

# Programmable Electrical Pulse Generator

## EPG-300M

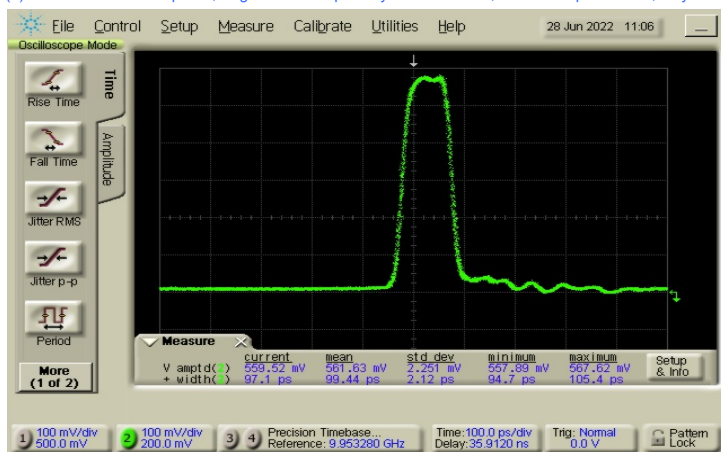
- Pulswidth tuning range of 100ps ~ 10ns, Option 50ps ~ 10ns
- Pulswidth tuning resolution of 1ps
- Frequency range 100kHz ~ 1GHz



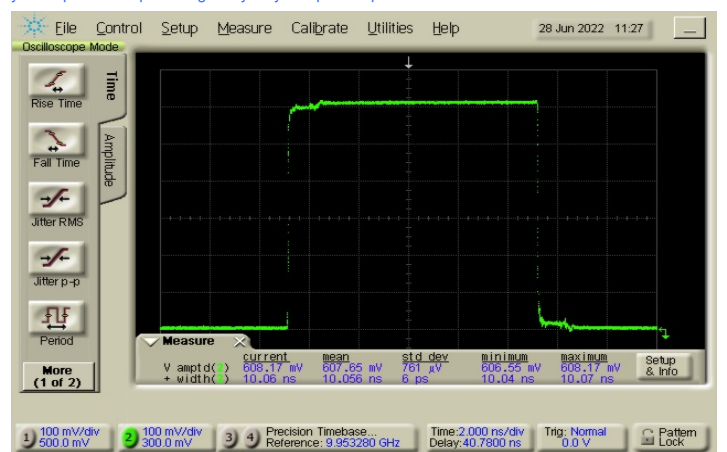
## Specification

Item		EPG-300M				
		Min.	Typ.	Max.	Unit	
Input Characteristics	Signal Type <sup>1</sup>	Sine or Square (Preferred)				
	Input Level <sup>2</sup>	(No Built-in Clock, "NC")	0.3	0.5	Vpp	
	Frequency Repetition Rate <sup>3</sup>		0.0001 (100kHz)	1	GHz	
Output Characteristics	Pulse Shape	Square				
	Pulse Width Tuning Range (FWHM)	100		10,000	ps	
	Extended Pulswidth Range (Optional) <sup>4</sup>	50		10,000	ps	
	Tuning Resolution		1	2	ps	
	Rise / Fall Time (20 - 80 %)	15		20	ps	
	Output Voltage	(Standard) <sup>5</sup>	0.4	0.5	0.6	Vpp
		(High-Voltage Option, "A") <sup>6</sup>		> 5		Vpp
	Additive Timing Jitter			< 0.7		ps
Clock Trigger Amplitude	(Built-in Clock Option, "C")		0.5	1.0	Vpp	
Electrical	Input/Output Coupling	AC/AC				
	Input/Output Impedance	50				
	Connector	Advanced SMA				
	Power Supply	(Module)	DC5V,1A (Module)			
	(Benchtop)	AC100~240, 50/60H		V		
Control	PC Interface	USB (Virtual COM Port)				
Operating & Storing	Operating Temperature	15		35	°C	
Environment	Storage Temperature	-20		70	°C	
Physical	Diemnsion (W x H x D)	(Module)	49 x 16 x 64 or TBD		mm	
		(Benchtop)	236 x 88 x 380		mm	
	Weight	(Module)	60		g	
		(Benchtop)	< 5		kg	

(1) Use square wave for minimal additive jitter, particularly at repetition below 100MHz. (2) The input couple is AC. (3) Repetition rate can be tuned by tuning the input clock frequency. Max. repetition rate is limited by pulse width. Please inquire for operation at <0.1MHz. The device can also be triggered on-demand within the specified frequency range. (4) Custom pulse width of down to 50ps is possible. The pulse width may broaden when combined with the high-voltage option. (5) Voltage for single-ended output. (6) Available for benchtop size, single-ended output only. Rise/fall times, and hence pulse width, may increase by a few ps. The output voltage may vary with pulse repetition rate.



100ps Pulsewidth @ Clock Freq. 1MHz



10,000ps Pulsewidth @ Clock Freq. 1MHz

## Ordering Information

EPG-300M-XXX-S(D)-P(N)-T-N-N

EPG-300B-XXX-S-P(N)-T-A(N)-C(N)

M: Module, XXX: 050 or 100, S: Single-ended, P: Positive, T: Tunable, A: Amplifier, C: Built-in Clock Generator  
 B: Benchtop, D: Differential, N: Negative, N: No Amplifier, N: No Clock Generator

CT017\_EPG-300M(B)-XXX-S(D)-P(N)-T-A(N)-C(N)\_R1.20



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