

# The new HP-27 Scientific/Plus from Hewlett-Packard.



Gives you every scientific function  
we've ever offered in a preprogrammed  
calculator—plus the added power  
of statistics and finance.

# Now you can work exponential, log and and finance—all on one power!

## HP-27 makes short work of a wide range of problems you face every day.

The new HP-27 ScientificPlus is the most powerful preprogrammed pocket calculator Hewlett-Packard has ever built.

Its highly sophisticated design effectively integrates every significant scientific and financial function—and thus eliminates the need for two separate calculators.

The extraordinary versatility of the HP-27 will be extremely valuable to any scientist or engineer whose responsibilities extend into targeting, budgets, cost analysis and other financial and forecasting considerations.

### New statistical and financial functions greatly expand your calculating power.

The HP-27 gives you all the most-used statistical and financial functions, including five new functions never before made available on an HP pocket calculator—variance, correlation coefficient, normal distribution, net present value and internal rate of return for uneven cash flows.

With the remarkable HP-27, you can handle not only scientific calculations but other vital calculations you need to arrive at intelligent financial decisions and recommendations.

All the fundamental scientific, statistical and financial functions are preprogrammed and permanently stored in the HP-27. All you have to do is key in your data, press the appropriate function keys and see your answer displayed in seconds.

And for added convenience, the HP-27 provides an exceptionally large memory capacity, flexible display controls and selective clearing options.



Complete with manual, battery pack, recharging unit and carrying case.

## Perhaps the most useful calculator ever designed for scientists and engineers.

The enormous variety of preprogrammed functions on the new HP-27—more than Hewlett-Packard has ever made available in one pocket calculator—gives you solutions to virtually every calculation required in science and business management.

### 28 exponential, log and trig functions— all preprogrammed.\*

The HP-27 gives you all the most-used exponential, log and trig functions—including sines, cosines, tangents and their inverses in three angular modes, natural and common logs and anti-logs; all related arithmetic functions; coordinate conversions; angle conversion, angle addition and subtraction.

### 15 important statistical functions— all preprogrammed.\*

Many statistical functions useful in both science and business are provided by the HP-27—including three new functions: variance, correlation coefficient and normal distribution. Summations of data points are stored for easy access. What's more, you can adjust or correct input data without having to repeat an entire calculation. Once your data is keyed in, you can calculate the means, standard deviations and variances for two variables. You can also calculate linear regression, linear estimates and the correlation coefficient for two variables. In addition, you can calculate the density function and upper-tail area under a normal distribution curve.

### 10 valuable financial functions— all preprogrammed.\*

For convenience in solving both personal and job related business problems—such as mortgages, compound interests and sinking funds—all fundamental financial functions are preprogrammed into the HP-27 to eliminate the need for bulky books of equations and interest tables. Two new preprogrammed functions—net present value and internal rate of return for uneven cash flows—facilitate capital budgeting and resource allocation. In addition, the HP-27 provides three separate percentage functions for ease in calculating margins, markups, discounts, percents of totals, etc.

\*For individual key descriptions, see back page.

# trig problems—plus statistics, business ul preprogrammed calculator.



## **RPN—the professional logic system— gives added flexibility, speed and confidence.**

Compared to algebraic logic, the RPN logic system is faster, more efficient and more versatile in solving the complex problems faced by today's professionals in science and finance. For most calculations, it requires fewer keystrokes. You don't need parentheses keys and you don't need to keep track of complicated hierarchies. Intermediate answers are displayed and stored automatically in an operational stack of four memories—so you never need to write them down and risk errors. And because only intermediate results are stored, the size and complexity of problems that can be handled with RPN logic are virtually unlimited.

## **Exceptional memory capacity and versatile operating options for even greater convenience.**

The HP-37 Scientific/Plus gives you all the advantages of expanded memory capacity, selective memory clearing and three display modes.

