ACCESSORIES

Hewlett-Packard has a support system unequaled in the industry. Supplies like **blank program cards** and **battery packs** keep you operational. And then convenience accessories like a **reserve power pack** to provide you with a second set of batteries always at full charge, a **DC recharger** to enable calculator use in your car, boat or plane, and a **security cradle and cable** for protection, give the flexibility you require. And these are just a few.

Add to this the extensive line of software HP provides to give you quick programming answers to your problems—and you have the picture. Total solution from Hewlett-Packard.

In Canada:
Hewlett-Packard, Ltd.
6877 Goreway Drive
Mississauga, Ontario
L4V-1M8 Canada

In Singapore:
Hewlett-Packard Singapore (Pty.) Ltd.
Alexandra Post Office
P.O. Box 58, Singapore 3

In New Zealand:
Hewlett-Packard New Zealand, Ltd.
4-12 Cruickshank Street
Kilbirnie, Wellington 3
New Zealand

In Australia:
Hewlett-Packard Australia (Pty.) Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia

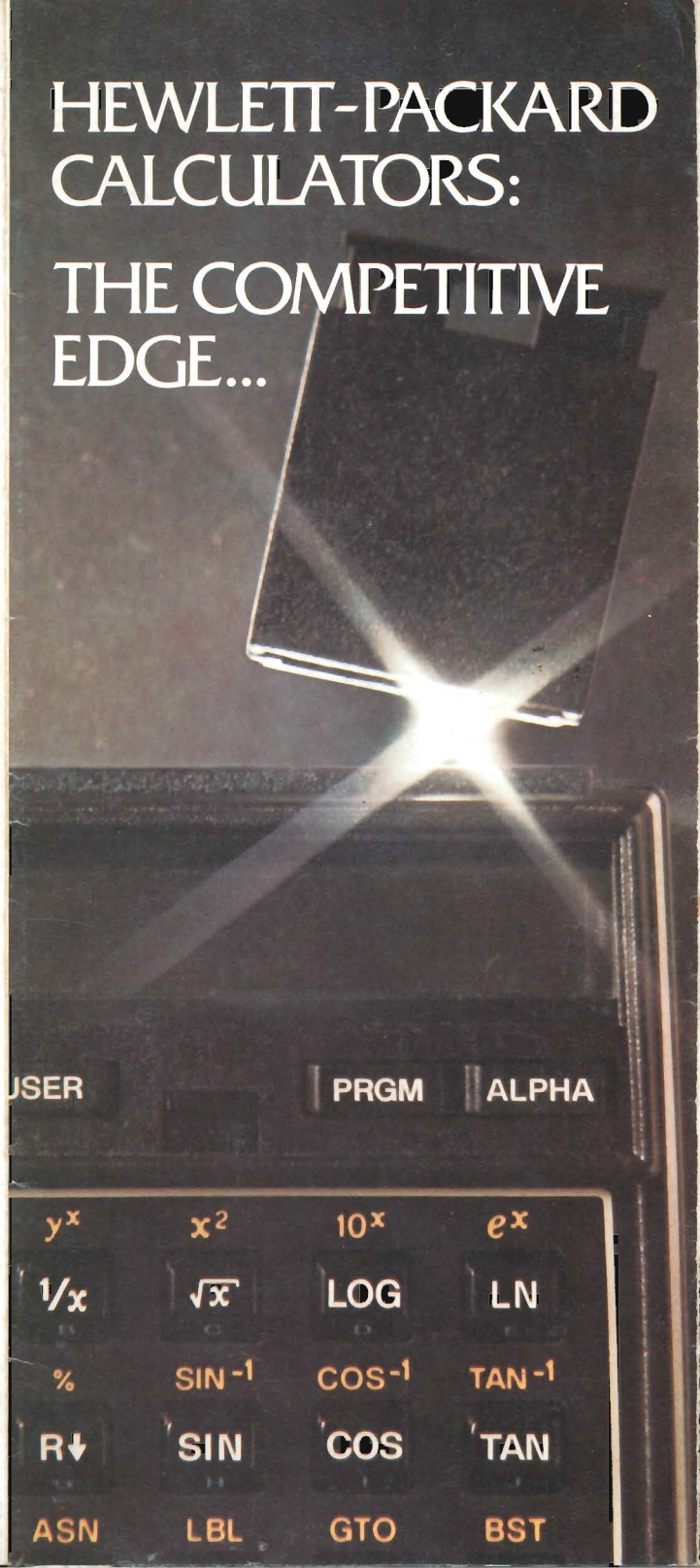
In South Africa:
Hewlett-Packard SA (Pty.) Ltd.
Private Bag, Wendywood
Sandton, Transvaal, 2144
South Africa

