



Spectrophotometer

Reliability & Variety

PEAK Instruments Inc.

C OMPANY PROFILE

Our Promise

Respond to customers and provide solutions in 8 hours.

Our Mission

Provide high quality products and services.

Our Vision

To be a well-known brand for analytical instruments.

PEAK Instruments Inc is located in Houston, TX-77084, where our head office and warehouseare also located, which is a high tech enterprise integrated with R&D, production, sales and service of spectrophotometer, pH meter, conductivity meter, dissolved oxygen meter, ion meter and balances, which have wide applications in the following areas like metallurgy, pharmacy, food, health, institutes, biological chemistry, life science, petrochemical industry, quality control, environmental protection, electrochemistry and water quality analysis, etc..

We have professional teams of management, R&D, production, QC, sales and technical support, which guarantee good quality products, competitive prices and efficient service for global customers. We have CE and ISO9001 certificates. We continuously absorb new ideas and technologies to improve our products and services in accordance with the concept of innovation, quality and service.

We have steady growth and good reputation in the markets of more than 95 countries, like USA, Argentina, Italy, Germany, Spain, Russia, Korea, India, Indonesia and Egypt.

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.



- 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.

MODEL	C-7100	C-7100S	C-7100A	C-7200	C-7200S	C-7200A
Display	7 inch TFT					
Keyboard Control	Silicone Buttons					
Ontired Systems	Single Beam			Double Beam		
Optical System	Holographic grating, 1200 lines/mm					
Slit Width	2nm	1nm	0.5,1,2, 4nm	2nm	1nm	0.5,1,2, 4nm
Wavelength Range			190 - 1	100nm		
Wavelength Resolution			0.1	nm		
Wavelength Accuracy			±0.	3nm		
Wavelength Repeatability			≤0	2nm		
Photometric Accuracy	0	.2%T (0-100%	%T), ±0.002А	(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)					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			0.0003	A@500nm		
Working Mode			T,A	A,C,E		
Wavelength Setting			Auto	omatic		
Scanning Speed	Low, Medium, High (up to 3000nm/min)					
Detector			Solid Silico	on Photodio	de	
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	001					940*740*510mm 52kg

UI Design_(Silicone Buttons)

Photometry

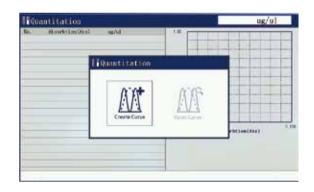
There are three test modes.

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.



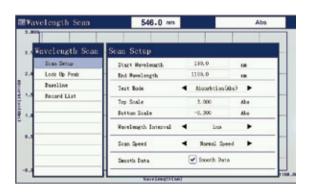
Kinetics Measurement (Time Scanning)

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.



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.

- Osram 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

- 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.

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	Single Beam Double Beam						
Spectral Bandwidth	2nm	2nm	1nm	0.5,1,2,4nm				
Wavelength Resolution	0.1nm	0.1nm	0.1nm	0.1nm				
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 110-220	V 50-60Hz					
Humidity Range	Less Than 85%							
Shipping Dimensions and Weight	790*660*370mm, 28kg 940*740*510mi 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)

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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.



X-8200

Introduction

International advanced xenon light (Hamamatsu) source makes the instrument more stable and reliable. Three years warranty. 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.



- 7 inch TFT screen and long life, more comfortable and easy-to-operate silicone buttons or capacitive touch screen. 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 xenon lamp which can work up to 5 years. Socket type lamp makes 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.

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MODEL	X-8200	X-8200S	X-8200A	X-8200T	X-8200TS	X-8200TA	
Display	7 inch TFT				7 inch TFT		
Keyboard Control	;	Silicone Butto	ns	Touch Screen			
Wavelength Resolution		0.1nm			0.1nm	0.1nm	
Ontired Cyreters	Double Beam						
Optical System	Holographic grating, 1200 lines/mm						
Spectral Bandwidth	2nm	1nm	0.5,1, 2,4nm	2nm	1nm	0.5,1, 2,4nm	
Wavelength Range			190 - 1	1100nm			
Wavelength Accuracy			±0.	6nm			
Wavelength Repeatability			≤0.	2nm			
Photometric Accuracy	0.3%T (0-100%T) , ±0.005A(0-0.5A) , ±0.01A(0.5-1A)						
Photometric Repeatability	≤0.2%T (0-100%T), 0.003A(0-0.5A), 0.005A (0.5-1A)						
Stray Light	≤0.1%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	0.002A@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	Xenon Lamp						
Data Output	RS232, USB(A),USB(B)						
Processor	Cortex_M3, 120Mhz						
Power Requirements	AC 110-220V 50-60Hz						
Shipping Dimensions and Weight		0*370mm 8kg	940*740*510mm 52kg		0*370mm 8kg	940*740*510mm 52kg	

C-7000 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.



