Easy Data Import
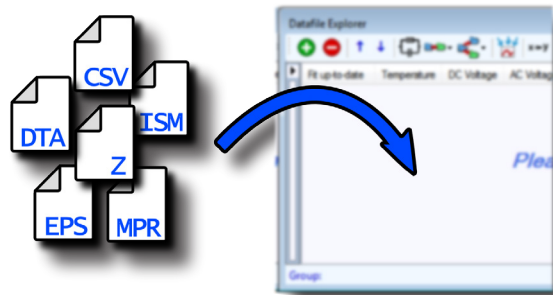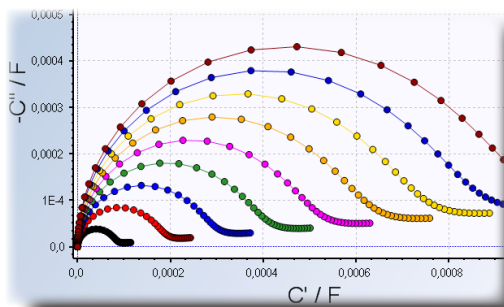

- Import more than ten[SDK] different data file formats or arbitrary text files.
- Easy drag & drop operation.
- Read and use additional metadata from data files like temperature or DC bias.
- Easily duplicate or merge data files as needed.

Versatile Evaluation Tools

- Display and fit data in the impedance, complex capacitance or admittance plane[SDK].
- Visualize your spectra in multiple different representations like Nyquist or Bode plots[SDK].
- Overlay multiple spectra for easy comparison.

[SDK] Extendable with the RelaxIS SDK

RelaxIS - Impedance Spectrum Analysis is a fast and powerful software solution for analyzing electrochemical impedance spectra.

It allows for the quick and comfortable evaluation of large amounts of spectra by combining powerful fitting algorithms with a modern user interface.

RelaxIS supports a broad variety of file formats from different hardware manufacturers as well as arbitrary text formats. Files can be loaded by simple drag & drop operations. It is possible to perform automatic fitting of different standard spectra as well as using arbitrary, user-defined equivalent circuits.

Multiple advanced features like the live preview of fit results, fitting of temperature dependent data to Arrhenius and VFT functions, a circuit simulator and powerful export and reporting capabilities make **RelaxIS** a valuable asset for everyone using impedance spectroscopy.

For questions, quotes and orders, please contact us:

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Germany

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T +49 6151 8707187
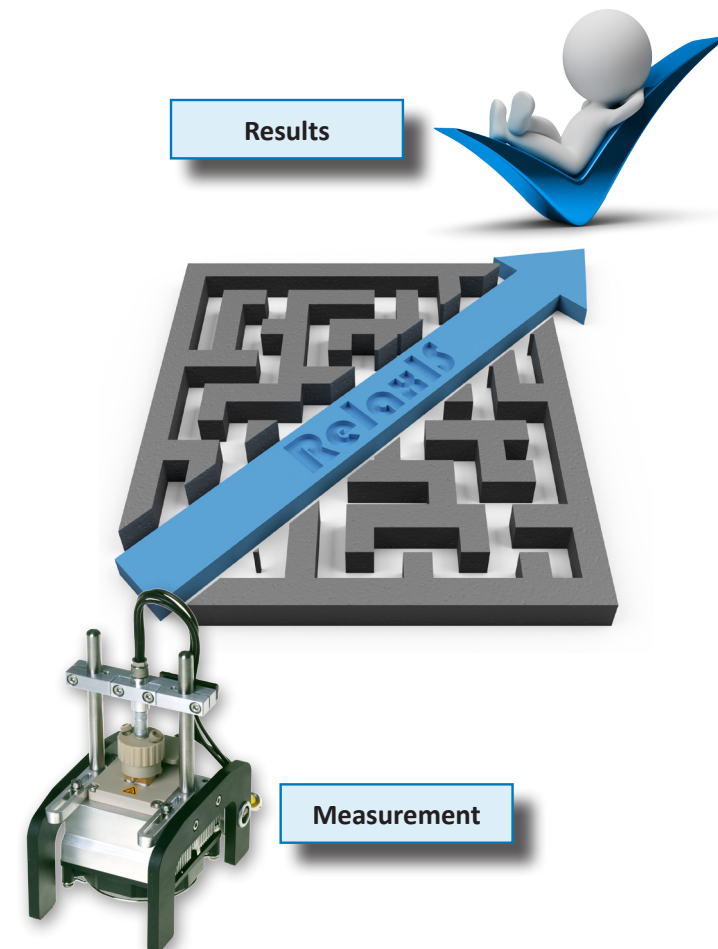
www.rhd-instruments.de

RelaxIS 3
Impedance Spectrum Analysis

Focus your attention on the results and not on how to obtain them.

