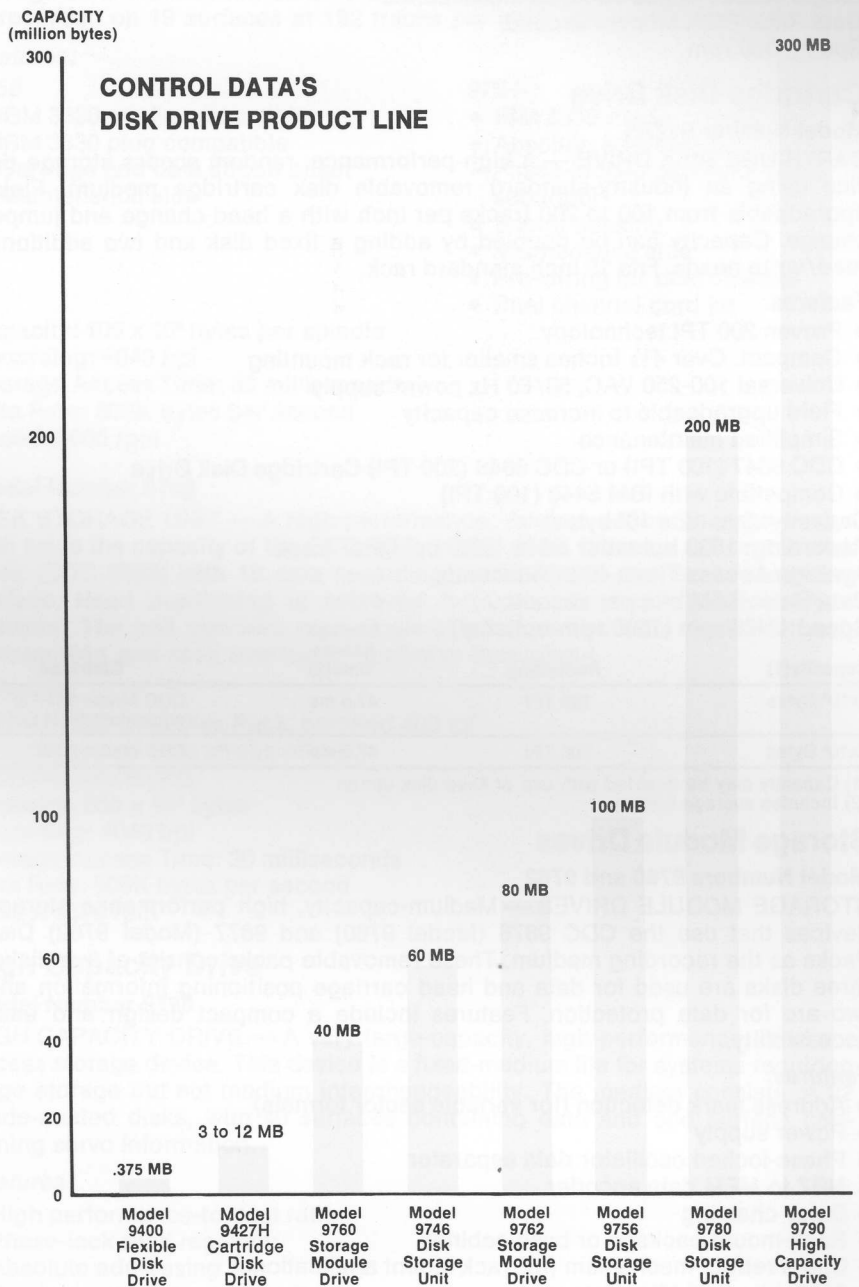


The following described disk drives are a complete family of rotating memory devices — from the .375-million byte Flexible Disk Drive to the 300-million byte High Capacity Drive. Control Data can supply disk drive systems to meet any requirement. This chart depicts the disk drive family.



Flexible Disk Drive

Model Number 9400

FLEXIBLE DISK DRIVE — A low-cost, 3-megabit, random access information storage device utilizing a removable, flexible, mailable 7.88-inch magnetic disk as the recording medium. The flexible disk stores the equivalent of 3000 80-column punch cards. It has a long life — more than 2,000,000 passes per track without signal degradation. The disk is enclosed in a protective jacket, which is not removed when the disk is in use. The envelope contains a center hole and an access slit. In use, the slotted envelope enables the magnetic head to contact the recording surface of the disk, and the envelope is held in a fixed position while the disk is rotated by the drive spindle.

