

# **Gene Electroporator**



#### Introduction:

BK-GE2CS Gene Electroporator consists of the main unit, gene electroporation cup, and dedicated connecting cables. It primarily uses electroporation to introduce DNA into competent cells, plant and animal cells, and yeast cells. Compared to other methods, the gene electroporator offers high repeatability, high efficiency, ease of operation, and precise control. Additionally, electroporation has no genotoxicity, making it an essential technique in molecular biology.

## Application:

- \* Electroporation of bacteria, yeast, and other microorganisms.
- \* Transfection of mammalian cells, plant tissues, and protoplasts.
- \* Cell hybridization and gene fusion.
- \* Introduction of marker genes for labeling and indicating purposes.
- \* Introduction of drugs, proteins, antibodies, and other molecules for studying cellular structure and function.

## Features:

- $\*$  High Efficiency. Short transformation time, high conversion rate, small tolerance.
- $\*$  Intelligent Storage. Experimental parameters can be stored for user convenience.
- \* Precise Control. Microprocessor-controlled pulse discharge.
- \* Aesthetic Design. Integrated design, intuitive display, simple operation.

#### **Technical Parameters:**

Model	BK-GE2CS		
Pulse Type	Exponential decay		
High Voltage Output	401~3000V		
Low Voltage Output	50~400V		
High Voltage Capacitance	10μF, 25μF, 35μF, 50μF, 60μF		
Low Voltage Capacitance	50μF, 100μF, 125μF, 150μF to 1560μF in 25μF steps		
Parallel Resistance	$50\Omega$ , $100\Omega$ , $150\Omega$ up to $1650\Omega$ in $50\Omega$ steps		
Operating System	Microcomputer control		
Time Constant	With adjustable RC time constant		
Power Supply	AC 220V, 50/60Hz(Standard); 110V, 50/60Hz(Optional)		
Standard Accessory	Gene seat*1, cuvette*2, fuse*2		
External Size(W*D*H)	400*300*200mm		
Package Size(W*D*H)	580*360*250mm		
Net Weight	5.5kg		
Gross Weight	7kg		

### Conversion Rates for Different Strains:

Туре	Pulse Voltage (V)	Resistance (Ω)	Capacitance (µF)	Electroporation Cup (mm)
E.Coli	1800	200	25	1
E.Coli	2500	200	25	2
E.Coli	3000	200	25	2
A.tumefaciens	2400	200	25	1
P.asruginosa	2500	200	25	2
S.aureus	2900	100	25	2
B.cereus	1000	200	25	2
S.pyogenes	2100	200	50	2
L.plantarum	2000	400	25	2
S.cerevisiae	1500	200	25	2
S.pombe	2300	200	25	2
C.albicans	1500	200	25	2
P.pastoris	2000	200	25	2

Note: Due to variations in experimental conditions across different labs, the above parameters are for reference only.