OLIS DSM 245

CPL Solo plus Circular Dichroism

Measure your chiral molecules in both their ground and excited states using this one compact, all new spectrophotometry system. Think of it as an OLIS CD with CPL or as an OLIS CPL Solo with circular dichroism; both are correct. Single beam absorbance, fluorescence, polarization of fluorescence, circularly polarized luminescence, and circular dichroism. Two spectral ranges are available, UV optimized or red shifted.



Standard Acquisition Mode:

Absorbance
Fluorescence
Polarization of Fluorescence
Circularly Polarized Luminescence
Circular Dichroism

Enhancements Supported:

CLARITY
Phosphorescence Lifetime
Peltier Thermal Control
Thin Film Holder
Titrator

OLIS DSM 245 SPECIFICATIONS

Light Source	150 watt xenon arc lamp for CD and CPL emission; UV optimized version uses UV coated lamp which
	requires N2 purging; optional LED for CPL excitation at chosen wavelength(s)
Monochromator 1	Subtractive double grating monochromator with two concave gratings for either 170-700 nm (UV) or
	200-800 nm (red shifted) performance; very high stray light rejection and photometric accuracy. Used
	for CD; optionally used during CPL.
Monochromator 2	Single grating monochromator with single concave grating, used for 250-850 nm scanning during
	fluorescence and CPL.
Wavelength Range	170-700 nm or 200-800 nm for absorbance & CD; 250-870 nm for fluorescence & CPL
Spectral Bandwidth	0.5, 2.4, 5.0, 13 and 25 nm.
Wavelength Accuracy	± 0.2 nm
Monochromator Motor Step	0.125 nm/step
Integration Time	10 ms to 100 s
Wavelength Scanning Speed	2000 nm/min
Wavelength Slewing Speed	60 nm/sec
Acquisition Method	Digital Subtractive Method (DSM) for entirely digital data acquisition. Raw abs(L) and abs(R) are used
	for CD; raw fluor(L) and fluo(R) for CPL
G-Factor Acquisition	Not Required, because of DSM
Lock-in Amplifier	Not Required, because of DSM