DATAPOINT MASS STORAGE DISK CONTROLLER AND DRIVE

The Datapoint 9370 is a 20-surface, removable pack disk system. It provides the user with a non-volatile, random access mass memory. The drive accommodates a multiple platter disk pack.

The on-line capacity is a maximum of 25 million bytes per disk drive for the 5500 system, or if the maximum of eight disk drives is attached to the controller, 200 million bytes. For the 2200 system, addressing restrictions limit the on-line capacity to 20 million bytes per drive and 2 drives per system. Off-line capacity is unlimited, as the disk packs are removable for storage.

The controller includes a buffer memory which is divided into 16 pages of 256 bytes each, allowing the storage of 16 independent sectors of data (4096 bytes) in the controller buffer memory.

The buffer memory can be addressed randomly, thus facilitating the updating and sorting of small amounts of data within a sector. Data is not required to be transferred to the processor, but can be processed in the disk buffer itself, thus saving considerable time.

For error detection, a parity check is made on buffer transfers and a 16 bit CRCC (cyclic redundancy check character) check is made on disk transfers.

The 9370 Mass Storage Disk Controller is enclosed in a standard freestanding cabinet or Equipment Console (9373). The Disk Drive is housed in a caster-supported cabinet.

Functional Characteristics

Capacity (each drive):

Surfaces:

Tracks/Surface: 203 Tracks/Pack: 4,060

Sectors/Track: 24 97,440 Sectors/Pack:

Bytes/Sector: 256 24,944,640 Bytes/Pack: Buffer memory size: 4096 characters

Disk Pack: Multiple platter type

Timing:

Bit Transfer rate: 2.5 MHz (to and from

Byte Transfer rate: 312.5 KHz (to and from

buffer)

Rotation: 2400 RPM

Average access time: 12.5 milliseconds

Head Positioning:

Maximum: 60 milliseconds Average: 35 milliseconds

Physical Characteristics

Equipment Dimensions:

Controller:

Width: 28 in. (71 cm)

Height: 28 in. (71 cm) 24 in. (61 cm) Depth:

165 lbs. (75.3 kg) Weight:

Disk Drive (each drive)

Width: 30 in. (76.5 cm)

Height: 39 in. (99 cm)

Depth: 24 in. (61 cm)

394 lbs. (180 kg) Weight:

Power Requirements:

208 or 230 VAC 3-phase 60Hz (220 or 380 VAC 50 Hz optional)

Environment:

50 to 100 degrees F

10 to 38 degrees C

20 to 90% relative humidity, non-condensing

Model Codes

9370 Mass Storage Disk Drive and Controller, Freestanding

9371 Mass Storage Disk Drive Extension for

9373 Mass Storage Disk Drive and

Controller, Console

9372 50 Hz power option

