Introduction

Excellent optical system, high level mechanical system, advanced circuit control system, rigorous production process, friendly and intuitive software interface, good technical specifications, stable and reliable performance can meet the analysis requirements from high level and professional customers.

Main Features

Appearance and internal structure

Modern and elegant appearance, extendable design, separate structure design for optical and circuit system can efficiently avoid the loss of photometric energy.

Convenient and intuitive operation interface

This series has 7-inch high resolution colored capacitive touch screen and newly developed UV-SUPER2.0 software with strong functions, which make the operation simple and easy.

Excellent performance and stability

Totally enclosed monochromator and optical mirror coated with SiO2 guarantee the optical components are not influenced by gas and environment.

❶ Philips and Hamamatsu lamps.

❷ Newly improved screw pole drive structure makes good wavelength repeatability and high wavelength accuracy.

❸ Totally new design, superior materials and rigorous production process.

Advanced photoelectric test system

❶ 32 bit ARM11 microcontroller with clock speed up to 533MHz.

❷ 20 bit analog digital device specialized for photoelectric data collection and processing from BB company.

❸ Support internal huge data storage, mouse operation and big SD card memory.

Simple and convenient maintenance

❶ Socket type lamps make the optical adjustment not necessary and maintenance much easier.

❷ Separated Optical and circuit system has no cross influence and make the instrument more reliable.

Specifications

MODEL	T-9100	T-9200	T-9200S	T-9200A
Display	7 inch TFT colored capacitive touch screen			
Wavelength Range	190 - 1100nm			
Optical System	Single Beam	Double Beam		
Spectral Bandwidth	2nm	2nm	1nm	0.5,1,2,4nm
Wavelength Accuracy	±0.5nm	±0.5nm	±0.3nm	±0.3nm
Wavelength Repeatability	≤0.2nm	≤0.2nm	≤0.1nm	≤0.1nm
Photometric Range	0-200%T, -0.3-3.0A, 0-9999C (0-9999F)			
Photometric Accuracy	0.2%T (0-100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)			
Photometric Repeatability	≤0.15%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)			
Scanning Speed	Low, Medium, High (up to 3000nm/min)			
Stray Light	≤0.05%T@220nm,360nm			
Baseline Flatness	±0.003A	±0.002A	±0.001A	±0.001A
Drift	0.003A/30min @500nm	0.002A/30min @500nm	0.001A/30min @500nm	0.001A/30min @500nm
Noise	0.0005A@500nm			
Working Mode	T,A,C,E			
Wavelength Setting	Automatic			
Detector	Solid Silicon Photodiode			
Light Source	Tungsten Halogen/Deuterium Lamp			
Output Port	USB HOST, USB DRIVE, RS232			
Power Requirements	AC 110-220V 50-60Hz			
Humidity Range	Less Than 85%			
Shipping Dimensions and Weight	770*630*340mm, 27kg			880*690*530mm, 45kg

UI Design (Touch Screen)

Absorbency and transmittance test

Photometry

To test sample solution concentration, you can choose different methods like coefficient, standard curve, linearity, linear zero crossing and quadratic. Operators can choose single, double and tri-wavelength and change the coefficients of double and tri-wavelength. Advanced arithmetic makes curvilinear regression more precise and test data more accurate.

Quantitative Measurement

To test the sample chemical reaction process by fixed time scanning the sample solution with fixed wavelength. The equipment can calculate its changing rate after entering the corresponding parameters.

Kinetics Measurement(Time Scanning)

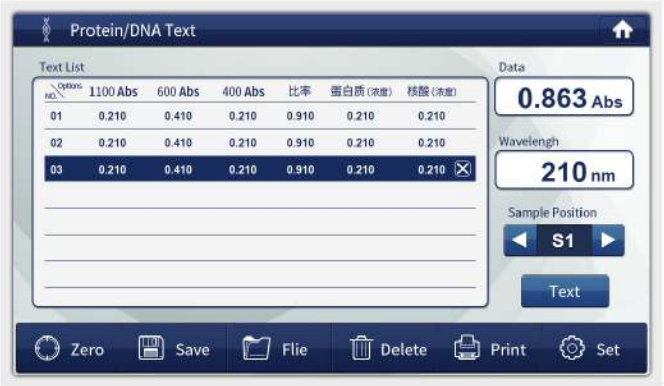
UI Design (Touch Screen)

Wavelength Scanning(Qualitative Test)

To test sample solution absorbency peak, can scan the sample characteristic curve of any wavelength range between 190 and 1100nm. And do the chart overlay and arithmetic.

Multi Wavelength Measurement

It is much more convenient for users to test the absorbency or do the arithmetic in case of several wavelengths for the same sample solution, which is much simpler than single wavelength testing.



DNA/Protein Measurement

It is a special function for specific users and make the operation easier.

Accessories

Manual 4-position cell holder (standard for single beam)

Single-hole cuvette holder (Standard for Double Beam)

Automatic 8-position round cell holder

Manual 4-position 10cm cell holder

Manual 4-position film holder

Single hole film holder

Single hole long optical path holder

Tube rack

Adjustable XY micro cell holder

Comparison Table

	UV/Vis.	Optical System	Display	Slit Width	Wavelength Accuracy	Wavelength Repeatabiltiy	Stray Light	Light Source	Page
E-1000V	Vis.	Single	70*40mm LCD	4 nm	±2 nm	≤1 nm	≤0.15%T@360nm	Tungsten Halogen Lamp	1/2
E-1000UV	UV							Tungsten Halogen /Deuterium Lamp	
C-7000V	Vis.	Single	7 inch FTF	2 nm	±0.3 nm	≤0.1 nm	≤0.05%T @220nm,360nm	Tungsten Halogen Lamp	3/4
C-7000UV	UV							Tungsten Halogen /Deuterium Lamp	5/8
C-7100									
C-7100S				1 nm					
C-7100A				0.5,1,2,4nm					
C-7200		Double		2 nm			≤0.03%T @220nm,360nm		
C-7200S				1 nm					
C-7200A				0.5,1,2,4 nm					
C-7200PC				1, 2nm					
X-8200	UV	Double	7 inch FTF	2 nm	±0.6 nm	≤0.2 nm	≤0.1%T @220nm,360nm	Xenon Lamp	9/10
X-8200S				1 nm					
X-8200A				0.5,1,2,4 nm					
X-8200T			Touch Screen	2 nm					
X-8200TS				1 nm					
X-8200TA				0.5,1,2,4nm					
T-9100	UV	Single	Touch Screen	2 nm	±0.5 nm	≤0.2 nm	≤0.05%T @220nm,360nm	Tungsten Halogen /Deuterium Lamp	11/14
T-9200		Double							
T-9200S				1 nm	±0.3 nm	≤0.1 nm			
T-9200A				0.5,1,2,4,nm					