

## > IP-HC-50: FULLY EQUIPPED H-CELL KIT

The **IP-HC-50** is a fully equipped, horizontally mounted and a dual compartment electrochemical H-Cell set-up for a wide variety of studies that require a separate compartment for counter and / or reference electrodes. Each compartment is capable to hold 50 mL of electrolyte. The construction is gas-tight having two separate chambers, each equipped with gas inlet and outlet. This allows bubbling the solution and evacuating gases. Chambers can be separated with an ion-exchange membrane (DuPont's Nafion® membrane – not included in the price), so the electrochemical products appearing at working and counter electrode do not affect the opposite electrode. Set-up is compatible with a power source meter or a Potentiostat / Galvanostat.



**Available Volumes:** 25 mL, 50 mL, 100 mL, 250 mL, 500 mL, and 1000 mL (ASTM Grade Hydrogen Permeation study)

**Customization Options:** YES. Photo-electrochemistry possible. Organic electrolytes possible. Nafion N115 Membrane available. Membrane diameter – 16 mm or 35 mm

**Wet Parts:** Glass & silicon and thus, no limitations due to pH of electrolyte.

**Includes:** Glass reservoirs with three-electrode set-up (2), Spacer (2), Grip nuts (2), Screws (2), Purge adaptor (2), Teflon support holder (2), Top silicon dummy (4), Plugs (6), Silicon tube 0.5 meters (4), Silicon septa (6)

### Related Applications:

- Electrochemical water splitting - HER / OER or any such electrocatalysis applications
- Redox flow battery setup
- Carbon Dioxide Reduction Studies
- Membrane research: Proton conductivity, Ionic conductivity, membrane efficiency
- Reference electrode testing
- ASTM grade Corrosion studies – Hydrogen Permeation
- Fuel Cell Studies: Hydrogen peroxide fuel cell, enzymatic fuel cell research, microbial fuel cell research, etc.

### Compatible Accessories:

- BASi Reference Electrodes (Aqueous or Non-Aqueous); BASi Working Electrodes (Standard disk type)
- BASi Counter Electrodes; BASi Working electrode (flat samples like ITO) holder.

### Ordering Information for Recommended Parts:

- IP-HC-50: Fully Equipped H-Cell Kit (50 mL Volume)
- MF-2052: Ag/AgCl (3M NaCl) Reference Electrode with Flex. Connector
- MW-1033: Coiled Platinum Wire Counter electrode
- MF-2012: Glassy Carbon Electrode (3 mm))
- MF-2024: Working Electrode Holder