

Spectroelectrochemical cells

01

RAMANCELL

RAMAN cell for screen-printed electrodes (SPEs)

Cell suitable to perform **RAMAN experiments with screen-printed electrodes** along with a RAMAN Probe (ref. RAMANPROBE). Also, it has a small aluminum crucible holders to facilitate precise optical characterization of solid and liquid samples. The crucibles included have different depths: 1.6 mm and 4.2 mm.

This cell has been developed in PEEK with an innovative open-close system (no screws required) for an easy sensors replacement.



TLFCLRAMANCELL

RAMAN flow cell for thin layer flow-cell screen-printed electrodes (TLFCL SPEs)

The TLFCLRAMANCELL is suitable to perform **RAMAN flow spectroelectrochemical measurements in combination with TLFCL screen-printed electrodes**. It has a hole for fitting the reference RAMANPROBE getting an easy and optimized set-up for RAMAN experiments.

This cell has been developed in PEEK with an innovative open-close system (no screws required) for an easy sensors replacement.



TRANSCCELL

Cell for transmission experiments with screen-printed electrodes

This cell is suitable for conducting **transmission experiments with transparent substrate screen-printed electrodes** in conjunction with a transmission fiber (ref. TFIBER-VIS-UV), collimating lens (ref. CLENS) and reflection probe (ref. RPROBE-VIS-UV).

The cell is developed in PEEK with an innovative open-close system (no screws required) for an easy replacement of the sensors.



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Spectroelectrochemical cells

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REFLECELL

Cell for reflection experiments with screen-printed electrodes

This cell allows to carry out **reflection experiments with screen-printed electrodes** in combination with a reflection probe (ref. RPROBE-VIS-UV).

The cell is made in PEEK with an innovative open-close system (no screws required) for an easy replacement of the sensors.



TLFCL-REFLECELL

Reflection flow cell for TLFCL SPEs

This cell is a suitable support for **spectroelectrochemical measurements in flow with TLFCL SPEs**, thanks to its design with a hole to place the reference RPROBE-VIS-UV.

In combination with the ref. TLFCL-FLOWFITTING and TLFCL-INLINEPORT, an easy and comfortable setup for reflection experiments under flow conditions is achieved.

In addition, it has an innovative open-close system (no screws required) for an easy sensor replacement.



PTGRID-TRANSCELL

Cell for bulk electrolysis

The PTGRID-TRANSCELL cell allows mass electrolysis to be easily performed while **transmission measurements** (1 mm optical path) are acquired in the solution close to the electrode.

The cell also includes the platinum grid working electrode, platinum counter, and a Ag/AgCl chloride reference electrode.



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Spectroelectrochemical cells

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RAMANCELL-C

Raman spectroelectrochemical cell for conventional electrodes

Cell with support included for **Raman spectroelectrochemical measurements**. It is **designed in PEEK** and has a **magnetic opening and closing system** (without screws).

It is useful for experiments in **aqueous and organic solvents** (recommended maximum volume 3 mL).

The cell is designed be used with ref. **RAMANPROBE** and **conventional Metrohm electrodes**. Thanks to the different positions in the top cover of the cell you can adjust the focal distance of RAMANPROBE in order to easily optimize your measurements.

Suitable Metrohm electrodes are as follows:

- Working electrode (WE): glassy carbon (ref. 6.1204.300), platinum (ref. 6.1204.310), gold (ref. 6.1204.320) and silver (ref. 6.1204.330).
- Counter electrode (CE): platinum (refs. 6.0343.000 and 6.0343.100) and steel (ref. 6.0343.110).
- Reference electrode (RE): Ag/AgCl (refs. 6.0728.010, 6.0728.110 and 6.0728.120).



REFLECELL-C

UV-Vis/NIR spectroelectrochemical cell for conventional electrodes

Cell for **UV-Vis/NIR spectroelectrochemical measurements** with conventional electrodes. **Designed in black PEEK**, this cell with an **innovative open-close system** (no screws needed) facilitates the performance of spectroelectrochemical experiments in aqueous and organic solvents (volume recommended 3 mL).

The cell is suitable to be used with reflection probes (refs. **RPROBE-VIS-UV** and **RPROBE-VIS-NIR**, Metrohm DropSens) and the following electrodes (Metrohm) – Not included with the cell:

WE: glassy carbon (ref. 6.09395.014), platinum (ref. 6.09395.024), gold (ref. 6.09395.034) and silver (ref. 6.09395.044).

CE: platinum (ref. 6.0343.100) and steel (ref. 6.0343.110).

RE: Ag/AgCl (refs. 6.0728.010, 6.0728.110 and 6.0728.120).

In addition, two Metrohm caps (ref 6.2730.030) can be used for closing the cell.

In order to facilitate the experiments, a holder is also included.



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