

MQ Micro Volume Spectrophotometer

Cat No: MSP-M-850

MOLEQULE-ON®



Description

The MOLEQULE-ON has introduced a new full-wavelength micro-spectrophotometer that is capable of rapidly and precisely detecting nucleic acids, proteins, and cell solutions. It also includes a cuvette mode for measuring the concentration of bacterial culture fluids. The device offers simple and quick operation and can be utilized in various applications including clinical diagnosis, blood concentration analysis, forensic identification, environmental microbiology testing, food safety assessment, and molecular biology research.



Detection of nucleic acids, proteins, and cellular solutions is achieved quickly and accurately using only 0.5-2ul of sample.



Utilizing the Android operating system, this device features a 7-inch capacitive touch screen and can be used independently without the need for an online connection to a computer.



Equipped with an OD600 optical path detection system, making it convenient to detect the concentration of bacteria, microorganisms, and other culture solutions.

Features

- 7-inch capacitive TFT screen with a multi-touch interface for easy operation.
- The device features automatic detection, enhancing efficiency.
- Only 0.5 to 2ul sample volume is needed for testing, and it can be retrieved post-measurement.
- Equipped with a high-precision motor drive, the optical path accuracy is 0.001mm, ensuring high absorbance detection repeatability.

Specifications

Model		MSP-M-850
Volume		0.5ul – 2 ul
Wavelength Range		190nm – 850nm
Concentration Range		2ng/ul dsDNA – 37500ng/ul dsDNA
Detection Time		<6s
Optical Path		0.03mm, 0.05mm, 0.1mm, 0.2mm, 1mm
Light Source		Xenon flash lamp/number of flashes
Detector Type		2048 pixel linear array CCD
Accuracy		±1nm
Spectral Resolution		≤3nm (FWHM@Hg253.7nm)
Absorption Accuracy		0.002Abs (1mm optical path)
Absorption Accuracy		1% (7.332Abs absorbance @ 260nm)
Absorbance Range		0.04-750 (at 260nm wavelength, equivalent to 10mm optical path)
OD600	Light Source	Single color LED
	Absorbance Range	0-4.000 Abs
	Absorbance Stability	(0,3) ≤0.5%, (3,4) ≤1.5%
	Repeatability	(0,3) ≤0.5%, (3,4) ≤1.5%
	Absorption Accuracy	(0,2) ≤0.005A, (2,3) ≤1%, (3,4) ≤2%
	Heating Temperature	37°C ±0.5°C
	Stirring Speed	12 adjustable speeds, 100-1200rpm
Printing		Built-in thermal printer
Communication		USB2.0 x 2
Data Export Formats		xls, csv, txt, jpg, png
Experimental Data		>10,000
Input Voltage		DC12V, 5A
Power Supply		60W