

TECHNICAL DATASHEET

Chirascan™-plus ACD Automated Circular Dichroism Spectrometer



Extending the capabilities of the revolutionary Chirascan™-plus to give unparalleled productivity, the Chirascan™-plus ACD automated circular dichroism spectrometer utilises next generation, dual polarising prism monochromator technology with advanced solid state detection and x-y-z fixed probe autosampler.

With capacity for four individually temperature controlled 96-well plates and up to 200 scans or 16 full thermal denaturation experiments per 24 hours, Chirascan™-plus ACD allows you to optimise your work throughput.



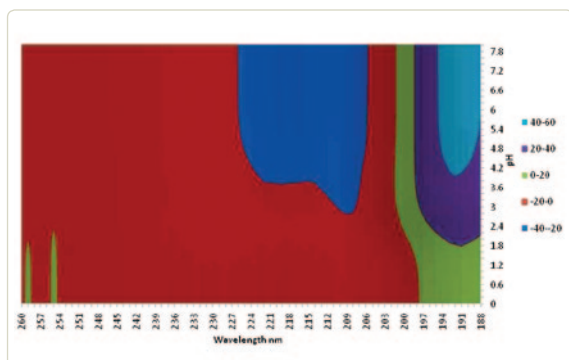
- ▶ Maximises productivity of CD spectroscopy – uninterrupted operation up to 200 scans per 24 hours
- ▶ Minimises sample usage
- ▶ Delivers accurate, reproducible results
- ▶ Eliminates human error
- ▶ Effective cell cleaning routines even after thermal denaturation experiments
- ▶ Up to four 96-well plates with individually independent temperature control

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Chirascan™-plus ACD Technical Specifications

Robot type	Fixed probe, x-y-z robot with 96-well plate advanced liquid handling technology
Capacity	2 x 96-well titre plate as standard, optional 4 x 96-well titre plate
Productivity:	
CD Scans	Up to 200 samples in 24 hours
Multi- λ thermal denaturation	Up to 16 samples in 24 hours
Sample usage far-UV	Typically 35 μ g - 70 μ g (approximately 60 μ L at 0.6 - 1.3mg/ml)
Sample usage near-UV	750 μ L of sample required out of which 85% can be recovered
Enclosure	Full, front access, interlocked (option for fully vented enclosure available)
Sample environment (storage)	Micro-plate temperatures individually Peltier controlled
Sample environment (cuvette)	Peltier controlled
Advanced experimental protocols	Flexible templates for a variety of applications including pH/ionic strength incubations and titrations, clone selection (mutations), ligand or drug binding, excipient effects, chemical and thermal denaturation studies, and many more
Bench space, W x H x D	200 x 120 x 75cm
Weight	~ 150kgs
Operating system	Windows 7 64-bit

Note: Please refer to the Chirascan™-plus datasheet for the CD spectrometer specifications



Contour map for the three-state model showing CD as a function of pH and wavelength

Chirascan-plus™ ACD is a paradigm shift in CD technology making it an essential part of your protein research. Even far-UV scans requiring 0.1mm light path length cells are handled with ease, up to 200 scans per 24 hours being achieved. Chirascan-plus™ ACD offers application opportunities for your research that were previously not considered.

Typical applications

- ▶ Lead candidate selection and optimisation
- ▶ Pre-formulation and formulation studies
- ▶ Repetitive, routine scans
- ▶ Fragment based drug design
- ▶ Biotherapeutic comparability studies,

And many more