Fluorescence Spectrophotometer - Xenon Lamp Spectrofluorometer - 200-900 nm - 60000 nm/min Scan

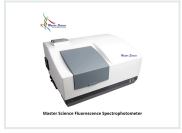
Model **MSSP-LF98SWISS** | Brand **Master Science**











The Master Science Fluorescence Spectrophotometer is a high-performance molecular luminescence instrument with excitation and emission monochromators that both cover 200 to 900 nm. A 150 W xenon lamp and a photomultiplier tube detector supply the intensity and sensitivity.

KEY HIGHLIGHTS

- Trace-level sensitivity
- Fast spectra
- Resolution to suit the sample
- Small sample needs
- Protection for unstable samples

AT A GLANCE

200 to 900 nm EXCITATION WAVELENGTH	**-9999 to 9999** PHOTOMETRIC RANGE
±0.4 nm WAVELENGTH ACCURACY	**≤0.2 nm** WAVELENGTH REPEATABILITY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

Its horizontal-slit optics give a water Raman signal-to-noise ratio of at least 350:1 peak-to-peak. Slits are selectable from 1 to 20 nm, scanning reaches 60000 nm/min, and a standard 10 mm cell needs only 0.5 mL of sample.

Key Benefits

Trace-level sensitivity
the Master Science Fluorescence Spectrophotometer detects quinine sulfate at 5×10^{-11} g/mL.

Fast spectra
scanning up to 60000 nm/min.

Resolution to suit the sample
five slit widths on each monochromator.

Small sample needs
0.5 mL per measurement.

Protection for unstable samples
built-in optical shutter.

For absorbance measurements, see the Master Science double beam UV-Vis spectrophotometer.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSSP-LF98SWISS
SKU	MSSP-LF98SWISS
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Excitation Slit	1 / 2 / 5 / 10 / 20 nm
Emission Slit	1 / 2 / 5 / 10 / 20 nm
Signal-to-Noise Ratio	≥350 (P-P); ≥1000 (RMS)
Detection Limit	≤5×10^{-11} g/mL (quinine sulfate solution)
Linearity	γ ≥0.995
Peak Repeatability	≤1.5%
Minimum Sample Volume	0.5 mL in a standard 10 mm square cell
Excitation Source	150 W xenon lamp
Filter	Built-in octave filter
Response Time	0.02 / 0.1 / 0.5 / 1 / 2 / 4 / 8 s, auto adjust
Data Transfer	USB 2.0
Power	110-240 V AC, 50/60 Hz, 200 W

OPTICAL PERFORMANCE

Excitation Wavelength	**200 to 900 nm**
Emission Wavelength	**200 to 900 nm**
Wavelength Accuracy	**±0.4 nm**
Wavelength Repeatability	**≤0.2 nm**
Wavelength Scan Speed	**Multi-level, up to 60000 nm/min**
Photometric Range	**-9999 to 9999**

DIMENSIONS & WEIGHT

Instrument Dimensions	610 × 460 × 365 mm
Net / Gross Weight	21 kg / 26 kg

COMMON PROBLEMS AND HOW THIS INSTRUMENT HELPS

Common Problems and How This Instrument Helps	How the Master Science Fluorescence Spectrophotometer supports luminescence analysis:
Weak signals lost in noise	high signal-to-noise optical design.
Slow 3D scans	very high scan speed.
Unstable samples	built-in optical gate.
Fitting filters by hand	built-in octave filter.

The Master Science Fluorescence Spectrophotometer is used in

- **Material research**
- **Drug analysis**
- **Biochemical and clinical testing**
- **Water quality control**
- **Food safety testing**

Optics

- Horizontal slit optical design
- Xenon light source and photomultiplier tube detector
- Built-in frequency filter
- Built-in optical gate

Software

- 3D fluorescence scanning
- Constant-wavelength-difference synchronous scanning (pro software)
- Constant-energy-difference synchronous scanning (pro software)

Expansion

- Fluorescence quantum yield accessory available
- Range of sample accessories

Optional Accessories

- Fluorescence quantum yield accessory
- Pro version software for synchronous scanning