In other countries:
Hewlett-Packard Co.
3495 Deer Creek Road
Palo Alto, CA 94304 U.S.A.

HEWLETT PACKARD

HEWLETT-PACKARD CALCULATORS:

THE COMPETITIVE EDGE...



Printed in U.S.A. 11/79

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CHOOSE YOUR CALCULATOR BY USING THIS COMPARISON CHART

This chart is designed for your convenience in making direct comparisons of the features and functions on Hewlett-Packard calculators.

	Programmable								
	Business			Advanced			Scientific		
Features/Functions	**37E**	**92**	**38E/C**	**67/97**	**41C**	**34C**	**33E/C**	**32E**	**31E**
RPN Logic System	●	●	●	●	●	●	●	●	●
Automatic four-memory stack	●	●	●	●	●	●	●	●	●
Maximum storage registers	7	30	20	26	319	21	8	15	4
Financial registers	5	8	5						
Last-x register		●	●	●	●	●	●	●	●
Maximum program lines			99	224	2240 (bytes)	210	49		
Continuous program memory			Ⓒ		●	●	Ⓒ		
Continuous storage registers			Ⓒ		●	●	Ⓒ		
Dynamic memory allocation			●		●	●			
Controllable memory allocation					●				
Stack roll down	●	●	●	●	●	●	●	●	●
Stack roll up		●		●	●	●			
x ‥ y register exchange	●	●	●	●	●	●	●	●	●
x ‥ I register exchange					●	●			
x ‥ any register (indirect)					●	●			
x ‥ any register (direct)					●				
Alpha display					●				
Mantissa			●			●	●	●	●
Fixed notation	●	●	●	●	●	●	●	●	●
Scientific notation	●	●	●	●	●	●	●	●	●
Engineering notation				●	●	●	●	●	
Automatic overflow into scientific	●	●	●	●	●	●	●	●	●
Automatic underflow into scientific	●	●	●	●	●	●	●	●	●
Enter exponent		●	●	●	●	●	●	●	●
Change sign	●	●	●	●	●	●	●	●	●
Annunciators					●				
Program review—back step/single step			●	●	●	●	●		
Insert/delete program lines				●	●	●			
Direct branching (Go To)			●	●	●	●	●		
Pause			●	●	●	●	●		
Alpha prompts					●				
Conditional tests			2	8	10	8	8		
Flags				4	56	4			
Looping				●	●	●			
Controlled looping					●	●			
Levels of subroutines				3	6	6	3		
Smart card reader				●	Ⓟ				
User-defined alpha labels					●				
Single-character alpha labels				10	59	2			
Numeric labels				10	99	10			
User-definable key functions				10	68	2			
Indirect control of:									
Alpha storage and recall					●				
Data storage and recall				●	●	●			
Storage arithmetic				●	●	●			
Unconditional branching				●	●	●			
Subroutine branching				●	●	●			
Loops				●	●	●			
Display				●	●	●			
Display formats					●				
Audible tone					●				
Flags					●				
Location of statistical registers					●				
Clear x	●	●	●	●	●	●	●	●	●
Clear stack					●		●		●
Clear all	●	●	●		●			●	●
Clear storage registers		●		●	●	●	●	●	●
Clear statistical registers		●	●		●	●	●	●	
Clear prefix			●		●	●	●	●	●
Clear program memory (all)			●	●		●	●		
Clear specific program					●				
Clear financial registers	●	●	●						
Clear character (backspace)					●				
Print x		●		97	Ⓟ				
Print alpha					Ⓟ				
Print flags					Ⓟ				
Print key assignments					Ⓟ				
List stack registers		●		97	Ⓟ				
List storage registers		●		97	Ⓟ				
List statistical registers		●			Ⓟ				
Paper advance		●		97	Ⓟ				
Print modes (3)		●		97	Ⓟ				

