

Fluorescence Spectrophotometer Specifications

- Measurement techniques should be Fluorescence, Phosphorescence, Luminescence, 3 dimensional time scan measurement.
- Should be equipped with a Cuvette system and have a microplate reader.
- System should be satisfied precision machining technology for bright optics System.
- Should have double diffraction gratings, one for excitation side and one is for fluorescent light side.

Sensitivity	: Should be with Higher sensitivity with S/N 15000:1 or better (RMS) using Raman band of water S/N 250 or better (Peak to Peak), Excitation wavelength 350 nm, bandwidth 5 nm, response 2s .
Wavelength Scan speed	: 30,000 nm/min or better
Wavelength range	: Excitation (200-800 nm), Emission (200 – 900 nm).
Optics	: Monochromator based.
Variable Spectral bandwidth:	Both for Excitation and emission side: 1, 2.5, 5,10 & 20 nm etc.
Wavelength accuracy	: ± 1 nm or better
Wavelength repeatability	: 0.5 nm or better
Detector	: Photomultiplier tube (PMT)
Light source	: Ozone free Xenon lamp, with at least 150W power, with self-deozonating lamp house.
Resolution	: 1.0 nm or better.
Response	: Response from 0 to 98%, Selectable from 0.002, 0.004, 0.01, 0.05, 0.1, 0.5, 2, 4 sec
Interface	: USB interface for communication with the computer.
Standard Software	: Standard Software should have program for controlling the instrument & its accessories. 3-dimensional time scan measurement and Data processing features such as quantitative analysis, cumulative data averaging, first to fourth order differentiation, statistic calculation, wavelength scan measurement, time based measurement such phosphorescence life time, 3-D measurements, Data export to Microsoft Excel etc.

Essential Accessories:

- A 96 well microplate reader
- One long life 150W Xe lamp
- Quartz Cell for Fluorescence, 10 mm pathlength, 1 pair (700 μ L)
- A suitable PC (Dual Core i7, Minimum 8TB of Harddrive and 8 GB RAM with Graphic card and USB etc) with printer to run the FI solution software.
- Please quote other accessories like thermostated cell holder with stirrer etc.
- Two year warranty
- System must be CE & ISO certified
- Good quality chiller (**specifications:** Temperature range: -10 °C to 25 °C, temperature control accuracy (± 1 °C),Cooling capacity (450W at 10 °C), Maximum flow rate 10L/min, The instrument should have an inbuilt digital display for the temperature. The instrument should have accuracy in temperature control for at least ± 2 °C (within two degree centigrade).

All the above specifications should be mentioned in printed literature of manufacturer.
Quoted company must have factory trained experienced engineer & Kolkata based service station for rendering effective after sale service.