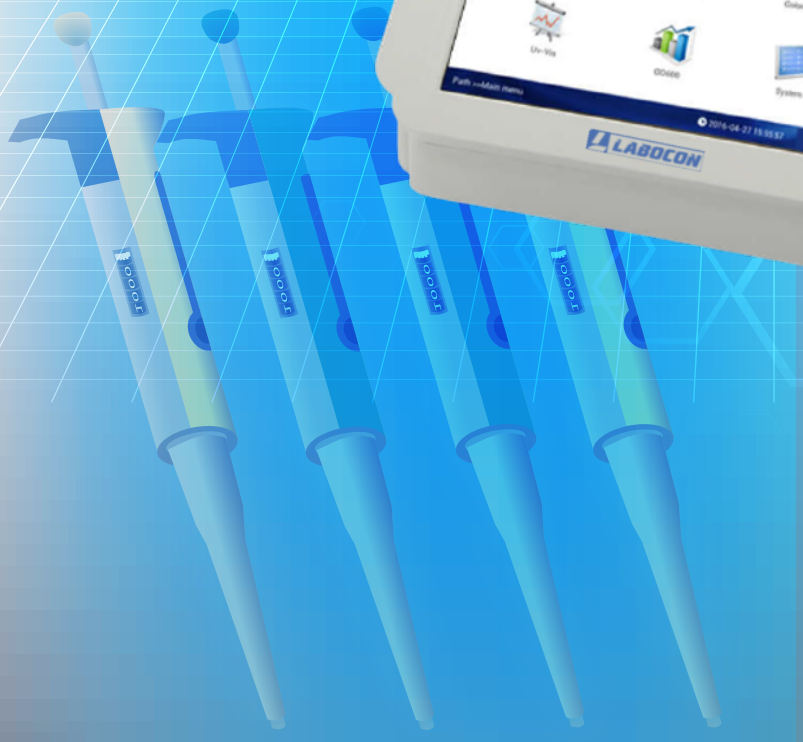
LABOCON

NANO

Spectrophotometer



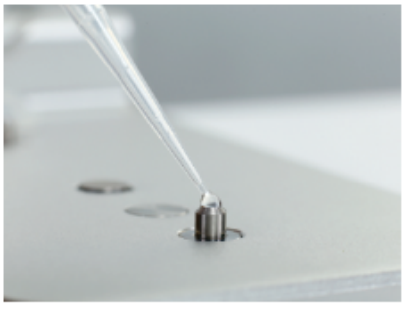
NOTE: The color of the actual product may differ from the color pictured in this catalog due to printing limitation.

NANO SPECTROPHOTOMETER LNS-100 SERIES

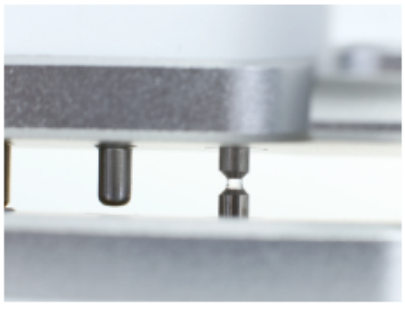
Labocon Nano Spectrophotometer LNS-100 Series is a perfect instrument for micro-volume UV-VIS spectrophotometer. LNS-102, LNS-103 and LNS-104 is an advanced model of Micro UV-VIS Spectrophotometer with full range of wavelength (200-800nm) requires 0.5-2ul sample to measure nucleic acids, protein. LNS-104 It is with an added new function of bacterium cell concentration measurement (OD600) in a cuvette.

