



JUL 9 1984



5.25" Winchester Disk Drive

The 4020 offers 20 MBytes of storage on two disks. Featuring an attractive cost-per-byte alternative, the 4020 enables systems designers to offer up to 15.7 MBytes of formatted storage for little more than they are paying for 10 MBytes.

To ensure that OEM's are getting the highest quality and most reliable 5.25 inch Winchester available, MiniScribe disk drives must pass 96 continuous hours of extensive performance and quality control testing. That's the MiniScribe standard of excellence.

Features:

- Proven rack and pinion actuator for positioning accuracy over temperature extremes.
- IC preamplifier, within the sealed enclosure, assures data reliability in electrically noisy environments.
- Industry standard interface.
- Microprocessor-controlled internal self diagnostics provide fast performance verification.
- Patented breather filter, coupled with a recirculating filter, guarantees a clean and pressurized environment to heads and disk.
- Dedicated shipping zone in non-data area, plus durable shock mounting, provide outstanding protection against severe handling.
- Single PC board increases reliability through reduced component count and fewer interconnections.



5.25" Winchester Disk Drive

Specifications

Capacity Unformatted

Per Drive	20.0 MBytes
Per Track	10,416 Bytes

Capacity Formatted

Per Drive	15.7 MBytes
Per Track	8,192 Bytes
Per Sector	256 Bytes
Sectors Per Track	32

Functional

Rotational Speed	3600 RPM
Recording Density	8,575 bpi
Areal Density	5.04 Mbits/sq. in.
Track Density	588 tpi
Tracks	1,920
Cylinders	480
R/W Heads	4
Disks	2

Access Time (including settling)

Average	133 msec.
Track-To-Track	18 msec.
Latency (average)	8.33 msec.

Reliability

MTBF	10,000 hours
PM	None
MTTR	30 minutes

Error Rates

Soft Read Errors	1 per 10 ¹⁰ bits read
Hard Read Errors	1 per 10 ¹² bits read
Seek Errors	1 per 10 ⁶ seeks

DC Power Requirements

+ 5 V DC ± 5%	1.0 amp typical
+ 12 V DC ± 5%	1.5 amp typical
Start surge (5 sec.)	4.5 amps

Environmental Limits

Ambient Temperatures	40° F to 115° F (4° C to 46° C)
Relative Humidity	8% to 80%
Maximum Wet Bulb	78° F (26° C)

Heat Dissipation

23 watts

Physical

Height	3.25 in.
Width	5.75 in.
Depth	8.00 in.
Weight	5.5 pounds

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