



ScienceGears

Driving Scientific Excellence



# Product Catalog

Electrochemistry & Spectroscopy Solution for  
Research Excellence

# ABOUT US

**ScienceGears Pty Ltd** is an Australian-based scientific instrumentation distributor dedicated to empowering researchers with advanced solutions in electrochemistry and spectroscopy.

Founded by experienced researchers and industry professionals, ScienceGears partners with leading global manufacturers to deliver world-class instrumentation, application expertise, and training to laboratories and research organisations across Australia and New Zealand.

Our portfolio spans potentiostats/galvanostat, battery cyclers, spectroscopy systems (Raman, LIBS, NIR), electrochemical test cells, electrodes, and accessories — covering applications from energy storage, catalysis, and corrosion studies to biosensing, photovoltaics, and materials research.

**At ScienceGears, we believe in more than just supplying instruments. We provide end-to-end support, including:**

- ✦ Tailored product recommendations for specific research needs
- ✦ Application and technical support backed by real-world research experience
- ✦ Reliable after-sales service and training to help you get the most out of your instruments

Our mission is to be a trusted partner for researchers and engineers, offering cutting-edge tools that accelerate innovation in academia and industry alike.

**“ScienceGears — Your Partner in Research Excellence”**

# Product Overview

## 01. Electrochemistry

- Potentiostats / Galvanostats A
- Electrochemistry Accessories B
- Disposable Electrochemical Sensors C
- Spectroelectrochemistry D
- Photoelectrochemistry & Photovoltaics E
- Battery Cycler F
- Battery Environmental Test Chambers G
- Battery Cycler Accessories H
- Electrochemical and Microfluidic Platforms I
- Microfluidic accessories J

## 02. Spectroscopy

- Handheld Raman ..... K
- Lab Raman ..... L
- Online Raman ..... M
- Online FT-IR ..... N
- LIBS ..... O



# Electrochemistry

## 01. Potentiostats / Galvanostats

● Portable	A.1
● Single Channel	A.2
● Bipotentiostats & RRDE Systems	A.3
● Multichannel	A.4
● Modular	A.5
● Current Boosters	A.6
● Specialised Devices and Modules	A.7

## 02. Electrochemistry Accessories

● Working Electrode	B.1
● Reference Electrodes	B.2
● Counter Electrodes	B.3
● Electrochemical Cell	B.4
● H-Cell	B.5
● Electrode Clamp/Holder	B.6
● Membrane Electrode Assembly (MEA) Test Cells	B.7
● Corrosion Test Electrochemical cell	B.8
● Battery Test Cell options	B.9
● Spectroelectrochemical Cell	B.10
● In-Situ Raman Spectroelectrochemical Cell	B.11
● Photoelectrochemical Cells	B.12
● RDE/RRDE Electrodes	B.13
● Electrode Polishing Kit options	B.14
● Faraday Cage Options	B.15

## 03. Disposable Electrochemical Sensors

● 3D Porous Graphene Sensing Strip Electrode	C.1
● Thin-Film Microfabricated Electrodes	C.2
● Thick Film Screen-Printed Electrodes	C.3

# Electrochemistry

## 04. Spectroelectrochemistry

- Spectroelectrochemistry Raman ..... D.1

## 05. Photoelectrochemistry & Photovoltaics

- CIMPS Photoelectrochemistry ..... E.1
- CIMPS accessories ..... E.2

## 06. Battery Cycler

- CE-6000 Series ..... F.1
- CT-4000 Series ..... F.2
- CT-9000 Series ..... F.3
- CT/CTE-8000 Series ..... F.4
- CT/CTE-5000 Series ..... F.5
- EIS Battery Cycler Series ..... F.6

## 07. Battery Environmental Test Chambers

- Coin Cell All-in-one Testing System ..... G.1
- All-in-One Battery Testing System ..... G.2
- Constant Temperature Test Chamber ..... G.3
- Mini-All-in-one Testing System ..... G.4
- 4 Temperature Zone All-in-one Testing System ..... G.5
- Mini Constant Temperature Test Chamber ..... G.6
- High and Low Temperature Test Chamber ..... G.7
- Explosion-Proof Test Chamber ..... G.8

## 08. Battery Cycler Accessories

- Ring Connector ..... H.1
- Polymer Clamp ..... H.2
- Toggle Clamp ..... H.3

# Electrochemistry

●	Clamp Holder	H.4
●	Alligator Clamp	H.5

## 09. Electrochemical and Microfluidic Platforms

●	Drop-cell Connector	J.1
●	All-In-One Platform Add-ons	J.2
●	All-In-One SPE Platform Add-ons	J.3
●	Multi8x All-In-One Platform Add-ons	J.4
●	Multi-electrode Chip Platform	J.5
●	External Electrode Platform (EEP)	J.6
●	Replacements for Platforms	J.7
●	Device Accessories	J.8
●	All-In-One SPE Platform	J.9
●	All-In-One Platform	J.10
●	Multi8x All-In-One Platform	J.11

## 09. Microfluidic accessories

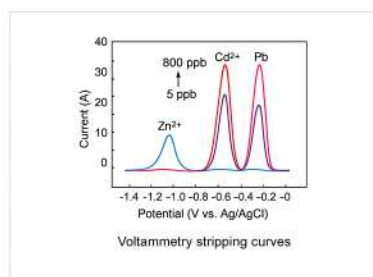
●	SPE Connectors	K.1
●	Thin-Film Connectors	K.2
●	External Electrodes	K.3
●	Syringe Pumps – NE Series	K.5
●	Syringe Pumps – LP Series	K.6
●	Flow System Packs	K.7
●	Peristaltic Pumps	K.8



# Portable Potentiostat

## CS100 Series Portable Potentiostats (CS100E with EIS / CS100 without EIS)

The CS100 Series brings high-performance electrochemical testing into a truly portable format. Compact, lightweight, and battery powered, these potentiostats are designed for both field use and laboratory research. The rugged build ensures reliable operation even outside controlled lab environments, while USB and Bluetooth connectivity provide flexible data transfer and remote control options.



