

12965A Disc File Subsystem

Features

- 23 million byte storage capacity
- 32 milliseconds average access time
- Electronic servoing and continuous temperature compensation for guaranteed interchangeability
- Completely integrated with HP minicomputers

The Hewlett-Packard 12965A Disc Subsystem supplies over 23 million bytes of disc storage. Its large storage capacity allows computer solutions to problems that require quick random access to data. The 12965A uses a removable pack. Now your HP computer has the flexibility of dedicating a pack to a particular computing problem. Its 32 millisecond

access time assures you that information will be in memory when you need it — making more efficient use of your HP computer.

The disc file slave unit (12965A-020) doubles the on-line storage of the basic subsystem.

The HP 12965A is supported by a modular disc operating system, custom tailored to fit your configuration. This facilitates the manipulation of a disc input/output file. To speed and simplify the creation, checkout and execution of your disc oriented programs, FORTRAN II and IV, ALGOL and Assembly Language are available. Normally, 12K words of computer memory are required to use the 12965A Disc Operating System. This includes, however, a user area that varies depending upon your computer configuration.

The HP 12965A is backed up by a world-wide service organization of over 170 sales and service offices.



HEWLETT  PACKARD

Specifications

CAPACITY

23,552,000 bytes

ORGANIZATION

Discs: 11
Number of Heads: 20
Number of Cylinders: 203 (including 3 spares)
Track: 23 sectors
128 words/sector
5888 bytes/track

DATA ACCESS

Head Positioning (including settling time):

Minimum: 10 ms
Average: 32 ms
Maximum: 60 ms

Rotational Delay (Latency):

Average (1/2 revolution): 12.5 ms
Maximum (1 revolution): 25 ms

Average Access Time:

Position and Rotation: 44.5 ms

OPERATION

Start Up: 20 sec (nominal)
Stop Time: 20 sec maximum (nominal)
Disc Rotational Speed: 2400 RPM
Data Transfer Rate: 312,000 bytes/sec. nominal

ACTUATOR

Electro-magnetic actuator with optical servo positioning.

DISC PACK – HP 12868A

No physical sectoring required.
20 surfaces
200 tracks/surface plus 3 spare tracks/surface

POWER REQUIREMENTS

60 Hz	50 Hz
208 VAC \pm 10%	220/240 VAC \pm 10%
3 phase 60 Hz \pm 1%	Single phase 50 Hz \pm 1%
5 amps running	4.5 amps running
25 amps starting surge	25 amps starting surge

2885A Power Sequencer (rack mounted)
supplies power to a maximum of 6 Disc Drives

ENVIRONMENTAL

Temperature: 15° to 35°C (60° to 90°F)
Humidity: to 80% relative humidity
Heat Dissipation: 3000 BTU/Hour 12965A-30
2200 BTU/Hour 12965A-20
900 BTU/Hour Power Sequencer

PHYSICAL

Height: 40-inches (1016 mm)
Width: 30-inches (762 mm)
Depth: 24-inches (609,6 mm)
Weight: 390 lbs (858 kg)
Mounting: Casters and Levelers
Required Clearance: 18-inches Front and Rear

INTERFACE

Included in the 12965A subsystem
Uses 2 I/O slots in the computer
Supports up to 2 disc drives
Requires the use of Direct Memory Access
Current: 2.30A (+4.5V); 0.15A (2.0V)
No other voltages required

ORDERING INFORMATION

- 12965A: Disc File Subsystem (23.5M Bytes) for HP 2100 series computers includes 2883 disc drive, 2885 power sequencer, 12565 controller interface, 12868 disc pack, 115V/60 Hz operation and disc operating system software.
- 12965A-015: Same as A except 230V; 50 Hz operation.
- 12965A-020: Second or fourth drive;* disc file slave unit deletes controller, power sequencer and controller interface; and adds interconnect cables. (Include -015 for 230V, 50 Hz operation.)
- 12965A-030: Third drive* disc file with controller interface; deletes power sequencer.
- 12868A: Additional disc pack. (Include -015 for 230V, 50 Hz operation.)

*Maximum of two disc drives on one controller interface.



For more information, call your local HP Sales Office or East (201) 265-5000; Midwest (312) 677-0400; South (404) 436-6181, West (213) 877-1282. Or write: Hewlett-Packard, 1501 Page Mill Road, Palo Alto, California 94304. In Europe: Post Office Box 85, CH-1217 Meyrin 2, Geneva, Switzerland. In Japan: YHP, 1-59-1, Yoyogi, Shibuya-ku, Tokyo, 151.