



Tektronix 31 Programmable Calculator

The time and distance machine.

Time. Want to spend less on calculations and more on answers? Designed to be the shortest distance between you and your solutions. The 31 can provide the natural power you're looking for. Natural. That's because the 31 is built for easy mathematical conversation. Using English-type programming steps and a math keyboard that thinks of calculations the way you do, the 31 is a natural for your discipline.

Power. Another way of describing the width and depth of 31 features:

- 35 built-in math functions
- 24 user-definable function keys
- Complete alphanumerics. With each key providing a different alphabetical or punctuation character when

in the alpha mode, the 31 allows completely versatile print-outs (via optional printer)

- User definable PROM (programmable, read only, memory) capability
- 512 step program memory
- 74 data registers
- Programs, all or part can be stored on magnetic tape cartridges
- Easily installed memory options
- A variety of optional software programs
- Complete edit capability: insert, delete, step forward, step back
- Flashing display for illegal or overrange math operations
- Optional silent alphanumeric thermal printer

Product Data



Programming

- Data entry with floating, scientific or mixed notation
- Conditional branching
- Unconditional branching
- Single key register arithmetic
- Indirect addressing
- Symbolic addressing of sub-routines
- Sub-routine nesting
- Programmable flag

Display:

10 digit mantissa with 2 digit exponent.

Standard accessories:

- Tektronix 31 instruction manual
- Tektronix 31 verification program
- Power Cord
- 1 magnetic tape cartridge (6000 step capacity)
- 2 user definable overlays

Options:

- Silent alphanumeric thermal printer
Some 31 Printer Points:
The 31 Calculator printer operates in alpha and numeric characters which makes it invaluable for two reasons. First, program listing. The printer, using English mnemonics, lists each program step in sequence.
The second advantage? Interactive programs. When prompted by the program, the printer can ask the user for specific data input. Additionally titled solutions are easily produced the same way. This way the printer not only provides for convenient execution but provides a printed copy of the program and each of its steps. Additional 31 Printer Points
Each printed line is up to 16 characters wide.
A "print display" will result in the printing of the alpha information, then whatever is in the display. The printer can be operated exclusive of any program.
Silent operation.
Automatic indication of over-range or illegal operation.

- Thermal printing paper: capacity 18,000 lines per roll
- Statistics program library
- Mathematics program library
- Memory Increase:

1024 Steps	128 Registers
1536 Steps	192 Registers
2048 Steps	256 Registers
2048 Steps	640 Registers
3584 Steps	448 Registers
5120 Steps	256 Registers
2048 Steps	1000 Registers
5120 Steps	640 Registers
8192 Steps	256 Registers
- PROM Packs. A plug-in program-mable read-only memory to be loaded with the program the operator finds in repeated use.
- Handle
- User definable overlay package
- Thermal printing paper
- Magnetic tape cartridges

Peripherals:

X-Y plotter with program control, digital operation.

4010 Graphic Terminal. Data presentation and analysis with complete TTY keyboard.

Physical Characteristics:

Weight: 32 lbs; 14.5 kg.
Height: 7.9 ins; 20 cm.
Width: 14.3 ins; 36 cm.
Length: 20.5 ins; 52 cm.
Shipping weight: 48 lbs; 21.8 kg.
Aluminum case construction with "modular design" internal components.

Environmental Characteristics:

Non-operating temperature:

—67° F to 167° F;
—55° C to 75° C.

Operating temperature:

32° F to 122° F;
0° C to 50° C.

Non-operating altitude:

50,000 ft; 15,250 m.

Operating altitude:

15,000 ft.; 4,570 m.

Power Requirements:

Line Voltage Range: $\pm 10\%$

Low Med Hi

100 110 120 operates between
90 V to 132 V RMS

200 220 240 operates between
180 V to 264 V RMS

Maximum Line Voltage Input:

250 V RMS

Line Frequency: 48 Hz to 66 Hz

Power Consumption (Max) from
190 watts 60 Hz, 115 V line.

Warranty:

All TEKTRONIX instruments are warranted against defective materials and workmanship for one year. Questions regarding warranty should be discussed with your Tektronix Sales Engineer.

Tektronix, Inc.

Information Display Division
P.O. Box 500, Beaverton, Ore. 97005
Telephone: (503) 644-0161
Telex: 36-691
Cable: TEKTRONIX
or Tektronix Datatek N.V.
P.O. Box 7718 Schiphol Airport
The Netherlands

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