	Programmable								
	Business			Advanced			Scientific		
Features/Functions	**37E**	**92**	**38E/C**	**67/97**	**41C**	**34C**	**33E/C**	**32E**	**31E**
List program				97	Ⓟ				
List specific program lines					Ⓟ				
Trace program				97	Ⓟ				
Print user-defined characters					Ⓟ				
Plotting					Ⓟ				
Buffered printing					Ⓟ				
Percent	●	●	●	●	●	●	●	●	●
Price	●								
Percent Change	●	●	●	●	●	●		●	
Percent of total	●	●	●	●				●	
Mean, standard deviation (with 2 variables)	●	●	●	●	●	●	●	●	
Linear regression/estimate	●	●	●	Ⓜ	Ⓡ	●	●	●	
Factorial	●		●	●	●	●		●	
Gamma				Ⓜ	Ⓜ	●			
Summations (n, $\sum x$, $\sum x^2$, $\sum y$, $\sum y^2$, $\sum xy$)	●	●	●	Ⓜ	●	●	●	●	
Correlation coefficient	●	●	●	Ⓜ	Ⓡ	●	●	●	
Normal distribution			Ⓐ	Ⓜ	Ⓡ	Ⓐ	Ⓐ	●	
Number of periods	●	●	●	Ⓜ	Ⓡ	Ⓐ	Ⓐ		
Interest rate/period	●	●	●	Ⓜ	Ⓡ	Ⓐ	Ⓐ		
Payment/period	●	●	●	Ⓜ	Ⓡ	Ⓐ	Ⓐ		
Present value	●	●	●	Ⓜ	Ⓡ	Ⓐ	Ⓐ		
Future value	●	●	●	Ⓜ	Ⓡ	Ⓐ	Ⓐ		
Simple interest			●	Ⓜ	Ⓡ				
Accumulated interest, remaining balance	●	●	●	Ⓜ	Ⓡ		Ⓐ		
Net present value (max. uneven cash flows)		30	20	Ⓜ	Ⓡ	Ⓐ			
Internal rate of return (max. uneven cash flows)		30	20	Ⓜ	Ⓡ	Ⓐ			
Begin/end period selection	●	●	●	Ⓜ	Ⓡ	Ⓐ			
Solve, Integrate				Ⓜ	Ⓡ	●			
Trigonometric:									
Modes (decimal degrees, radians, grads)				●	●	●	●	●	●
Sin, Sin^{-1}, Cos, Cos^{-1}, Tan, Tan^{-1}				●	●	●	●	●	●
Rectangular coordinates ‥ polar coordinates				●	●	●	●	●	●
Decimal angle ‥ angle in deg(hr.)/min/sec				●	●	●	●	●	
Degrees ‥ radians				●	●	●	●	●	●
Hyperbolics (sinh, $sinh^{-1}$, cosh, $cosh^{-1}$, tanh, $tanh^{-1}$)				Ⓜ	Ⓡ	Ⓐ	Ⓐ	●	
Logarithmic:									
Logx, 10^x	●	●	●	●	●	●	●	●	●
Lnx, e^x					●				
Ln(1+x), $(e^x)-1$					●				
Metric conversion:									
Inch ‥ millimeter				Ⓜ	Ⓡ			●	●
Gallon ‥ liter				Ⓜ	Ⓡ			●	
Pound ‥ kilogram				Ⓜ	Ⓡ			●	●
Fahrenheit ‥ Celsius				Ⓜ	Ⓡ			●	●
+, −, ×, ÷, y^x, $\sqrt{x}$, 1/x	●	●	●	●	●	●	●	●	●
x^2				●	●	●	●	●	
π				●	●	●	●	●	●
Absolute value				●	●	●	●		
Integer/fraction truncation			●	●	●	●			
Decimal ‥ octal conversions					●				
Modulo					●				
Sign of a number					●				
Rounding		●	●	●	●				
Calendar functions		●	●	Ⓜ	Ⓡ				
Commas in display	●		●	●	●	●	●	●	●
Self-check	●		●			●	●	●	●
Alpha mode					●				
Reassignable keyboard					●				
Catalog of functions, programs, peripheral functions					●				
Automatic power OFF					●				
Programmable OFF					●				
Audible tone					●				
View any register					●				
Applications modules					●				

