SDS-250 / DDS-500

The MCM DISKETTE SYSTEM provides the user with totally random on-line storage. Access time for any random files are typically one second, under control of the MCM Virtual Memory System. In order to meet the demands of both large and small applications, MCM offers two models - the SDS-250 Single Diskette and the DDS-500 Dual Diskette Systems. With the exception of the additional disk in the DDS-500, both systems are identical.

Each DISKETTE provides immediate access to over 250,000 characters of online stored data and programs. If your data requirements exceed the 500,000 character capacity of the DDS-500—simply add as many SDS-250's or DDS-500's as required, up to a maximum of eight drives (2 megabytes).

Each system includes a number of advanced features designed to enhance performance and extend the life of the unit. Some of these features include; a patented diskette/clamping registration design which eliminates the possibility of damage to the diskette due to misregistration and guarantees over 30,000 interchanges with each diskette; proprietary ceramic read/write head to provide media life exceeding 3.5 million passes per track and head life exceeding 15,000 power-on hours; and activity light indicating drive in use; and RELIABILITY with an average in excess of 8000 operating hours between failures specified under normal usage conditions.

Both DISKETTE Systems operate under MCM's highly regarded Virtual Operating System (AVS), and External Allocation System (EASY), allowing both tapes and diskettes to be accessed interchangeably. No program modifications are required.

Each diskette contains 208 alternate sectors which are used to replace any data sector which may become defective. This reduces the possibility of failure by a factor in excess of 100. The system also maintains two redundancy check sums per sector with full read after write and bit checking for every bit written on the disk.

Access method is Random with dynamic recovery in the case of write error. First fit allocation minimizes seek time.
3. PHYSICAL SPECIFICATIONS

Environmental Limits
- Ambient Temperature: 10°C to 38°C (50°F to 100°F)
- Relative Humidity: 20% to 80% (without condensation)

AC Power Requirements
- 50/60 Hz ± 0.5 Hz
- 100/115 VAC @ 1.8A (DDS)
- 200/230 VAC @ .95A (DDS)

Mechanical Dimensions
- Width: 44.5 cm (17.25 in.)
- Depth: 45 cm (17.5 in.)
- Height: 27.5 cm (10.75 in.)
- Weight: 22 kg (50 lbs.)

Convenience outlets are provided at the rear of the chassis to facilitate connection of other equipment.

4. RELIABILITY SPECIFICATIONS

MTBF: 5000 Power-On hours under heavy usage
Mean Time Between Failure: 8000 Power-On hours under typical usage
PM: Every 5000 POH under heavy usage
Preventative Maintenance Frequency: Every 15000 POH under typical usage
MTTR: 30 minutes

Error Rates:
- Soft Read Errors: 1 per 10^9 bits read
- Hard Read Errors: 1 per 10^12 bits read
- Seek Errors: 1 per 10^6 seeks

Media Life:
- Passes per Track: 3.5 x 10^6
- Insertions: 30000+