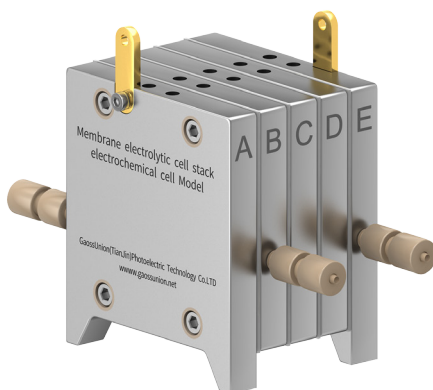
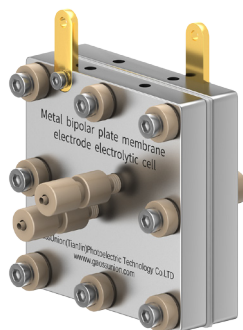
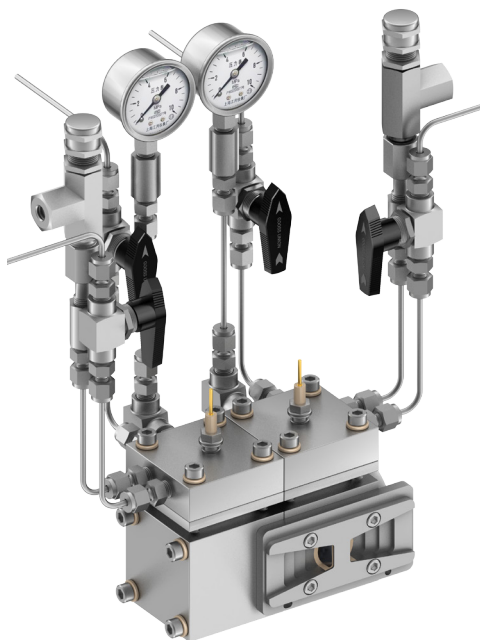


Electrochemical Product Catalogue

Electrolytic Cells Electrode



COMPANY

Company Profile Gaoss Union was established in 2008 in East Lake High-Tech Development Zone of Wuhan, known as "Optics Valley of China".

Ever since its establishment, Gaoss Union has devoted to research, development, production, sales and service of electrochemical products. It is a scientific and technological company with research of electrochemical reactions as well as design and manufacture of electrochemical devices as its major businesses.

Gaoss Union manufacture and sell three-electrode, electrolytic cells, flow cells, characterization cells, electrochemical materials, etc. required for electrochemical experiments, as well as provide customized electrode and electrochemical device services.

Welcome to inquire.



Specialized Function Cell Series

Swagelok battery testing cell (three-electrode system) Model: B001-1

Cell Body Material: Corrosion resistant PEEK

Reference Electrode: Ag/AgCl

Conductive Medium to Electrodes: Glassy carbon electrode (GC- Φ 3mm)

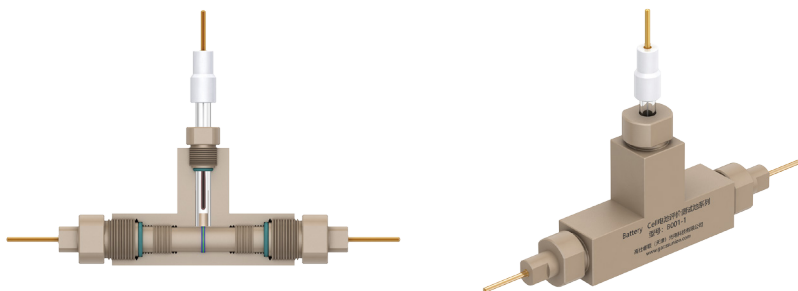
Positive and Negative Electrodes: The positive and negative electrodes consist of the test samples, with a membrane sandwiched between the two specimens.

Utilized for Simulating Coin-Cell Battery Testing: This system is employed to replicate and assess the performance of coin cell batteries.

Battery Testing: By securely tightening the glassy carbon electrodes on both sides, the positive and negative electrodes are firmly pressed against the conductive medium, ensuring effective simulation of battery testing conditions.

Opening the Reference Electrode for Additional Solution: The reference electrode can be unscrewed to introduce additional solution.