Symbols

- ● Built-in function.
- Ⓟ Available with peripheral.
- Ⓜ Available on *pre-recorded* magnetic program card.
- Ⓐ Available program in application book.
- Ⓒ Available with Continuous Memory model.
- Ⓡ Available with ROM (read only memory) Application Pac.

...The year is 1972. Hewlett-Packard delivers a breakthrough in personal computing in the form of the first professional scientific pocket calculator. And personal computation has never been the same. Today, Hewlett-Packard is recognized in professional circles worldwide as a leader and innovator in calculator technology.

Hewlett-Packard calculators are appropriately found in some very unlikely places. Aboard the winning entry of the last America's Cup Yacht race. Or as standard equipment on several manned space flights. And most recently, one even played a role in the historic Double Eagle II transatlantic balloon crossing to France. HP was there—when second best wasn't good enough.

EXCELLENCE BY DESIGN

Professionals know and respect the excellence by design that is standard in Hewlett-Packard calculators. This means attention to even the smallest engineering detail. From the quiet, positive click you feel when you press a key, to the moisture-proof plastic film under the keyboard protecting the internal circuitry from accidental spills. It's this attention to detail which explains the difference between an average calculator and an exceptional one.

RPN

Hewlett-Packard calculators use an RPN logic system which has achieved universal acceptance as being the most powerful and efficient logic system for solving complex problems. With RPN, or Reverse Polish Notation, you simply treat problems the same way as if you were solving them with pencil and paper. The consistent methodology of RPN as well as its superior speed in operation, make it the logical choice for user satisfaction.

