

hp 33s

2-line display
scientific calculator



electronic specification

- CPU: SPLB31A
- LCD: 14 character dot matrix
(5 × 7) × 2 lines
- power supply: CR2032 × 2
- battery life expectancy:
0.73 year @ 1 hr/day
(approximately 9 months)
- power consumption:
0.03 W
- auto power OFF:
approximately 10 minutes

material specification

- plastic/rubber
(with upper nameplate)
- material of key top: plastic
- dimensions:
158.0 × 83.0 × 16.1mm
6.2 × 3.2 × .06in
- weight:
119 grams



i n v e n t

your HP calculator stockist:

Total Survey Systems Pty Ltd
7 South Street
Rydalmere NSW 2116
Ph 9638 0055
Fax 9638 3933
www.totalsurvey.com.au

menu type function selection

- MODES: DEG, RAD, GRAD, °, °
- DISPLAY: FIX, SCI, ENG, ALL

key in logic:

- RPN, algebraic

program memory: 32KB

- keystroke programming
- FLAGS: 0~11; SF, CF, FS?
- X?Y, X?, <, >, =, ≤, ≥, ≠
- SHOW: press and hold [SHOW] to display CK=value length
- MEM: press [MEM] for the catalog of program labels
- XEQ, R/S: execute a labeled program
- GTO, LBL, SOLVE, INPUT, VIEW, ISG, DSE, FN=, RTN, PSE key
- (i) indirect address
- solving and integrating programs
- statistics programs:
 - curve fitting: straight line, exponential, logarithmic, power
 - normal and inverse-normal distributions
 - grouped standard deviation
- miscellaneous programs and equations

statistical function

- one/two- variable statistics
- linear and inverse regressions
- $\Sigma+$: enter data point
- $\Sigma-$: remove data point
- SUM: n, Σx , Σy , Σx^2 , Σy^2 , Σxy
- S, σ , S_x , S_y , σ_x , σ_y
- x, y, x, y, xw
- L.R.: r, m, b, x', y'

base-n function

- binary, octal, decimal, and hexadecimal number calculation and conversion
- complement calculation

equations:

- equalities: the equation contains an "=", and the left side contains more than just a single variable
- assignments: the equation contains an "=", and the left side contains just a single variable
- expressions: the equation does not contain an "="
- "EQN" key
- "SPACE" key
- SOLVE: the equation then prompts for a value for every other variable in the equation
- XEQ: returns the value of the equation, regardless of the type of equation
- integration calculation

system

- internal Napier precision
- 13-level parenthesis or maximum number of pending operation: 13 @ALG
- memory protection while power off
- automatic power off
- decimal point selection
- adjustable contrast
- angle conversions: →RAD, →DEG
- "SHOW" key
- "MEM" key
- LASTx function

- \lceil key: left shift function key
- \rceil key: right shift function key
- C key: CLEAR, ON/OFF
- R \downarrow , R \uparrow function
- \blacktriangle \blacktriangledown function in equation list and program

edit

- "←" key: deletes
- 4-arrow key in menu:
 - " \uparrow " displays previous entry in catalog in equation list and program
 - " \downarrow " displays next entry in catalog in equation list and program
- display of error message description
- clear display expression

memory

- 27 variables
- storage arithmetic
- recall arithmetic
- store and clear variable
- recall variable

mathematical function

- trigonometric, inverse-trigonometric, hyperbolic
- polar-rectangular coordinate conversion
- power, square root, square, cube root, cube, reciprocal
- logarithmic and exponential
- natural logarithmic and exponential
- Factorial
- RND
- Int \div
- IP: truncate to be integer
- FP: truncate to be fraction
- ABS: absolute value
- permutation and combination
- RAND: random number <0,1>
- Seed
- SGN: sign

fraction mode

- /c function
- FDISP function: fraction, decimal conversion
- most precise fraction
- factors of denominator
- fixed denominator

40-physics constants

scientific, engineering notation

unit conversions:

- unit conversions: →cm, →in, →l, →gal, →kg, →lb, →°F, →°C
- time conversions:
 - HR, →HMS
- engineering notation conversions:
 - ENG, ←ENG

%CHG key

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www.hp.com/calculators



pocket-sized
and
full-featured

