

# Fluorescence Spectrophotometer

## LFS - A11



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Fluorescence Spectrophotometer LFS - A11 is a high performance equipment with a 150 W Xenon Lamp for providing sufficient light intensity signal to detect sensitivity. It is built for maintaining best possible accuracy. It contains characteristics like Ultra scanning speed, ultra high resolution, and ultra-high wavelength accuracy to meet most of the measurements. Quantum yield is also available for this fluorescence spectrophotometer.

### Features

- Horizontal slit optical design with finite luminous detection efficiency and high SNR
- Water Raman peak SNR better than 350: 1 (P-P) or 1000: 1 (RMS)
- Standard 10 mm square sample cell utilizes minimum sample volume of 0.5 mL
- Wavelength scanning speed is flexible and can reach up till 60000 nm / min
- Adjustable bandwidth feature
- Accessories are available for Fluorescence Quantum Yield
- Software is versatile enough to offer functions like fluorescence 3D scanning, equal wavelength difference synchronous scanning, and equal wave number difference (constant energy difference) synchronous scanning
- Synchronous scanning function require pro version software
- Multiple accessories provided
- Best quality assurance given by using 150 W Xenon Lamp, to provide sufficient light intensity signal to detect sensitivity
- Unstable samples is analysed via built-in optical gate and built-in frequency filter

### Applications

They can be widely applicable in material research, drug analysis, biochemical, scientific research clinical testing, water quality control, food safety testing and other areas covering quantity and quality analysis.

## Specifications

Model No.	LFS- A11
Excitation Source	150 W Xenon Lamp
Excitation Wavelength	200 nm to 900 nm
Excitation Slit	1 nm, 2 nm, 5 nm, 10 nm, 20 nm
Emission Slit	1 nm, 2 nm, 5 nm, 10 nm, 20 nm
Wavelength Accuracy	± 0.4 nm
Wavelength Repeatability	≤ 0.2 nm
Signal-to-Noise Ratio	S/N ≥ 350 (P-P), S/N ≥ 1000 (RMS)
Limit	≤ 5 × 10 <sup>-11</sup> g /ml(Quinine Sulfate Solution)
Linearity	γ ≥ 0.995
Peak Repeatability	≤ 1.5 %
Wavelength Scan Speed	Multi-speed Level, Maximum at 60000 nm / min
Minimum sample size	0.5 mL (Using a standard 10 mm square sample cell)
Octave filter	Build in Octave filter
Photometric Quantity Range	-9999 to 9999
Response Time	Auto adjust (0.02 s, 0.1 s, 0.5 s, 1 s, 2 s, 4 s, 8 s )
Data Transportation	USB 2.0
Power	200 W
Power Supply	AC 220 V / 50 Hz, 110 V / 60 Hz
Dimension	610×460×365 mm
Net Weight	21 kg
Gross Weight	26 kg

## Optional accessories

Accessory No.	Accessory Name	Functions
1.	Multi- function fluorescent sample	Base of other sample racks.
	rack holder	
2.	Membrane sample rack	
3.	Powder sample rack	
4.	Sample cell jacket	
5.	200 $\mu$ L micro centrifuge tube accessory	
6.	Up conversion fluorescent accessory	
7.	Fluorescence Quantum Yield accessory	