

**FLUORESCENCE SPECTROPHOTOMETER -1No.**  
**Doc. No: ST/12/Fluo-Spec/2016-17/19**

**APPLICATION:**

For biochemical analysis of proteins, metabolites such as vitamins/ASH/AGE

**FEATURES :**

- Software controlled equipment compatible with latest operating system.
- GLP/GMP compliance and validation software
- Facility for spectra measurement, quantitative measurement, fixed wavelength measurement, 3D spectra, Abs & Lifetime Phosphorescence measurements.
- Provision for highest sensitivity, fastest spectral scanning capabilities
- Auto calibration, automatic lamp position alignment, self checking, self diagnostics and auto zero functions
- Sample holder to accommodate 10mm standard pathlength rectangular cuvette and provision to use both microcell and macrocell.
- Provision to store data and results on external memory devices
- System included with peltier thermostated cell holder, micro plate reader and automatic polarizer.
- Provision for further upgradability.

**SPECIFICATIONS:-**

**SPECTRAL:**

Wavelength Range	: 200 to 800nm, and zero-order light (on both EX and EM).
Wavelength Accuracy	: $\pm 1$ nm
Scan speed	: up to 20,000nm/min or better
Spectral bandwidth	: 1,5,10, 20nm in both Ex and Em side.
Repeatability	: $\pm 1$ nm

**FLUOROMETRIC:**

Measurement	: Excitation, Emission and synchronous spectrum measurement, quantitation, automatic search of optimal Ex & Em wavelength.
Sensitivity	: Raman band of water S/N Ratio of 500:1 peak to peak or better Excitation wavelength 350nm, band pass 5nm, response 2S
Detector	: Photomultiplier tube
Sensitivity selection	: High, Medium & Low
Minimum sample volume	: < 1mL (in use of standard 10mm rectangular cell)
Light source	: Xenon Arc lamp
Response time	: Selection of 0.1, 0.25, 0.5, 2, 4 and 8 seconds.
Power supply	: 220 volts AC, 50 Hz.

**Essential Accessories :****1. PeltierThermostatted Cell Holder:**

- |                           |  |
|---------------------------|--|
| Compatible cells          | : Microcell 3x3 or 5x5mm rectangular cell, 10x10mm-1no |
| Temperature control       | :Utilizingpeltier heating/cooling system               |
| Peltier heat radiation    | : Water-cooled   |
| Temperature setting range | :-10° to 110°C   |
| Temperature control range | :0 to 100°C at 25°C                                    |
| Temperature accuracy      | :±0.2°C within cell                                    |
2. Micro plate reader :96well plate
  3. Fluorescence cuvettes : A set (2 nos) of micro & macro cuvettes.
  4. Micro cell jacket :Micro quartz cell 3x3mm – 1no. with 3mm pathlength& sample volume of 50µl
  5. Branded PC (Dell/Hp) with latest configuration with LCD monitor, suitable operating system and laser color printer.
  6. UPS of reputed brand and suitable capacity with backup of 30mins at maximum load to be indicated and quoted along with all specifications and features.

**Note:**

- **All the essential accessories like cell holder, micro plate reader and automatic polarizer to be quoted along with the instrument.**
- **Instrument Warranty: 3 years comprehensive warranty along with 2 years non-comprehensive warranty should be offered at free of cost.**