

# Localized Electrochemical Measurement

## EC Minicell



**EC Minicell** represent the most advanced tool for any localized electrochemical measurements on surface areas in the order of few mm<sup>2</sup>. The peristaltic pump and cell design allow for electrolyte flow in proximity of the Working Electrode avoiding detrimental concentration gradients of both reactants and products. The stereo lithography 3D printed cell is equipped with combined electrode that embeds both Ag/AgCl Reference Electrode and Platinum Counter Electrode. The electrolyte in the Reference Electrode can be both liquid or gel, allowing for upside-down measurements in the field. EC Minicell can be used for any electrochemical application with evidences of agreement with standard procedure literature data. The localization of the electrochemical reaction allows even for coulometric tests to determine metallic deposits thickness and in-situ determination of porosity via linear polarization on complex shaped objects. There are no constrains anyway on the type of electrochemical measurement that can be performed. The instrument can be connected to any AMEL's new potentiostat, not included, and it is fully controlled by the provided Windows<sup>®</sup> based software, with plenty of implemented electrochemical techniques. It comes is a complete set ready for operations.



PRODUCT CODE:

EC Minicell

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The following accessories are suggested for common operations of the cell.

468	Peristaltic pump & control unit
593/ABS	ABS 3D printed main body
593/CAP	Cap for ABS 3D printed main body
600/791	Sample gasket, blue, Ø3.2mm
600/792	Sample gasket, green, Ø2.2mm
600/793	Sample gasket, yellow, Ø1.5mm
468/SS	Sainless steel contact block
468/04	Insulating block
130302	BNC to 4mm banana splitter
805/CPG/5	Combined electrode with Ag/AgCl reference and Pt counter electrode
805/CPG/5G	Combined electrode with gel Ag/AgCl reference and Pt counter electrode
191/25M74	EC minicell connection cable for AMEL potentiostats