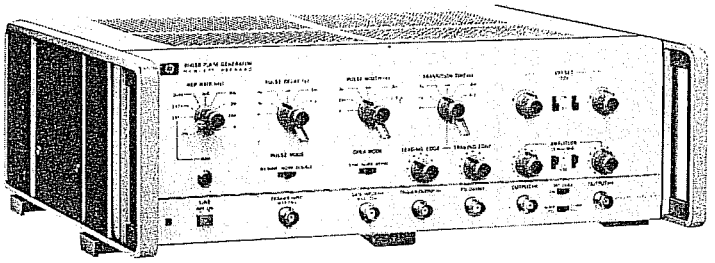
- Dual outputs, +10 V and −10 V
- TTL output
- Gating, square wave, double pulse modes
- Repetition rate 0.1 Hz to 20 MHz
- Positive/negative/symmetrical output
- Normal/complement switch



8005B

The 8005B is a general purpose, triple output pulse generator. This instrument has all parameters variable and produces simultaneous pos. and neg. pulses. It also has a TTL output with all parameters variable except amplitude. This feature, together with the normal/complement facility, greatly improves the ease of operation.

8005B Specifications

Pulse Characteristics

Transition times: ≤ 10 ns to 2 s. Edges independently variable.
Non-linearity: for transition times >30 ns, < 4% of pulse amplitude.
Preshoot, overshoot, ringing: < 5% of pulse amplitude.
Pulse width: < 25 ns to 3 s. **Jitter:** <0.1% of setting + 50 ps.
Max. duty cycle: >80% (0.3 Hz – 1 MHz), >50% (1–20 MHz).
Square wave: 0.15 Hz – 10 MHz.
Pulse delay: < 100 ns to 3 s. **Jitter:** < 0.1% of setting +50 ps.
Pulse outputs: simultaneous pos., neg. and TTL outputs.
Pulse amplitude: 300 mV to 10 V.
Output protection: max. external voltage ± 10 V.
Source impedance: 50 ohms ± 10% or high impedance selectable.
TTL compatible output: +4.6 V norm. or comp. 50 Ω impedance.

Repetition Rate and Trigger

Repetition rate: 0.3 Hz to 20 MHz in 5 ranges. **Jitter:** < 0.1% + 50 ps.
Double pulse: 10 MHz max. Simulates 20 MHz.
Trigger output: > +2 V ampl. across 50 ohms. **Width:** > 6 ns.

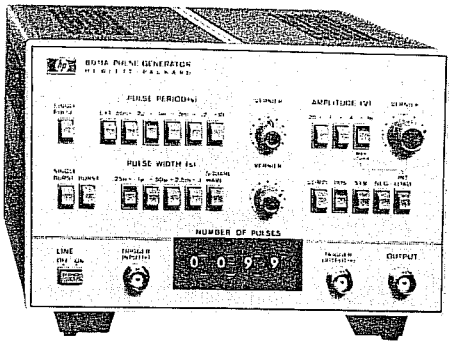
External Operating Modes

External Triggering (dc to 20 MHz)
Delay: approx. 35 ns trig. input to trig. output.
Maximum input: ± 10 V. **Sensitivity:** sine 2 Vpp.
Impedance: approx. 1k ohms, dc coupled. **Pulses:** ±1 Vpeak.
Input pulse width: ≥ 10 ns.
Gating
Synchronous: gate signal turns on repetition rate. Last pulse is always completed.
Asynchronous: gate signal controls output of rate generator.
Gate Input (impedance 1 k ohms dc coupled)
Amplitude: 2 V to 20 V (max.). **Polarity:** negative.

General

Operating temperature: 0°C to 55°C.
Power: 115/230 V rms; +10%, −15%; 48 to 440 Hz, 180 VA max.
Weight: net 7 kg (15.5 lb). Shipping 9 kg (20 lb).
Size: 130 H x 426 W x 290 mm D (5.1" x 16.8" x 11.4").

Ordering Information 8005B, 8011A	Price
8011A Pulse Generator	$1000
Opt 001: Pulse Burst	add $350
Opt 910: extra Operating and Service Manual	add $20
15179A (for 8011A): Adapter frame, Rack mount for 1 or 2 units, includes blank panel for single-unit operation.	$205
8005B Pulse Generator.	$2810
Opt 908: Rack Flange Kit (part number 5060-8740).	add $37.50
Opt 910: extra Operating and Service Manual.	add $28



Picture shows 8011A with Option 001, Burst.

The 8011A is a versatile, reliable, low cost pulse generator. This compact instrument features an uncomplicated design using high quality components to ensure long, dependable service. Ease of operation results from the logical and simple front panel layout. These qualities and the many pulse formats available emphasize the Model 8011A's cost-effectiveness in a wide application range.

8011A Specifications

Pulse Characteristics (50 ohm source/load impedances)

Transition times: < 10 ns fixed.
Overshoot, ringing and preshoot: < ± 5% of pulse amplitude. May increase to 10% at counter-clock wise positions of amplitude vernier.
Pulse width: 25 ns to 100 ms in four ranges. Vernier provides continuous adjustment within each range.
Width jitter: < 0.1% + 50 ps on any width setting.
Maximum duty cycle: > 50% (100% using pulse complement)
Maximum output: 8 V. With internal 50 Ω and external Hi-Z or internal Hi-Z/external 50 Ω, then 16 V max.
Attenuator: 3-step attenuator provides the ranges 0.25 V – 1 V – 4 V – 16 V. Vernier provides continuous adjustment within each range.
Source impedance: 50 Ω ± 10% shunted by 30 pF, except in 4 V – 16 V range which is 50 Ω/Hi-Z, switch selectable.
Polarity/format: pos., neg., or sym./norm. or compl., switch select.

Repetition Rate and Trigger

0.1 Hz to 20 MHz in 5 ranges. Vernier provides continuous adjustment within each range. **Period jitter:** < 0.1% + 50 ps of per. setting.
Square Wave: 0.05 Hz to 10 MHz.
Trigger output: dc coupled 50 Ω (typ.) source delivering ≥ +1 V into 50 Ω (can increase to +5 V). **Trigger pulse width:** 20 ns ± 10 ns.

External Operating Modes

Input impedance: 50 Ω ± 10%. **Trigger polarity:** positive.
Maximum input: ±5 V. **Sensitivity:** 1 V.
Manual: front panel pushbutton for generating single pulse.
Repetition rate: 0 to 20 MHz. In square wave, output frequency is half the input frequency.
Trigger source: manual or ext. signal. Min. ext. signal width 20 ns.
Pulse burst mode (option 001): preselected number of pulses generated on receipt of trigger.
Burst trigger source: man. or ext. signal. Min. signal width 25 ns.

General

Operating temperature: 0°C to 55°C.
Power: 100/120/220/240 V rms; +5%, −10%; 48 Hz to 440 Hz, 70 VA max.
Weight: net, 4 kg (9 lb). Shipping, 6.5 kg (14.6 lb).
Dimensions: 126 H x 200 W x 280 mm D (5" x 7.9" x 11").