

PCD-250/350

IDE Flash Disk Module



Information

Advantech's PCD-250/350 is a Flash disk solution which is as easy to install and use as an HDD. That's because the casing, mounting holes, and IDE interface are exactly the same as a 2.5" or 3.5" HDD. Because of this fact, no mechanical or configuration changes need to be made in order to use this unit.

The controller found within the PCD-250/350 is manufactured by SanDisk. The PCD-250/350 is the embedded solid-state data storage device for harsh environment applications. It is 100% compatible with the IDE (PC/AT) interface, requiring no additional device drivers to run existing applications.

The sector size of the PCD-250/350 is the same as in a magnetic disk drive: 512 bytes. The endurance specifications for each sector to 300,000 writes guaranteed (reading a local sector is unlimited). Even very heavy use of the PCD-250/350 in a computer system will use only a fraction of the total endurance over the computer's five year lifetime. For instance, it would take over 34 years to wear out an area on the drive on which a file of any size (from 512 bytes to drive capacity) was rewritten 3 times per hour, 8 hours a day, 365 days per year.

Features

- Up to 220 MB of solid-state storage
- 100% IDE compatible
- Noiseless
- Sector size of 512 bytes
- Automatic error correction and retry capabilities
- Sophisticated defect management system

Specifications

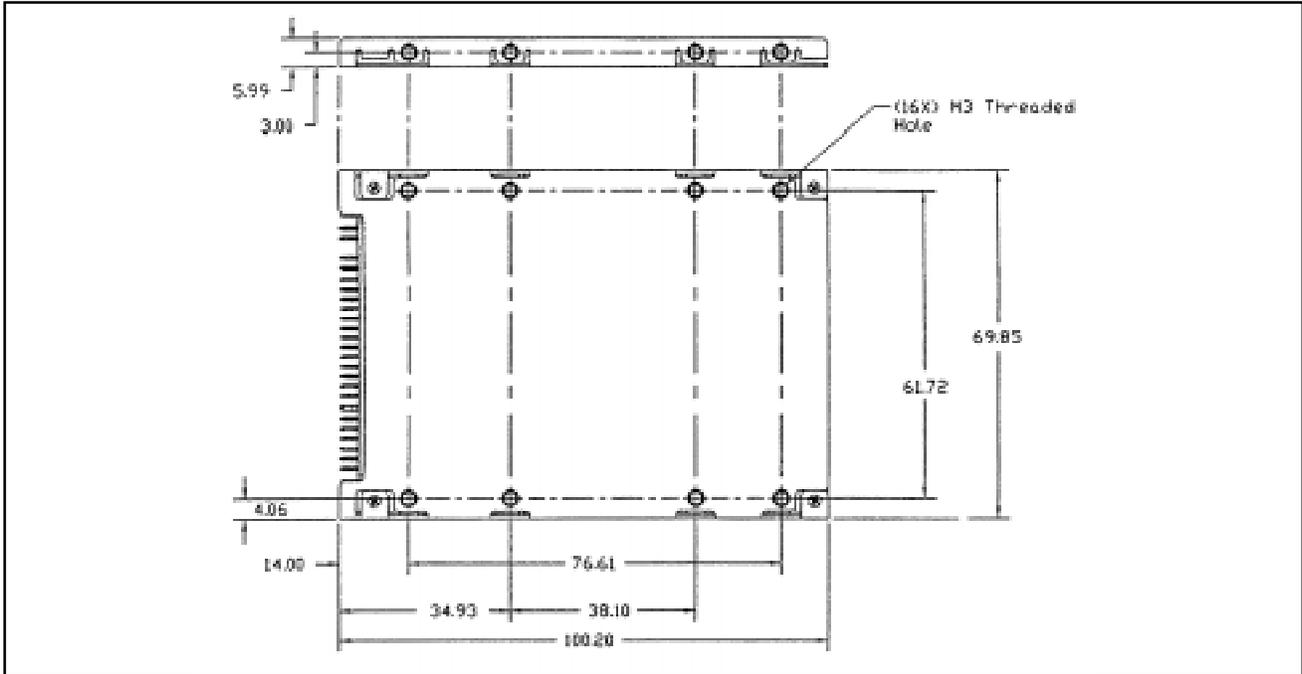
- **Capacity:**
20, 40, 60, 80, 100, 220 MB
- **Temp:**
0 ~ 60° C (operating)
-25 ~ 80° C (non-operating)
- **Humidity:**
8% ~ 95%, non-condensing (operating)
8% ~ 95%, non-condensing (non-operating)
- **Acoustic noise:** 0 dB (at 1 meter)
- **Vibration:**
15 G peak to peak max. (operating)
15 G peak to peak max. (non-operating)
- **Shock:**
1000 G max (operating)
1000 G max (non-operating)

- **Power consumption:**
DC input voltage: 3.3 V \pm 5%, 5 V \pm 10%
Typical power dissipation:
Sleep: 200 μ A (3.3 V); 500 μ A (5 V)
Read: 32~80 mA (3.3 V); 46~120 mA (5 V)
Write: 32~80 mA (3.3 V); 46~120 mA (5 V)
- **Performance:**
 - Sleep to write: 2.5 msec maximum
 - Sleep to read: 2.0 msec maximum
 - Reset to ready: 50 msec typical, 400 msec maximum
 - Data transfer rate to/from Flash: 4.0 Mbyte/sec burst
 - Data transfer rate to/from host: 6.0 Mbyte/sec burst
 - Controller overhead command to DRQ: 1.25 msec maximum
 - Endurance: 300,000 erase/program cycles per logical sector
 - MTBF (@ 25° C): > 1,000,000 hours

Ordering Information

- PCD-250-0020/0040/0060/0080/0100/0220:
2.5" IDE Flash Drive 20/40/60/80/100/220 MB
- PCD-350-0020/0040/0060/0080/0100/0220:
3.5" IDE Flash Drive 20/40/60/80/100/220 MB

PSD-250 2.5" IDE Flash Drive Dimensions (mm)



PSD-350 3.5" IDE Flash Drive Dimensions (mm)

