

A **diode array** system is an important tool for studying reaction intermediates.

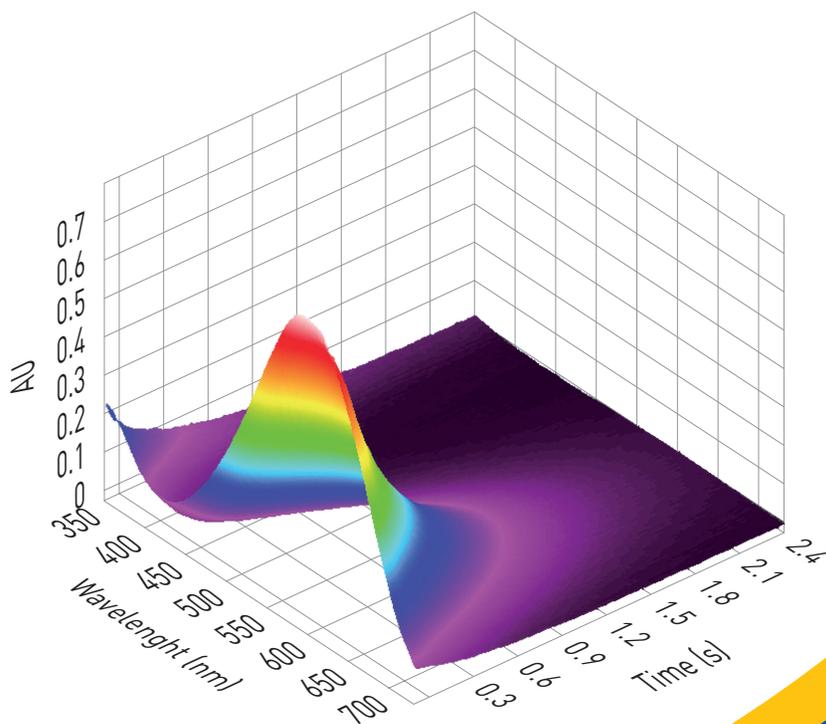
Using a photo-diode array, investigators can capture millisecond resolution absorbance data, over a wide wavelength range, all in a single sample run. UV, visible, and near IR spectra can be captured at one time, with one sample prep. The results can quickly identify reaction steps that can be studied in detail using conventional single wavelength systems.

Bio-Logic offers four diode array systems to meet the needs of any kinetics research program.

Key specifications are the number photo-diodes in the detector, and the wavelength range covered. The right model for an application will give the investigator the optimum balance between wavelength and time resolution. Fewer photo-diodes mean lower wavelength resolution, but faster collection times. More photo-diodes mean longer collection times, but better wavelength resolution.

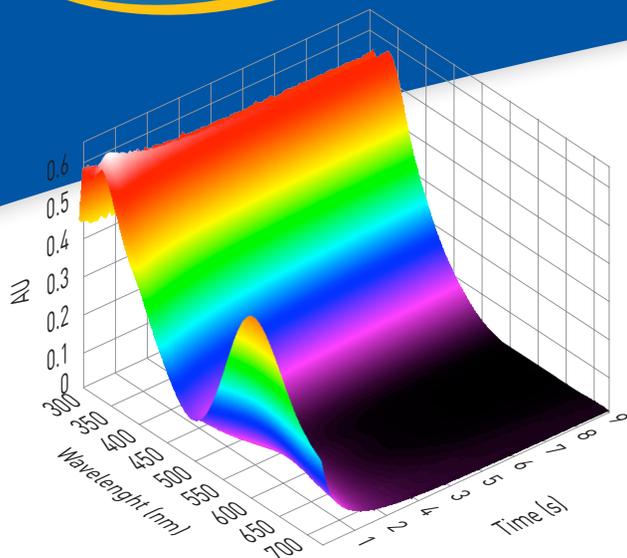
Bio-Logic diode array systems are available in four models, from 256 to 1 024 channels. Collection times range from 0.4ms (2500 samples/second), to 1.5 ms per spectrum (666 samples/second).