Operational Sample Dimensions of the Electrolytic Cell: 10/12/16mm



Swagelok battery testing cell (two-electrode system) Model: B001-2

Cell Body Material: Corrosion resistant PEEK

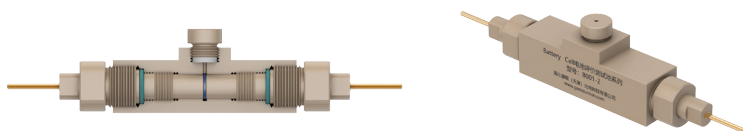
Conductive Medium to Electrodes: Glassy Carbon Electrode (GC- Φ 3)

Positive and Negative Electrodes: The positive and negative electrodes consist of the test specimens, with a membrane sandwiched between the two specimens.

Utilized for Simulating Coin-Cell Battery Testing: This configuration is employed to replicate and evaluate the performance of coin-cell batteries.

Battery Testing: By securely tightening the glassy carbon electrodes on both sides, the positive and negative electrodes are firmly pressed against the conductive medium, ensuring effective simulation of battery testing conditions.

Operational Sample Dimensions of the Electrolytic Cell: 10/12/16 millimeters.



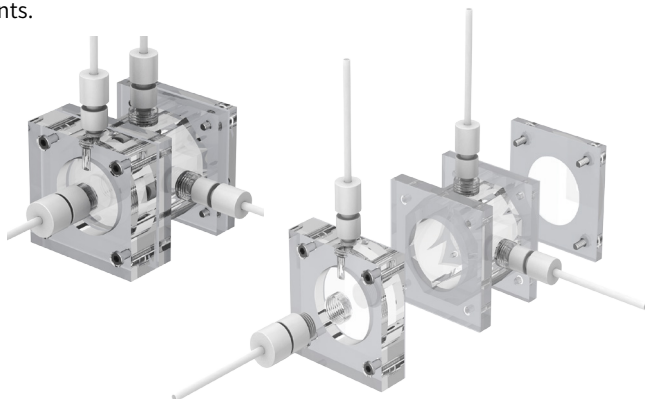
Specialized Function Cell Series

Metal-air battery test cell (three-electrode) Model: Zn-1

Material: PMMA (Polymethyl methacrylate)

Cyclable Gases: Capable of accommodating gases cycling loops.

Customizable Dimensions: Dimensions can be tailored according to specific requirements.



Metal-air battery test cell (two-electrode) Model: Zn-2

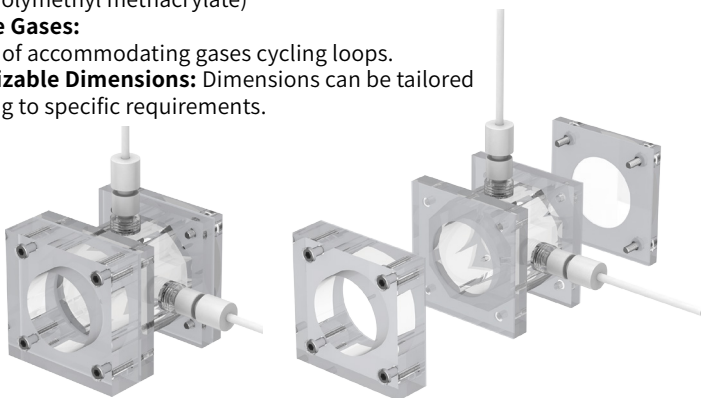
Material:

PMMA (Polymethyl methacrylate)

Cyclable Gases:

Capable of accommodating gases cycling loops.

Customizable Dimensions: Dimensions can be tailored according to specific requirements.



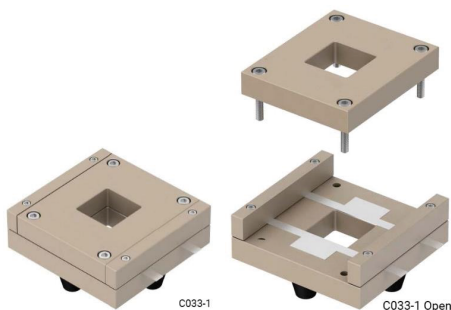
Model	Specifications
Zn-1	30mL, 50mL
Zn-2	30mL, 50mL

All sizes listed are common sizes, can be customized according to requirements.

Committed to the electrochemical equipment research&development, and manufacturing

Specialized Function Cell Series

Membrane conductivity test cell Model: C034-1



Material: PEEK case, platinum foil conductive component

Purpose: Designed for conducting experiments to measure the ion-exchange membrane conductivity (or other solid membranes).

