

Acknowledgments

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Chung C. Tung

Chung Tung received his BSEE degree from National Taiwan University in 1961 and his MSEE degree from the University of California at Berkeley in 1964. As a member of HP Laboratories from 1965 to 1972, he was involved in the design of the 9100 Calculator and the HP-35 and HP-45 Pocket Calculators. He subsequently joined the Advanced Products Division as manager of the HP-65 project and is now engineering section manager there. Chung has done work towards his PhD degree at Stanford University, although he isn't presently enrolled there. He is married, has a son and a daughter, and lives in Santa Clara, California. Music, reading, and table tennis are his principal modes of relaxation.

SPECIFICATIONS

HP-65 Programmable Pocket Calculator

PRE-PROGRAMMED FUNCTIONS:

TRIGONOMETRIC: $\sin x$ • $\arcsin x$ • $\cos x$ • $\arccos x$ • $\tan x$ • $\arctan x$
LOGARITHMIC: $\log x$ • $\ln x$ • e^x • 10^x
OTHER: y^x • $\sqrt{x}$ • $1/x$ • π • x^2 • $n!$ • conversion between decimal angle, degrees/minutes/seconds, radians or grads • rectangular/polar coordinate conversion • decimal/octal conversion • degrees(hours)/minutes/seconds arithmetic • integer/fraction truncation

OTHER FUNCTIONS:

REGISTER ARITHMETIC: Addition, subtraction, multiplication or division in serial, mixed serial, chain or mixed chain calculations

FEATURES:

DISPLAY: Up to 10 significant digits plus 2-digit exponent and appropriate signs
DYNAMIC RANGE: 10^{-99} to 10^{99}
Primary functions activated by single keystroke; alternate functions use prefix keys
Five user definable keys
Four-register operational stack
Program memory for storage of up to 100 steps
Single step running and/or inspection of a program
Insert/delete editing features
Nine addressable memory registers
"Last X" register for error correction and number reuse
Two flags for skip or no-skip programming or branching to another part of program
 $x=y$, $x \leq y$, $x=y$, $x > y$ relational tests
Magnetic card reader/writer
Built-in counter
Automatic decimal point positioning
Selective round-off; range: 0-9 decimal places
Two display modes: fixed point and scientific
Indicators for improper operations and low battery condition

Operates on rechargeable batteries or ac
Light-emitting diode (LED) display

APPLICATION PROGRAM PACS:

Standard Pac (17 miscellaneous programs, 2 diagnostics, 1 head cleaning card, 20 blank cards)
Math Pac I (40 mathematical programs)
Math Pac II (33 mathematical programs)
Stat Pac I (37 statistical programs)
Survey Pac I (34 surveying programs)
Medical Pac I (33 medical programs)
EE Pac I (35 electrical engineering programs)

POWER:

AC: 115 or 230 V, $\pm 10\%$, 50 to 60 Hz, 5 watts.

BATTERY: 500 mW derived from nickel-cadmium rechargeable battery pack.

WEIGHT: 11 ounces (312 g) with battery pack. Recharge: 5 ounces (155 g).

SHIPPING WEIGHT: approx. 3 lbs (1.4 kg).

DIMENSIONS:

LENGTH: 5.8 in (14.7 cm).

WIDTH: 3.2 in (8.1 cm).

HEIGHT: 0.7 to 1.4 in (1.8 to 3.4 cm).

TEMPERATURE RANGES:

OPERATING: 32°F to 104°F (0°C to 40°C).

CARD READER: 50°F to 104°F (10°C to 40°C).

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