

TEXT,C,55  
 CONNER PERIPHERALS INC  
 CP-3024 SPECIFICATION SUMMARY

GENERAL:

Embedded Controller/Interface	PC/AT
Capacity (Formatted)	21.5 MB

PHYSICAL CONFIGURATION:

Actuator type	Voice-coil
Number of Disks	1
Data Surfaces	2
Data Heads	2
Servo	Embedded
Tracks per Surface	636
Track Density	1150 TPI
Track Capacity (formatted)	16,896 bytes
Bytes per Block	512
Blocks per Drive	41,976
Sectors per Track	33

PERFORMANCE:

Seek Times (*)	
Track to Track	8 msec
Average	27 msec **
Maximum	50 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	4.0 MB/sec
Start Time - Power Up (0-3575 RPM)	
Typical	5 sec
Maximum	10 sec
Start Time - Power Down	
Typical	5 sec
Maximum	10 sec
Start/stop Cycles	20,000 min
Interleave	1:1

\* = 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	12,379 BPI
Flux Density - ID (flux reversals per inch)	14,396

**POWER REQUIREMENTS**  
(PC/AT interface typical):

	+12VDC+/-5%	+5VDC+/-5%	POWER
R/W Mode	230 ma	275 ma	4.2W
Seek Mode	140 ma	180 ma	2.8W
Idle Mode	120 ma	120 ma	2.0W
Standby Mode	1 ma	90 ma	0.5 W
Sleep Mode	1 ma	77 ma	0.4 W
Spin-up Mode	700 ma	180 ma	n/a

**PHYSICAL CHARACTERISTICS:**

Physical Dimensions	Height	1.00" (25.4mm)
	Length	5.75" (146.1mm)
	Width	4.00" (101.6mm)
	Weight	1.1lbs (0.50kg)

**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)	>50,000 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	5 Gs WNRE
Non-operating Shock	75 Gs

Vibration - swept sine, 1 octave per minute

Operating Vibration

5 - 27 Hz (double amplitude) .010"

28 - 500 Hz (peak) .5 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