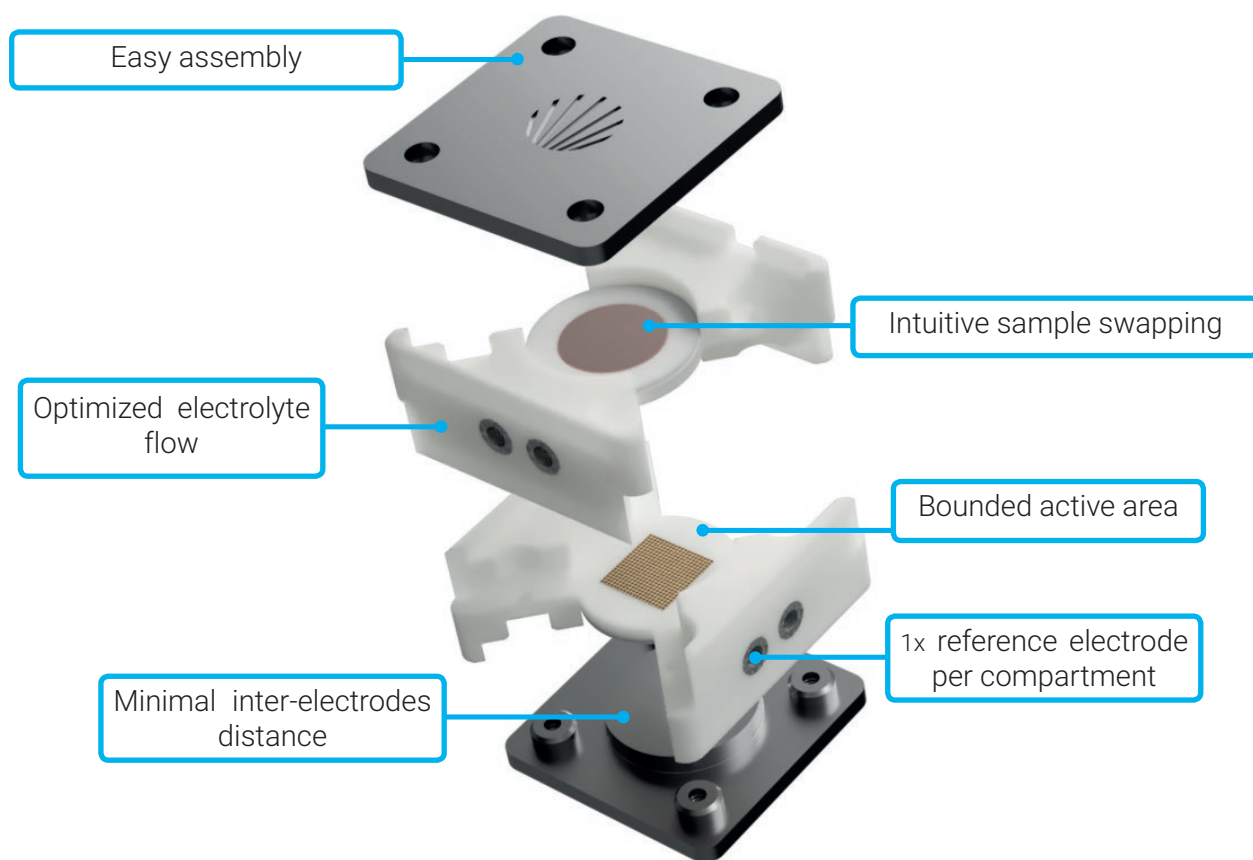


## FLC - Flow Cell for electrochemistry



The FLC was designed to simplify electrochemical measurements with flowing electrolyte. The cell is composed of two compartments separated by a membrane. Each compartment has an independent electrolyte-flow channel and its own reference electrode.

The FLC is made to test redox-flow systems, catalyst materials, ion conducting membranes, photochemical or gas-interface reactions.

The symmetrical design is made for maximum versatility: exchanging the top and/or bottom parts will allow the user to switch between a total of six possible configurations.

