

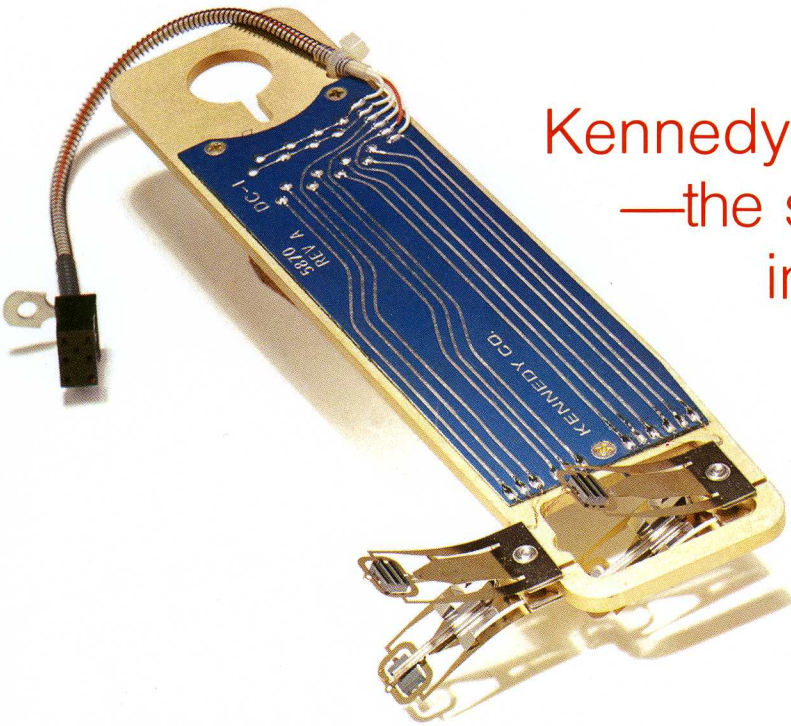
Model 5380 & 53160 Disk Drives



E.B.A. MICROWAVE

CS 6800 (A123)

369 17th Street, Suite 21
Costa Mesa, California 92627
(714) 857-6079



Kennedy Model 5380 & 53160 —the state of the art in disk technology

The Kennedy Company is proud to offer the Models 5380 and 53160 fixed Disk Drives. The 5380 provides 82 million bytes of unformatted capacity and the 53160 stores 165 million unformatted bytes. These high performance, low cost devices employ proven Winchester Technology and are engineered to provide the OEM with low cost of ownership through:

Design and Construction

- Extremely high density recording is possible by using 3350 type media (6330 BPI)
- Low mass Winchester Heads offer flying heights of 19 μ in thereby allowing higher track densities (430 TPI/680TPI)
- Track following Servo positioner reducing Seek errors to 1 in 10^6 Seeks
- A positive pressure closed loop air circulation system allowing 20,000 landing/takeoffs from the 3350 lubricated media without the danger of head crashes
- Single piece unit rack mountable in a 19" x 24" RETMA rack
- Storage Module Interface and format compatibility
- A choice of fixed or variable sector lengths (1-256)
- Internal Write precompensated Data for greater data reliability, and
- Controller capability to recover marginal data through data strobing techniques

Series Features: Design and Construction

- 3350 Media
- Winchester Heads
- Rotary Positioner (Voice Coil)
- Closed Loop Air Circulation System
- Rack Mountable
- Storage Module interface and format Compatible
- Fixed or Variable Length Sector
- Internal Write Precompensation
- Marginal Data Recovery

Maintainability

- Single Function Plug in Boards
- Fault Logic Board Visually Identifies Fault
- Zero Preventive Maintenance

Application

- Integral Power Supply
- Brown Out Protection
- Non-Computer Room Environment

Maintainability

- Single function, printed circuit boards simplifying debugging and maintenance
- Fault logic board with nine fault indicator lamps for easier diagnosis
- Zero preventive maintenance

Application

- An integral power supply saving rack space and wiring
- $\pm 10\%$ voltage tolerance for brown out protection
- Sealed module for non-computer room environment

Specifications

Major Components

Electronics	TTL, Schottky, ECL, Analog and Discrete Components	
Positioner	Rotary Actuator	
Headload/Unload Mechanism	Winchester Technology	
Spindle Motor	Induction	
Mechanical Framework	Cast Aluminum	

