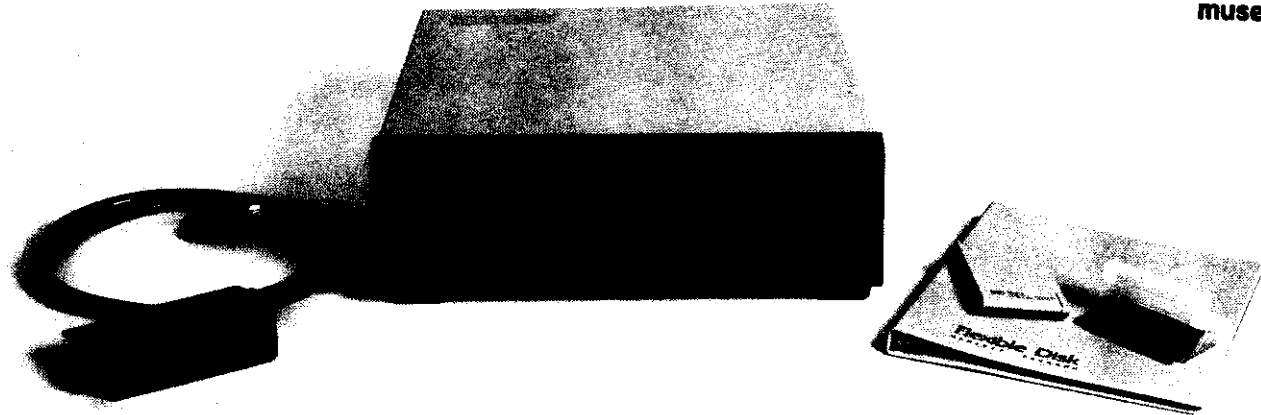


HEWLETT  PACKARD

9885

9885M/S FLEXIBLE DISK DRIVE

TECHNICAL DATA* MARCH 1977



The HP 9885 Flexible Disk Drive provides you with a convenient, reliable, and low-cost method of transferring programs and data to and from the desktop computer at high speeds.

The 9885 is a random access, removable, mass storage device with a capacity of up to 500,000 bytes per disk, and the removable, low-cost media provide unlimited storage. The 9885M (Master) Flexible Disk Drive contains a built-in controller, and up to three 9885S's (Slaves) can be connected to each 9885M.

Double-density read/write on the flexible disk enhances access rate and, in addition, increases total storage capacity.

The 9885 system reliability is enhanced by the write-verify feature that, when turned on, ensures that the information recorded on the flexible disk is identical to the source information in the desktop computer memory.

The 9885 is self-contained and incorporates a self-test feature.

These benefits—lower cost, higher speed, larger capacity, greater reliability, and ease of operation—make the 9885 a truly valuable peripheral.

FEATURES

- High-speed transfer
- Double-density read/write
- Write-verify for greater reliability
- High-level system software
- Self-contained package
- Approximately 500,000 bytes of total user-available space per disk
- Low-cost, removable media
- Multiple flexible disk drives per desktop computer
- Data recovery routines.

FLEXIBLE DISK DRIVE SOFTWARE

The 9885 software system is contained in a ROM and "bootstraps" which are supplied on a data cartridge (9825) or disk (9831). The bootstraps are moved to the disk drive when it is initialized. The system requires about 1000 bytes of desktop computer read/write memory for data buffer, bootstrap area, pointers, and status words. All statements are programmable. The file-by-name system has a directory that maintains user files and available space. Following are some typical commands:

open	Creates a data file with a specified number of physical records and assigns it a name.
save	Stores an entire program or parts of it in a specified file.
save keys	Stores Special Function key definitions in a named file.
get	Loads a program from the disk to the desktop computer
get keys	Loads Special Function key definitions from the disk to the desktop computer.
kill	Erases the named file from the disk and adds the file space to the availability table.
files	Declares which files are to be used.
assign	Allows the declared files to be changed and allows a string variable to declare a file to be used.
catalogue	Lists information about every user file on the disk.
chain	Loads a program from the disk to the desktop computer, retaining variable values.
copy	Duplicates the contents of one file into another file or drive.

