

## Ultrafast Electrical Pulse Generator

Calmar's ultrafast electrical pulse generator EPG-01 series provide pulse streams featuring broad range of pulse widths, high pulse amplitude, widely tunable repetition rates, low added timing jitter. The pulse generator can be triggered by an external random input and the pulses are locked to a RZ clock or sine wave input. They provide a versatile TTL gating function to enable end users to create required data modulation easily.

EPG-01 produces an electrical pulse stream with adjustable repetition rate from 10MHz to 13GHz. The output amplitude is 7V. The pulsewidth (FWHM) is selectable and/or tunable within 40 ~ 200ps. The added timing jitter is less than 1.0 picosecond.

In addition to be used as the electrical driver of high-speed laser diodes, EPG-01 can also be used independently as a tool to calibrate and characterize ultrafast electrical components, modules, instruments and networks.



- 5~7V output amplitude
- 10MHz ~ 10GHz repetition rate
- 40 ~ 200ps pulsewidth
- < 1ps added timing jitter

### Optional Upgrades

- TTL gating
- Repetition rate up to 13GHz

## Technical Specifications

<b>Model Number</b>	<b>EPG-01</b>
<b>Output Pulse Characteristics</b>	
Output Pulse Width (ps)	40 ~ 200 (adjustable, wider pulsewidth available)
Output Amplitude	5 ~ 7V (positive default, negative optional)
Timing Jitter (ps)	<1.0
Coupling	AC (50Ω impedance)
<b>Trigger Input Characteristics</b>	
Repetition Rate (MHz)	20 ~ 5,000 (tunable, up to 13GHz available, random electrical pulse acceptable)
Sine Wave Power (dBm)	-3 ~ +3
Square Wave Voltage (Vp-p)	0.4 ~ 0.9
Coupling	AC (50Ω impedance)
<b>Other Parameters</b>	
Connector	SMA
Operating Temp (°C)	5 - 40
Operating Voltage (V)	85 - 264 AC
Dimensions (cm)	34(w) x 42(d) x 9(h)

Specifications are subject to change without notice 5/1 /2005