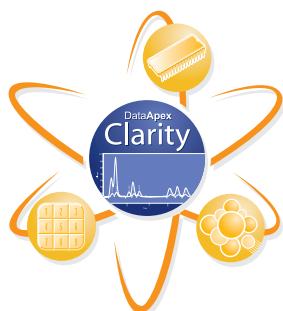# Clarity PDA Extension

Software module for processing 3D data from Photodiode Array Detectors

The Clarity PDA module is a tool for processing data that has been acquired from photodiode array detectors. Spectral data, together with chromatograms, add a third dimension to data analysis.

The Clarity PDA module expands the capability of Clarity Chromatography Software by providing interactive spectral analysis, peak purity analysis and compound identification that is based on a spectral library search. PDA data can be displayed in a set of optional views including 3D rendering.

The PDA Extension is an optional addition to Clarity software, it cannot be used as a standalone program.

Clarity PDA Extension
Software module for processing 3D data from PDA detectors

The PDA Extension is an optional, fully integrated addition to Clarity software. It can be ordered as a part of new software or as an extension to existing software.

The LC-PDA mode is selectable for any LC Instrument within a station. The PDA Extension is also compatible with Clarity Offline software.
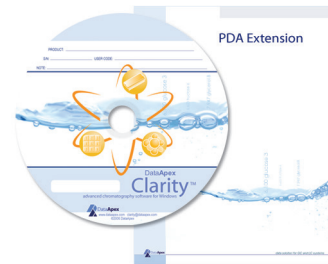
Features

PDA Data: *All data is saved in a single file; a chromatogram at any wavelength or a spectrum only can be simply recalled after an analysis for review. UV-VIS spectra, acquired using a PDA detector, may be interactively selected from a chromatogram signal for visual inspection and comparison. The spectra may also be used for peak purity determinations, wavelength optimization and component identification through spectral libraries.*

PDA View: *The PDA view is customizable; up to four views can be displayed at one time (possible views: Isoplot, Chromatogram, Spectra, 3D Display, Peak Purity, Peak Purity Spectra, Library Spectra Search and Spectral Library). The user can easily extract chromatographic signals from PDA data to determine the optimal detection wavelength for each peak.*

PDA Method: *The Clarity PDA method includes an option for Spectral Library Search and Peak Purity analysis.*

Peak Purity: *This analysis helps to discover hidden impurities. Purity is calculated from 5 or all spectra within the peak. The similarity curve is displayed in the PDA window. Peak Purity analysis can be optimized by setting custom preferences relating to the purity threshold, wavelength restriction and absorbance threshold.*

Spectral Library: *The Clarity software compares the peak spectra with the spectra of an unlimited number of spectral libraries. Spectra stored in a Spectral Library include retention times and analysis parameters. The Spectral Library Search can perform automatic identification of integrated/calibrated components (peaks). The library search may be constrained by the RT Window and by Wavelength Range. A Background Correction option is also available.*

Import/Export Data: *Spectral data can be imported/exported in ASCII text formats to or from the Clarity software.*

Reports: *Users can easily include PDA options such as data 3D Display, Isoplot, Spectra, Peak Purity and Library Search results in reports using the intuitive Report Setup dialog.*

Instrument Control: *Control modules (p/n A24) for Agilent, Shimadzu, Knauer and Duratec DADs are available (as of May 2007). Additional control modules for other PDA detectors can be developed upon request.*

Specification

Part No.:	A29
Related Products:	Clarity (p/n C50) - required
	Clarity offline (p/n C59)
	LC Control (p/n A24) - see the list of available PDA detectors at www.dataapex.com

EXTENSIONS

DataApex www.dataapex.com

DataApex reserves the right to make changes to described products without prior notice.