



# 507 Series

## Digital Delay Current Generators

The 507 Current Pulse Generator is an ideal fire set for airbag squib, detonator and pyrotechnics initiator testing. The instrument provides adjustable current signals up to 25 amps. The unit comes with 2 or 4 digitally controlled load resistant independent outputs. Output pulse widths and delays are unique to each channel and can be precisely controlled from 0.1 to 100 ms in 200 ns steps. The 507 Current Pulse Generator also provides a TTL Sync output to T0 – particularly useful as a reference source/trigger for cameras or other equipment.

### Basic Specifications

- 200 ns Timing Steps
- Up to 25 amps per Channel\*
- 2 or 4 Channel Outputs
- Benchtop Design
- Easy Programming Interface
- TTL Sync output to T0
- Safety Interlock



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## SPECIFICATIONS

## 507 Series

MODELS 507-2C: 2 independent channel outputs  
507-4C: 4 independent channel outputs

Standard Communications: RS232  
Memory Storage: 12 slots

### DELAYS

channels	independent outputs, with digitally controlled delay and pulsewidth.
current	0 to 25 A (bank voltage 44 V minimum)*
resolution	10 mA
accuracy	50 mA
delay	0 to 99.9999998 s
resolution	200 ns
pulse width	100 $\mu$ s to 100 ms*
resolution	200 ns
accuracy	100 ns + .0001 x delay
timebase	5 MHz, 25 PPM crystal oscillator
RMS jitter	100 ns
trig delay	ext trig to T0, 10 $\mu$ s

### EXTERNAL TRIGGER

rate	DC to 1/ (75 ms + largest delay + period)
threshold	3 VDC (3 mA into optoisolator)
impedance	1000 $\Omega$

### INTERNAL RATE GENERATOR

modes	single shot, external trigger
RMS jitter	100 ns

### OUTPUTS(T1,T2)

impedance	1.405 $\Omega$
slew rate	> 2.5 A/ $\mu$ s
overshoot	< 100 mA + 10% of pulse amplitude
amplitude	0-25 A (loads 1 - 10 ohm)
peak current	25 A per channel
DC current limit	150 mA (each channel)

### GENERAL

weight	10 lbs.
power	<100 W @ 120 or 220 VAC
communications	RS232

### OPTIONS

G - GPIB Interface

\*Contact us for other options for amperage and pulse widths.



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