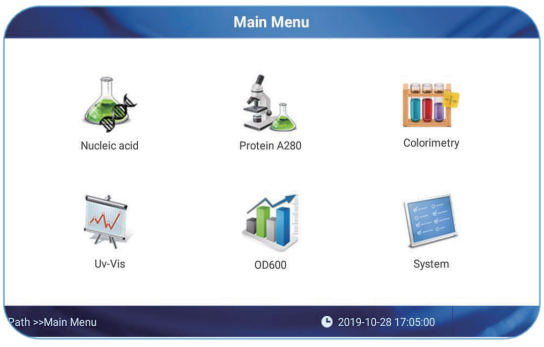
Nano-300 Micro-spectrophotometer

Nano-300 is a improved Micro-spectrophotometer based on Nano-100 with full wavelength (200-800 nm). It added a function of bacterium cell concentration detection (OD 600) and without requiring a computer. It can not only measure the sample concentration rapidly and accurately like Nano-100 only needs 2 μL sample, but also equipped with the cuvette mode to measure the concentration of bacteria and other culture media, so as to estimate count the growth of bacteria. Nano-300 uses a 7-inch capacitive touch screen and a customized android system to make it more efficient and convenient for life science experiments.

- 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
- 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



Nano-300 Unique Advantages

- Android system, 7-inch capacitive touch screen, optimized APP software
- Newly designed OD600 optical path detection system, new cuvette mode, convenient for the concentration detection of bacteria, microorganisms and other culture solutions
- High resolution CCD array detector, 5 s can complete the detection, display the results
- With its own high-definition touch screen and control program, it can be detected without a computer connection
- Long life pulse xenon light source, intelligently identify the user's usage. No operation within 5 minutes, the light source will be automatically turned off to prolong the service life
- The test data is transferred to your computer via USB flash memory for easy data sorting, analysis and storage
- Easy-to-use data to printer option, can print reports directly through the built-in printer
- Automatic detection and automatic blank function: automatically detect the sample concentration when the detection arm is lowered, which greatly shortens the detection time of large batches of samples.

Micro-spectrophotometer

Micro-specrophotometer can quickly and accurately detect nucleic acid, protein and cell solution. Because it is easy to use, less sample consumption, no preheating, can quickly cleanup residual samples, no cuvettes or other sample positioning devices required, samples do not need to be diluted and other characteristics. It has become a routine instrument in many laboratories. During the test, users can directly add the sample point to the sample plate. After the test the sample can be directly erased or recovered.

Features

User-friendly software, easy to use

Graphical software operation, more intuitive interface, the results can be directly exported, easy to save, view and output data.

Micro-volumes measuring

Only 0.5 μL-2 μL sample is needed for each test. After the measurement, the samples can be recovered and the precious samples can be studied with confidence.

Fast detection

No dilution or cuvette needed in the detection process;
5 s can complete the test and display the result.

Long life light source, do not need to warm up

Xenon flash, life span is 10^9 (up to 10 years).
No preheating, direct use, ready to test in any time, no need for other consumables.

High concentration detection

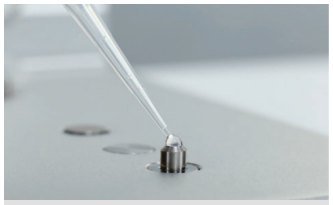
The maximum concentration of the detectable sample is 4,500 ng/μL (Nano-300, dsDNA as an example), and the sample basically does not need to be diluted.

Convenient and easy to use

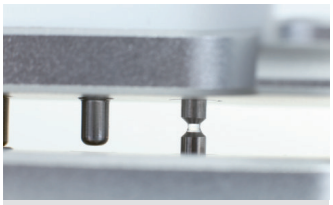
Directly point the sample on to the sample plate without dilution or cuvette. The sample concentration can be measured as 50 times of the conventional uv-visible photometer, and the result can be directly output as the sample concentration.

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

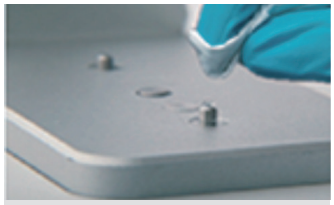
Operation Process



Adding sample



Measuring sample



Quick and easy cleaning

Specification

		Nano-300
Wavelength range		200~800 nm
Minimum sample size		0.5~2.0 μL
Path length		0.2 mm 1.0 mm
Light source		Xenon flash lamp
Detector type		2048-linear CCD array
Wavelength accuracy		1 nm
Spectral resolution		≤ 3 nm
Absorbance precision		0.003 Abs
Absorbance accuracy	1 % (7.332 Abs at 260 nm)	1 % (7.332 Abs at 260 nm)
Absorbance range		0.04~90 A
Nucleic acid detection range		2~4500 ng/μL (dsDNA)
Measurement time		< 5 s
Dimension (W×D×H) mm		210×268×181
Weight		2.8 kg
Sample pedestal material	Aluminum alloy and quartz fiber	Aluminum alloy and quartz fiber
Operating voltage		DC 24 V 2 A
Operating power		25 W
Standby power		5 W
Software compatibility		Android system

Cuvette mode (OD600 measurement)

Light source	LED
Wavelength range	600±8 nm
Absorbance range	0~4 A

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