Parameter	Specifications
Maximum Output Current	±100 mA
Maximum potential control	±10 V
Compliance voltage	±10 V
Potential resolution	1 $\mu$ V
Current sensitivity	1 pA
EIS frequency range (CS100E)	10 $\mu$ Hz – 1 MHz
Power supply	Built-in Li-ion battery (10 Ah @ 3.7 V) or USB-powered
Communication ports	USB / Bluetooth

- **Compact & Field-Ready** – Small (150 × 90 × 30 mm, ~500 g) and robust design, powered by a 10 Ah Li-ion rechargeable battery.
- **Wireless & USB Connectivity** – Supports both USB and Bluetooth, with an Android APP for portable operation.
- **High Sensitivity** – Detects currents down to 1 pA with 1  $\mu$ V potential resolution.
- **Electrochemical Impedance Spectroscopy (EIS)** – Available on the CS100E model, covering a broad frequency range of 10  $\mu$ Hz to 1 MHz
- **Research Applications** – Ideal for biosensor development, corrosion monitoring, battery and fuel cell analysis, environmental studies, and food/drug testing
- **Research Applications** – Ideal for biosensor development, corrosion monitoring, battery and fuel cell analysis, environmental studies, and food/drug testing
- **Advanced Software** – CS Studio software enables multi-graph visualization, automated test protocols, and detailed analysis including corrosion rate, Tafel slopes, polarization resistance, and EIS fitting

# Portable Potentiostat

## ECStat2020 Electrochemical Workstation

The ECStat2020 is a versatile electrochemical station built for multi-technique analysis in research and teaching labs. With a wide current and voltage range, high measurement resolution, and robust software support, it covers both routine electrochemistry and advanced material investigations.

**Applications:** Batteries, fuel cells, corrosion testing, electrocatalysis, biosensors.



Parameter	Specifications
Potential control range	$\pm 10$ V
Current range	nA – 1 A (configurable)
Compliance voltage	$\pm 12$ V
Techniques supported	CV, LSV, SWV, DPV, CA, CP, OCP, EIS
Frequency range (EIS)	10 $\mu$ Hz – 1 MHz
Resolution	1 $\mu$ V / 1 pA
Connectivity	USB / LAN
Software	ECStat Studio with automation & analysis

- **USB connection for both power and data transfer** – eliminating bulky external power supplies.
- Operated through **MicruX EC Manager software**, offering an intuitive interface and advanced control options.
- **Frequency Response Analyzer (FRA/EIS)** covering a wide spectrum from **10  $\mu$ Hz up to 1 MHz**.
- Access to **more than 25 powerful electroanalytical methods**, including **voltammetry, amperometry, potentiometry, and impedance spectroscopy**.
- Broad **compatibility with screen-printed electrodes (SPEs), thin-film electrodes, and multiple electrochemical platforms**.
- Supplied in a **protective carry case**, complete with accessories and software, ready for plug-and-play integration with any computer system.



# Portable Potentiostat

## ECSENS Bipotentiostat Interface

The **ECSENS Bipot** is a dual-channel electrochemical sensing interface designed for biosensing and portable diagnostics. With low-noise current measurement, dual working electrode control, and smartphone compatibility, it supports next-generation electrochemical sensor

**Applications:** Disposable sensor platforms, point-of-care testing, food/drug analysis, and academic teaching



Parameter	Specifications
Channels	2 (independent working electrodes)
Potential control range	$\pm 2$ V
Current ranges	pA – mA (auto-ranging)
Resolution	1 $\mu$ V / 1 pA
Supported modes	Amperometry, voltammetry, chrono techniques
Connectivity	USB / Bluetooth
Power supply	Rechargeable Li-ion / USB powered
Software / App	ECSENS software + mobile app support

- ⊕ **Ultra-miniature device** – At just 39 x 17 x 9 mm, ECSENS delivers robust performance in a pocket-sized form factor for versatile laboratory and field use.
- ⊕ **Effortless power and connectivity** - Powered and interfaced via USB for seamless integration with computers or compatible Android smartphones, simplifying setup and portability.
- ⊕ **Versatile electrochemical measurements** – Operates as both a bipotentiostat and potentiostat (multi-channel mode supported), supporting potential ranges of  $\pm 1.5$  V and currents from 0.25  $\mu$ A to 12.5 mA (maximum  $\pm 5$  mA).
- ⊕ **Broad electrode compatibility** – Designed for screen-printed electrodes (SPE), making it ideal for standard and custom sensor experiments.
- ⊕ **Complete accessory package** – Includes all necessary cables, connectors, and software for hassle-free interfacing and operation out of the box.
- ⊕ **Electroanalytical methods** – Supports essential voltammetric and amperometric analysis in both standard and BIPOT modes for advanced investigative flexibility.



# ScienceGears

Driving Scientific Excellence

Explore our precision instruments designed for electrochemical and spectroscopy research across energy and scientific applications.

Trusted by Leading Brands

NEWARE

micrux

Ai Admiral  
instruments

ZAHNER

CORRTEST  
instruments

JINSP

iGii



Follow Us



+61 493 868 335

info@sciencegears.com.au

sciencegears.com.au