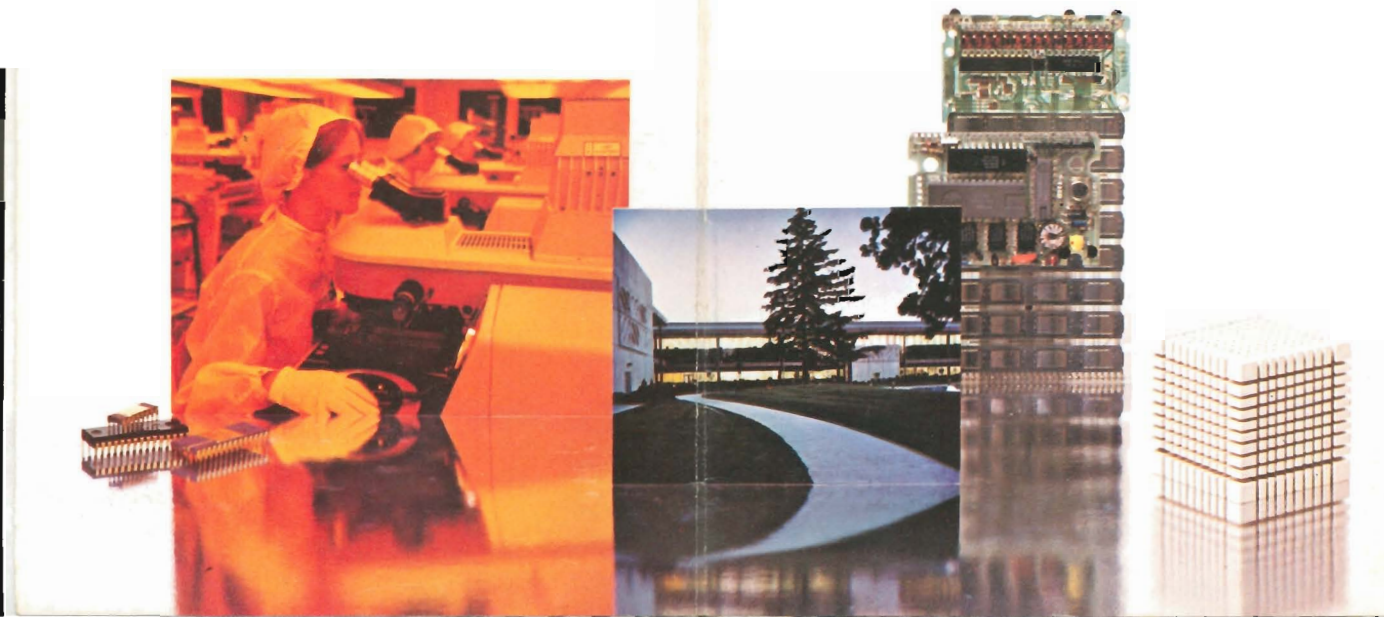
CONTINUOUS MEMORY

In 1975 Hewlett-Packard pioneered Continuous Memory for handheld calculators. And today this technology prevails as a standard in the industry. With the Continuous Memory feature, frequently needed calculations and functions can be programmed once and remain intact even when the calculator is turned off. It saves time by eliminating program reloading and makes possible the addition of specialized functions.

AND MORE...

Add to these features a support system unequaled in the industry, and the picture of "Excellence By Design" becomes clear. HP's Owner's Handbooks and Application Books have long been respected for being clear, thorough, easily understood, and above all—useful. And this same meticulous approach is used in the preparation of an extensive line of software. Excellence is designed into Hewlett-Packard personal calculators in every aspect, and the result is a professional instrument which meets professional needs.

If you're a professional, or soon to be, now may be just the time to step up to Hewlett-Packard. You'll be in excellent company.



SCIENTIFIC

HP-31E Scientific. Ideal entry level calculator for students and professionals who require uncompromising scientific capability in a no-nonsense format. Full set of mathematical functions. Trigonometric and logarithmic functions and their inverses. Rectangular/Polar and Degree/Radian conversion. Inch/mm, °F/°C, Pounds/Kilogram conversions. 4 user storage registers.

HP-32E Scientific with Statistics. Designed for students and professionals who need sophisticated statistics at the touch of a key, as well as a thorough scientific capability. All the functions of the HP-31E plus hyperbolic trigonometric functions and their inverses, as well as extensive statistical functions: two-variable means and standard deviations; linear regression and linear estimate; correlation coefficient; normal distribution; factorial. 15 user storage registers.

Features common to all Hewlett-Packard Series E calculators.

- Easy-to-read display, with commas or decimal points automatically inserted just as you would yourself.
- Exclusive self-check capability, coded error messages, and improved accuracy.
- Lowest HP prices ever.
- Time-proven RPN and Hewlett-Packard quality.

PROGRAMMABLE SCIENTIFIC

HP-33E Programmable Scientific. Geared for students and professionals who need an easy-to-master programming capability that can perform repetitive scientific calculations quickly and easily. 49 lines of program memory with each line holding up to three keystrokes. Three levels of subroutines. 8 conditional tests. 8 user storage registers. A full range of mathematical, trigonometric and statistical functions including integer, fraction and absolute value of a number.

HP-33C Programmable Scientific with Continuous Memory. All the features of the HP-33E, plus Continuous Memory which retains data and programs even when the calculator is off.

