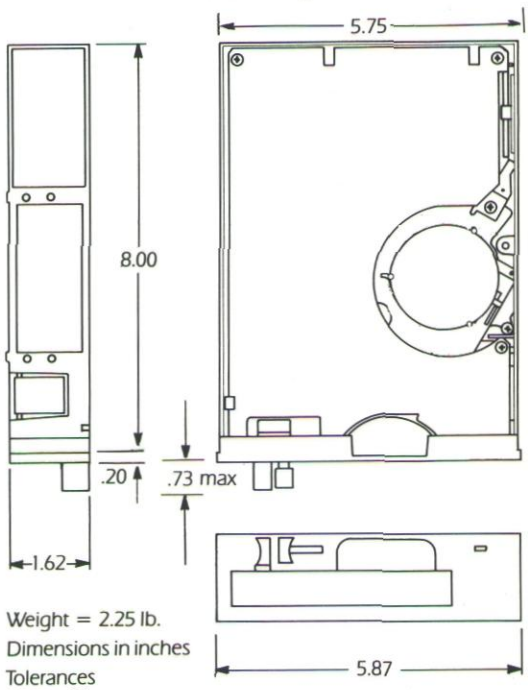
6150I Series Specifications

	6150I	6150SI
Power Requirements		
+12 VDC (±10%) Average	1.4A	1.5A
Surge (peak 150 ms)	4.0A	
+5 VDC (±5%)	.9A	1.5A
Total Power Dissipation (watts)	25	
Acoustics		
Sound Pressure-Operator Position (dBA/Streaming at 72 ips)	50	
Environmental Tolerances		
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	
Approvals		
Safety U.L. (Recognized Component File No.)	In process	
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	

Half-Height



Weight = 2.25 lb.
Dimensions in inches
Tolerances
x.xx + .01

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AccuTrak™

Precision Formatted Data Cartridges

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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:

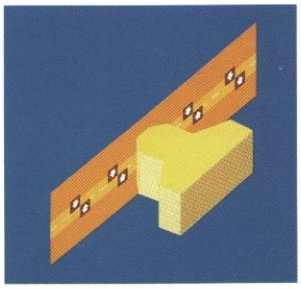
- Burnished — to polish and harden the tape surface and to prepare it for formatting.
- Servo-Written — to embed a pattern of electronic servo signals on each tape track.
- Formatted — to map the tape, identifying and preparing "blocks" where data will be stored.
- Verified — to ensure that servo-writing 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 interchangability. 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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