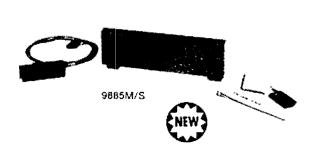


CALCULATORS & PERIPHERALS

2-level priority interrupt; flexible disk mass storage Models 9825A, 9885M/S





9825A

The 9825A Calculator, designed principally for use in engineering, research, and statistics, has many features previously found only on minicomputers. It is a powerful stand-alone calculator and is particularly suited to controller applications.

Significant contributions include two-level priority interrupt, live keyboard, direct memory access with input speeds up to 400 k 16-bit words per second, high-performance bidirectional tape drive, multidimensional arrays, automatic memory record and load, and extended internal calculation range ($\pm 10^{513}$ to $\pm 10^{-333}$). Some of these are standard features and others are available in optional plug-in read-only memories (ROMs).

HPL, a high-level, formula-oriented language, is easy to learn and is designed for controller applications as well as for data processing. HPl provides for subroutine nesting and flags and allows 26 simple variables and 26 multidimensional array variables, limited only by the size of the calculator memory. Editing of lines and characters is simple, and error locations are identified by a flashing cursor in the display. Fixed- and floating-point formats can be set from the type-writer-like keyboard.

The keyboard has 12 special function keys that, combined with the shift key, can handle 24 different operations. These keys help in program writing and in peripheral and instrument control. They can serve as immediate execute keys, as call keys for subroutines, and as typing aids.

With the live keyboard, never before found on a desktop calculator, the user can examine and change program variables, perform complex calculations, call subroutines, and record and list programs while the calculator is performing other operations.

Interrupt capability, available in the Extended I/O ROM, permits the calculator to act as a controller for several instruments or peripherals requiring attention at unpredictable rates or times.

A 32-character LED display and a built-in 16-character thermal printer provide alphanumeric readout including both capital and lower-case letters. Some European and Greek characters are also available in an optional ROM.

The high-speed bidirectional data cartridge holds 250 k bytes of information and has an average access time of 6 seconds to any place on the tape. Bidirectional search speed is 2286 mm/s (90 in./s), and read/write speed is 559 mm/s (22 in./s). The entire calculator memory can be recorded on the cartridge for reloading at a later time. Verification of files is automatic on recording.

9885M/S

The 9885M/S Flexible Disk Drive provides the 9825A user a convenient, reliable, and low-cost method of transferring programs and data to and from the calculator at high speeds. It is a random access, removable, mass storage device with a capacity of up to 468 480 bytes per disk. The 9885M (Master) contains a built-in controller. Up to three 9885S's (Slaves) can be connected to each 9885M.

Average transfer rate is 23 k bytes/s. Double-density read/write on the flexible disk further enhances access rate and increases total storage capacity. Average access time to any place on the disk is 267 ms, and average transfer time is 11.1 ms/record.

The write-verify feature ensures that the information recorded on the flexible disk is identical to the source information in the calculator memory.

The disk holds 256 bytes per record, 30 records per track, 61 user-available tracks, and 320 files maximum.

The 9885M/S is self-contained and incorporates a self-test feature

Features

Double-density read/write
Write-verify for greater reliability
High-level system software
Self-contained package
468 480 bytes of total user-available space per disk
Low-cost, removable media
Up to 32 flexible disk drives per calculator
Data recovery routines available to the user

Software system

The software system's built-in friendliness, efficiency, and power make it easy to take advantage of the hardware features. For interfacing to the 9825A, it is contained in Option 025, which consists of a ROM and bootstraps on a data cartridge. The system requires 1140 bytes of calculator 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.

Model number and name	Price
9825A Programmable Calculator	\$5900
9885M Flexible Disk Drive Master and Opt. 025	\$3900
9885S Flexible Disk Drive Slave	\$2500