

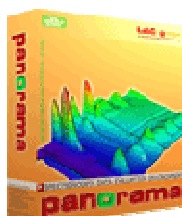
Product Information

Our Standard Products

We offer easy to use spectroscopy products with a vast number of default and optional functionalities:

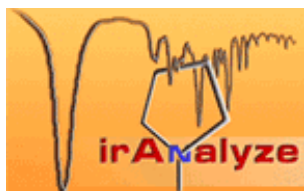


panorama Pro



... is a classic high-end software platform including data manipulation, evaluation and basic quantification. This is the perfect working environment for experts and power-users.

irAnalyze



... is a high sophisticated IR spectrum interpretation tool. Based on an IR spectrum it provides you with automatic results for IR bands to functional group correlations and their characteristic frequencies. Furthermore it is a comprehensive dictionary to browse frequencies for correlated IR bands.

RAMalyze

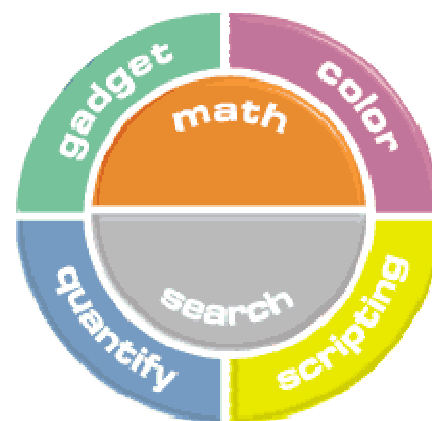


... **RAMalyze** means Raman spectrum interpretation and functional group assignment. The well proven functions of **irAnalyze** are now available for Raman interpretation, too. You only need a few clicks to get an automatic functional group assignment of prominent Raman bands in your spectra.

Numerous add-on modules are available to enhance the standard functionality of our products according to your requirements.

panorama is an ideal OEM platform for you...

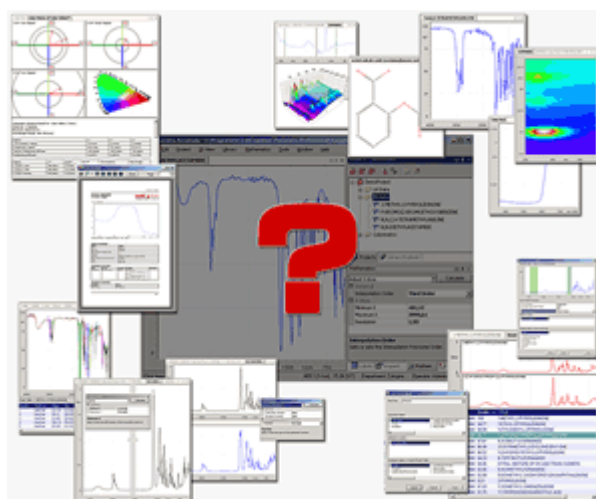
On request we add your personal brand to **panorama**.



What is **panorama**?

panorama is a modular laboratory software solution for spectroscopic data...

- Manipulation
- Evaluation
- Acquisition
- Archiving
- Searching
- Calibration
- Printing
- Converting
- and more...



It is designed to perfectly assist you and to keep you focused on your daily work instead of computer or software problems.

Supported File Formats

panorama supports the file import and export from/to all major data formats like:

- Galactic's SPC data
- JCAMP-DX data
- Thermo Nicolet's SPA data
- Perkin Elmer's SP data
- Etc.

2D and 3D Data Visualization

panorama displays 2 dimensional analytical data with axes, units and other important related information on the application workspace at a glance. All needed basic and many advanced operations to analyze your data are available:

3D analytical data is visualized as three dimensional cube or as two dimensional top down view. Advanced zooming and rotating functions are available to view the data from all relevant positions. You have the opportunity to display 2D cuts online and move through your 3D data in real time. 2D cuts can be extracted as new 2D data objects for further processing.

