

## Fluorescence Spectrophotometer

### Applications:

Fluorescence analysis can provide information including excitation and emission spectrum, emission light intensity and measurement of life of emission light and polarization fluorescence etc and a wide lineal range of working curve. This method has been used in: Medical science and clinical ,Pharmaceutical science and pharmacology,Biochemistry ,Food industry, Pollution and Organic and inorganic chemistry.



### Features for BK-F96PRO:

- \* Two operation modes fluorescence intensity and luminous intensity.
- \* 365nm exciting wavelength, Raman peak of water S/N ≥150.
- \* 10 stages emission spectrum scanning.
- \* Support off-line mode and on-line mode.

### Features for BK-F93 :

- \* 1200 line diffraction grating emission monochromator.
- \* LED is a cold-light source with longevity, lower background & reliability, prevent from thermo-pollution.
- \* Automatic zero adjustment and automatic background subtraction.
- \* Eight stage sensitivity adjustment, Real time fluorescence value display and concentration print out,.Extra wide dynamic range of fluorescence value ensures accurate measurement of minute changes in micro samples.

### Technical Parameters:

| Model                      | BK-F96PRO   | BK-F93  |
|----------------------------|---|---|
| Light Source               | Hamamatsu 150W Xenon lamp   | 4 digits LED  |
| Excitation filter          | Interference optical filter<br>a) Standard set is equipped with an interference optical filter of central wavelength at 365nm and 10nm bandwidth<br>b) An optional interference optical filter of 25mm diameter of fixed wavelength select from range 250–700nm can be provided on users demand                 | LED options<br>a) Standard set includes LED at wavelength 365nm<br>b) The A set includes LED wavelength at 365nm, 376nm, 392nm, 405nm<br>c) Customizable wavelength from 360nm to 600nm |
| Emission Monochromator     | C-T diffraction grating (Em 200~900nm, bandwidth 10nm)  | 360~650nm (C-T diffraction grating)   |
| Wavelength Accuracy        | ±1nm  | ±2nm  |
| Wavelength Repeatability   | ≤0.5nm  | ≤1nm  |
| Sensitivity                | Raman peak of water in 1 cm quartz fluorescence cuvette with S/N≥150  | 1*10 <sup>-9</sup> g/ml (Standard aqua of the sulfuric acid Quinine, 12nm bandwidth)  |
| Linear Measurement(r)      | ≥0.995  |   |
| Stability                  | better than 1.5%/10min  | better than 3%/10min  |
| Response Time              | (0.1~4)s, 6 stages adjustable   | (0.1~4)s  |
| Fluorescence Display Value | 0.00~600.00   | 0.00~250.00   |
| Standard Accessories       | 365nm filter(Preassembled), 1 pc<br>F96PRO software package, 1 pc<br>USB interface, 1 pc<br>Quartz fluorescence sample cell10mm, 1 pair   | RS232 serial port, Glass fluorescence cuvette 10mm 1 pair   |
| Optional Accessories       | Fuses(2A/5A), 200-700nm interference optical filter (φ25mm)<br>Quartz fluorescence sample cell10mm<br>Multi-function fluorescent sample rack holder, Membrane sample rack, Powder sample rack, Sample cell jacket, Octave Filters<br>200uL microcentrifuge tube accessory<br>Upconversion fluorescent accessory | Data processing software package (pack, for PC) Fuses(2A)<br>Quartz fluorescence cuvette10mm<br>Optional LED A Set includes: 365nm, 376nm, 392nm, 405nm                                 |
| Power Supply               | AC110/220V±10%, 60/50Hz   |   |
| Package Size(W*D*H)mm      | 535*500*380   | 450* 420 *280   |
| Gross Weight(kg)           | 14  | 9   |