Features

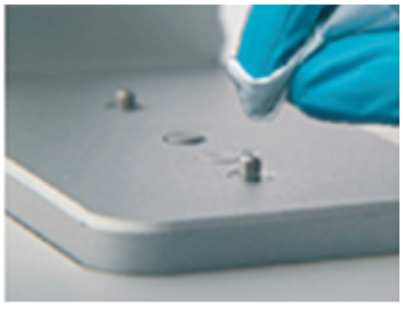
- Nano Spectrophotometer LNS-101 is a basic micro-volume UV spectrophotometer designed only 3 types of wavelength: 230nm, 260nm and 280nm
- LNS-102, LNS-103 and LNS-104 is a Full range of wavelength (200-800nm) with scan capability from 200-800nm within 5sec for the measurement of nucleic acids and proteins.
- It is added a function of bacterium cell concentration detection (OD600).
- Android system operation, 7 inch touch screen no computer, APP soft, simple interface, easy to use. (Only for LNS 101, LNS 103 and LNS 104)
- User-friendly software, easy to use.
- Micro-volumes measuring: Only require 0.5-2µl sample to accurate determinate of nucleic acids, proteins.
- Turn on and instantly measure without lamp warm up time
- Flexible data output. The data can be printed with built-in printer, and output via USB memory stick. (Only for LNS-101, LNS-103 and LNS-104)
- Long life's Xenon flash lamp: Xenon flash lamp, 10 flashes, up to 10 years, no cells or cuvettes, no dilutions and expensive consumables.
- Easy Handling:



Adding sample



Measuring sample



quick and easy cleaning

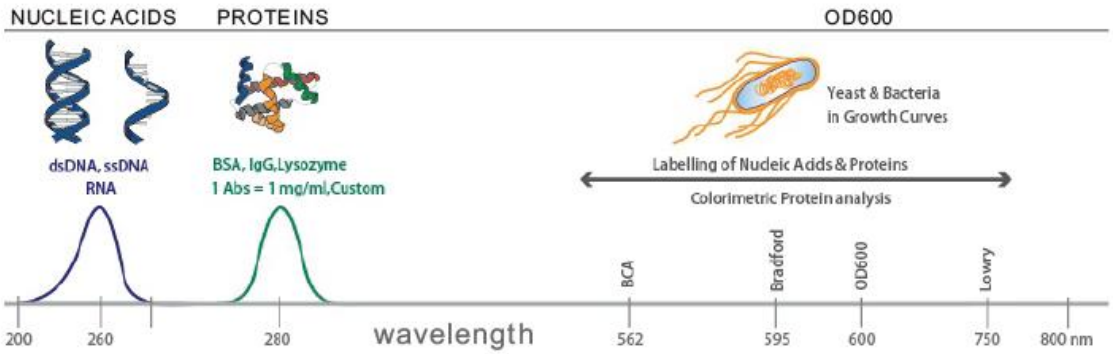
New fluorescence detection function for Nano Spectrophotometer LNS-104

Fluorescence detection combined with fluorescence quantitative analysis kit, able to accurately quantify DNA, RNA and protein concentration through the specific binding of fluorochrome with target material, and the minimum limit is 0.5pg/u (dsDNA).

LNS-104 can be compatible with common fluorescence quantitative reagent to provide users with maximum convenience and minimum detection cost.

Applications

Labocon Nano Spectrophotometer LNS-100 Series is used to detect the concentration and purity of DNA, RNA and protein. It is an ideal equipment for a biology laboratory to make life science research more efficient.



