

Ultrafast Electrical Pulse Generator

Calmar's ultrafast electrical pulse generator (EPG) 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.

EPG produces an electrical pulse stream with adjustable repetition rate from 10MHz to 5GHz. The output amplitude is typically 5V. The pulsewidth (FWHM) is selectable and/or tunable within 50 ~ 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 can also be used independently as a tool to calibrate and characterize ultrafast electrical components, modules, instruments and networks.



- 0.5 ~ 7V output amplitude
- 10MHz ~ 5GHz repetition rate
- 50 ~ 200ps pulsewidth
- < 2ps added timing jitter

Distribution in the UK



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The leading supplier of scientific and industrial lasers, optical systems and associated accessories, fibre optic components and instrumentation, and machine vision products.

Technical Specifications

Model Number	EPG-01	
Output Pulse Characteristics		
Output Pulse Width (ps)	60 ~ 200 (tunable)	50 ~ 60 (Tunable)
Maximum Output Amplitude (V)	3V (60ps) ~ 7V (200ps)	0.5V (50ps) ~ 3V (60ps)
Timing Jitter (ps)	< 2.0	
Coupling	AC (50Ω impedance)	
Trigger Input Characteristics		
Repetition Rate (MHz)	10 ~ 2000 (adjustable)	2000 ~ 5000 (adjustable)
Sine Wave Power (dBm)	-3 ~ +3	
Square Wave Voltage (Vp-p)	0.4 ~ 0.9	
Coupling	AC (50Ω impedance)	
Other Parameters		
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 12/1/2007