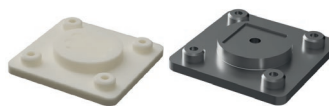
### Set content:



1x Holder



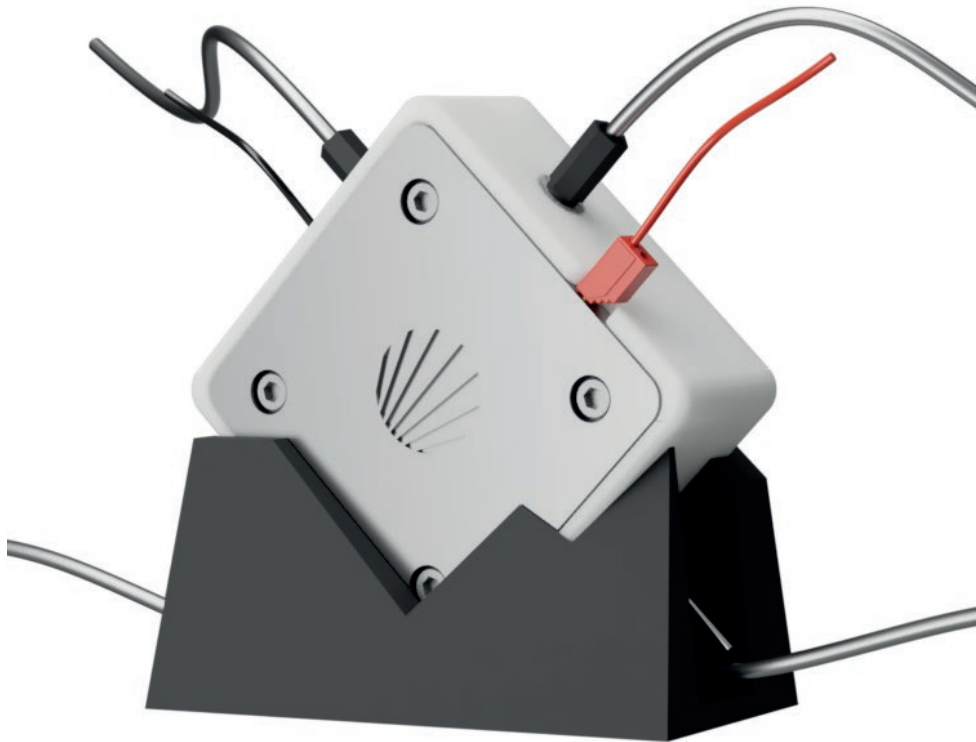
1x Cell



1x Extra top



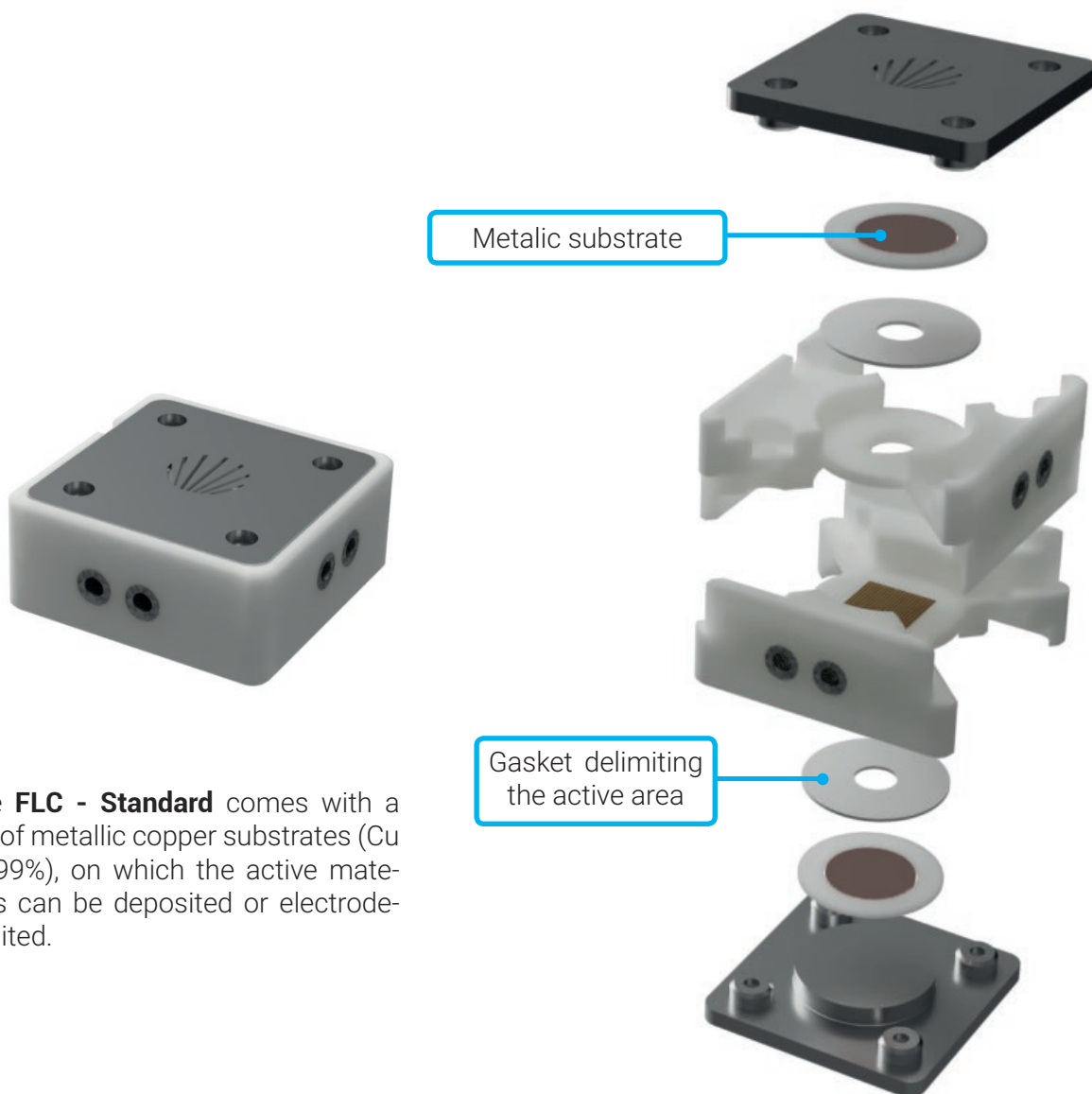
2x Metallic substrate



**Technical characteristics:**

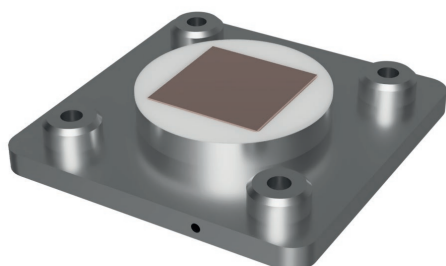
- PTFE body and gaskets for tightness
- Low cell volume (1.2 ml)
- Electrolyte flow up to 150 ml/min
- The Holder keeps the Cell in an upright position to improve the flow and gas evacuation
- 4-screw assembly with a simple hexagonal key (included in the set)
- Compatible with multiple membrane shapes (between 15 mm to 30 mm diameter)

## FLC - STANDARD: Flow Cell for plane metallic substrates

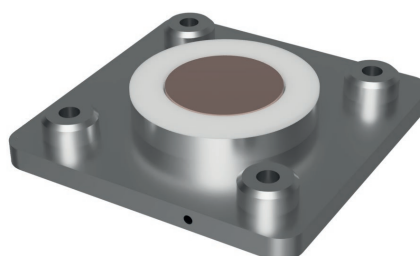


The **FLC - Standard** comes with a set of metallic copper substrates (Cu 99.99%), on which the active materials can be deposited or electrodeposited.

