UltraNano *Plus*

Micro Spectrophotometer

Product Description

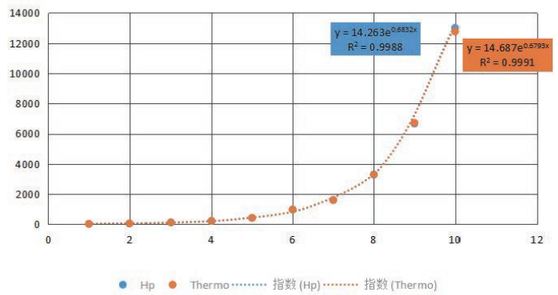
UltraNano Plus does not require a computer equipped full wavelength (190-850nm) micro spectrophotometer. It can quickly and accurately detect nucleic acids, proteins and cell solutions. And euipped with a colorimetric dish mode for detecting bacterial and other culture medium concentrations, with a minimum limit of 0.5ng/uL (dsDNA).

The sample size required for each measurement of nucleic acid testing is only 0.5 to 2.0uL, and the sample can be directly placed on the sampling table without the need for accesories such as colorimetric cups or capillaries. After the measurement is completed, You can choose to directly wipe off the sample or use a pipette to recover the sample. All steps are simple, fast, and completed in one time. It can be applied in various fields such as clinical disese diagnosis, blood transfusion safety, forensic identification, environmental microbiology testing food safety monitoring and molecular biology research.

Product Feature

- Light source flicker: The flicker frequency of the ligh source is short, which increases the service life of the light source compared to traditional detection methods. The ligh intensity stimulation is small, and the test sample can be detected faster and is not easily degraded;
- Adopting 4 optical paths detection technology: unique motor control technology, By using “4” optical paths detection method, with better stability, repeatability, linearity, and larger measurement range;
- Sample contractiono: The sample does not need to be diluted, and the concentration range of the measurable sample is more than 50 times that of a conventional UV visible spectrophotometer;
- Fluorescence function: paired with fluorescence quantitative reagents, it can detect pg level concentration of dsDNA;
- Built-in printer: With a simple and easy-to-use data to printer option, you can directly print reports through the built-in printer;
- Operating system: An independently developed Android operating system with a 7-inch capacitive touch screen, which does not required a computer to be connected and can be tested on a single machine.

- Equipped with OD600 baterial solution and microbial detection: Equipped with OD600 optical path detection system, it is more convenient to detect the concentration of bacterial, microorganisms, and other culture solutions than the dish mode.
- Strong repeatability and high linearity:



Accessories

Item No.	Description
UltraNano Plus	Colorimetric dish

Detection Mode

Nucleic Acid Testing

Can quickly and accurately detectin nucleic acids。

Protein Testing

Can quickly and accurately detect proteins.

OD600 Detection

Equipped with a colorimetric dish mode for detecting the concentraction of bacteria and other culture media.

Software Functions

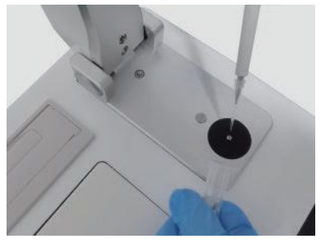
Main interface
Simple and user-friendly interface

Measurement interface
Fast and stable operation without delay.

Data intrface
Data export, batch priting, history recording function.

Operation Instruction

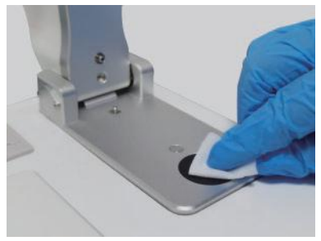
Micro detection



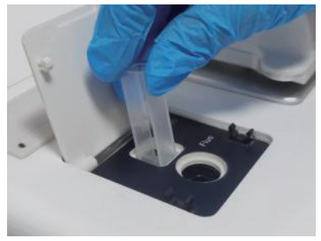
Before using the instrument, first use 0.5~2.0uL clean two sample stands and two light machine stands with ultrapure water or sample buffer solution, and wipe the solution clean with dust-free paper; Repeat at least 2 times.

Suck 0.5~2.0uL sample buffer onto the testing machine base, lower the testing arm, click “blank” to obtain the baseline, and wipe it clean with dust-free paper after completion Colorimetric dish detection.

Suck 0.5~2.0uL sample solution onto the testing machine base, lower the testing arm, and click on “sample” for testing.



After testing, use 0.5~2.0uL clean two sample holders and two light holders with ultrapure water, and wipe the solution clean with dust-free paper; 3 to 4 times.



Insert the OD600 detection cuvette solt and click on “sample” to test the absorbance of the sample.

Technical Specification

Model	UltraNano Plus
Sample Volume	0.5~2.0μL
Optical Path	0.02mm, 0.05mm (high concentration measurement)
	0.2mm, 1.0mm (Ordinary concentration measurement)
Light Source	Xenon flash lamp
Detector	HAMAMATSU UV Enhanced CMOS Linear Array
Wavelength Range	190~850 nm
Wavelength Accuracy	±1 nm
Spectral Resolution	< 1 nm
Photometric Range	0.02~300A (Equivalent to 10mm)
Photometric Accuracy	0.002Abs (0.2mm optical path)
Aborbance Precision	±0.005A or ±1%
Aborbance Accuracy	±1% (7.332Abs at 260nm)

Model		UltraNano Plus
Nucleic Acid Detection Range		0~27,5000 ng/μL dsDNA
Protein Detection Range		0.06~820mg/mL BSA
Detection Time		< 5 seconds
Fluorometer	Linearity	dsDNA: 0.5pg/μL
	Repeatability	≤1.5%
	Stability	≤1.5%
OD600 Cuvette (45x12.5x12.5mm)	Abs Range	0~6.000Abs
	Abs Stability	(0,3)≤0.5%, (3,4)≤2%
	Abs Repeatability	(0,3)≤0.5%, (3,4)≤2%
	Abs Presicion	(0,2)≤0.05A, (2,3)≤1%, (3,4)≤2%
	Temperature	37±0.5°C
Display		7 inch, 1280x800 high-definition LCD capacitive touch screen
Operating System		Android
Internal Storage		32GB flash memory
Data Output		USB, Built-in printer
Power Supply		AC110V~220V, 50/60Hz
Overall Dimension		200x260x165mm
Weight		5kg

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