The wavelength range is from 190 nm to 1 100 nm.

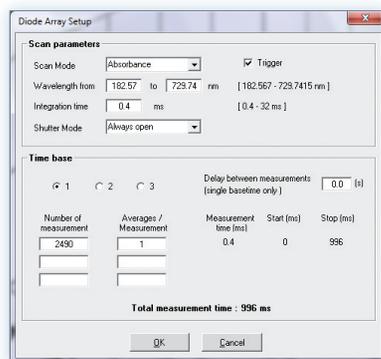


DIODE ARRAY
Compatible with all SFM models

DIODE ARRAY DETECTORS



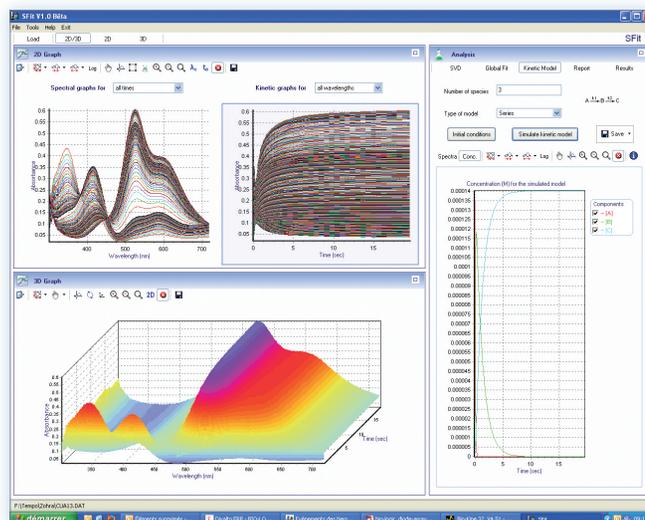
Bio-Logic diode array systems include software for system control and data analysis. Biokine provides full system control for the diode array, and for **Bio-Logic** stopped flow mixers. Initial results are shown immediately, and the single control interface, lets experimenters rapidly fine tune the shot design and collection parameters to get results quickly.



Bio-Logic's SFit analytical software is included with the system. SFit includes tools for 2D and 3D data analysis, including Single Value Decomposition (SVD).

SFit and SVD provide tools for:

- extracting individual spectra,
- extracting concentration profiles,
- automatic estimation of the number of vectors,
- global fitting with residuals,
- Levenberg-Marquardt and Simplex algorithms,
- comparison to a library of kinetics models,
- import of data.



SPECIFICATIONS

	MMS UV-VIS	MMS UV-NIR	MCS UV	MCS UV-NIR
Numbers of Diodes	256	256	512	1 024
Wavelength range (nm)	190 - 720	300 - 1100	190 - 610	190 - 1000
Spectral resolution	2 nm/diode	2 nm/diode	0,8 nm/diode	0,8 nm/diode
Max sampling rate	0,4 ms/spectrum	0,4 ms/spectrum	0,8 ms/spectrum	1,5 ms/spectrum
Linear signal range	0 - 0,8 A.U.	0 - 0,8 A.U.	0 - 2 A.U.	0 - 2 A.U.
Maximum number of Spectra	2 500	2 500	1 500	750
Wavelength accuracy	Better than 0,1 nm			
Wavelength reproducibility	Better than 0,07 nm			
Noise	Better than 1.10-4 A.U (single scan) Better than 1.10-5 A.U. (100 scans)			
Stopped flow connection	Fiber optic			
Includes	Diode array system, fiber optic and adaptor for stopped flow head, trigger cable, Sfit software, Biokine software			
Light Source: not included but recommended	Deuterium Tungsten 30 W source for excitation from 200 nm to 1 100 nm			
PC requirements (not included)	Compatible with windows XP, vista, 7 (32 ou 64 bits) with one available ethernet connection			

Specifications are subject to change

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