

Micro-spectrophotometer

Nanobio-300

Features

- Direct detection of high concentration samples without dilution, maximum detection concentration up to 4500 ng/μL (dsDNA)
- Android system, 7-inch capacitive touch screen, optimized APP software.
- Newly designed OD600 optical path detection system, new cuvette mode, for bacteria concentration detection.
- LED light source, long life component.
- High resolution CCD array detector, 5 s can complete the detection and display the results.
- Long life pulse xenon lamp light source.
- The test data is transferred to the computer via USB for easy sorting and analysis.
- The built-in printer can print the report directly.

Application

- 260 nm: dsDNA、ssDNA、RNA
- 280 nm: A280、BSA、IgG、Lysozyme
- 562 nm: BCA
- 595 nm: Bradford
- 600 nm: Bacterial concentration
- 650 nm: Lowry

Description

Nanobio-300 is a UV-Vis micro-spectrophotometer with full range of wavelength (200-800nm). Not only can it quickly and accurately detect nucleic acids, proteins and cell solutions with only 2 μl, but it is also equipped with a cuvette mode to detect the concentration of bacteria and other culture solutions, and then determine the growth of bacteria. Nano-300 is added a new function of bacterium cell concentration test (OD600). Nanobio-300 uses 7-inch touch screen and is integrated with Android system, which do not need to connect to a computer. It can be efficiently and conveniently applied to various fields of life science, and has become a routine configuration instrument in many laboratories.

Model	Feature
Nanobio-300	CCD array detector, high concentration direct detection, cuvette mode



1. Performance

	Nanobio-300	Nanobio-200	Nanobio-500
Wavelength range	200~800 nm	260 nm, 280 nm	200~800 nm
Minimum sample size	0.5~2.0 μ L	1.0~2.0 μ L	0.5~2.0 μ L
Path length	0.2 mm 1.0 mm	0.5 mm	0.05 / 0.2 mm 1.0 mm
Light source	Xenon flash lamp	UV LED	Xenon flash lamp
Detector type	2048-linear CCD array	UV-silicon photocell	2048-linear CCD array
Wavelength accuracy	1 nm	----	1 nm
Spectral resolution	≤ 3 nm	≤ 8 nm	≤ 3 nm
Absorbance precision	0.003 Abs	0.005 Abs	0.003 Abs
Absorbance accuracy	1 % (7.332 Abs at 260 nm)	2 % (7.332 Abs at 260 nm)	1 % (7.332 Abs at 260 nm)
Absorbance range	0.04~90 A	0.2~50 A	0.04~300 A
Nucleic acid detection range	2~4500 ng/ μ L (dsDNA)	10~2500 ng/ μ L (dsDNA)	2~15000 ng/ μ L (dsDNA)
Measurement time	< 5 s	< 6 s	< 6 s
Dimension (WxDxH) mm	210x268x181	208x280x186	208x320x186
Weight	2.8 kg	2.0 kg	3.6 kg
Sample pedestal material	Aluminum alloy and quartz fiber	Aluminum alloy and quartz fiber	Aluminum alloy and quartz fiber
Operating voltage	DC 24 V 2 A	DC 24 V 2 A	DC 24 V 2 A
Operating power	25 W	25 W	25 W
Standby power	5 W	5 W	5 W
Software compatibility	Android system	Android system	Android system

Selection guide

	Nanobio-300	Nanobio-200	Nanobio-500
Wavelength range	200~800 nm	200~800 nm	260 nm, 280 nm
Nucleic acid test dsDNA (ng/ μ L)	2~4500	2~15000	10~2500
A280 protein BSA (mg/mL)	0.1~135	0.1~450	0.5~75
Colorimetry	●	●	
Full wavelength scan	●	●	
OD600	●	●	●
Fluorometer		●	
Touch screen	●	●	●