Features:

- Write current switched at track 43 for true IBM compatibility
- Ceramic head
- Lightweight, easily portable, mailable medium
- Small size permits easy mounting
- Easy loading and accessing
- Interchangeable disks
- CDC 9878 Diskette
- Compatible with IBM 3740 Diskette

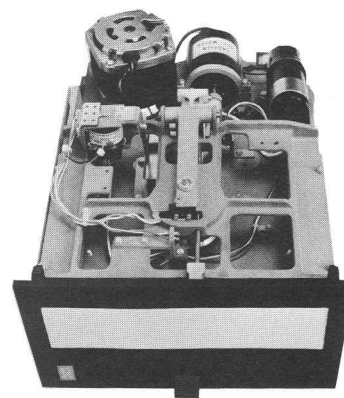
Capacity: 3×10^6 bits

Recording: 3268 bpi (track 76)

Single Track Access Time: 20 milliseconds

Data Rate: 249K bits per second

Speed: 360 rpm



9400 Flexible Disk Drive

Cartridge Disk Drive

Model Number 9427H

CARTRIDGE DISK DRIVE — A high-performance, random access storage device using an industry-standard removable disk cartridge medium. Field-upgradeable from 100 to 200 tracks per inch with a head change and jumper change. Capacity can be doubled by adding a fixed disk and two additional read/write heads. Fits 19 inch standard rack.

Features:

- Proven 200 TPI technology
- Compact. Over 4½ inches smaller for rack mounting
- Universal 100-250 VAC, 50/60 Hz power supply
- Field upgradeable to increase capacity
- Simplified maintenance
- CDC 9847 (100 TPI) or CDC 9848 (200 TPI) Cartridge Disk Drive
- Compatible with IBM 5440 (100 TPI)

Capacity: 3 to 12×10^6 bytes

Recording: 1530 bpi outer track, 2220 bpi inner track

Average Access Time: 40 milliseconds

Data Rate: 2.5M bits per second

Speed: 2400 rpm (1500 rpm optional)

Capacity(1)	Recording	Average Access Time(2)	Cartridge
3×10^6 Bytes	100 TPI	47.5 ms	CDC Model 9847 or equivalent (IBM 5440)
6×10^6 Bytes	200 TPI	47.5 ms	CDC Model 9848

(1) Capacity may be doubled with use of fixed disk option

(2) Includes average latency



9427H Cartridge Disk Drive

Storage Module Drives

Model Numbers 9760 and 9762

STORAGE MODULE DRIVES — Medium-capacity, high performance storage devices that use the CDC 9876 (Model 9760) and 9877 (Model 9762) Disk Packs as the recording medium. These removable packs consist of five disks: three disks are used for data and head carriage positioning information and two are for data protection. Features include a compact design and easy accessibility.

Features:

- Address mark detection (for variable sector formats)
- Power supply
- Phase-locked oscillator data separator
- NRZ to MFM data encoder
- Daisy chaining
- Rack-mount package or base cabinet
- Cable retract mechanism (for rack mount applications)
- 2400 rpm, 6.45 MHz data rate

Capacity: 40×10^6 bytes per spindle (Model 9760)

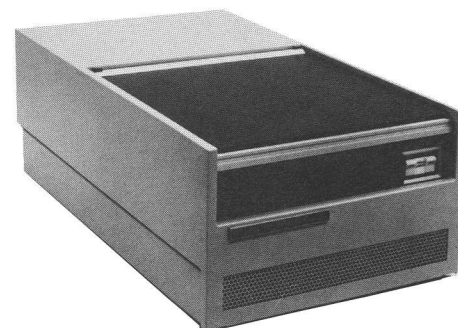
80×10^6 bytes per spindle (Model 9762)

Recording: 6038 bpi

Average Access Time: 30 milliseconds

Data Rate: 1.2M bytes per second

Speed: 3600 rpm



9760 Storage Module Drive



9746 Disk Storage Unit

Disk Storage Units

Model Number 9746

DISK STORAGE UNIT — A large-capacity, high-performance, random-access storage device which uses the CDC 9873 Disk Pack (or equivalent). The pack contains eleven disks, with information stored on twenty surfaces at 200 tracks per inch, 400 tracks per surface.

Features:

- Absolute addressing
- Use of simplified TTL interface, single-ended transmission system
- Use of industry standard 20-surface disk pack (IBM 2316)
- Significant cost-per-byte advantage over available 30M or 60M byte products

Capacity: 60×10^6 bytes

Recording: 2220 bpi

Average Access Time: 35 milliseconds

Data Rate: 312K bytes per second

Speed: 2400 rpm

Model Numbers 9754-1 and 9756

DISK STORAGE UNITS — Large capacity, high performance, random access storage units that use the CDC 9879 Disk Pack or equivalent (IBM 3336). Data is recorded on 19 surfaces at 192 tracks per inch, 404 tracks per surface.

Features:

9756

- IBM 3330 media compatible
- IBM 3330 plug compatible
- Carriage and data strobe offset
- Maintenance aids

9754-1

- IBM 3330 media compatible
- Absolute addressing
- Phase-locked oscillator data separator
- Sector sensing
- Maintenance aids
- Pre-wiring for dual channel
- Dual channel card kit

Capacity: 100×10^6 bytes per spindle

Recording: 4040 bpi

Average Access Time: 30 milliseconds

Data Rate: 806K bytes per second

Speed: 3600 rpm

Model Number 9780

DISK STORAGE UNIT — A high-performance, random-access storage device with twice the capacity of the CDC 9756 or IBM 3330. It uses a removable disk pack (CDC 9883) with 19 data recording surfaces and one servo recording surface. Head positioning is achieved through use of a voice-coil linear actuator. The unit operates as a single-channel device with rotational position sensing and seek overlap to maximize throughput.

