

Annexure-A

Specification of Potentiostat:

Portable and Wireless (Bi)Potentiostat/ Galvanostat/ Impedance Analyzer that can be used for Voltammetric, Amperometric, Potentiometric and Electrochemical Impedance Spectroscopy (EIS) measurements. A complete solution for laboratory and fieldwork.

Available techniques 02 POTENTIOSTAT Voltammetry Linear Sweep Voltammetry, Cyclic Voltammetry, Square Wave Voltammetry, Differential Pulse Voltammetry, Normal Pulse Voltammetry, Differential Normal Pulse Voltammetry, AC Voltammetry, Linear Polarization Resistance Amperometry, Amperometric Detection, Zero Resistance Amperometry ,Fast Amperometry (tint < 0.1 s), PAD Pulsed Amperometric Detection, MAD Multipulsed Amperometric Detection, COUL Coulometric Detection, **EIS / FRA**,

GALVANOSTAT LSP Linear Sweep Potentiometry, CP Cyclic Potentiometry, PD Potentiometric Detection (galvanostatic), ZCP Zero Current Potentiometry (OCP), FP Fast Potentiometry (tint < 0.1 s) PSAG Potentiometric Stripping Analysis (galvanostatic), PSAF Potentiometric Stripping Analysis (faradaic), MPD Multipulsed Potentiometric Detection, MIXED TECHNIQUES * LSV+ AD Linear Sweep Voltammetry + Amperometric Detection CV+ AD Cyclic Voltammetry + Amperometric Detection *

Power Li-ion Battery	(2300 mAh) USB
DC	charger adaptor compatible (5V)
PC	interface Bluetooth® / USB
Operating mode	Potentiostat/Galvanostat/ Impedance Analyzer
DC- Potential Range	±4 V
Current ranges (potentiostat)	±1 nA to ±10 mA (8 ranges)
Maximum measurable current	±40 mA
Potential ranges (galvanostat)	±100 mV, ±1 V (2 ranges)
Applied Potential Resolution	1 mV
Measured Current Resolution	0.025% of current range 1 pA on lowest current range
Applied Current Resolution	0.1% of current output range
Measured Potential Resolution	0.012% of potential range
Potential Accuracy	±0.2%
Current Accuracy	≤0.5% of current range at 100 nA to 10 mA
External inputs/outputs Iout, Eout	2 Analog inputs, 1 Analog output, 2 Digital input/outputs, TX, RX, RTS signals for RS232 connection
LED indicators Power, Status, Measuring, Bluetooth®	
EIS Frequency Range	1 mHz to 1 MHz
Current ranges (EIS)	±1 nA to ±100 mA (9 ranges)
DC fix potential or OCP	-3.5 V to 3.5 V
AC Amplitude range	1 mV to 0.350 V rms (1.0 V p-p)