Recording Characteristics	5380	53160
Recording	Modified Frequency Modulation (MFM)	
Recording Density (Bits per Inch)	6330	6330
Track Density (Tracks per Inch)	430	680
Track to Track Spacing	0.0023 Inches	0.00147
Head Type	Monolithic	Composite
Head Flying Height	19-21 Micro Inches (μ in)	
Servo Surfaces	1	1

Compatibility

Interface	• Storage Module Disk (SMD) Interface
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Performance Characteristics

BIT Transfer Rate	8MHz (1000kB/sec)	
Data Capacity (Unformatted)	82 Megabytes	165 Megabytes
Sector Size	Fixed or Variable (1-256)	
Data Heads/Surface	2	2
No. of Servo Tracks per Drive	412	823
No. Data Tracks per Surface	823	1646
No. of Platters	3	3

Positioning Characteristics

Single Track	10 Milliseconds Max.	
Average	30 mSec	
Max. Track	55 mSec	
Latency Time	10 mSec	
RPM	3000 Rev/Min.	

Error Rates

Recoverable Read	1 in 10^{10} BITS Transferred		
Seek	1 in 10^6 Seeks		

Environmental Limits	Operating	Non-Operating	Transit
Temp. (°F)	50 to 104	-14 to 122	-40 to 158
R.H. (%) Non-condensing	20 to 80	5 to 95	0 to 100

Reliability & Service Goals

MTBF	10,000 Hrs.	
MTTR	< 1 Hr.	
Service Life	5 Years	

Physical Parameters

Panel Size	7 In. x 19 In. Standard	
Depth Behind Panel	24.75 In.	
Weight	75 Lbs.	

Power Requirements	Standard	Optional
AC	120 Volts 60 Hz	100 Volts 50 Hz 100 Volts 60 Hz 220 Volts 50 Hz 230 Volts 50 Hz 240 Volts 50 Hz
DC	None	None



All Model 5380s and 53160s are assembled in Kennedy's 2000 sq. ft. Class 100 clean room.

KENNEDY

An Allegheny International Company

CORPORATE HEADQUARTERS

1600 Shamrock Ave.
Monrovia, CA 91016
(213) 357-8831
TELEX 472-0116 KENNEDY
TWX 910-585-3249

EUROPEAN HEADQUARTERS

Koningin Elisabethplein, 8
B-2700 Sint-Niklaas
Belgium
Tel: (031) 771962
Telex: 71870 KEN CO

KENNEDY INTERNATIONAL

McGraw Hill House
Shoppenhangers Road
Maidenhead, Berkshire
SL 6 2QL
England
Tel: (0628) 73939
Telex: 847871 KENUKS G

EASTERN REGIONAL OFFICE

350 Vanderbilt Motor Parkway
Hauppauge, N.Y. 11787
Tel: (516) 231-6063
Telex: 510-227-6145

Kennedy Means Quality

Kennedy understands both your needs and those of your customers. Kennedy, a leader in OEM products, provides advantages in price, performance, reliability, service and quality. The 5380/53160 are designed using "State of the Art" technology and engineered for performance. Take a close look, test, evaluate and compare. You'll find the Kennedy quality and reliability that is demanded of you by your customers.

Kennedy Means OEM Services

Kennedy Company recognizes the need for factory assistance in the many areas required to satisfy today's demanding OEM Market. Among the areas in which Kennedy Company offers assistance are:

Application Engineering. During the initial phases of the 5380/53160 program, a qualified engineer will assist you in integrating the device to your system. Should problems arise he will be prepared to make recommendations for interface controller hardware and firmware improvements.

Service Seminars. A skilled staff is available to train customers in the operation, care and maintenance of all Kennedy products. These seminars can be held at Kennedy Company in either the U.S. or European Headquarters, or at the customer's facility.

OEM Spare Parts. Kennedy Company maintains fully stocked spare parts depot at strategic locations in the U.S. and Europe. Many years of experience serving the OEM Market have provided us with a professional and responsive spare parts capability. We are committed to ship your spare parts within 48 hrs. after the order is received. We can provide you with a recommended spare parts list on optimum level of spare parts to profitably service both yourself and your customers.

Service Support. Our own field engineering staff is available to support your customer engineers upon request. Factory trained service centers are also available in strategic cities worldwide.