HP-34C Advanced Programmable Scientific with Continuous Memory. Designed for scientific students and professionals who need the flexibility and power of advanced programming and Continuous Memory to handle their frequent and repetitive problems. Advanced programming includes: labels, tests, flags, loop controls. Dynamically controlled memory varying between 210 program lines and 70 data registers. Continuous Memory saves programs and data. And two new function keys: Solve, which finds real roots for an incredibly wide range of functions; and Integrate, which computes the area of a function bounded by upper and lower limits.

FINANCIAL

HP-37E Business. Designed for the residential real estate, retailing, and business communities who need to make financial decisions quickly and accurately. Solves compound interest problems. Computes a yield with a balloon. Amortization schedules. Percent and price functions. Full set of statistical functions plus factorial. 5 financial plus 7 user storage registers.

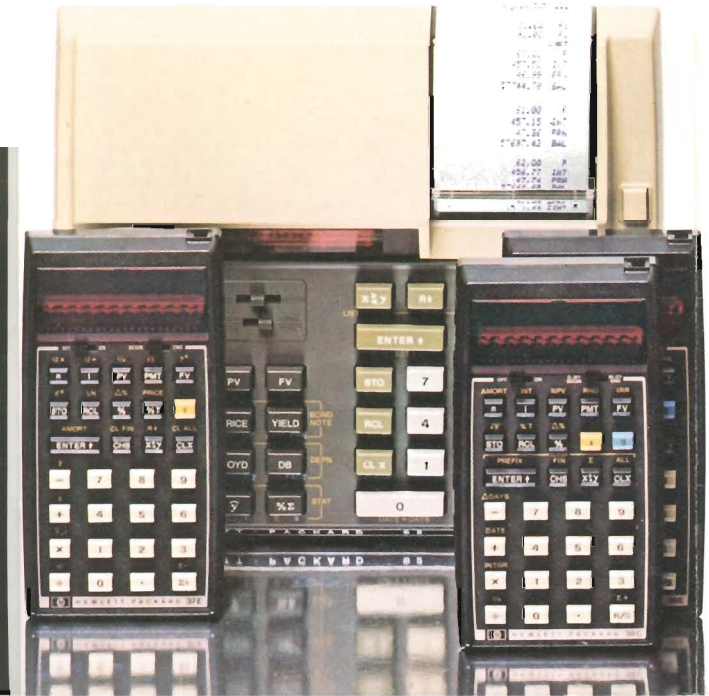
HP-38E Advanced Financial Programmable. Provides easy-to-master programming capability to solve repetitive financial and investment analysis problems. All the capability of the HP-37E plus: solves discounted cash flow problems using both NPV and IRR. Up to 99 lines of keystroke programming for repetitive calculations: 2000-year calendar to compute days between dates. 5 financial plus 20 user storage registers.

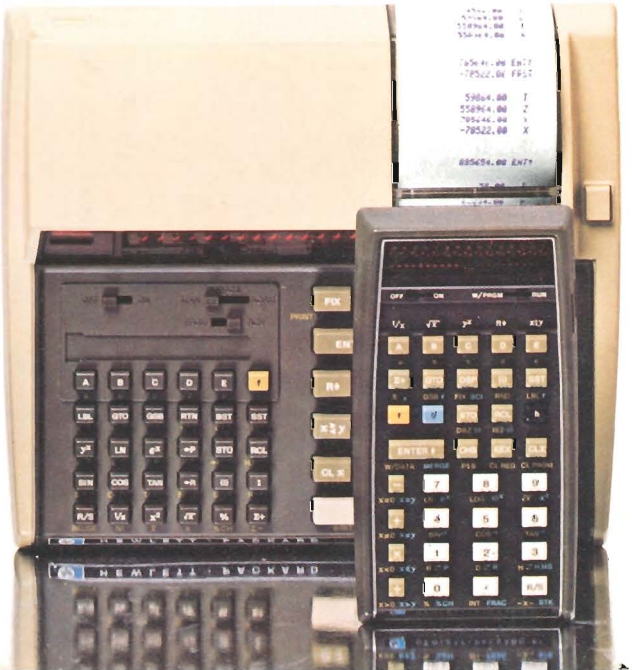
HP-38C Advanced Financial Programmable with Continuous Memory. All the features of the HP-38E, plus Continuous Memory which retains data and programs even when the calculator is off.

