



Reference No. (PR No. 1000017915)

RFx No. 6100000729

TECHNICAL SPECIFICATIONS

Spectrofluorimeter - Photon Counting Fluorimeter

1. Computer controlled photon counting fluorimeter
2. Standard, a continuous 150W ozone-free xenon source delivering excitation light from 230nm to the NIR.
3. Spectrometers with 1200g/mm ruled gratings, blazed at 330 nm at the excitation for the optimization of the excitation intensity in the UV-VIS range, and blazed at 500 nm at the emission channel for the optimization of the fluorescence signal in the VIS-NIR range. Both monochromators have continuously adjustable entrance and exit slits operated under computer control for the selection of the bandpasses in the range 0- 30nm.
4. Software for the control of the instrument and data analyses.
5. Configured computer [Computer (minimum of i5, 8G RAM, ITB Hard drive, and 22-inch monitor) and appropriate software for running the instrument].
6. **NIR Detector (800nm-1550nm)**
7. **Liquid Cuvette** (Quartz Cuvette, 4ml volume, 10x10mm optical path, open top with cap. AS well as Quartz Cuvette with 1 ml volume)
8. **Multi sample holder (at least two)**
9. **Solid Sample Holder** (olid Sample Holder Designed for viewing front-face fluorescence of thin films, powders, pellets, paper, fibers, or microscopic slides. Variable alignment angle)
10. **Bandpass filters and adapter** (Bandpass filter, 320 nm \pm 12.5 nm FWHM, 25.4 mm diameter; Bandpass filter, 340 nm \pm 12.5 nm FWHM, 25.4 mm diameter; Filter holder adaptor: receives 1-inch (and 25mm) round filters and fits in 2x2-inches square standard filter holders from the instrument)
11. **Higher Order Sorting Filters** (Set of 5 2-inch x 2-inch square filters cut-on at 370, 399, 450, 500 and 550nm.
12. **Peltier Accessory** (Rapid Peltier temperature controlled single sample holder ~ - 15 degree C to ~ +105 degree C, with stir and stir bar, water circulator and software driver)
13. **Polarization Accessory**
14. **Stopped Flow Accessory** (Stopped Flow, rapid kinetics accessory. Two 2.5 ml syringes, Injection port. Ideal for studying reaction kinetics; External trigger cable.
15. **Warranty:** Minimum 3 years of comprehensive warranty