

Technical specifications for electrochemical work station

The instrument should have following capabilities to measure cyclic voltammetry, cyclic charge-discharge, impedance measurements, and other electrochemical properties.

1. We should be able to measure with the voltage window of atleast to 0 to ± 30 V.
2. Scan rate capability to be minimum 1 mV/s to atleast 10000 V/s
3. Data acquiring capacity i.e. has to be less than 1 micro second.
4. We should be able to measure output current from minimum 10 pA to atleast 30 mA.
5. There has to be an option of current or power booster as extra accessories.
6. Frequency range: minimum 1 mHz to atleast 1 MHz
7. It should have options of cell connections of 2, 3 or 4 electrodes.
8. Power ratings: 240 V AC, 50 Hz
9. Should have provision for electrical isolation from earth ground
10. Noise level in the data should be less than 10 μ V rms.
11. Measurements and parameter to be controlled with the latest software interfaced to computer or laptop though USB cable
12. The software package must contain atleast two additional licenses
13. The main system will be a one unit with weight less than 10 kg with total dimensions lot more than 15,000 cm³.