

Electro Cell Fusion & Electroporation System ECM[®] 2001

TECHNICAL SPECIFICATIONS



PRODUCT DESCRIPTION

The ECM 2001 is a versatile electro cell manipulation instrument. It generates a proprietary AC wave form for benign dielectrophoretic alignment of cells. With only microsecond switch-over time from AC to DC, efficient fusion can take place. After fusion AC re-application keeps cells together for the rounding off process. The 2001 DC square pulse feature can be used as a stand alone powerful electroporation system with a wide range of voltages and pulse lengths capable of operating into low impedance loads (20 ohms).

APPLICATIONS

- Hybridoma Production
- Cell Fusion
- Plant Protoplast Fusion
- Nuclear Transfer
- Tetraploid Production
- Mammalian Cell Transfection

FEATURES

- Versatile Electro Cell Fusion & Electroporation Instrument
- Microprocessor Controlled Precision
- Wide Range of Parameters

TECHNICAL SPECIFICATIONS

AC Parameters	(Alignment)
Proprietary nonsinusoidal wave shape:	
Frequency	1 MHz
Voltage	0 – 75 V (zero to peak)
Duration	0 – 99 sec
Post fusion AC	1/10 of alignment current
Post fusion ramp	1 – 9 sec
Pause between AC/DC	50 µsec

DC Pulse Parameters

(Fusion Electroporation)

High Voltage Mode:	
Voltage	10 – 3000 V
Pulse Length	1 – 99 µsec
Low Voltage Mode:	
Voltage	10 – 500 V
Pulse Length	0.01 – 0.99 msec/0.01 msec resolution
Number of Pulses	1 – 9

ORDER INFORMATION

Item #	Description
45-0011	ECM 2001EP Electroporation System includes, ECM 2001 Generator, Safety Stand 630B, Cuvettes 1 mm, 2 mm, 4 mm, pkg. of 30 (10 each), Cuvette Rack 660
45-0012	ECM 2001EM Embryo Manipulation System includes, ECM 2001 Generator Micro-Slides 450, 450-1, 453 and Connection Cable
45-0010	ECM 2001EF Electro Cell Fusion System includes, ECM 2001 Generator, Micro-Slides Models 450 and 453, Meander Fusion Chamber Model 454, Flat Electrode/Divergent Field Model 484, Electrode Adapter, Connection Cable, Safety Stand 630B Cuvettes 1 mm, 2 mm, 4 mm, pkg. of 30 (10 each), Cuvette Rack 660
45-0080	ECM 2001 Generator Only
45-0013	ECM 2001 / ENHANCER 3000 System: ENHANCER 3000 Probe, ENHANCER Interface Box, Oscilloscope with USB communications, ECM [®] 2001 Generator, Safety Stand, Cuvettes 1 mm, 2 mm, 4 mm, pkg. of 30 (10 each) and Cables