SPECIFICATION

Model	LNS-101	LNS-102	LNS-103	LNS-104
Wavelength Range	230nm, 260nm, 280nm	200-800nm		
Minimum Sample Size	0.5 2.0μl			
Path Length	0.2mm (High concentration) 1.0mm (Ordinary concentration)			0. 05/0.2mm (For high concentration measwrement) 1.0mm (Ordinary concentration)
Light Source	Xenon flash lamp			
Detector Type	UV-sillion photocell	3864-Element linear CCD array		2048-element linear silicon CCD array
Wavelength Accuracy	-	±0.5 nm		
Spectral Resolution	-	≤1nm (FWHM at Hg546nm)		
Absorbance Precision	0.003Abs			
Absorbance Accuracy	1% (7.332Abs at 260nm)			
Absorbance Range	0.02 - 80A	0.02 - 90A	0.02 - 100A	0.04 - 200A
Detects Nucleic Acid up to	10-4000ng/ul (dsDNA)	2-4500ng/ul (dsDNA）	10-5000ng/ul (dsDNA)	2-15000ng/ul (dsDNA)
Measurement Time	<15S	<8S	<6S	<6s
Data Output	USB	Connect PC	USB, SD-RAM Card	USB
Sample Pedestal Materia	Aluminum alloy and Quartz fiber			
Operating Voltage	24V DC			
Power Consumption	25W	20W	40W	25W
Standby Power Consumption	5W			
Dimension (W x D x H)mm	210 x 280 x 181	200 x 250 x 166	210 x 268×181	208 x 310 x 186
Weight	3.6kg	2.6kg	3.6kg	
Software Compatibility	Android System	WinXP, Windows 7, Windows 8	Android System	
Fluorescent detection				
Sensitivity	-			dsDNA: 0.5pg/ul
Linear Dynamic Range				R2＞0.995
Repeatability	-			＜1.5%
OD600nm Measurement				
Light Source	LED	-	LED	LED
Wavelength Range	600±8nm	-	600±8nm	600±8nm
Absorbance Range	0 4A		0 4A	0 4A

LNS-101

LNS-102

LNS-103

LNS-104

NANO SPECTROPHOTOMETER LNS-200 SERIES

Labocon Nano Spectrophotometer LNS-200 Series is low volume spectrophotometers requires 0.3-2ul sample to measure nucleic acids, protein. A new type of full-wavelength spectrophotometer.

Features

- Instrument control and operation: built-in win10 system, built-in 7-inch high-definition display, full touch operation.
- Data output method: Built in >32GB storage space. Users can directly store measurement result data and custom methods, which can be automatically saved in spreadsheet mode. USB output or network transfer data, with electronic manual.
- Data output port: 2 USB ports, which can be connected to various devices such as mouse, keyboards, desktop computers, etc.
- Built-in Bluetooth, WIFI, available to remote operation and print results data wirelessly
- Platform material: stainless steel and quartz fiber. (LNS 202 to LNS 205)
- No need to warm up, start testing at any time. (LNS-202 to LNS-205)
- Built-in fiber to avoid fiber breakage caused by external force collision, resulting in chaotic measurement results. (LNS-202 to LNS-205)
- With a liquid column to determine abnormal function. (LNS-204 to LNS-205)

Applications

Labocon Nano Spectrophotometer LNS-200 Series can detect nucleic acid, protein, colloidal, microarray samples, and conventional full-wavelength scanning, Industrial dyes at 490 nm, Colorimetric assays of Protein such as : BCA at 562nm, Branford assay at 595nm, Modified Lowry at 650nm, Gold Nanoparticles at 520nm, etc.

