



# Essential single channel Potentiostats.

Robust, ampere capable, single channel instruments with 20 V control as standard (800 A capability with boosters)



# Essential measurement tools for electrochemists.

## SP-150e

From  $\mu\text{A}$  to 800 A

The power to do **more**



**Voltage:**  $\pm 10\text{ V}$

Adjustable between  $-20\text{ V}$  to  $+20\text{ V}$

**Current:**  $\pm 1\text{ A}$  down to  $20\text{ nA}$

**EIS:** Up to  $1\text{ MHz}$

**The only ampere capable potentiostat to boast high-current capability with boosters (up to 800 A) – a potentiostat that will grow with your research needs.**

- Current max  $\pm 1\text{ A}$
- Two channels (SP-150e): perfect for rotating ring disk electrodes (RRDE)
- EIS quality indicators: validate your impedance measurements
- Powered by EC-Lab<sup>®</sup> the benchmark for potentiostat control and analysis software
- Highly modular potentiostat. Users can easily add low/high current boosters (no factory upgrade required)

## Powerful, proprietary functionality unique with EC-Lab<sup>®</sup>...

### Modify-on-the-fly

This unique functionality gives freedom and control; enabling users to build experiments without having to anticipate and plan experiments from scratch. This leads to:

- Easier management of long-term experiments
- Increased creativity
- Easier set-ups

### Display & Embedded Analysis

- Global view
- Multigraph
- Improved visibility of data for easier monitoring
- EIS data modeling (Z Fit)
- CV data modeling (CV Fit)
- Range of fitting tools
- Data export

# SP-50e: The perfect instrument for **education** & general use

**Voltage:**  $\pm 10$  V

**Current:**  $\pm 1$  A down to 20nA

**EIS:** up to 1 MHz

**A  $\pm 1$  current range makes the SP-50e perfect for energy-based applications including battery, supercapacitor, fuel cell and electrolysis research**



- Highly cost-effective workstation—now with EIS
- Simple, easy-to-use, compact chassis
- Ideal for general use and education – perfect for new researchers
- Exploit the power and performance of EC-Lab with a limited budget

## Add-ons: instruments that grow with your needs

Options	Specification	Application
Low current option	LC option	Provides pA accuracy, for analytical electrochemistry, corrosion and also small battery cells
High Power booster	20 V boosters: 2, 5, 10, 20 A +/-3 V at +/-80 A 5V at +/-100 A 60V at 50 A* 12V at 200 A* * Up to four boosters can be connected together to increase current capability	Battery, supercapacitor, fuel cell, electroplating & electrolysis, Supercapacitor or fuel cell characterization Battery testing Battery pack characterization Large battery cells supercapacitors, or fuel cell characterization
EIS	Up to 1 MHz	EIS measurements can be made and validated with BioLogic EIS Quality Indicators

## ...and the ability to get more out of your experiment

### Energy-specific features

- $< 3 \mu\text{s}$  switching time from Potentiostat to Galvanostat
- Manage 3 electrode cell/control between positive and negative
- C-rate calculation and use in next technique
- 60 V with FlexP
- Safety limits

### Advantages

- Higher-quality measurements
- Online processed data
- Easier management of long-term experiments
- Easier set-ups

### Ethernet capable/Buffer

- Facilitate group-working. Share instruments and experiments on your local area network (LAN)
- Built-in buffer protects precious experimental data against PC crashes or electrical blackouts
- Easier management of long-term experiments
- Safer/more reliable data transfer

# Overview.

## ENERGY STORAGE & CONVERSION

Batteries  
Fuel cells & electrolyzers  
Supercapacitors  
Photovoltaics  
Redox Flow Batteries

## RESEARCH ELECTROCHEMISTRY

Analytical Electrochemistry  
Sensors

## CORROSION

## MATERIAL SCIENCE



BioLogic **Essentials** are workhorse potentiostat/galvanostats, designed for researchers who need robust, high-quality, electrochemical measurement equipment. No compromise on quality has been made on instruments whose high-performance and high-precision hardware is matched by a powerful, easy to use, and ever-evolving benchmark interface, EC-Lab.

Built around a modular design the multichannel VSP, VSP3-e and VMP-3e will grow with your research needs and help take your research to the next level.

Specification	SP-50e	SP-150e
Max current	±1 A	±1 A Down to nA range with low current option
Voltage	±10 V	±10 V (customisable to match 0 to 20 V) Up to 60 V with FlexP-0060
Impedance	Up to 1 MHz	Up to 1 MHz
EIS Quality Indicator	Yes	Yes
Bipot capability	No	Yes

### Need high-level EIS measurements?

Please refer to our **Premium Range** of potentiostat/galvanostats at [www.biologic.net](http://www.biologic.net)

### Innovation is engrained in our commercial DNA.

The first multi-channel computer-controlled potentiostat (MacPile, 1991), Ethernet connectivity and Embedded EIS are just some of the BioLogic innovations helping scientists around the globe. Our high-quality, high-performance instruments have been designed to withstand the rigors of time and the laboratory and give scientists increased freedom, flexibility and creativity. [www.biologic.net/about us](http://www.biologic.net/about-us)

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Shaping the future.  
Together.