



### Nano Spectrophotometer | Product Introduction

Nano-800 Nano Spectrophotometer is a high-reproducibility full-wavelength spectrophotometer that uses a dual-detection mode on both the pedestal and cuvette for a wider concentration range of sample detection. It is easy to operate and can be used not only to measure the purity and concentration of DNA, RNA, and protein, but also for absorbance detection in general substance analysis.



### Product Features

- ◆ Uses independently developed light source control algorithm and data acquisition correction algorithm to make data more accurate and stable.
- ◆ Unique motor control technology, using "4" optical path detection mode, with better stability, repeatability, linearity, and larger measurement range.
- ◆ Samples do not need to be diluted, and the concentration range of samples that can be measured is more than 150 times that of conventional UV-visible spectrophotometers.
- Strong repeatability and high linearity.
- ◆ Equipped with an OD600 optical path detection system, which is more convenient for detecting the concentration of bacteria, microorganisms, and other culture media than the cuvette mode.
- ◆ Independently developed Android operating system, 7-inch capacitive touch screen, no need to connect to a computer, can be operated as a standalone device.
- ◆ Easy-to-use data-to-printer options, you can directly print reports through the built-in printer.
- ◆ With fluorescent quantification reagents, it can detect pg-level concentration of dsDNA {Nano-800 exclusive}.

Technical Parameters

Model	Nano-800
Wavelength Range	190nm-900nm
Sample Volume	0.5-2 $\mu$ l
Light Source	Xenon lamp
Detector	HAMAMATSU UV-enhanced CMOS linear array sensor
Accuracy of Absorbance	0.002Abs
Precision of Absorbance	$\pm$ 1% (7.332Abs at 260nm)
Range of Absorbance	0.02 - 300A (equivalent to 10mm)
Wavelength Reproducibility	<0.2nm
Nucleic Acid Detection Range	2.0 - 27,500 ng/ $\mu$ L dsDNA and 0.06 - 820 mg/mL BSA
Detection Time	<5S

Technical Parameters

Fluorescence Sensitivity	DsDNA: 0.5pg/ul
Fluorescence Linearity	$\leq$ 1.5%
Optical Density Reproducibility	[0,3] $\leq$ 0.5%, [3,4] $\leq$ 0.2%
Optical Density Accuracy	[0,2] $\leq$ 0.005%, [2,3] $\leq$ 1%, [3,4] $\leq$ 2%
Wavelength Accuracy	<1nm
Data Output	USB
Photometric Accuracy	<0.005A or <1%
4-Path Length	0.02mm, 0.05mm {for high concentration measurement}, 0.2mm, 1.0mm {for normal concentration measurement}
Sample Volume Requirement	0.5~2ul
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 $\times$ 260 $\times$ 165(W $\times$ D $\times$ H)mm