

## Fluorescence Spectrophotometer

*PC controlled Fluorescence Spectrophotometer capable of measuring Fluorescence, Phosphorescence, Chemiluminescence and Bioluminescence.* With the following technical specifications:

<i>Sr. No.</i>	<i>Parameters</i>	<i>Description</i>
1.	Light Source	Software controlled Polarized light generated using an Ozone free Xenon Lamp
2.	Measuring Wavelength	200 – 900 nm (Excitation and 200 – 900 nm (Emission) or better, Zero Order Settable.
3.	Optical System	Monochromator Diffraction/holographic grating: 900 lines/mm or more
4.	Sensitivity	S/N ratio 1000:1 (RMS) or better using Raman band of water, Excitation Wavelength 350 nm, Bandpass 5 nm or 3000:1 (RMS) or better using Raman band of water, Excitation Wavelength 350 nm, Bandpass 10 nm, response time 2 second
5.	Spectral Bandpass	Excitation & Emission side 2 to 20 nm or better
6.	Resolution	± 2 nm (Minimum)
7.	Wavelength accuracy	± 1.5 nm or better
8.	Wavelength Scan Speed	Up to 60,000 nm/min or better
9.	Data Collection Rate	Atleast 80 data points/sec for fluorescence mode measurements
10.	Filter	System should comprise of software selectable emission filters
11.	Detector	Photomultiplier Detector with support for the range 200 – 900 nm / High Performance PMT or better
12.	Power Compliance	230 Volts, 50Hz.
13.	Software	Compatible with Windows 8 should have various data analysis facilities like arithmetic functions, smoothing, First to fourth order derivatives, area peak, normalization, merger difference interpolate and specific application programs should also be provided for determination of phosphorescence, simple quantitation and kinetic evaluations, GLP compliant.
14.	Cell	One pair of standard 10 mm quartz cell with PTFE

		lid – 10X10 mm path length
15.	Micro Cell	One; 10 mm length quartz micro cells
16.	Cell Holder	Peltier controlled One and Four 10 mm cuvette holding capacity & magnetically stirred cell holder.
17	PC	HP PC Core i3 Processor or better, RAM 4GB or better, HDD: 1TB or better
18	Warranty:	One year or more
19	UPS	An instrument compatible UPS to be provided with the system
20	Installation and training	Installation and training should be provided at installation site

**The Following Optional Items should also be quoted**

1. **Solid Sample Holder:** Solid/Powder Sample Holder for Solid/Powder/Film samples to be included
2. **Peltier** Supplied through instrument manufacturer only software controlled Temperature range 0 to 100° C (Minimum) with temperature stability  $\pm 0.5^{\circ}$  C (Maximum)