

Programmable Electrical Pulse Generator

EPG-300M

- Pulsewidth tuning range of 100ps ~ 10ns, Option 50ps ~ 10ns
- Pulsewidth tuning resolution of 1ps
- Frequency range Single-shot ~ 1GHz



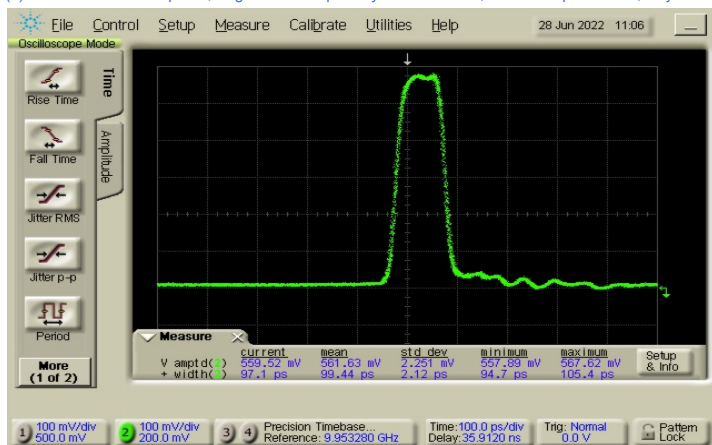
Specification

Item		EPG-300M			
		Min.	Typ.	Max.	Unit
Input Characteristics	Signal Type ¹	Sine or Square (Preferred)			
	Input Level	(No Built-in Clock, "NC") 0.3			
	Frequency Repetition Rate (Standard Frequency, "SF")	0.0001 (100kHz)			
	(Single Shot Option, "SS") ³	Single-shot ~ 1GHz			
Output Characteristics	Pulse Shape	Square			
	Pulse Width Tuning Range (FWHM)	100		10,000	ps
	Extended Pulsewidth Range (Optional) ⁴	50		10,000	ps
	Tuning Resolution		1	2	ps
	Rise / Fall Time (20 - 80 %)	15		20	ps
	Output Voltage	(Standard) ⁵ 0.4	0.5	0.6	Vpp
		(High-Voltage Option, "A") ⁶	> 5		Vpp
	Additive Timing Jitter		< 0.7		ps
Electrical	Clock Trigger Amplitude	(Built-in Clock Option, "C")	0.5	1.0	Vpp
	Input/Output Coupling	AC/AC (Standard Frequency) DC/AC (Single-shot Option)			
	Input/Output Impedance	50			
	Connector	Advanced SMA			
	Power Supply	(Module)	DC5V,1A (Module)		
Control	PC Interface	(Benchtop)	AC100~240, 50/60Hz		
			USB (Virtual COM Port), Option: RS232 or TTL or LVTTTL		
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		
		(Benchtop)	236 x 88 x 380		
	Weight	(Module)	60		
		(Benchtop)	< 5		

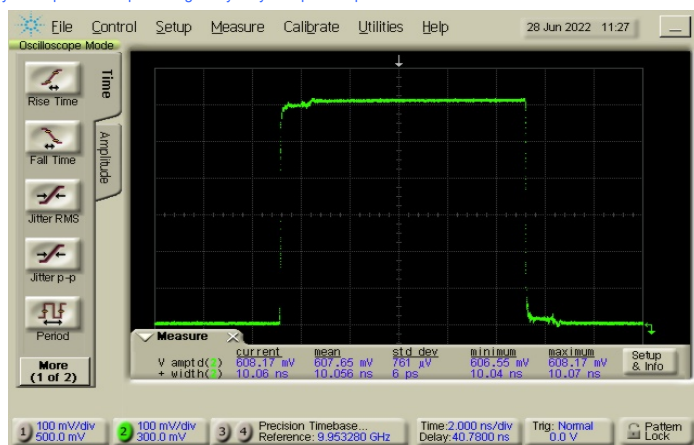
(1) Use square wave for minimal additive jitter, particularly at repetition below 100MHz. (2) The input couple is DC. (3) Repetition rate can be tuned by tuning the input clock frequency. Max. repetition rate is limited by pulse width. Please inquire for operation at <1MHz. The device can also be triggered 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-0100-S(D)-P(N)-T-N-SF(SS)-N

EPG-300B-0100-S-P(N)-T-A(N)-SF(SS)-C(N)

M: Module, **S:** Single-ended, **P:** Positive, **T:** Tunable,
B: Benchtop, **D:** Differential, **N:** Negative,

A: Amplifier,
N: No Amplifier,

SF: Standard Frequency,
SS: Single Shot,

C: Built-in Clock Generator
N: No Clock Generator