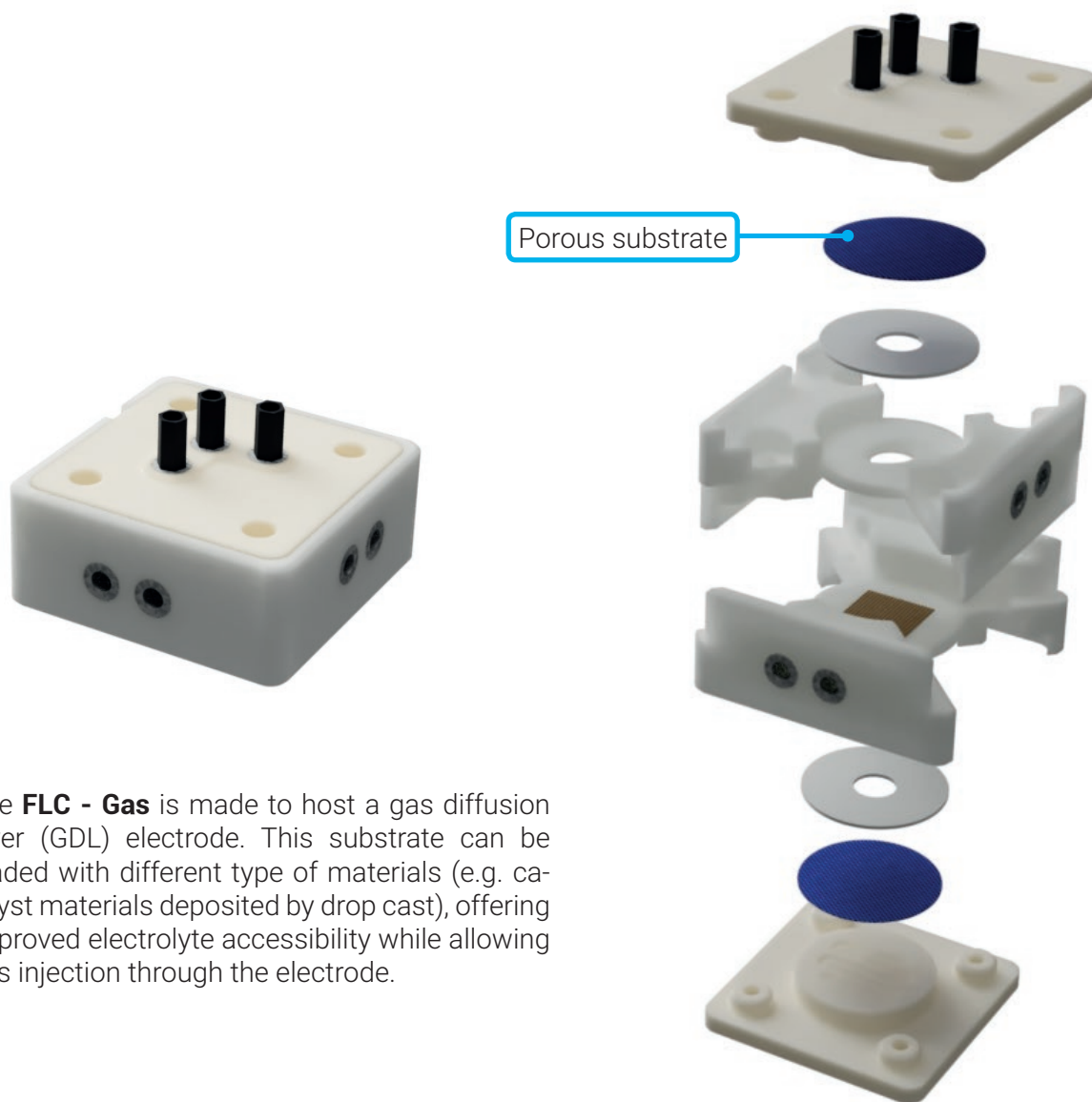
Square geometry:  
25 x 25 mm  
thickness 1mm



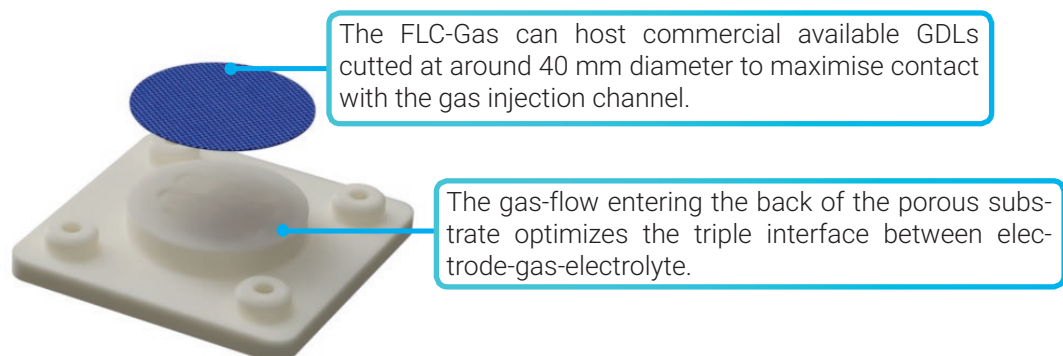
Circular geometry:  
diameter 25 mm  
thickness 1mm