HP-92 Desktop Investor. Designed for the professional who needs powerful financial capability as well as a printed copy and the convenience of a large display and keyboard. Solves compound interest problems, balloons, residuals. Solves discounted cash flow problems using both NPV and IRR. Bonds and notes. 30 storage registers.

FULLY PROGRAMMABLE

HP-67 Handheld Fully Programmable and HP-97 Desktop Fully Programmable Printing. These proven performance calculators are ideal for the most demanding professionals and students who require magnetic card flexibility and the programming power and versatility to handle multiple and lengthy scientific and business programs. They incorporate outstanding features such as: recording and loading of data placed in the 26 storage registers via magnetic cards; 224 merged program lines, each line holding up to three keystrokes. Control of all reading/recording operations by "smart" magnetic card readers. Editing features to easily correct or modify your programs. Choice of 3 addressing systems—symbolic, relative or indirect which increase programming power while decreasing program length. Ten user-definable keys, eight conditional tests, four flags, 3 levels of subroutines. All commonly used mathematical, trigonometric and statistical functions. The HP-97 combines this programming power with a battery operated printer in one self-contained unit, while the HP-67 comes in the classic handheld size.





ALPHANUMERIC FULLY PROGRAMMABLE

A Calculator. A System. A Whole New Standard. The new HP-41C incorporates the latest technology to give you the most powerful personal calculator Hewlett-Packard has ever designed. Power that starts with 63 data storage registers or up to 400 lines of program memory and can expand to 319 registers for data storage or 2,000 lines of program memory. Or any combination. While at the same time, the HP-41C sets a new standard in ease-of-use.

COMMUNICATION

The HP-41C's alphanumeric capability lets you name and label programs, functions, variables, constants—and prompt for data with words or sentences; status annunciators indicate mode conditions. The high resolution liquid-crystal display (LCD) is easy to read inside and out.

CUSTOMIZATION

Over 130 operations are built into the HP-41C with 58 functions right on the keyboard. And, you can reassign any function or program to any keyboard location. Blank keyboard overlays let you notate these assignments.

CONTINUOUS MEMORY

Continuous Memory preserves all your program, data and key assignments even when the calculator is turned off. So you can program frequently needed calculations once and call them up again and again. With Continuous Memory you also have reduced power drain and longer battery life.

ENHANCED PROGRAMMABILITY

With the HP-41C there is no complicated language to learn. And alpha capability lets you name your programs. Each program is autonomous; and each can have up to 99 local labels for addressing, subroutining or defining program parts. Also: up to 6 levels of subroutines, 10 conditionals, 56 internal flags, specific loop control, indirect addressing, local and global branching.

THE SYSTEM

Alone, the HP-41C is an extraordinary calculating instrument. But in combination with peripherals and modules designed specifically for the HP-41C, you can develop an expanded system that meets your growing needs.

Memory Modules: Plug-in Memory Modules can quintuple memory capacity. 64 registers per module, all with Continuous Memory. Four extra modules possible for 319 total registers or 2,000 lines of program memory.

Card Reader: The "extra-smart" plug-in Card Reader lets you store your own program library on magnetic cards. Loads programs in any sequence. Provides program security. And HP-67/97 recorded cards are compatible. Note: Longer programs may require additional memory modules.

Printer: The Printer is a complete alphanumeric, plotting printer with 3 modes for documenting calculations and generating hard-copy and graphic outputs. Prints upper and lower-case alpha characters, including special characters. Intensity control for optimum readability.

Wand: The Wand lets you quickly load long programs by reading bar codes on printed paper. HP-41C Solutions Books and User's Library programs will be available with printed bar codes for a fast and easy way to load a variety of inexpensive software. (Available early 1980.)

Application Modules: Preprogrammed, plug-in modules that give solutions to a wide range of problems—basic math to medicine.

HP Computer Museum
www.hpmuseum.net

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