AppliedPhotophysics

Ultrasensitive Spectroscopy for the Life Sciences

TECHNICAL DATASHEET

Chirascan[™]-plus Circular Dichroism Spectrometer



From the same stable as the ground breaking Chirascan™ circular dichroism spectrometer, Chirascan[™]-plus pushes CD boundaries still further, sharing the same next generation, dual polarising prism monochromator technology, but enhancing data quality with an advanced, APD solid state detector module.

Faster scan times are not the only benefit from Chirascan[™]-plus: T_m values, van't Hoff enthalpies and structural change data can be gleaned from one thermal denaturation experiment.



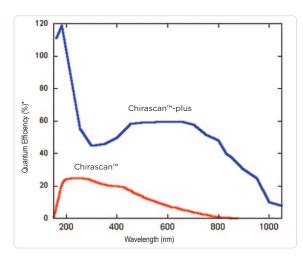
- ► Unparalleled sensitivity with ► Simultaneous absorbance significantly enhanced S/N ratio
- Rapid data acquisition
- ► Wide wavelength range using a single detector
- measurements equivalent to UV-Vis standards
- Continuous full wavelength temperature ramping up to 4°C per minute

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Chirascan™-plus Technical Specifications	
Monochromator	Dual polarising, dual dispersing monochromator
Light Source	150W air-cooled Xe arc lamp
Wavelength range	<170nm to 1150nm using single detector
Cell carriage	Single cell, Peltier temperature controlled Optional 4-cell auto changer also available
Detection modes (5 channels)	Simultaneous CD, absorbance, temperature, detector HT and DC target voltage
Typical RMS noise specifications (measured at 1nm Bandwidth and 2 sec D.I.T.)	0.04mdeg @ 175nm 0.02mdeg @ 180nm 0.02mdeg @ 200nm 0.02mdeg @ 250nm 0.02mdeg @ 500nm
Stray light	<3ppm at 200nm
Wavelength resolution	0.1nm at all wavelengths
Nitrogen purge requirements	5 l/min across the entire wavelength range; 2 l/min in the near UV (> 200nm)
Bench space, W x H x D	150 x 55 x 60cm
Weight	60kgs
Operating system	Windows 7 OS (USB communications)



Quantum efficiency of Chirascan[™] and Chirascan[™]-plus detectors

Unsurpassed speed and sensitivity makes Chirascan[™]-plus the instrument of choice for the most demanding applications in circular dichroism. Whether it is used for scans, titrations, stopped-flow or thermal denaturations, researchers who own Chirascan[™]-plus have CD technology that pushes boundaries.

Typical applications

The unique qualities of Chirascan[™]-plus overcome the application barriers of traditional CD in the biopharmaceutical and biotechnology markets, namely;

- Characterisation
- Stability studies
- ► Biopharmaceutical formulations
- Clone selection
- ► Comparability
- And many more

The technical specifications provided in this datasheet are for general information purposes only. They may be subject to change at any time without prior notice.

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