Features:

- Uses CDC 9883 Disk Pack, certified 400 tpi
- Carriage and data strobe offset
- Maintenance aids

Capacity: 200×10^6 bytes

Recording: 4040 bpi

Average Access Time: 30 milliseconds

Data Rate: 806K bytes per second

Speed: 3600 rpm



9754-1 Disk Storage Unit

High Capacity Drive

Model Number 9790

HIGH CAPACITY DRIVE — A very-large-capacity, high-performance, random-access storage device. This device is a fixed-medium file for systems requiring large storage but not medium interchangeability. The medium consists of 22 oxide-coated disks, with 40 surfaces containing data and one surface containing servo information.

Features:

- High performance-to-cost ratio
- Phase-lock read recovery
- Absolute addressing
- Carriage and data strobe offset
- Maintenance aids

Capacity: 300×10^6 bytes

Recording: 6000 bpi

Average Access Time: 50 milliseconds





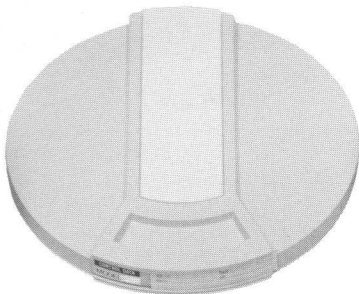
9849 Disk Pack



9869 Disk Pack

9871 Disk Pack

9879 Disk Pack



9846 Cartridge Disk Pack

9848 Cartridge Disk Pack



11-High CE Pack

Disk Packs

Model Number 9849

DISK PACK — This pack has six 14-inch-diameter disks with 10 useable disk surfaces and 20 sectors. This disk pack is compatible with IBM 1316.

Model Number 9851

DISK PACK — This pack has six 14-inch-diameter disks with 10 useable disk surfaces and 32 sectors. Used primarily with CDC systems. This pack is also available to the OEM Customer who has installed the required sector option.

Model Number 9869

DISK PACK — This pack has eleven 14-inch-diameter disks with 20 useable surfaces and 1 index slot. This Disk Pack is compatible with the IBM 2316.

Model Number 9871

DISK PACK — This pack has eleven 14-inch-diameter disks with 20 useable surfaces and 14 sectors. Used primarily with CDC systems, but can also be used on OEM units if sector option is installed.

Model Numbers 9876 and 9877

DISK PACKS — These packs have five 14-inch diameter disks with five useable data surfaces and one servo track surface. The cannister-type packs have two protective disks; one on the top and one on the bottom. The 9876 pack has 200 TPI and 6000 BPI, and is used on the Model 9760 Storage Module Drive. The 9877 pack has 400 TPI and 6000 BPI, and is used on the Model 9762 Storage Module Drive.

Model Number 9878

FLEXIBLE DISKETTE — A single, magnetic coated 7½-inch disk, enclosed in a protective jacket. It has one recording surface. There are 77 tracks. Capacity is 3 megabits. Used on the CDC 9400 Flexible Disk Drive, and compatible with the IBM 3741, 3742, 3747, and 3540, or equivalent.

Model Number 9879

DISK PACK — This pack has eleven 14-inch-diameter disks with 19 useable data surfaces and one servo-track surface, 200 TPI, 4000 BPI. Used with CDC 9754 Disk Storage Unit. This Disk Pack is compatible with IBM 3336.

Model Number 9846

CARTRIDGE DISK PACK — This cartridge has a single 14-inch-diameter disk with 2 useable surfaces, 100 TPI, 1100 BPI. Used on the IBM 2310 Cartridge Disk Drive, and compatible with the IBM 2315.

Model Number 9847

CARTRIDGE DISK PACK — This cartridge has a single 14-inch-diameter disk with 2 useable surfaces, 100 TPI. Used with CDC 9425 Cartridge Disk Drive, and compatible with the IBM 5444.

Model Number 9848

CARTRIDGE DISK PACK — This cartridge has a single 14-inch-diameter disk with 2 useable surfaces, 200 TPI. Used only with CDC 9427 Cartridge Disk Drive.

Model Number 9883

DISK PACK — This pack has eleven 14-inch diameter disks with 19 useable data surfaces and one servo-track surface, 400 TPI, 4000 BPI. Used with CDC 9780 Disk Storage Unit.

Customer Engineering Packs

CDC eleven-high, six-high and cartridge Customer Engineering Disk Packs are highly precise maintenance and alignment tools for use with CDC and IBM or equivalent drives. These packs contain information pre-recorded under controlled conditions by a high-precision writing device. This pre-recorded information is used for head alignment, index-transducer assembly circumferential adjustment, head-angle checks, carriage alignment, read/write head tracking adjustment, and other maintenance checks.

All alignment information recorded on the CDC packs has been related to and is compatible with the IBM Customer Engineering Alignment Packs.

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SALES OFFICES AND SERVICE CENTERS