Fluorescence Spectrophotometer

Model: DW-F97 Series

DW-F97 fluorescent spectrophotometer is a new generation of high performance molecular luminescence analysis instrument. The product structure is exquisite, has the characteristics of high detection sensitivity, fast scanning speed, wide spectrum measuring range, high dynamic range, fast 3D scanning, and so on. Easily meet the requirements in the field of material research, pharmaceutical analysis, biochemical and clinical testing, water quality analysis and control, food safety testing (dairy products, aquatic products, such as vitamin C, selenium, aflatoxin), and other areas.

Features

- High sensitivity: based on high efficiency optical design and weak signal detection technology, the water Raman peak signal to noise ratio can be greater than 200 (P - P) to the leading domestic and international advanced level.
- High scanning speed: the high speed digital signal processing unit provides the world's fastest scanning speed at 48000nm/min. Only 1 second to get classic fluorescence spectra, 1 minute to get high quality of three-dimensional fluorescence spectra.
- Wide Spectral measurement range: using a double monochromator design, excitation and emission wavelength range covering 200 nm to 900 nm, meet the needs of most fluorescence analysis.
- Excitation light path monitoring system: instrument is equipped with excitation light dual beam ratio monitoring system to ensure the fluorescence signal high and stable.
- High quality assurance: using Hamamatsu’s high quality Xenon light source and photoelectric multiplier tube detectors and instruments to provide sufficient light intensity signal and the detection sensitivity.
- Built-in optical gate: Built-in optical gate, designed for unstable sample.

Standard Set

	Item	Quantity
1	Main unit	1 pc
2	Data processing software	1 set
3	Power cable	1 pc
4	USB cable	1 pc
5	10mm Fluorescence Cuvette (Quartz)	1 pair(two pcs)
6	User Manual	1 copy
7	Packing list	1 copy
8	Fuse	4 pcs

Parameters

Specification of F97 Series Fluorescence Spectrophotometer

Excitation Source	150W xenon lamp（Hamamatsu）
Excitation Wavelength	200nm~900nm
Emission Wavelength	200nm~900nm
Excitation Slit	F97XP/F97Pro：2nm 5nm 10nm 20nm
	F97：10nm
Emission Slit	F97XP/F97Pro：2nm 5nm 10nm 20nm
	F97：10nm
Wavelength Accuracy	F97XPI ±0.4nm
	F97/ProF97：±1.0nm
Wavelength Repeatability	F97XP：≤0.2nm
	F97/F97Pro：≤0.5nm
Signal-to-Noise Ratio	F97XP：Raman peak of water（P-P）：S/N≥200（10nm Slit）
	F97/F97Pro：Raman peak of water（P-P）：S/N≥150（10nm Slit
Limit	)F97XP：_<5x10-11 g/ml（Quinine Sulfate Solution）
	F97/F97Pro：≤1x10-10 g/ml（Quinine Sulfate Solution）
Linearity	y≥0.995
Peak Repeatability	≤1.5%
Stability(lOmin)	Zero Drift：±0.3
	Value Limit：±1.5%
Wavelength Scan Speed	Multi-speed Level, Maximum at 48000nm/min
Photometric Quantity Range	0.00-10000.00
Data Transportation	USB2.0
Power	200W
Power Source	AC 220V/50HZ； 110V/60HZ
Instrument Dimension	380x445x310（MM）
Weight	Net Weight：12kg Gross Weight：14kg

Optional Parts

Accessories	Functions
Single sample rack	Conventional liquid fluorescence sample
Multi purpose fluorescent sample rack holder	Base holder for other racks
Double-frequency filter（300nm 350nm 400nm 450nm 500nm 550nm 600nm 650nm 8 for one set）	Remove the interference of double-frequency peaks of these wavelengths.
200ul micro scale centrifuge tube rack	For centrifuge tube fluorescence measurement
Micro scale capillary sample rack	For micro scale capillary sample
Semi-auto sample rack	Semi-auto sample rack
Membrane sample rack (Reflection)	For membrane sample
Membrane sample rack (Transmission)	For membrane sample
Powder sample rack	For powder samples
Jacket sample rack	