Specifications of Electroporation system

1) The system should consist of complete electroporation system for transfection of both eukaryotic and prokaryotic cells. It Should transfect all cell types, from bacteria, fungi, and plant cells.

2) The electroporation system should be Ideal for all electroporation requirements, including CRISPR, in vivo, in vitro.

3) The system should be compatible with cuvettes for electroporation of cell suspensions as well as specialty electrodes such as caliper or tweezer type electrodes for delivery of pulses in vivo in to plant callus or tissues.

4) The single system should be capable of delivering outputs as Waveform: Exponential or square and should have a compatible Voltage range of 05–3,000 V adjustable in 1-10V increments or better.

5) The system should consist of main generator unit and a separate cuvette chamber, should be able to accommodate at least two cuvettes at a time.

6) The System should have exponential decay wave capacitance of 10–500 V, 25– 3,275 μF in 25 μF increments.

7) The System should have exponential decay wave Resistance in parallel for 50– 1,000 Ω in 50 Ω increments.

8) The System should have Sample resistance of 20 Ω minimum at 10–2,500 V.

9) A broad, pulse timing range from 0.05 ms to 10 ms in 0.05 ms steps to 10 ms to 100 ms in 1 ms steps.

10)The system should have a color display touch screen the size of 5-10 inches for ease of program input, and system monitoring.

11) The system should be capable of connectivity to a PC and should be able to be controlled via a desktop/laptop PC

12)System should be able to store at least 400-500 user programs/protocols.

13)Input voltage of the System should be 220–240 VAC, 50/60 Hz

14)System should have Regulatory Safety features confirming to EN 61010, EMC EN 61326 Class A

Essential accessories: (Should be supplied along with the system)

1. Suitable reusable cuvettes of 1 mm, 2 mm and 4 mm 10 Nos each should be provided with the instrument.

2. Cuvettes should be suitable for use in electroporation and electrofusion of bacteria, yeast, insect and plant cells. Sterile cuvettes of 1, 2 and 4 mm each 100 nos. should be provided

3. A set of caliper and tweezer electrodes suitable for in vivo electroporation.

4. A suitable un interrupted power supply with battery backup.

Warranty terms and conditions:

1. A Warranty: 3-year warranty along with AMC for 4th and 5th year. And after sales support and service for 10 years.

2. Training: Demo training should be provided for 3-5 or more personnel.