

T-9100/9200

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 color capacitive touch screen and newly developed UV-SUPER2.0 software (optional) 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 environment.

- ① Philips and Milas lamps.
- ② Newly improved screw pole drive structure makes good wavelength repeatability and high wavelength accuracy.
- ③ Totally new design, superior materials and rigorous production process.

Advanced photoelectric test system

- ① 32 bit ARM11 microcontroller with clock speed up to 533MHz.
- ② 20 bit analog digital device specialized for photoelectric data collection and processing from BB company.
- ③ Support internal data storage, there are standard RS232, USB(A) and USB(B) port.

Simple and convenient maintenance

- ① Socket type lamps make the optical adjustment not necessary and maintenance much easier.
- ② Separated optical and circuit system has no cross influence and make the instrument more reliable.

T-9100/9200

Specifications

MODEL	T-9100	T-9200	T-9200S	T-9200A
Display	7 inch TFT color 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	±0.3nm	±0.3nm	±0.3nm	±0.3nm
Wavelength Repeatability	≤0.2nm	≤0.2nm	≤0.2nm	≤0.2nm
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	±0.002A	±0.002A
Drift	0.003A/30min @500nm	0.002A/30min @500nm	0.002A/30min @500nm	0.002A/30min @500nm
Noise	0.0003A@500nm			
Working Mode	T,A,C,E			
Wavelength Setting	Automatic			
Detector	Solid Silicon Photodiode			
Light Source	Tungsten Halogen/Deuterium Lamp			
Output Port	RS232, USB(A),USB(B)			
Power Requirements	AC 110-220V 50-60Hz			
Humidity Range	Less Than 85%			
Shipping Dimensions and Weight	790*660*370mm, 28kg			940*740*510mm, 52kg

UI Design (Touch Screen)



Photometry

There are three test modes.

Absorbance, transmittance and energy.



Quantitative Measurement

To test sample solution concentration, you can choose different methods like coefficient, standard curve, linearity, linearity through zero and quadratic. Up to 15 standard samples can be used to create a curve. Advanced arithmetic makes curvilinear regression more precise and test data more accurate.



Kinetics Measurement(Time Scanning)

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.

UI Design (Touch Screen)



To test sample solution absorbance peak, can scan the sample characteristic curve of any wavelength range between 190 and 1100nm. You can look up the peak value on the standalone device.

Wavelength Scanning(Qualitative Test)



It is much more convenient for users to test the absorbance of several wavelengths for the same sample solution, which is much simpler than single wavelength testing.

Multi Wavelength Measurement



There are two test modes and formulas based on absorbance ratio 260nm/280nm or 230nm with subtracted absorbance at 320nm.

DNA/Protein Measurement

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 5cm cell path holder



Tube rack



Adjustable micro cell holder

Comparison Table

	UV/Vis.	Optical System	Display	Slit Width	Wavelength Accuracy	Wavelength Repeatability	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	≤0.2 nm	≤0.05%T @220nm,360nm	Tungsten Halogen Lamp	3/4				
C-7000UV	UV							1 nm		0.5,1,2,4nm	2 nm	≤0.03%T @220nm,360nm	Tungsten Halogen /Deuterium Lamp
C-7100													
C-7100S													
C-7100A				Double			1 nm	0.5,1,2,4 nm	1 nm	≤0.03%T @220nm,360nm	5/8		
C-7200													
C-7200S													
C-7200A													
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-8200TS			0.5,1,2,4,nm										
T-9100	UV	Single	Touch Screen	2 nm	±0.3 nm	≤0.2 nm	≤0.05%T @220nm,360nm	Tungsten Halogen /Deuterium Lamp	11/14				
T-9200		Double		1 nm	±0.3 nm	≤0.2 nm							
T-9200S													
T-9200A										0.5,1,2,4,nm			