IBM 2319

IBM 2319
Disk Storage
Facility

Product Description:

The 2319 Disk Storage Facility provides direct access storage attachment capability for the System 370/145 Integrated File Adapter (IFA).

Direct Access Storage enables retrieval of random records without searching a complete file of records. This method is most efficient when only a few of the records in a file is needed. Such records can be read, updated and replaced considerably faster using the direct access method than by using a sequential method.

The basic attachment subsystem consists of a 2319 which contains three 2314-A Series type file drives mounted in a single frame together with associated electronics. Each file drive mod-

ule has an access mechanism with a read/write head for each of 20 disk pack surfaces. The access mechanism positions the heads to any one of 200 primary cylinders and 3 alternate cylinders. Average access time is 60 milliseconds. Disk rotation speed is 2400 RPM. The configuration may be expanded up to a maximum of 8 file drives by the addition to the basic 2319 of combinations of 2312 (single drive), 2318 (dual drive), or 2313 (quad drive) units.

The 2319 uses the standard 2316 disk pack with full compatibility and interchangeability with other 2314 subsystems.
The packs provide large amounts of on-line storage and virtually unlimited off-line storage.

General Characteristics:

The following characteristics of the 2314-A Series file drives apply to the 2319:

200 cylinders per pack
20 tracks per cylinder
7294 maximum bytes per track
29.176 million bytes on-line capacity per drive module
87.528 million bytes on-line capacity—2319 (3 drives)
233.408 million bytes on-line *maximum* per subsystem (8 drives).
60 millisecond average access time
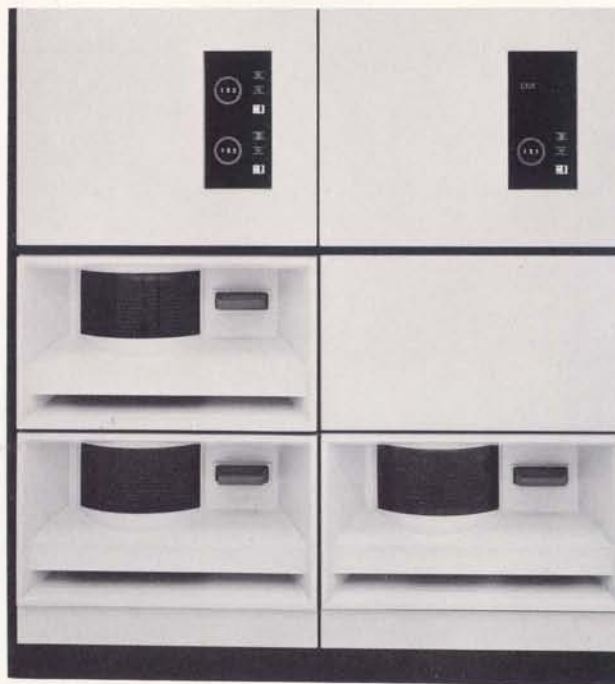312 kilo bytes per sec data transfer rate
25 millisecond disk rotation.

Service Features:

CE Panel—A CE panel mounted in the 2319 is provided to initiate and interpret in-line micro-diagnostics.

In-Line Microdiagnostics— This is a group of diagnostics which reside in read only storage, together with the IFA control program. They are initiated via the CE panel and operate in conjunction with any module in the configuration which is designated "Service Module".

On-Line Tests (OLT's)—Facilities are provided to allow maintenance programs to be run on the processor concurrent with customer operations.

This is an FE Career Path "General Systems" product.

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