Micro-Volume Spectrophotometer - Nucleic Acid, OD600 and Fluorescence - 190-850 nm

Model **MSSP-601-FSWISS** | Brand **Master Science**





The Master Science Micro-Volume Spectrophotometer measures nucleic acids, proteins and cell suspensions from only 0.5 to 2 µL of sample, which can be recovered afterwards. Full-spectrum detection from 190 to 850 nm with a xenon flash lamp and 2048-pixel CCD gives a result in under 6 seconds.

KEY HIGHLIGHTS

- Tiny sample use
- Three instruments in one
- Purity check included
- Fast results
- No PC needed

AT A GLANCE

190 to 850 nm WAVELENGTH RANGE	**±1 nm** WAVELENGTH ACCURACY
2 to 37500 ng/µL DSDNA RANGE	**±1 % (7.332 Abs at 260 nm)** ABSORBANCE ACCURACY

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

Three measurement modes are built in: micro-volume UV-Vis, an OD600 cuvette position with 37 °C heating and stirring for bacterial cultures, and two-channel fluorescence for dye-based quantification. A 7-inch touch screen and built-in printer make it a stand-alone instrument.

Overview

- Cuvette OD600 with 37 °C heating
- Magnetic stirring 100 to 1200 rpm
- Two fluorescence channels

Key Benefits

Tiny sample use
the Master Science Micro-Volume Spectrophotometer needs just 0.5 to 2 µL.

Three instruments in one
UV-Vis, OD600 and fluorescence.

Purity check included
flags common contaminants.

Fast results
under 6 seconds per sample.

No PC needed
touch screen, printer and USB export.

For cuvette work, browse Master Science spectrophotometers and lab instruments.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSSP-601-FSWISS
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Detection Modes	Nucleic acid / protein (micro-volume), OD600, fluorescence
Sample Volume	0.5 to 2 µL (micro-volume); ≥ 50 µL in 0.5 mL PCR tube (fluorescence)
Path Lengths	0.03, 0.05, 0.1, 0.2, 1 mm, motor-driven, 0.001 mm accuracy
dsDNA Range	**2 to 37500 ng/µL**
Contaminant Detection	EDTA, GTC, phenol, protein, guanidine salts, RNA
Measurement Time	< 6 s
OD600 Mode	LED, 0 to 4 Abs, 37 ±0.5 °C heating, stirring 100 to 1200 rpm (12 speeds)
Fluorescence	2 channels; Ex 470 / 624 nm, Em 525 / 692 nm; 4 s; linearity $R^2 \geq 0.995$
Power	DC 12 V, 5 A, 60 W

OPTICAL PERFORMANCE

Light Source	Xenon flash lamp (> 10^9 flashes)
Detector	2048-pixel linear CCD
Wavelength Range	**190 to 850 nm**
Wavelength Accuracy	**±1 nm**
Spectral Resolution	≤ 3 nm (FWHM, Hg 253.7 nm)
Absorbance Precision	0.002 Abs (1 mm path)
Absorbance Accuracy	**±1 % (7.332 Abs at 260 nm)**
Absorbance Range	**0.04 to 750 (10 mm equivalent, 260 nm)**

DISPLAY & DATA	
Display	7-inch capacitive multi-touch screen
Printer / Interfaces	Built-in thermal printer, 2 × USB 2.0
Data	> 10000 results; export xls, csv, txt, jpg, png

DIMENSIONS & WEIGHT	
Dimensions (L × W × H)	318 × 210 × 188 mm
Weight	4.85 kg

HOW THE MASTER SCIENCE MICRO-VOLUME SPECTROPHOTOMETER HELPS	
Precious samples used up in cuvettes	0.5 µL measurements, sample recoverable.
Separate instruments for DNA and OD600	combined in one unit.
Unknown sample purity	contaminant detection.
Manual dilution of concentrated DNA	range up to 37500 ng/µL.

The Master Science Micro-Volume Spectrophotometer is used in

- **Molecular biology research**
- **Clinical diagnostics**
- **Blood analysis and forensic identification**
- **Environmental microbiology**
- **Food safety testing**

Micro-Volume UV-Vis

- 190 to 850 nm full spectrum
- Five automatic path lengths
- Contaminant analysis

Operation

- 7-inch touch screen
- Built-in printer
- Over 10000 stored results