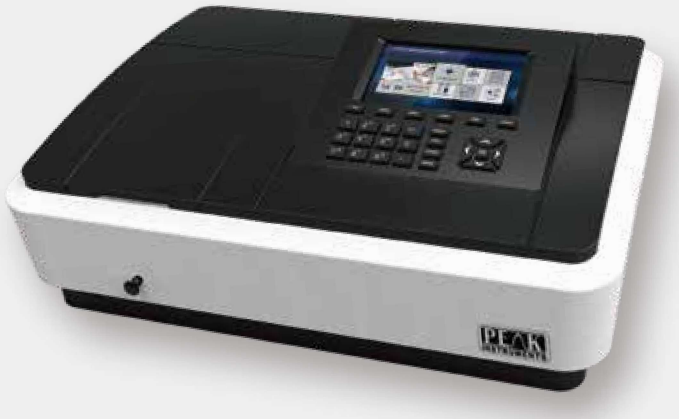
C-7100/7200 Series

Introduction

Steady, modern and elegant appearance design. Adopt the newest microcomputer technology and electronic control system. Optimized optical system and structure can both extend new functions and ensure the accuracy, stability and durability.



Main Features

- 7 inch TFT screen and long life, more comfortable and easy-to-operate silicone buttons. The instrument can show various scanning curves and charts for users to complete various tests without computers.
- Support USB storage and different data formats such as Excel, txt and image (PC software). Users can output test data to flash memory, open and edit them on computers directly without any auxiliary software.
- Advanced hardware and 32-bit Cortex_M3 processor with the clock speed 120MHz. The equipment can store 5000 pieces of data and 500 curves.
- High-efficiency holographic grating of 1200 lines/mm and low stray light.
- The equipment has long-life socket type tungsten-halogen and deuterium lamps which can work up to 2000 hours, can switch the lamps according to test needs and record its working time automatically. Socket type lamps make the replacement much easier.
- Excellent silicon photodiode can guarantee the equipment is highly sensitive and stable.
- Huge sample chamber and various accessories can meet all kinds of needs.
- Can be connected to printer directly and output test charts and data.
- Powerful PC software (optional).
- Standard RS232,USB(A) and USB(B) port.

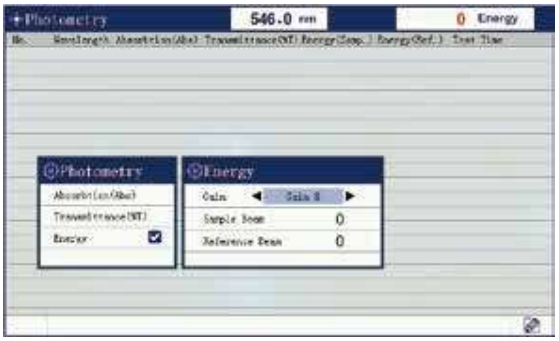
Specifications

MODEL	C-7100	C-7100S	C-7100A	C-7200	C-7200S	C-7200A
Display	7 inch TFT					
Keyboard Control	Silicone Buttons					
Optical System	Single Beam			Double Beam		
	Holographic grating, 1200 lines/mm					
Slit Width	2nm	1nm	0.5,1,2, 4nm	2nm	1nm	0.5,1,2, 4nm
Wavelength Range	190 - 1100nm					
Wavelength Resolution	0.1nm					
Wavelength Accuracy	±0.3nm					
Wavelength Repeatability	≤0.2nm					
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)					
Stray Light	≤0.03%T@220nm, 360nm					
Stability	±0.002A/h@500nm					
Photometric Range	0-200%T, -0.3-3.0A, 0-9999C(0-9999F)					
Baseline Flatness	±0.002A (200-1000nm)					
Noise	0.0003A@500nm					
Working Mode	T,A,C,E					
Wavelength Setting	Automatic					
Scanning Speed	Low, Medium, High (up to 3000nm/min)					
Detector	Solid Silicon Photodiode					
Light Source	Tungsten Halogen/Deuterium Lamp					
Data Output	RS232, USB(A),USB(B)					
Processor	Cortex_M3, 120Mhz					
Power Requirements	AC 110-220V 50-60Hz					
Shipping Dimensions and Weight	790*660*370mm 28kg					940*740*510mm 52kg

UI Design(Silicone Buttons)

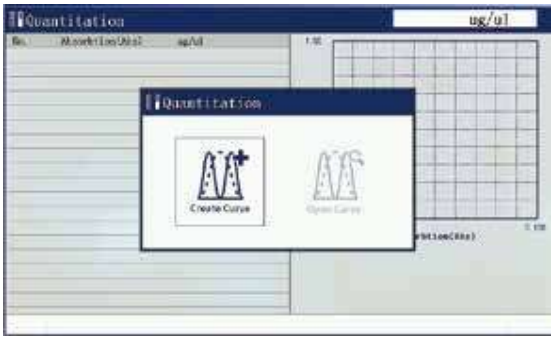
Photometry

There are three test modes.
Absorbance, transmittance and energy.



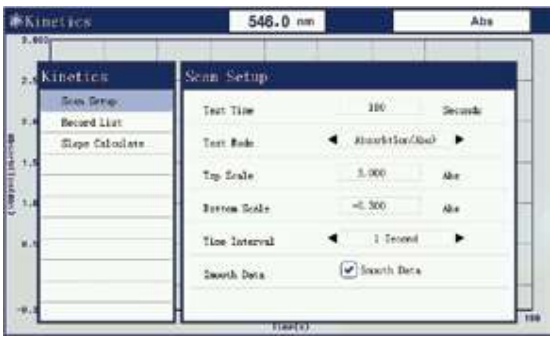
Quantitative Measurement

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.



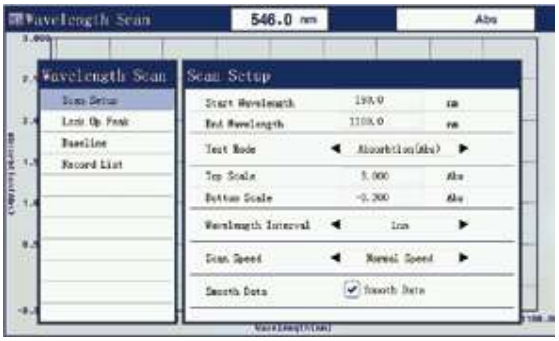
Kinetics Measurement (Time Scanning)

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.



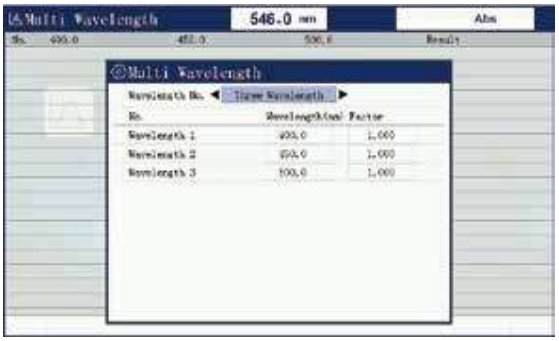
Wavelength Scanning (Qualitative Test)

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.



Multi Wavelength Measurement

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.



DNA/Protein Measurement

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