

TEXT,C,55  
 CONNER PERIPHERALS INC  
 CP-3104 SPECIFICATION SUMMARY

GENERAL:

Embedded Controller/Interface	PC/AT
Capacity (Formatted)	104.9 MB

PHYSICAL CONFIGURATION:

Actuator type	Voice-coil
Number of Disks	4
Data Surfaces	8
Data Heads	8
Servo	Embedded
Tracks per Surface	776
Track Density	1150 TPI
Track Capacity (formatted)	16,896 bytes
Bytes per Block	512
Blocks per Drive	204,864
Sectors per Track	34 physical 33 accessible

PERFORMANCE:

Seek Times (*)	
Track to Track	8 msec
Average	25 msec **
Maximum	45 msec
Average Latency	8.4 msec
Rotation Speed (+/-1%)	3575 RPM
Controller Overhead	1 msec
Data Transfer Rate	
To/from Media	1.25 MB/sec
Data Transfer Rate	
To/from Buffer	3.75/4.75 MB/sec
Start Time - Power Up (0-3575 RPM)	
Typical	15 sec
Maximum	20 sec
Start Time - Power Down	
Typical	15 sec
Maximum	20 sec
Start/stop Cycles	10,000 min
Interleave	1:1
Buffer Size	32K

\* = At nominal DC input voltages

\*\*= Average seek time is determined by dividing the total time required to seek between all possible ordered pairs of track addresses by the total

number of these ordered pairs.

READ/WRITE:

Recording Method	2,7 RLL code
Recording Density - ID	23,441 BPI
Flux Density - ID (flux reversals per inch)	15,627

POWER REQUIREMENTS

(PC/AT interface typical):

	+12VDC+/-5%	+5VDC+/-5%	POWER
R/W Mode	350 ma	300 ma	5.7W
Seek Mode	260 ma	180 ma	4.0W
Idle Mode	175 ma	160 ma	2.9W
Spin-up Mode	180 ma	180 ma max	n/a

PHYSICAL CHARACTERISTICS:

Physical Dimensions	Height	1.625" (41.3mm)
	Length	5.75" (146.1mm)
	Width	4.00" (101.6mm)
	Weight	2.0lbs (0.9kg)

ENVIRONMENTAL CHARACTERISTICS:

Temperature

Operating	5oC to 55oC
Non-Operating	-40oC to 60oC
Thermal Gradient (maximum)	20oC per hour

Humidity (non-condensing)

Operating	8% to 80%
Non-operating	8% to 80%
Maximum Wet Bulb	26oC

Altitude (relative to sea level)

Operating	-200 to 10,000 feet
Non-operating (max.)	40,000 feet

RELIABILITY AND MAINTENANCE:

MTBF (POH)	30,000 hrs
MTTR (typical)	10 minutes
Preventative Maintenance	None
Component Design Life	5 years
Data Reliability	<1 nonrec- overable error in 1012 bits read

SHOCK AND VIBRATION:

Shock - 1/2 sine pulse	
Operating Shock	10 Gs WNRE

Non-operating Shock                      50 Gs

Vibration - swept sine, 1 octave per minute

Operating Vibration

5 - 27 Hz (double amplitude)            .010"

28 - 500 Hz (peak)                      .25 Gs WNRE

Non-Operating Vibration

5 - 62 Hz (double amplitude)            0.020"

63 - 500 Hz (peak)                      4 Gs

WNRE = Without Non-Recoverable Errors

**MAGNETIC FIELD:**

The externally induced magnetic flux density may not exceed 6 gauss as measured at the disk surface.

**ACOUSTIC NOISE:**

Acoustic Sound Pressure (max)            40 dBA at 1m