

# OLIS DM 45 Fluorimeter Specifications

HARDWARE SPECIFICATIONS	
Light source	Standard: 75 watt xenon arc lamp; Optional: 150W or 300W Xe arc
Excitation monochromator	Standard: Single concave 1200 l/mm, 350 nm blaze; Optional: Single, concave 1200 l/mm blazed at 250 nm 450 nm
Emission monochromator	Standard: Single concave grating, 1200 l/mm, 450 nm blaze;; Optional: Single concave grating, 1200 l/mm, 250 nm or 350 nm blaze
Wavelength scale	185-1100 nm (see next item for realized range options)
Detection range with photon counter	Standard: 280-800 nm; Optional: 230-630 nm or 300-870 nm
Spectral bandwidth	Standard: 0.5, 2.4, 5.0, 13, and 25 nm;
Wavelength accuracy	± 0.2 nm
Monochromator motor step	0.125 nm/step
Sensitivity	Standard: S/N of 2200 (75W lamp); Optional: S/N of 4000 (300W lamp); Conditions: 350 nm excitation, 5 nm bandwidth, 1 sec integration
Maximum data collection rate	20 Hz
Integration time	10 ms to 100s
Wavelength scanning	Arbitrary to 2000 nm/min
Wavelength slewing speed	4000 nm/min
Interface	RS232, USB
Dimensions and weight	56 cm x 74 cm & 55 kg
Power requirements	120-240V; 50/60Hz
Operational temperature range	15-30° C
Operational humidity range	< 90%
Warranty	One year comprehensive, extendable annually
Optional Accessories	Peltier cell holder, multi-cell turret, PolarizationToolbox, automated shutters, titrator, stopped flow, thin film holder, cryostat, flash lamp, CLARITY enhancement
SOFTWARE SPECIFICATIONS	
Measurement	Excitation, emission, and synchronous scanning, time-course measurement, programmable repeated scans, automated emission excitation matrix scanning, scripted temperature control.  With optional Polarization Toolbox: G-factor free anisotropy, polarization of fluorescence, and CPL
Data processing	Arithmetic processes involving simplest math to digital smoothing, first through fifth order derivative, logarithmic conversion, emission correction, interpolation, peak-finder, area calculation, averaging scans, and more
Data output	3D graphical data, Excel, Olis binary, comma delimited ASCII
Data fitting	2D and 3D (global) analysis with over 60 algorithms
PC requirements	Pentium 4 or Duo Core, 512MB RAM, 80GB HD; Win 10