

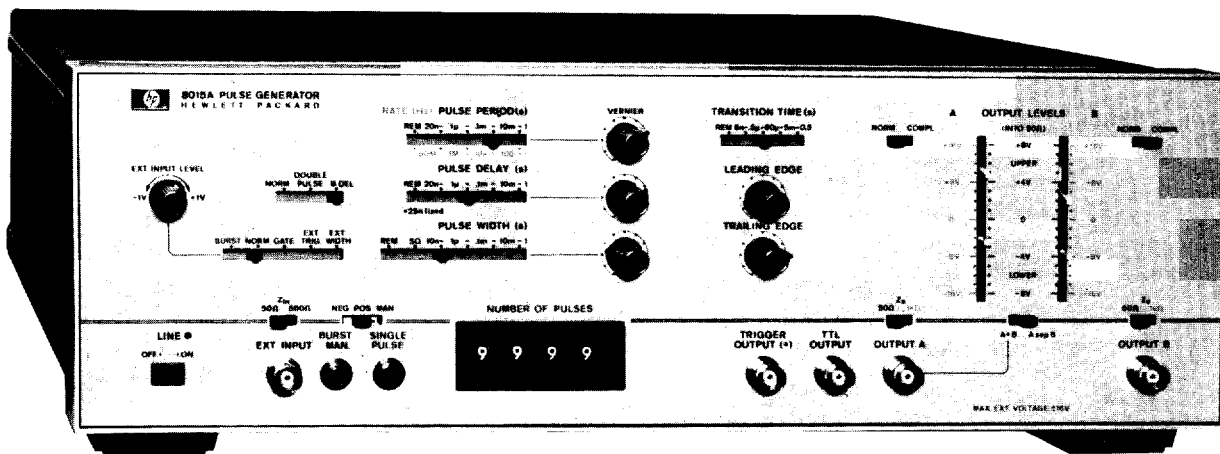


PULSE GENERATORS

50 MHz, Dual Output

Model 8015A

- Two independent ± 16 V outputs
- Additional TTL output
- Remote control and counted burst options
- Complex waveforms



Picture shows 8015A with
Option 002, Burst

Offering B Delay mode in addition to variability of all pulse parameters, the HP 8015A is ideal for analyzing critical timing conditions, or generating 2-phase clocks.

A + B mode gives a 30 V output within a ± 16 V window. Combined with B Delay mode, three-level signals, special codes or simulated biomedical signals can be generated.

Option 002 Burst mode generates an exact number of pulses by means of an internal counter.

Direct access to either or both output amplifiers (Option 007) converts to MOS/CMOS levels. Alternatively, high-level tracking capability ensures that clock and data signals follow the supply, and thus safeguards CMOS devices.

For use in automatic test, Option 003 allows all pulse parameters to be controlled remotely.

Specifications

Timing

Repetition rate: 1 Hz to 50 MHz (square wave and double pulse to 25 MHz, A + B mode to 40 MHz, B delay 20 MHz).

Width: 10 ns to 1 s or square wave.

Delay: 20 ns to 1 s (both channels, interchannel or double pulse).

Jitter: 0.1% + 50 ps.

Output (50 Ω Output Impedance into 50 Ω termination. Voltages double in 50 Ω / 1 k Ω or 1 k Ω / 50 Ω operation).

Magnitude: 1 V to 8 V amplitude (2 V to 16 V in A + B mode).

High level: -7 V to +8 V. **Low level:** -8 V to +7 V.

Transition times: 6 ns to 0.5 s in four ranges, independent leading/trailing vernier adjustment.

Non-linearity: 5% for transitions > 30 ns.

Preshoot, overshoot and ringing: 5%.

A + B mode: sum of channel A and channel B outputs.

Complement: independently selectable.

Impedance: 50 Ω / 1 k Ω , independently selectable.

Trigger Input

Impedance: 50 Ω / 500 Ω selectable.

Level: adjustable +1 V to -1 V (50 Ω), +10 V to -10 V (500 Ω).

Slope: + or - selectable.

Auxiliary Outputs

TTL: 50 Ω output impedance, timing as channel A.

Trigger output: 1 V, 50 Ω into 50 Ω .

Option 002 Burst Mode

Burst length: 1-9999 pulses, selectable.

Pulse repetition rate: 1 Hz to 40 MHz.

Burst trigger: trigger input.

Minimum burst separation: 200 ns.

Option 003 Remote Control

Timing ranges: TTL or contact closure.

Timing verniers: current, voltage or resistor programming.

Output levels: voltage programming.

Burst: BCD, TTL/contact closure.

Option 007 Amplifier and Tracking Modes

Dual Amplifier Mode

Gain: 0.8 to 6.4.

Frequency response (-3 dB): 0 to 80 MHz.

Upper Level Tracking Mode

Upper level: input voltage $\pm 5\%$.

Lower level: 0 V ± 250 mV.

Settling time: 400 μ s to $\pm 5\%$ of final value.

General

Operating temperature: 0°C to 55°C.

Power: 100/120/220/240 V rms; +5%, -10%; 48 to 440 Hz, 180 VA max.

Weight: net, 11 kg (24.26 lb). Shipping, 14.7 kg (32.4 lb).

Size: 133 H x 426 W x 346 mm D (5.2" x 16.75" x 13.6").

Ordering Information

HP 8015A Pulse Generator

Opt 002: Pulse Burst

Opt 003: Remote Control

Opt 007: Dual Amplifier and Level Tracking modes

Opt 907: Front Handle Kit (Part No. HP 5061-0089)

Opt 908: Rack Flange Kit (Part No. HP 5061-0077)

Opt 909: Opt. 907, 908 combined

(Part No. HP 5061-0083)

Opt 910: Additional Operating and Service Manual

Price

\$4450

add \$700

add \$1600

add \$470

add \$55

add \$32.50

add \$80

add \$38