

PDDLS/BatchPlus System

Advanced characterization of proteins, antibodies, viruses, polymers, and nanoparticles

PDDLS/BatchPlus System

- A batch dynamic light scattering system measuring the hydrodynamic radius distribution (Rh) of macromolecules in solution with a range from 1.5 nm to 1000 nm.
- Exceptional sensitivity is obtained using a 30 mW low wavelength diode laser that is matched to our new single photon counting module (SPCM).
- Comes with PDI proprietary PrecisionDeconvolve?software for data acquisition and analysis, a low volume cuvette (<75 μL) and a self-installation tutorial CD-ROM.
- Ultra-low volume cuvettes now available (< 12 μL)

See your nanoparticles and proteins in a whole new light!



- High Performance Characterization for Budget
 Conscious Laboratories and Universities
- Designed for Protein and Antibody Quality Control Analysis
- Characterization of Aggregates or Decomposition Products
- Can be upgraded to our High Throughput Screening ALS3000 or 4000

The PD2000 family of molecular characterization detectors measures absolute values of molecular weights, sizes, and shapes. Typical applications are polymers, proteins, antibodies, polysaccharides and other macromolecules used in the plastics, biotechnology, pharmaceutical and food industries.

PrecisionDeconvolve32 Softer

PrecisionDeconvolve32Software

PDI uses the much acclaimed PrecisionDeconvolve?software to acquire DLS batch data and analyze the correlation functions obtained from the data. Incorporated in the software is a proprietary deconvolution algorithm developed and written by MIT professor Aleksey Lomakin. This algorithm is one of the most accurate regularization programs available today for Photon Correlation Spectroscopy. One of the main features of this algorithm is the ability to obtain stable distributions in real time. It can also be used to observe aggregation processes such as the effect of amyloid beta (Abeta) truncations on amyloid fibril nucleation and growth.



Advanced Photon Detection.

High sensitivity dynamic light scattering batch system unit for the manual determination of molecular size as the hydrodynamic radius (Rh) from 1.5 nm to 1000 nm. Included with the system is a low volume cuvette (minimum 75 uL) is perfect for protein size, aggregate, interaction, and variable condition (e.g. pH, temperature) conformation studies for proteins, antibodies and other biomolecules. Platform includes 30 mW, 680 nm diode laser, 90 degree dynamic light scattering optics, single aperture (17 um) fiber optic cable, our new integrated photon counting module and autocorrelator, PrecisionDeconvolve software, and an installation tutorial CD-ROM.

System Options

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- Dual aperture fiber optics
 - o 17 um slit for ultra high sensitivity of proteins
 - 5 um slit for high concentrations, liposomes, virus particles and dense nanospheres.
- Mini-cuvette and adapter for 20 uL minimum
- Micro-cuvette and adapter for 12 uL minimum
- Multi-tau Correlator for ultra fast correlation functions
- High Powered 100 mW laser upgrade
- Peltier Heating/Cooling upgrade (4?0 degrees Celsius)