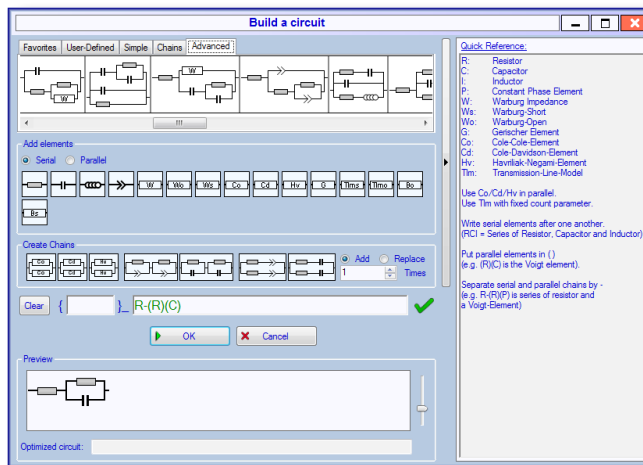RelaxIS - Impedance Spectrum Analysis eases impedance data analysis.

Results

Measurement

rhd instruments
flexible cell solutions

Main Features

- Easy to use drag & drop import of various data formats.

- Visualize and compare multiple spectra in Nyquist or Bode plots.

- Initialize fits using graphical aides or just use the Auto Fit without any initialization!

- Automatically evaluate spectra with specialized wizards.

- Fit even large amounts of spectra with modern algorithms and UI.

- Use a large model library, extendible with your own equivalent circuits and formulas.

- Export results easily with user-defined report templates, or raw data exports.

- Learn about impedance spectra with the RelaxIS Circuit Simulator.

- Extend RelaxIS with your own ideas using the RelaxIS SDK.

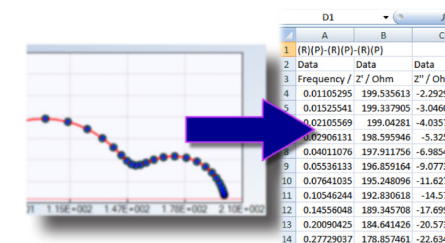- Use RelaxIS as a central data server with RelaxIS Remote.

Element	Value	Relative Error
CPE Q	4.70E-9 Fs$^{(\alpha-1)}$	0.17 %
CPE α	0.93	0.01 %
R	57.7E3 Ω	0.35 %

Equivalent Circuits

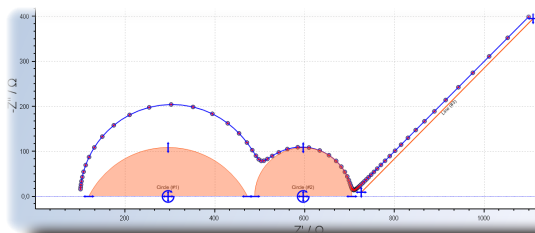- Use a large library of more than 70 pre-made, common equivalent circuits and models.

- Quickly create your own desired circuits.

- Create new circuit elements[SDK] to solve your tasks.

Data Fitting

Determination of fit start values by simple drawing using the circuit and line tool.

- Use a combination of some of the most powerful fitting algorithms and data weighting options[SDK].

- The Auto Fit function can initialize and fit any model automatically!.

- Calculate parameters by drawing circles and lines.

- Save precious time by using the extensive batch fitting possibilities.

Data Handling

- Create further evaluations[SDK] of fit parameters as a function of metadata, e.g. Arrhenius or VFT-Fits.

- Easy export of any type of data into text formats for use in third-party programs.

- Export graphs or equivalent circuits directly as images for use in presentations.

- Screen potential circuits with a genetic algorithm.

Additional Features

- Calculate the Distribution of Relaxation Times (DRT) for your impedance spectra!

- Simulate arbitrary equivalent circuits with free options in the RelaxIS Circuit Simulator.

- Determine the quality of your data by linear Kramers-Kronig testing and residual analysis.

- Extend RelaxIS with your own plugins using the RelaxIS SDK.

- Use RelaxIS as a central data server with RelaxIS Remote and RelaxIS WCF Link[SDK].