Evaluation and Manipulation Tools

All 2D and 3D spectroscopic data can be manipulated with just a few mouse clicks. Manipulation operations can be undone and redone with ease unlimited times. Frequently used mathematical operations are automatically stored in a math operation history and can be applied to subsequent data sets.

All data manipulations are logged in an audit trail. This audit trail is attached to the manipulated object for full **CFR 21 part 11** compliance.

Mathematical functions:

- ATR correction
- Multiplicative scatter correction
- Standard normal variate correction
- Smoothing
- Baseline correction
- Normalization
- Cutting
- Spectrum arithmetics (add, subtract spectra, etc.)
- Averaging
- Noise statistics
- Find Peaks
- Detrending
- Thickness Correction
- Unit Conversion for X- and Y-Axis
- and more...

Professional Reporting

panorama contains powerful, but still easy to use, reporting capabilities. All analytical data and its related information can be directly printed using predefined print layout templates. The templates are easy to edit and modify and automatically assigned by the software to the current object to be printed.

In addition inter-application exchange off all relevant data via the Windows Clipboard is supported. Just paste a picture of the examined spectrum area into your **Winword** report or transfer the spectral data to **Excel** by using Copy/Paste.

Add-On Modules

The list of add-on modules is perpetually enhanced according to our customer's needs. One or more of the following modules can be combined with our products.

Quantify Add-On Module

... is an expert in multivariate data analysis with quantitative methods like PLS and MLR. A convenient and intuitive wizard guides you through all steps of calibration model development. Complex statistical methods become very easy to use even for non-experienced users.

Search Add-On Module

... is an ideal add-on to archive your spectroscopic data and related information. It includes spectrum and full text search functionality on spectral libraries of various different library formats or directly on data in the file system.



We support commercial libraries from our partner

Scripting Add-On Module NEW

... is the ideal enhancement for custom work flow automation. A convenient script recorder records a series of operations in the software and lets the user repeat the sequence by just one click. The underlying Visual Basic compatible macro language provides a powerful tool to expert users for development of custom algorithms and personal add-on modules.

Security Add-On Module NEW

... provides data access control and permission schemes based on a built-in user administration. Users will only have access to program functions and data they are allowed to use. Hierarchical permission levels allow work flow oriented release of data objects according to your company's organizational structure.

irAnalyze - IR Spectrum Interpretation and Functional Group Assignment

irAnalyze is a sophisticated tool to assist you with IR spectrum interpretation. Only a few clicks are necessary to provide you with an automatic functional group assignment of prominent IR bands in your spectra.

Assignment is done based on a set of more than 1000 interpretation rules covering almost all functional groups in organic and inorganic chemistry.

A built-in functional group browser shows all applicable functional groups at a specific wavenumber in your spectrum. Even experts and inexperienced users can easily review potential functional groups located at desired positions without time consuming digging in printed functional group tables.

irAnalyze assists the analyst with knowing more than 400 functional groups and approximately 1000 characteristic IR band frequencies. It provides high quality functional group assignments in rather short time applying automatic or interactive analysis mode.

What is RAMalyze?

RAMalyze means Raman spectrum interpretation and functional group assignment. The well proven functions of **irAnalyze** are now available for Raman interpretation, too. You only need a few clicks to get an automatic functional group assignment of prominent Raman bands in your spectra.

Assignment is done based on a set of more than 1000 interpretation rules covering almost all functional groups in organic and inorganic chemistry.

Comprehensive sample analysis

Combine Raman interpretation with **spectral library search** to improve the quality of your interpretation results. A combination of both methods yields even better high quality spectrum analysis. Even for unknown compounds in R&D this is a must!

Other Features

- Interactive and automatic interpretation mode
- Enhanced spectrum pre-processing with baseline correction and peak detection
- Displaying identified peaks
- Highlighting all identified functional group assignments
- Show functional group definition in **Rule Designer**

IR and RAMAN Spectrum Interpretation in one Software!

If you have purchased both modules for IR and Raman interpretation, you can easily toggle between both methods in the software.