

PRODUCT INFO SHEET

Electrochemical Cycler and Accessories for Battery & Energy Storage Materials Research – Compatible with All ePROBE *In-Situ* NMR Probes

Description

The BioLogic SP-150e is a portable electrochemical workstation designed to grow with your research needs. With up to two channels, this EIS-capable potentiostat is perfect for a wide range of general electrochemistry applications, but the ± 1 A current range makes it especially suitable for energy applications including battery, supercapacitor, fuel cell (RRDE compatible), and electrolysis research.

The SP-150e's versatile, comprehensive specification is complemented by BioLogic's benchmark control and analysis software EC-Lab. Advanced analysis techniques can be managed directly in the software (no need to export) with Z-Fit EIS fitting software also embedded in the interface. Control, analysis, fitting – everything is in one place, saving you time and facilitating electrochemical measurements.

The SP-150e is delivered with the necessary adapters and filters to make it compatible with all ePROBE *in-situ/operando* NMR probes and enable the real time analysis of battery materials, without interference between electrochemistry and the NMR acquisition. In addition, the cycler includes an eCHEM Reference Cell to test and calibrate the complete electrochemistry setup.





Technical Data

Voltage

Control Voltage:	Different measurement ranges available between [-20; to +20] V Compliance: ± 10 V adjustable
Voltage Resolution:	5 μ V to 305 μ V
Accuracy:	< 0.1 % Full Scale Range (20 mV)

Current

Current Ranges:	± 1 A to 10 μ A (6 ranges). Automatic current range available. Option: up to 800 A with four FlexP0012
Current Resolution:	0.004% of the range (min 760 pA)
Accuracy:	< 0.1 % Full Scale Range (min 20 nA)

Electrochemical Impedance Spectroscopy (EIS)

Frequency Range:	1 MHz down to 10 μ Hz. EIS quality indicators
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Advanced

Channels:	Standard: 1 Channel Option: 2 Channels
Electrochemistry Connections:	2,3,4,5 terminal lead
Cell Cable:	1.5 m and 5 m. Option: 3 m or 10 m.
Control Software:	EC-Lab® (incl. free updates) and EC-Lab® developer package Option: Laptop with EC-Lab® software included
Different Potentiostat Models:	Option: BioLogic SP-50e Option: BioLogic SP-200

Electrochemistry Interface and Accessories

Adapters:	Banana plug adapters, compatible with all ePROBE <i>in-situ</i> NMR probes
Filters:	Low pass filters with cut-off frequencies: 2.5 MHz, 5 MHz, 15 MHz Option: Customized filters with higher cut-off frequency for EIS
eCHEM Reference Cell:	Testing and calibration of DC and EIS capabilities of eCHEM Setup

