# **PULSE GENERATORS**

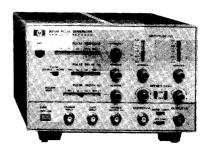
# 20/50 MHz Pulse Sources Models 8011A/8012B & 8013B

- Repetition rates up to 50 MHz
- Fixed transitions down to 3.5 ns
- Variable transitions from 5 ns to 0.5 s

- Output voltage up to 16V
- Up to 2 ch., select. output formats
- Selectable source impedance







**HP 8012B** 

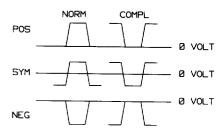
**HP 8013B** 

**Specifications** 

**HP 8011A** 

Model **HP 8011A** HP 8012B **HP 8013B** Parameter Period 50ns to 10s 20ns to 1s 20ns to 1s Pulse width 25ns to 100ms 10ns to 1s 10ns to 1s **Duty Cycle** >50% 40% to 75% 40% to 75% in pulse compl 100% 100% 100% Pulse delay 35ns to 1s 35ns to 1s **Transition Times** <10ns fixed 6ns to 0.5s 5ns fixed (int. Load IN) 5ns to 0.5s 3.5ns fixed jitter 0.1% of prog. 0.1% of prog. 0.1% of prog. value + 50ps value + 50ps value + 50ps max. out. voltage 50 Ohm source to 50 Ohm load 87 5٧ 5V into open 167 10V 10V offset ±2.5V  $\pm 2.5 V$ overshoot, ringing <±5% <±5% <±5% may increase to:  $<\pm10\%$  if ccw <±10% for <±10% for of vernier int. load OUT int. load OUT switchable Source impedance yes yes yes 50 Ohm / high imp Square wave, max frequency 10MHz 25MHz 25MHz

The HP 8011A 20 MHz, HP 8012B and HP 8013B 50 MHz Pulse Sources are versatile and reliable low-cost pulse generators. They provide the suitable solution to almost all digital logic testing problems. The simple and logical operation, which is achieved by a clearly designed front panel, guarantees rapid familiarization; the risk of setting up incompatible parameters is minimized. The instruments feature normal and complement output modes and a switchable internal 50 Ohm source. These features and performance emphasize the cost effectiveness of these models for many applications.



### **Supplemental Specifications**

(values describe typical, non-warranted performance)

### **Operating Modes**

**HP 8011A** 

Manual: front panel pushbutton for generating single pulse Ext. Repetition Rate: 0 Hz to 20 MHz. In square wave mode, output

frequency is half the input frequency.

Trigger source: manual or ext. signal. Min. ext. signal width >10 ns. Pulse burst mode (option 001): preselected number (up to 9999) of pulses generated on receipt of trigger.

Burst trigger source: man. or ext. signal. Min. signal width is 25 ns. HP 8012B & HP 8013B

Manual: front panel pushbutton for generating single pulse

Ext. Repetition Rate: 0 Hz to 50 MHz. In square wave mode, output frequency is half the input frequency.

Trigger source: manual or ext. signal. Min. ext. signal width >7 ns. Gate mode: Last pulse is completed even if the gate signal ends during pulse.

#### General

Operating temperature: 0°C to 55°C Humidity: 95% RH from 0°C to 40°C

Power: 100/120/220/240 Vrms, +5%, -10%, 48 to 440 Hz, 70 VA

max. Weight: 4 kg (9 lbs)

Dimensions (HxWxD): 142 mm x 200 mm x 330 mm

5.6 in x 7.9 in x 13 in

Ordering Information	Price
HP 8011A 20 MHz Pulse Generator	\$1250
HP 8012B 50 MHz Pulse Generator	\$1950
HP 8013B 50 MHz Pulse Generator	\$1900
Options	
001 Counted Burst for HP 8011A	\$370
910 Additional Operating and Service Manual	45.0
for HP 8011A or HP 8012B	\$20
	\$13

## **Accessories**

HP 15179 Rack Mounting Kit

Adaptor for rack-mounting one or two pulse generators HP 8011A, HP 8012B or HP

\$235

8013B

Tast-Ship Product — see page 766.