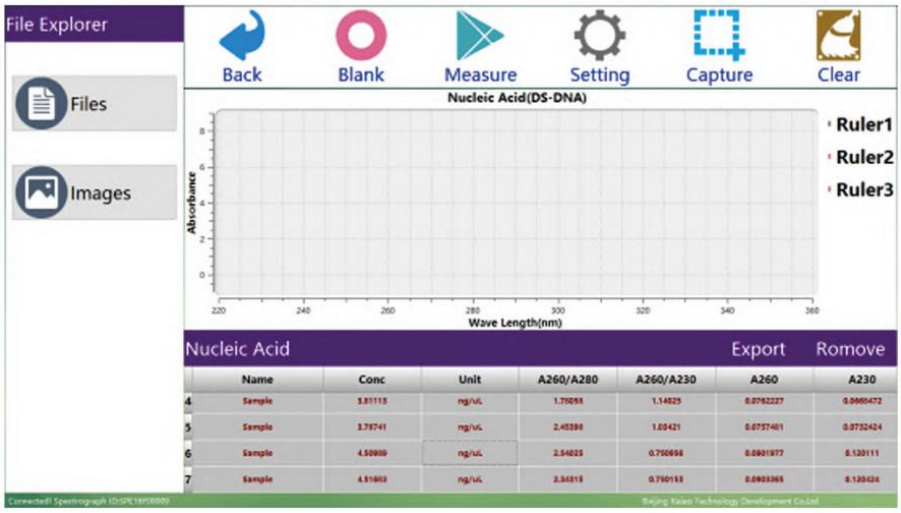
Specifications

Model	LNS-201	LNS-202A/LNS-202B	LNS-203A/LNS-203B
Light path	1mm	1/0.5/0.05mm automatic conversion	1mm, 0.05mm (optical path automatic conversion)
Sample base material	Stainless steel and Quartz Fiber		
Sample volume	1-2μL	0.3-2.0 μL	
Light source	Xenon lamp	Long life pulsed xenon flash lamp	
Detector	3684-element linear silicide CCD array	3864 linear CCD array	2048(CMOS) element linear silicide CCD array
Detection range	190~850nm	190-850nm	190 ~ 850nm
Wavelength range	190-1100nm	190-1100nm	190 ~ 850nm
Wavelength accuracy	± 0.1 nm		
Wavelength resolution	1nm (FWHM at Hg 546 nm)		
Wavelength Repeatability	< ±1nm		<± 5nm
Accuracy of absorbance	0.0001 Abs		0.0001 Abs
Absorbance accuracy	1% (0.76 absorbance at 350nm)		
Absorbance range	0.02~15Abs, equivalent to 10mm	0.002-300Abs (equivalent to 10mm optical path)	0.002 - 300Abs (equivalent to 10mm path length)
Detection time	Less than 3s		
Nucleic acid range	1-750 ng/ (dsDNA)	0.4-15000 ng/ (ds-DNA)	0.2 ~ 37500ng / (saDNA)
Protein measurement range	0.1-40 mg/ml, BSA	0.01-400MG/ML (BSA)	0.01 ~ 1120mg / ml (BSA)
Sample measurement time	- Less than 5 seconds		
Built-in Method	Nucleic Acid, Protein, Full Wavelength Scan		
Machine size	20 x 30 x 20cm	20x30x20cm	20x30x20cm
Machine weight	2.8kg	3.5kg	3.5kg

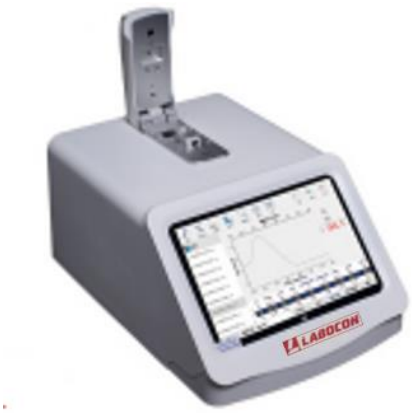
LNS-202B Cuvette Parameters	
Cuvette wavelength range	200nm-850nm
Trial cuvette specifications (light path)	1/2/5/10mm
Cuvette minimum volume	50 μL
Sample level height	5mm
Type	Recyclable micro cuvette
Cuvette darkroom	Standard cuvette darkroom, suitable for multi-size cuvettes

LNS-203B Cuvette Parameters	
Cuvette specifications (optical path)	1mm, 2mm, 5mm, 10mm
Min sample volume of the cuvette	20 μL
The minimum height of the cuvette sample	5mm
Type	A cuvette with a traceable cuvette specification
Cuvette Anechoic Chamber	A standard cuvette darkroom with a wide variety of cuvettes
Mixing system	Comes with mixing system
Temperature control	4 ~ 42 °C thermostat adjustable temperature error <± 0.5 °C

LNS-201

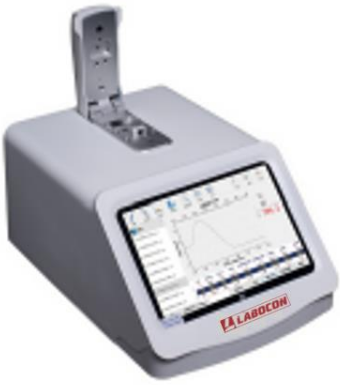


LNS-202A and LNS-202B



LNS-201

LNS-202A and 202B



LNS-203A and 203B

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