Typical data file commands are:

serial print	Prints data into a file after the last item previously read or printed, or at the beginning of the file.
random print	Prints data into a file from the beginning of a specified record.
serial read	Reads data from a file starting after the last item printed or read.
random read	Reads data from a file starting at a specified record.

Other supporting commands include:

- rename,
- file dump,
- file load,
- type,
- repack,
- resave,
- get binary.

SPECIFICATIONS

Technical

Total number of tracks per disk:	67 max
Number of user-available tracks:	61 max (Opt. 025) 65 max (Opt. 031)
Number of files/disk:	320 max (Opt. 025) 352 max (Opt. 031)
Number of records per track:	30
Number bytes per record:	256
Total user-available storage per disk:	468,480 bytes (Opt. 025) 499,200 bytes (Opt. 031)
Rotational speed:	360 rpm
Average access time:	267 ms
Transfer time:	11.1 ms/record
Transfer rate:	23,000 bytes/s

Power Requirement

Source:	100 V +5%, -10% 120 V +5%, -10% 220 V +5%, -10% 240 V +5%, -10%	} switch selectable
Line frequency:	50 Hz or 60 Hz ±3.5%	

Consumption (max):	9885M	9885S
100 V	2.0 A	1.8 A
120 V	1.6 A	1.5 A
220 V	890 mA	820 mA
240 V	800 mA	730 mA
	160 W	140 W

Dimensions

Height:	133,3 mm (5.25 in.)
Depth:	146,1 mm (5.75 in.)
Width:	425,4 mm (16.75 in.)
Net weight:	14,75 kg (32.5 lb)
Shipping weight:	21,14 kg (46.6 lb)
Cube:	0,13 m ³ (4.6 ft ³)

Environmental Range

System operating temperature range:	10°C to 45°C (ambient)
Storage temperature:	-40°C to +60°C
Relative humidity:	20% to 80% (25,5°C max wet bulb temperature)
Heat dissipation:	160 W
Attitude:	±45° from horizontal position
Operating vibration:	±0,127 mm displacement from 5 Hz to 55 Hz

ORDERING INFORMATION

For interfacing to the 9825, order 9885M Opt. 025; for interfacing to the 9831 Desktop Computer, order 9885M Opt. 031. These options include the appropriate cable, bootstrap cartridge or disk, and ROM. The 9885S includes a cable for connection to either a 9885M or another 9885S. The following additional options are available for both the 9885M and 9885S with the option number.

Opt. 001:	50 Hz
Opt. 002:	rack mounts

ACCESSORIES SUPPLIED

Depending on the mainframe used, some of the following accessories may vary.

Item	9885M	9885S
Power cord	1	1
Spare fuses	1	1
Initialized disk	1	0
Blank disk	1	2
Sheet of labels	1	1
Sheet of write protect tabs	1	1
User cartridge (bootstraps)	1	0
Drive no. decals (0 - 3)	1	1
Select Code decals (8-15)	1	1
9885M Disk Operating Manual	1	0
Quick Reference Guide	2	0
Flexible Disk Maintenance Note	1	1
Notebook	1	0
Extra cap for VDE fuse	1	1

ACCESSORIES AVAILABLE

Item	HP Part No.
Disk kit containing 5 flexible disks	09885-80004
Disk kit containing 25 flexible disks	09885-80005
Carrying case	98051A
Field installable rack mount kit	98024F

PURCHASE PLANS

Contact one of the Hewlett-Packard worldwide sales and service offices for specific prices and plans in your area.

MAINTENANCE AGREEMENTS

Maintenance agreements are available for all desktop computer products. Current U.S. rates are found in the Maintenance Service and Prices Microfiche, No. 5952-2432D. These agreements represent HP's best level of support. Major advantages to the customer include:

- fixed annual cost,
- priority service response,
- on-site service,
- regular maintenance,
- individualized contracts.

*Data subject to change.



Sales and service from 172 offices in 65 countries.
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