### **20 memories help simplify your most difficult calculations.**

In addition to the 5 financial memories, the 4 operational stack memories and a last-x memory, the HP-37 provides 10 addressable memories for data storage. This large memory capacity lets you make highly complex and lengthy calculations with ease and assurance. Displayed values may be stored in any addressable memory and later recalled to the display. In addition, register arithmetic can be performed on all ten addressable memories.

### **6 clearing options give you flexible use of memories.**

With the CLR key, you can clear the display only. You can clear all four memories of the operational stack with the STK key. The last six addressable memories, which are used for statistics, are cleared with the  $\Sigma$  key. The REG key clears all ten addressable memories, all five financial memories and the last-x memory. Or you can clear the status of the financial memories with the RESET key. In addition, you can clear the prefix keys with the key labeled PREF/DC.

### **You can display fixed decimal, scientific or engineering notation.**

In fixed decimal, the most commonly used notation, you can display between 0-9 places to the right of the decimal point. Whenever the value is too large or too small to be displayed in fixed notation, the display automatically changes to scientific notation. In scientific notation, useful when working with very large or small numbers, values are displayed with a single digit to the left of the decimal point followed by up to seven digits to the right, and a two-digit exponent. In engineering notation, useful in working with many units of measure, such as kilo ( $10^3$ ), nano ( $10^{-9}$ ), etc., values are displayed with exponents that are multiples of 3.

### **The 216-page Owners Handbook.**

The Owners Handbook for the new HP-37 Scientific/Plus is one of the most extensive and detailed texts ever published for a pocket calculator. It covers every aspect of operation—including clear descriptions of the RPN Logic System—valuable suggestions for maximum efficiency in use. Nearly half the book is devoted to practical applications of the HP-37 in mathematics, statistics, navigation, surveying and finance. Formulas for each of the preprogrammed functions in the HP-37 are provided for easy reference.





## The HP-27 Scientific/Plus Pocket Calculator comes complete with:

- Battery pack that under normal use provides 100 hours of operation and fully charges in under 5 hours
- Recharger AC adapter that lets you operate the calculator on AC while the battery pack is recharging
- Soft carrying case with belt loop
- Illustrated Owner's Handbook with instructions and sample problems

## Optional Accessories (Order with HP-27)

- Security credit lets you secure your HP-27 to your work area
- Reserve power pack provides a spare battery pack and keeps it fully charged

## Full one year warranty.

The HP-27 is warranted against defects in materials and workmanship for one year from the date of delivery. During the warranty period, Hewlett-Packard will repair, or at its option, replace at no charge components which prove to be defective, provided the calculator is returned shipping prepaid, to Hewlett-Packard's Customer Service facility.

This warranty does not apply if the calculator has been damaged by accident or misuse, or as a result of service or modification by other than an authorized Hewlett-Packard Customer Service facility. No other express warranty is given by Hewlett-Packard. **HEWLETT-PACKARD SHALL NOT BE LIABLE FOR CONSUMER DAMAGES.**

## Hewlett-Packard Quality.

HP pocket calculators are designed and built for you—the business or professional person—who needs a calculator rugged

enough for daily, day-out use and as accurate as a pen and paper.

HP pocket calculators meet these requirements—and more—because they're the most advanced pocket calculators in the world.

Battery life is double injection molded. The symbol on the face of the key goes through the entire key, so it won't wear off—no matter how often the key is pressed.

Every key is tested twice. A quality control inspector presses the keys to make sure they feel right. Then a specially designed machine exercises them to make sure they function right.

Under the keyboard is a moisture-proof gold-plated barrier to help protect the inside of the calculator from coffee spills and similar hazards.

The heavy polycarbonate case is contour-designed by a hand comfort lab, and rugged enough to withstand a tumble to a hard floor. (Even HP's pocket calculator even withstands an accidental journey through a paper shredder.)

Uncompromising quality, innovative design, high quality components and precision assembly combine to produce calculators that are second to none.

