Dual-Channel Micro-Volume Fluorometer, 1-20 µL, 3 s Reading, dsDNA, RNA and Protein Quantitation

Model **MSFLUOM-100SWISS** | Brand **Master Science**











The Master Science Dual-Channel Micro-Volume Fluorometer measures fluorescence intensity to quantify low-concentration biomolecules such as nucleic acids (dsDNA, oligo, RNA), proteins, hormones, drugs and microorganisms. Based on fluorescence assay principles, intensity is proportional to concentration at low levels, giving qualitative and quantitative results.

KEY HIGHLIGHTS

- Fast results
- Tiny sample use
- Low detection limit
- Works with common kits

AT A GLANCE

Five orders of magnitude
RESPONSE RANGE

1 tube
SAMPLE CAPACITY

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

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www.themsci.com

Scan to view online

Overview

It reads a 1-20 µL sample in a 0.5 mL PCR tube in about 3 seconds, detects down to 0.5 pg/µL dsDNA, and covers a five-order-of-magnitude response range. Two channels (470/525 nm and 625/690 nm) detect two fluorescence signals, and a 7-inch colour touch screen makes it simple to run.

> For full fluorescence spectra, see our Compact Fluorescence Spectrophotometer, 200-900 nm next to the Dual-Channel Micro-Volume Fluorometer.

Key Benefits

Fast results
About 3 seconds per sample.

Tiny sample use
Only 1-20 µL needed.

Low detection limit
Down to 0.5 pg/µL dsDNA.

Works with common kits
Compatible with most fluorescence reagents.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSFLUOM-100SWISS
SKU	MSFLUOM-100SWISS
Sample Capacity	**1 tube**
Sample Volume	1-20 µL
Tube Type	0.5 mL PCR tube
Channels	2
Measurement Time	3 s
Repeatability	< 1.5%
Calibration	2- or 3-point
Response Range	**Five orders of magnitude**
Linearity	$R^2 \geq 0.995$
Excitation / Emission	470/525 nm and 625/690 nm (standard)
Concentration Ranges	**dsDNA HS 0.005-120 ng/µL; dsDNA BR 0.2-2000 ng/µL; Oligo 0.01-240 ng/µL; RNA 0.2-200 ng/µL; microRNA 0.025-150 ng/µL; Protein 12.5 µg/mL-5 mg/mL; Protein BR 0.1-20 mg/mL**
Sensitivity	0.5 pg/µL dsDNA
Power	Adapter 100-240 V, 50-60 Hz; DC 12 V 2 A; 4.5 W

OPTICAL PERFORMANCE

Light Source	Monochrome LED
Detector	Photodiode

DISPLAY & DATA

Display	7-inch colour touch screen
Data Storage	10,000 records
Data Export	USB flash drive or printer; CSV, PDF
Interfaces	2 x USB Type A, 1 x USB Type B

DIMENSIONS & WEIGHT

Net Weight	1 kg

COMMON QUANTITATION PROBLEMS IT SOLVES

Very dilute samples	Fluorescence detection down to 0.5 pg/µL dsDNA.
Precious samples	Only 1-20 µL per reading.
Slow workflows	About 3 seconds per measurement.
Lost results	10,000-record memory with USB export.

Applications

The Dual-Channel Micro-Volume Fluorometer is used to quantify: dsDNA (high-sensitivity and broad-range) Oligonucleotides and RNA MicroRNA Proteins, enzymes, receptors and antibodies Hormones, drugs and other low-concentration bioactive compounds

Optics

- Two fluorescence channels
- Monochrome LED light sources
- Photodiode detection
- Five orders of magnitude dynamic range

Operation

- 7-inch colour touch screen
- 2- or 3-point calibration
- Readings in about 3 s
- Pre-set ranges for dsDNA, oligo, RNA, microRNA and protein assays

Data

- Stores up to 10,000 results
- Export via USB flash drive or printer
- CSV and PDF formats