



Ultra Micro Spectrophotometer | Product Introduction

Ultra Micro Spectrophotometer is a highly reproducible full-wavelength spectrophotometer that uses a dual detection mode on the pedestal and cuvette for wider concentration range sample detection. It is easy to operate and can be used not only for measuring the purity and concentration of DNA and RNA, measuring protein concentration, but also for absorbance detection in general substance analysis.



Product Features

- ◆ Nano-Plus is a fully wavelength (190-850nm) micro-volume spectrophotometer that does not require a computer for operation.
- ◆ The light source flashes a maximum of three times per measurement, which is much shorter than the hundreds of flashes in traditional detection, increasing the lifespan of the light source.
- ◆ Extending the lifespan of the light source, the low light intensity stimulation enables faster detection of the sample, and makes it less likely for the protein to denature.
- ◆ The unique motor control technology is used, and a three-optical-path detection method is employed, providing more stable stability, repeatability, linearity, and a larger detection range.
- ◆ Samples do not need to be diluted, and the concentration range of the samples that can be measured is more than 150 times that of conventional UV-Vis spectrophotometers.
- ◆ Equipped with an OD600 light path detection system and a cuvette mode, it is convenient for the detection of bacterial and microbial culture concentrations.
- ◆ It adopts a deeply customized Android operating system, a 7-inch capacitive touch screen, and does not require a computer to be connected, so it can be used as a stand-alone device.
- ◆ The simple and user-friendly data printer option allows you to print reports directly through the built-in printer.
- ◆ It uses image and table storage formats, the table is compatible with Excel, making it convenient for subsequent data processing, and it supports JPG image export.
- ◆ The appearance adopts an integrated metal casing, which has a more metallic feel.
- ◆ The mini size of the appearance saves laboratory space.

Technical Parameters

Model	Nano-Plus
Wavelength Range	190-850nm
Sample Volume	0.5-2ul
Light Source	Xenon Lamp
Detector	HAMAMATSU UV-enhanced CMOS linear array sensor
Accuracy of Absorbance	0.003Abs
Precision of Absorbance	±1% (7.332Abs at 260nm)
Range of Absorbance	0.04 - 300A (equivalent to 10mm)
Wavelength Reproducibility	<±0.2nm
Nucleic acid detection range	2-15000 ng/μl (dsDNA)
Detection time	<6s

Technical Parameters

OD600 absorbance range	0~4.000 Abs
OD600 absorbance stability	[0,3)≤0.5%; [3,4)≤2%
OD600 absorbance reproducibility	[0,3)≤0.5%; [3,4)≤2%
OD600 absorbance accuracy	[0,3)≤0.005A+1%; [3,4)≤2%
Data output method	USB
Sample pedestal material	Quartz fiber and high-hardness aluminum
Print	Built-in thermal printer
Power adapter	24V DC
Power consumption	25W
Weight	5kg
Dimensions	200×260×165 (W×D×H) mm