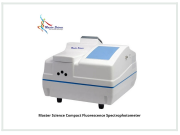
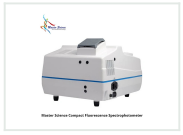
Compact Fluorescence Spectrophotometer - Dual Monochromator Fluorometer - 200-900 nm - 48000 nm/min

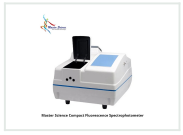
Model **MSSP-LF97SWISS, MSSP-LF97PROSWISS, MSSP-LF97XPSWISS** | Brand **Master Science**











The Master Science Compact Fluorescence Spectrophotometer is a small-footprint molecular luminescence instrument with a double-monochromator layout. Excitation and emission both cover 200 to 900 nm, driven by a 150 W xenon lamp and a photomultiplier tube detector.

KEY HIGHLIGHTS

- 3D spectra in a minute
- Steady signal
- Takes little bench space
- Good for sensitive samples
- Choice of performance level

AT A GLANCE

200 to 900 nm
EXCITATION / EMISSION WAVELENGTH

0.00 to 10000.00
PHOTOMETRIC RANGE

±1.0 nm (LF97, LF97PRO); ±0.4 nm (LF97XP)
WAVELENGTH ACCURACY

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

Scanning runs at up to 48000 nm/min, so a classic fluorescence spectrum takes about a second and a three-dimensional spectrum about a minute. Three versions differ in slit options, wavelength accuracy and sensitivity.

Key Benefits

3D spectra in a minute
the Master Science Compact Fluorescence Spectrophotometer scans at 48000 nm/min.

Steady signal
dual-beam ratio monitoring of the excitation light.

Takes little bench space
380 × 445 mm base, 12 kg.

Good for sensitive samples
built-in optical gate.

Choice of performance level
three versions.

A higher-resolution model is the Master Science fluorescence spectrophotometer.

Technical Specifications

GENERAL

General	Specifications of the Master Science Compact Fluorescence Spectrophotometer:
Brand	Master Science
Model Number	MSSP-LF97SWISS, MSSP-LF97PROSWISS, MSSP-LF97XPSWISS
SKU	MSSP-LF97SWISS, MSSP-LF97PROSWISS, MSSP-LF97XPSWISS
Brand	Master Science
Model Number	MSSP-LF97SWISS, MSSP-LF97PROSWISS, MSSP-LF97XPSWISS
SKU	MSSP-LF97SWISS, MSSP-LF97PROSWISS, MSSP-LF97XPSWISS
Excitation Source	150 W xenon lamp
Slits, MSSP-LF97SWISS	10 nm (excitation and emission)
Slits, MSSP-LF97XPSWISS and MSSP-LF97PROSWISS	2, 5, 10, 20 nm
Signal-to-Noise Ratio, P-P (10 nm slit)	≥150 (LF97, LF97PRO); ≥200 (LF97XP)
Signal-to-Noise Ratio, RMS (10 nm slit)	≥1000 (LF97, LF97PRO); ≥1200 (LF97XP)
Detection Limit (quinine sulfate)	$\leq 1\times10^{-10}$ g/mL (LF97, LF97PRO); $\leq 5\times10^{-11}$ g/mL (LF97XP)
Linearity	γ ≥0.995
Peak Repeatability	≤1.5%
Stability (10 min)	Zero drift ±0.3; value limit ±1.5%
Data Transfer	USB 2.0
Power	110-240 V AC, 50/60 Hz, 200 W

OPTICAL PERFORMANCE

Excitation / Emission Wavelength	**200 to 900 nm**
Wavelength Accuracy	**±1.0 nm (LF97, LF97PRO); ±0.4 nm (LF97XP)**
Wavelength Repeatability	**≤0.5 nm (LF97, LF97PRO); ≤0.2 nm (LF97XP)**
Wavelength Scan Speed	**Multi-level, up to 48000 nm/min**
Photometric Range	**0.00 to 10000.00**
Lamp fluctuations affecting results	ratio monitoring of excitation light.

DIMENSIONS & WEIGHT

Instrument Dimensions	380 × 445 × 310 mm
Net / Gross Weight	12 kg / 14 kg

COMMON PROBLEMS AND HOW THIS INSTRUMENT HELPS

Common Problems and How This Instrument Helps	How the Master Science Compact Fluorescence Spectrophotometer helps fluorescence work:
Long acquisition for 3D maps	high-speed scanning.
Solid or film samples	optional powder and membrane racks.
Crowded benches	compact, light housing.

The Master Science Compact Fluorescence Spectrophotometer is used in

Material research

Pharmaceutical analysis

Biochemical and clinical testing

Water quality analysis and control

Food safety testing, for example vitamin C, selenium and aflatoxin in dairy and aquatic products

Optics

- Double monochromator design
- Efficient optical layout with weak-signal detection
- Excitation light path monitoring system

Performance

- High detection sensitivity
- High dynamic range
- Fast three-dimensional scanning

Sample Protection

- Built-in optical gate for unstable samples

Optional Accessories

- Single sample rack for liquid samples
- Multi-purpose sample rack holder
- Octave filters
- Membrane sample rack
- Powder sample rack
- Automatic polarisation filter