

SpectraRTS[™]

Real-Time Process Analysis Software

SpectraRTS is leading edge Windows[®] based software utilized with analyzers for process monitoring, analysis and control. SpectraRTS delivers flexible set-up and control of your system, extensive diagnostics, easy-to-use scripting and robust DCS communications.

SpectraRTS Data Display

- Easy access tabs display results and system diagnostics
- Color-coded status information with click access to detailed information.
- Full integrated development environment for VB.Net[™] compatible scripting language.
- DCS communications status.
- Display of statistical data with custom sizing and splitter windows.

SpectraSuite™

Software for real-time process analysis, model development, data acquisition, validation routines and environmental reporting





- 1 Quick spectral display
- 2 Tabular display prediction results and analyzer status
- 3 Spectral diagnostics
- 4 Alarm status
- 5 Spectral display
- 6 Tabular results and scripting engine
- 7 Trending display

SpectraSuite™

Spectra Quant™

Advanced Chemometric Software

SpectraQuant is leading edge Windows® based chemometric software utilized on our Analect,™ PIONIR,® and RPM™ Analyzers for generating predictions. Leveraging Principal Component Analysis (PCA/PCR), SpectraQuant consolidates today's most recognized features for modeling complex multi-component processes.

SpectraQuant Chemometric Modeling

- Incorporates proven benefits of constrained principal component regression with the tools available in the Eigenvector Research PLS Toolbox™ Suite.
- Incorporates baseline constraints, pathlength constraints as well as spectral interference constraints.
- Features robust and intuitive user interface that includes a flow chart for step-by-step guidance through the model development process.
- Allows for multiple baseline corrections.
- Allows for easy frequency selection.
- Performs pathlength corrections.



- 1 Method progress status
- 2 Correction spectra selection
- 3 Plot calibration data
- 4 Region and baseline selection
- 5 Step by step analysis flow chart

SpectraSuite™

Spectra **Q**™

Process Development Software

SpectraQ enables the effective use of AIT's instruments & sampling accessories for routine laboratory analysis and instrument validation. SpectraQ is a software application designed to collect calibration spectra & perform routine quantitative analysis on samples. It is unique in the fact that it's designed to integrate seamlessly with AIT's SpectraRTS[™] process spectroscopy software.

SpectraQ incorporates a Routine Analyzer Validation Protocol that confirms the analyzer's performance is harmonized for the data collection mode. In the background and data collection mode, simple color-coded alarms alert the user to readiness and validity of the analyzer including system diagnostics. User prompts and status indicators provide for step-by-step instructions and verification of procedures. Customizable reporting functions allow the user to make one simple click to retrieve tabular reports including system diagnostics.



- 1 Sample collect with user selectable analysis method
- 2 Easy sample validation
- 3 CSV-customizable reports & diagnostics Spectral collection
- 4 outputs can be saved in 3 types of file formats
- 5 outputs can be saved in 3 types of file formats
- 6 Status indicators and user prompts verify procedures

SpectraSuite™

SpectraEVM[™]

Real-Time Environmental Monitoring Software

SpectraEVM is an environmental reporting package that allows continuous reporting of up to 99 streams for use in a CEMS or other ambient air monitoring applications. It provides flexible stream sequencing, alarming functions and historical archiving for reviewing past data.

Each channel or process stream will use color coding to indicate overall status at a glance to the user. There are two levels of alarms including yellow and red; yellow for warning level alarms and red for failure level alarms. In the event of an alarm of any type, the time of last alarm is displayed just above the stream number.

Streams can be sequenced in any user defined order. Methods can be created to establish specific stream sequencing events.

Historical data can be both archived and viewed. Trending functionality can be accessed through the SpectraRTS engine. In the event that the user has selected a date that has past, the user interface will update with the historical information and will show a message which lets the user know that the stream information is historical.





- 1 Primary HMI with status indicators for each stream
- 2 Current scan status
- Stream configuration set files and parameters
- Method name

Applied Instrument Technologies

2121 Aviation Drive, Upland, CA 91786 (909)204-3700 T • (909)204-3701 F • ait@AlTanalyzers.com • www.AlTanalyzers.com

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