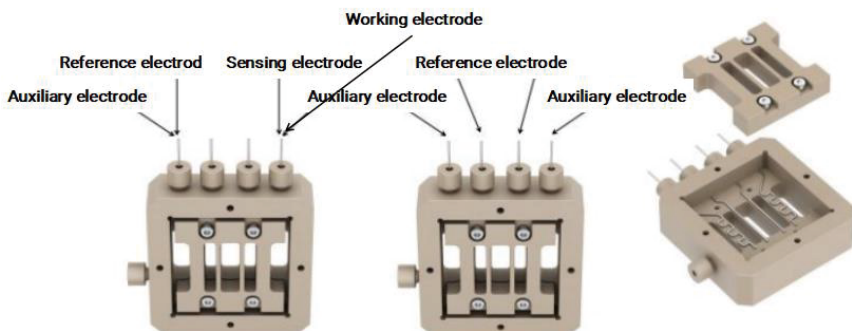
Usage Instructions: This electrochemical cell utilizes a two-electrode methodology. To ensure effective clamping, the four corners should be securely fastened by screwing, as depicted in the accompanying diagram.

Membrane conductivity test cell Model: C034-2

Material: PEEK case, platinum foil conductive component

Purpose: Designed for conducting experiments to measure the ion-exchange membrane conductivity (or other solid membranes).

Usage Instructions: This electrochemical cell utilizes a two-electrode or four-electrode methodology. To ensure effective clamping, the four corners should be securely fastened by screwing, as depicted in the accompanying diagram.



Model	Specifications
C034-1	Two-electrode
C034-2	Four-electrode

All sizes listed are common sizes, can be customized according to requirements.

Specialized Function Cell Series

Capacitive deionization device (desalination of seawater) Model: DQ-1

Capacitive Deionization (CDI) is a water desalination and purification technology based on the theory of double-layer capacitance. The fundamental principle involves the application of low voltage to the electrodes. Following this, cations, anions, or charged particles in the solution migrate towards the respective poles under the influence of the electric field and concentration gradient. They adsorb onto the electrode surfaces, forming a double layer, thereby achieving the desalination or purification objective. This technology is also referred to as the Electro sorption Technique (EST).

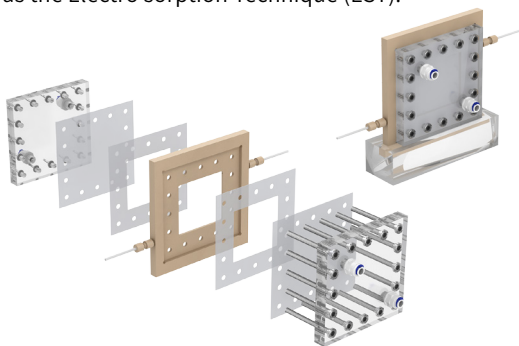
Device Specifications:

Protective panels: PMMA

Device material: PEEK

Dimensions: 140 x 140 x10mm

Anode-cathode distance: <3mm



Capacitive deionization device (desalination of seawater) Model: DQ-2

Improved upon the DQ-1 by incorporating a current collector plate to effectively achieve desalination or purification.

Device Specifications:

Protective panels on both sides: PMMA.

Device material: PEEK

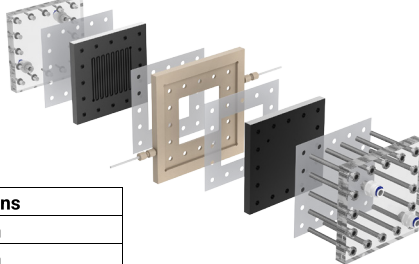
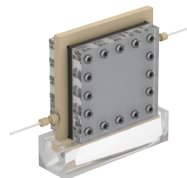
Current collector plate material:

Imported ultra-pure graphite (isostatic pressure 520).

Current collector plate design: Serpentine channel.

Current collector plate dimensions: 115 x 120 x 10mm.

Device channel dimensions: 50 x 50 x 2mm.



Model	Specifications
DQ-1	50*50mm
DQ-2	50*50mm

All sizes listed are common sizes, can be customized according to requirements.

Committed to the electrochemical equipment research&development, and manufacturing

Specialized Function Cell Series

Electrochemical-luminescent cell

This is a professional electrolytic cell for electrochemical luminescence, the cell body is chosen to use PEEK material. The bottom of the cell is illuminated and the working electrodes are made of light-transmissive ITO&FTO with an area of 1 cm^2 .

Diameter of pool body: 40mm, diameter of bottom step: $29 \times 1\text{ mm}$.

The height of the cell from the reference electrode and counter electrode is not higher than 55mm.

The pool contains inlet and outlet gases.

AgCl electrode and platinum counter electrode are standard.