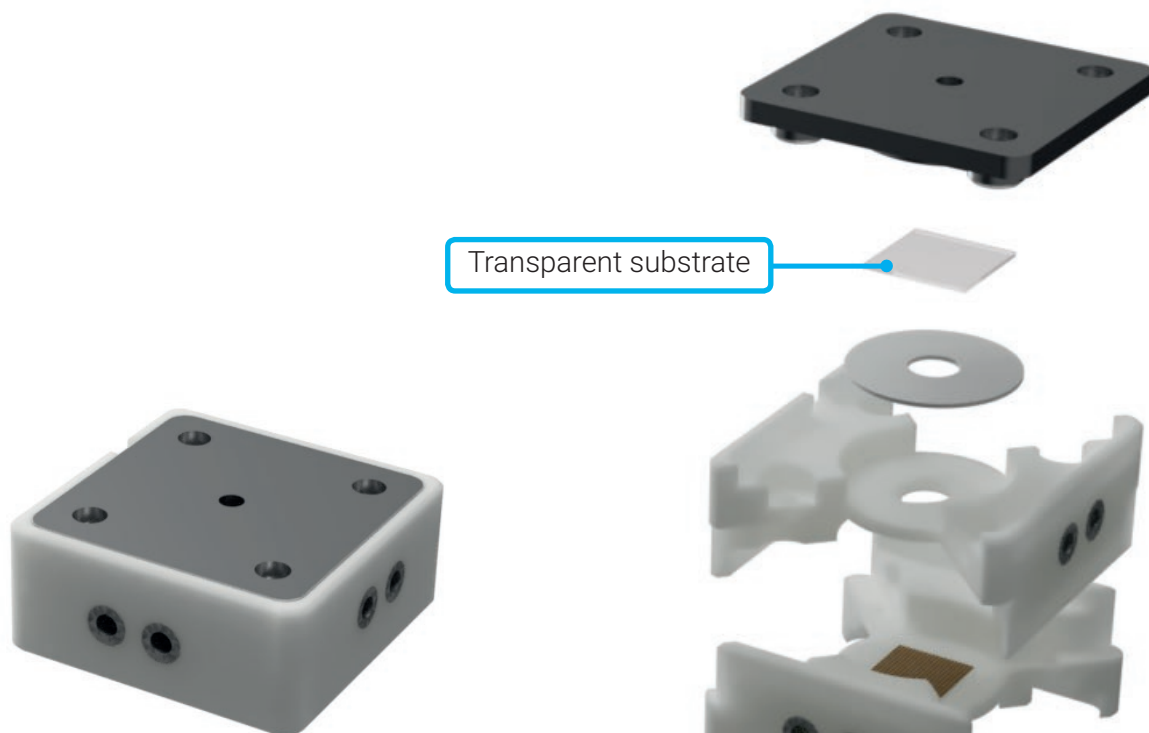
## FLC - GAS: Flow Cell for porous substrates



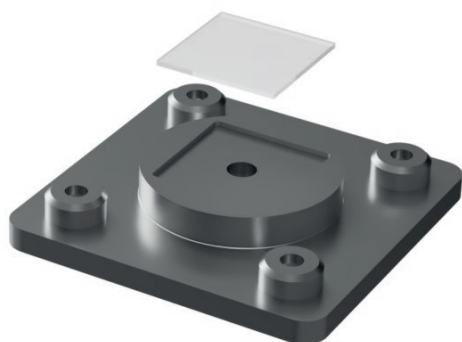
The **FLC - Gas** is made to host a gas diffusion layer (GDL) electrode. This substrate can be loaded with different type of materials (e.g. catalyst materials deposited by drop cast), offering improved electrolyte accessibility while allowing gas injection through the electrode.



## FLC - LIGHT: Flow Cell for photoelectrochemical substrates



The **FLC - Light** is compatible with commercial available transparent substrates and external light sources. The light source ray is concentrated through a 6mm diameter hole.



The cell is compatible with ITO and FTO substrates of 25 x 25 mm and 1.1 mm of thickness. The transparent substrates are fixed into the sample holder.

The electrical contact is assured by a conductive copper plate:



# FLC - Configurations overview



### Standard setup

Metallic vs Metallic substrate



### Gas setup

Gas vs. Gas substrate



### Light setup

Light vs. Light substrate



### Gas vs. Standard setup

Gas vs. Metallic substrate



### Light vs. Standard setup

Light vs. Metallic substrate



### Light vs. Gas setup

Light vs. Gas-substrate

