

Affordable, Multi Purpose Pulse Generator



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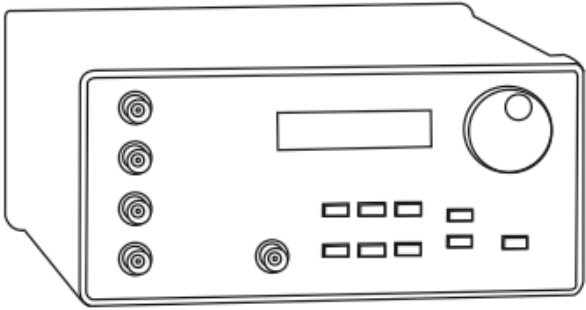
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ON

SELECT

✓ 4 INDEPENDENT CHANNELS  
 ✓ MULTIPLE MODES  
 ✓ 8 DIFFERENT EDGES  
 ✓ Free LabVIEW Driver  
 LESS THAN \$2,500

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M O D E L | 5 0 5

10 NS RESOLUTION . 2 NS CHANNEL-TO-CHANNEL JITTER



Performance • Versatility • Affordability

**CONFIGURATION** 2, 4, or 8 channels per instrument

#### TIMING DELAYS AND WIDTHS

**delay** 0 to 1000 seconds with 10 ns resolution  
**width** 100 ns to 1000 seconds with 10 ns resolution  
**accuracy** 10 ns + .0001 delay  
**time base** 50 MHz, 50 ppm crystal oscillator  
**RMS jitter** < 2 ns

#### EXTERNAL TRIGGER/GATE

**rate** 0 to 2 MHz  
**insertion delay** < 250 ns  
**threshold** 200 mV - 15V  
**trigger slope** Rising or falling edge, selectable  
**gate** Active low or active high, selectable  
**impedance** 1000 ohms

#### INTERNAL REP RATE GENERATOR

**rate** 0.001 Hz to 2 MHz  
**accuracy** 5 ns + 0.0001 x period  
**RMS jitter** < 500 ps  
**OUTPUTS** Adjustable to 20 V  
**IMPEDANCE** 50 ohm

#### ADJUSTABLE AMPLITUDE

**slew rate** > .2 V/ns  
**amplitude** 1 V - 10 V into 50 ohm load  
 2 V - 20 V into high impedance  
**peak current** 150 mA per channel  
**average current** 200 mA ave. (total for all channels)  
**polarity** Positive (active high) or Negative

#### COMPUTER INTERFACE

**RS232** 4800, 9600, 19200 & 38400  
**IEEE 4888** Standard

#### MODEL SELECTION

**model 505-2C** 2 Electrical Outputs  
**model 505-4C** 4 Electrical Outputs  
**model 505-8C** 8 Electrical Outputs  
**ACCESSORIES** 19" Rack Mount  
 Extended service/calibration agreements

Model 505 expands the previously established boundaries of antiquated pulse generating equipment by adding 8 independent channels, multiple modes of operation, and 16 different edges into a single instrument. As a pulse generator model 505 provides rate, delay, width, and output adjustability with each channel. As a digital delay generator, model 505 provides fine resolution, timing, and low jitter. By allowing external, internal, and 3rd party software to control the 505 this Digital Delay and Pulse Generator can address many application specific requirements.

The outputs are synchronized to one another with coherence of 5 ns. A channel's timing can be referenced to any other channel or to the zero delay point (To) The edges are adjustable in 10 ns steps. Channels can be selectively gated, enabled / disabled. Each channel possesses separate output level and polarity characteristics along with system level gating capability. Model 505 provides the ability to store custom parameter settings which are able to be recalled for later use.

#### INSTRUMENT KEY FEATURES:

- **Single Shot** – One Pulse with each pushbutton, internal, external, or software trigger.
- **Burst** – Each channel will output N number of pulses as specified by the user
- **Duty Cycle** – The user can configure each channel to provide N pulses on and M pulses off
- **Gate** – Channels can be instructed to respond or ignore trigger signals
- **Recall Capability** – The 505 can recall previously stored settings

