

FL-4000 Fluorescence Spectrophotometer



- *Easy to Operate*
- *High S/N Ratio*
- *High Speed Scan*
- *3-D Scanning*
- *Powerful Software*
- *USB Interfacing*

FL-4000 Fluorescence Spectrophotometer is a high quality analytical instrument and widely used for qualitative and quantitative analysis in various fields such as chemistry, pharmaceutical testing, materials, environmental protection, water quality, petrochemical industry, medical and health, food and nutrition etc.

Features

- High speed scanning at 30000nm/min and high sensitivity with S/N ratio better than 150 (peak to peak)
- Wavelength Scan supports measurement of fluorescence, luminescence and phosphorescence at excitation, emission and synchronous modes, repeat scanning up to 20 times
- Time Scan supports measurement of fluorescence, luminescence and phosphorescence at specified Ex and EM wavelengths, and scanning period
- Photometry function supports quantitative measurement with different calibration curves and multiple wavelengths
- 3-D Scan supports measurement of fluorescence and phosphorescence at specified EX/EM spectral range and sampling interval, can be displayed on both 3-D and 2-D contour view
- Powerful spectrum processing such as peak searching, smoothing, derivative and arithmetic operation and area calculation
- USB interface, user friendly and powerful software functions

Specifications

Light source	150W Xenon Lamp
Optical system	EX monochromator and EM monochromator Blazed concave grating, 1200 lines/mm
Wavelength range	EX: 200 - 900nm, zero order, EM: 200 - 900nm, zero order
Sensitivity	S/N \geq 250:1 (P-P) for distilled water Raman peak
Wavelength accuracy	\pm 2.0nm
Wavelength repeatability	1nm
Wavelength scan speed	30, 60, 240, 1200, 2400, 12000, 30000nm/min
Wavelength drive speed	30000nm/min
Band width	EX: 1.0, 2.5, 5, 10, 20nm EM: 1.0, 2.5, 5, 10, 20nm
Resolution	1.0nm
Response speed	0.004, 0.01, 0.05, 0.1, 0.5, 2, 4, 8 sec, auto
Photometric range	-9999 to 9999
Minimum sample volume	0.5ml (using standard 10mm cell)
Data communication	USB port
Dimensions	670 x 540 x 320 mm
Weight	Approx. 48kg
Power	100-240VAC, 50/60Hz, and rated power of 380W

Accessories

FL-4000 Fluorescence Spectrophotometer has below available accessories

- Solid sample holder, used for solids, powders or highly concentrated solutions
- Polarization accessory, used for measuring the polarization angle at UV and VIS
- Filter set, used for removing 2nd order and stray light
- Standard light source, used for calibrating emission spectrum of 500-900nm
- USB interface, user friendly and powerful software functions
- Long life 150W Xenon lamp
- Quartz cuvettes for fluorescence analysis
- Temperature-controlled cell holder
- Low scatter micro-cell
- Scattering cell frosted on four sides