Hewlett-Packard reserves the right to make changes in materials, specifications or accessories without notice.

## The HP-27 Scientific/Plus Pocket Calculator Features and Specifications.

### Mathematical Functions:

- SIN, COS, TAN** — Trigonometric functions
- SIN<sup>-1</sup>, COS<sup>-1</sup>, TAN<sup>-1</sup>** — and their inverses
- DEG, RAD, GRD** — Degrees, radians, and grads modes
- ln, e<sup>x</sup>, log, 10<sup>x</sup>** — Natural log and antilog
- e<sup>x</sup>, e<sup>1/x</sup>** — Common log and antilog
- e<sup>x</sup>, e<sup>1/x</sup>** — Exponential functions
- 1/x, 1/y** — Reciprocal (or inverse) calculation
- H.M.S. +, H.M.S.** — Time (angle) addition and subtraction in hours, minutes and seconds
- H.M.S., -H** — Time (angle) conversion in hours, minutes and seconds to decimal hours (degrees)
- 1/x, 1/y** — Convert math functions
- x<sup>2</sup>, x<sup>3</sup>, x<sup>4</sup>, +** — Arithmetic functions

### Statistical Functions:

- Σ x** — Accumulates  $x$ ,  $y$ ,  $x^2$ ,  $y^2$ ,  $xy$ ,  $x^3$
- Σ y** — Deviates unweighted data
- Σ x<sup>2</sup>, Σ y<sup>2</sup>** — Linear regression coefficients
- r** — Linear estimate
- r<sup>2</sup>** — Correlation coefficient
- Σ x** — Mean — two variables
- Σ y** — Standard deviation — two variables
- VAR** — Variance
- S.D.** — Normal distribution
- nt** — Rational

### Financial Functions:

- n** — Number of periods
- i** — Periodic interest rate
- PMT** — Periodic payment amount
- PV** — Present value of money
- FV** — Future value of money

- NPV** — Net present value
- IRR** — Internal rate of return
- %** — Percent
- Δ%** — Percent difference
- %C** — Percent of total

### Data Manipulation: display control, clearing options, storage functions

- ENTER** — Separates numerical entries
- 1/x, 1/y** — Exchanges contents of  $x$  and  $y$  stack registers
- PL** — Rotates contents of stack registers
- CHS** — Changes the sign of a number
- EXP** — Enter exponent
- LAST x** — Recalls last entry after an operation
- FIX** — Sets fixed decimal notation display
- SCI** — Sets scientific notation display
- ENG** — Sets engineering notation display

- CLT** — Clears display
- CLEAR STK** — Clears stack
- CLEAR REG** — Clears addressable registers, financial registers and LAST x.

- CLEAR C** — Clears conversion registers
- CLEAR PREP** — Clears prefix key
- RESET** — Clears financial status for a new problem

- STO** — Stores displayed value into addressable register
- RCL** — Recalls number in the display

- 1/x, 1/y** — Rotates addressable register
- Gold shift key** — selects functions printed in gold on keyboard

- Black shift key** — selects functions printed in black on front face of keys.

### Physical Specifications:

- Calculator length: 130.2 mm (5-1/8")
- Calculator width: 68.3 mm (2-11/16")
- Calculator height: 30.2 mm (1-3/16")
- Calculator weight: 170.1 g (6 oz.)
- Recharge weight: 140.8 g (5 oz.)
- Shipping weight: 680 g (1-1/8 lb.)
- Operating temperature range: 0°C to 44°C (32°F to 110°F)
- Storing temperature range: 15°C to 44°C (59°F to 110°F)
- Storing temperature range: -40°C to 85°C (-40°F to 181°F)
- Power requirements: AC: 115 or 230V, 50/60 Hz
- Battery: 2.15 Vdc nickel-cadmium rechargeable battery pack

**HEWLETT**  **PACKARD**

Sales and service from 113 offices in 66 countries

### In European Areas...

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