

Commercially available electroporators

Manufacturer	Leroy Biotech	Societe Jouan	Invitrogen	IGEA	Intracel	FID Technology	Pulse Biosciences	Harvard apparatus BTX
Name	ELECTROCELL B10	JOUAN	Neon	VITAE	TSS20	FPG 20-1NM4	Cell FX	Gemini X²
Output voltage	0±1000 V	0 - 1500 V	500 - 2500 V	500 - 3000 V	0.1 - 99.9 V	5 - 20 kV	0 - 11 kV	LV: 5-500 V HV: 505-3000 V
Number of pulses	1 - 10 000 or continuous	one pulse or continuous	1 - 10	1 - 100	1 - 999	depending on the load, it is necessary to determine a safe area for operation	1 - 300	<u>Square:</u> LV: 1-120 HV: 1-36 <u>Exponential:</u> 1-12 if R _{internal} < 100 Ω 1-24 if R _{internal} > 100 Ω
Pulse length	5 - 50 000 μs	5 μs - 24 ms	1 - 100 ms	50 - 1000 μs	1 - 999 ms	4 ns	200 - 550 ns	<u>Square:</u> LV: 10 μs - 999 ms HV: 10 μs - 600 μs <u>Exponential:</u> LV: τ = 1 ms to 5.158 s HV: τ = 0.5ms to 133.875 ms
Pulse frequency (1/P)	0.1 - 1000 Hz	up to 10 Hz	/	1 - 8000 Hz	0.1 - 100 Hz	max. 1 kHz	0.1 - 10 Hz	<u>Square:</u> 0.1 - 10 Hz <u>Exponential:</u> 0.03 - 0.2 Hz

LV = low voltage

HV = high voltage

/ = data not available