

of the 9100B is 392 steps. No language or code conversions are required.

The self-contained magnetic cardreader/recorder can record programs from program memory onto wallet-size magnetic cards. The reader/recorder can also read the magnetic cards back into program memory for repetitive use. Two programs of 196 steps each may be recorded on each reusable card. Cards may be cascaded for longer programs.

Program Instructions

Conditional branching: "IF" statements make the comparisons—less-than, equal-to, greater-than—and can be programmed to branch to any of the program addresses.

Unconditional branching: GO-TO statement can be programmed to branch to any of the program addresses. (Also used for manual addressing and correction of individual program steps.)

Subroutine: a true subroutine capability permitting instant access to subroutines from any point in a program. By using GO-TO-SUB/RET instruction, subroutines may be nested up to 5 deep. (9100B only)

Flag: provides conditional branching dependent on manual or programmed setting of flag.

Stop: halts program for data entry or display.

Pause: brief display of interim results in computation.

Step program: operator may step through program for visual verification of instructions. A "dual display" feature on the 9100B greatly simplifies program editing and modification. It allows the program step and the succeeding one to be displayed simultaneously.

Memory

Magnetic core memory includes

3 display registers (keyboard, accumulator, temporary.)

9100A has 16 storage registers with capacity for 196 program steps plus 2 constants. Total of 2208 bits of core memory.

9100B has 32 storage registers with capacity for 392 program steps plus 4 constants. Total of 3840 bits of core memory.

Capacity: register accommodates floating point number with 12 significant digits (including 2 undisplayed guard digits) and 2 digit exponent. Alternately, register accommodates 14 program steps.

Read-only-memory: contains over 32,000 bits of fixed information for keyboard routines.

9100A and 9100B COMPARISON

Items	9100A	9100B ¹
Storage Registers	16	32
Program Steps	196	392
Price	\$4400	\$4900

¹The 9100B also includes:

An additional positioning instruction $X \leftarrow ()$ for more convenient data recall.

A dual program display for more convenient program edification.

A greater subroutine capability.

General

Temperature: operating range, 0-45°C.

Weight: net 40 lbs (18,1 kg); shipping 65 lbs (29,5 kg).

Power: 115 or 230 V $\pm 10\%$ (slide switch), 50-60 Hz, 70 W.

For 9100A: 09100-90001	Operating and programming manual. Additional copies—\$2.50
For 9100B: 09100-90021	
For 9100A: 09100-90002	Program Library binder containing sample programs. Additional copies —\$30.
For 9100B: 09100-90022	
5060-5919	Box of 10 magnetic program cards. Additional box—\$10.
For 9100A: 09100-90003	Pad of 100 program sheets. Additional pads—\$2.50.
For 9100B: 09100-90023	
For 9100A: 09100-90004	Magnetic card with pre-recorded diagnostic program. Additional card—\$2.50.
For 9100B: 09100-90024	
For 9100A: 9320-1157	Pull out instruction card mounted in calculator. Additional card —\$5.
For 9100B: 9320-1183	
4040-0350	Plastic dust cover. Additional cover—\$2.50.

Additional Accessories Available

All of above

5000-5884 Single magnetic card, \$2.

09100-90000 Box of 5 program pads, \$10.

09100-90007 200 magnetic cards without envelopes, \$80.

Purchase Plan

Purchase: HP 9100A, \$4400.

HP 9100B, \$4900.

Rent: HP 9100A, \$260 per month.

HP 9100B, \$285 per month.

Lease: HP 9100A, \$115 per month.

HP 9100B, \$128 per month.

Service contracts available.

Option 001 Pull-out instruction card in French

Option 002 Pull-out instruction card in German

Option 003 Pull-out instruction card in Italian

Option 004 Pull-out instruction card in Spanish

No additional charge for options.

Program Library

The Program Library furnished with the 9100's include programmed solutions to practical problems in a wide range of scientific and engineering fields. It serves both as an illustration of programming techniques and as a source of ready-to-use programs. Program Library holders also receive the Hewlett-Packard KEYBOARD, a periodic publication which provides updating information and a forum for the exchange of programs by 9100 users. Program categories include:

Business	Mechanics
Chemistry	Physics
Electronics	Statistics
Fluid Mechanics	Structures
Life Sciences	Surveying
Mathematics	Thermodynamics

CALCULATOR PRINTER

The HP 9120A provides fast, quiet printer capability for use with the 9100 Calculators. The Printer prints the contents of any combination of X,Y and Z Calculator display registers upon manual or programmed command. It also lists contents of the Calculator's program memory upon command. Quiet operation is obtained using a unique electrosensitive printing principle. The 9120A Printer mounts on top of the 9100 Calculators to ensure easy access and minimum space requirement. Operation of the Printer is initiated either manually by a single keystroke or in a program by one program step.