- 7 inch TFT screen and long life, more comfortable and easy-to-operate silicone buttons.
- 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.
- Standard RS232,USB(A) and USB(B) port.
- High-efficiency holographic grating of 1200 lines/mm and low stray light.
- The equipment has long-life socket type tungsten-halogen and deuterium lamps, 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) can realize scanning function.

MODEL	0.0004	0.7000111/			
MODEL	C-7000V	C-7000UV			
Display	7-inch TF	T screen			
Wavelength Range	320 - 1100nm	190 - 1100nm			
Spectral Bandwidth	2nm	2nm			
Wavelength Resolution	0.1nm	0.1nm			
Wavelength Accuracy	±0.3nm	±0.3nm			
Wavelength Repeatability	≤0.2nm				
Photometric Accuracy	0.3%T (0-100%T), ±0.002	A(0-0.5A), ±0.004A(0.5-1A)			
Photometric Repeatability	≤0.15%T (0-100%T), 0.001	1A(0-0.5A), 0.002A(0.5-1A)			
Stray Light	≤0.05%T@220	0 nm, 360nm			
Stability	±0.002 A/h@500nm				
Baseline Flatness	±0.002A	±0.002A			
Noise	±0.0005A				
Working Mode	T,A,C,E				
Wavelength Setting	Automa	atic			
Photometric Range	0-200%T, -0.3 - 3A, 0-9999C(0-9999F)				
Detector	Solid Silicon Photodiode				
Software	Optional with extended functions of scanning and DNA/protein tes				
Printer	Optional				
Keypad	Silicone Buttons				
Data Port	RS232, USB(A),USB(B)				
Light Source	Tungsten Halogen Lamp	Tungsten Halogen/Deuterium Lamp			
Power Requirements	110-220V, 50-60Hz				
Humidity Range	Less than 85%				
Shipping Dimensions and Weight	750*630*410mm, 21kg				

E-1000 Series

Introduction

- Smooth appearance design
- Ingenious color assortment
- White backlit LCD screen
- Oval buttons
- Easy parameter setting and microprocessor make the operation more convenient

- 70*40 mm backlit LCD screen can show complete parameters like T,A,C,K.
- Calibrate 0%A and 100%T automatically.
- Large sample compartment can hold various cells from 5mm to 100mm and meet different test requirements.
- RS232 port for printer(optional) and PC software(optional and only compatible with XP system).
- Automatic lamp switches and manual wavelength setting.
- Save and view the test data.









MODEL	E-1000V	E-1000UV			
Display	70*40mm	backlit LCD			
Wavelength Range	320 - 1020nm	190 - 1020nm			
Spectral Bandwidth	4nm				
Wavelength Accuracy	±2nm				
Wavelength Repeatability	≤1nm				
Photometric Accuracy	0.5%T				
Photometric Repeatability	0.2%T				
Stray Light	≤0.15%T@360nm				
Stability	0.002A@500nm				
Output Port	RS232				
Light Source	Tungsten Halogen Lamp	Tungsten Halogen/Deuterium Lamp			
Power Requirements	110-220V, 50-60Hz				
Photometric Range	0-200%T, -0.3-3A,0-9999C(0-9999F)				
Shipping Dimensions And Weight	530*460*320mm, 9 kg				

Accessories



Integrating Sphere



Automatic 8-position round cell holder



Tube rack



Manual 4-position film holder



Manual 4-position 10cm cell holder



Single hole film holder



Single hole 5cm cell holder



Adjustable micro cell holder



Peltier Thermostat



Automatic Sipper

Comparison Table

		Optical System	Display	Slit Width	Wavelength Accuracy	Wavelength Repeatabiltiy	Stray Light	Light Source	Page				
C-7100				2 nm		≤0.2 nm	≤0.05%T @220nm,360nm	Tungsten Halogen /Deuterium Lamp	1/2				
C-7100S		Single		1 nm									
C-7100A	11\7	UV Double	7 inch	0.5,1,2,4nm	±0.3 nm								
C-7200	UV		TFT	2 nm	±0.5 11111		≤0.03%T @220nm,360nm						
C-7200S				1 nm									
C-7200A				0.5,1,2,4 nm									
T-9100		Single			±0.3 nm	≤0.2 nm							
T-9200	UV	1107	Touch	N /	2 nm	±0.3 nm	≥0.∠ 11111	≤0.05%T	Tungsten Halogen	E/C			
T-9200S	UV	Double	Double Screen	1 nm	±0.3 nm	≤0.2 nm	@220nm,360nm	/Deuterium Lamp	5/6				
T-9200A				0.5,1,2,4,nm									
X-8200				2 nm		40.0	≤0.1%T	Maran Laws	9/10				
X-8200S			7 inch TFT	1 nm									
X-8200A	UV			0.5,1,2,4,nm									
X-8200T	UV	OV	OV	Double	Double	Double		2 nm	±0.6 nm	≤0.2 nm	@220nm,360nm	Xenon Lamp	3/10
X-8200TS				Touch Screen	1 nm								
X-8200TS				0.5,1,2,4,nm									
C-7000V	Vis.	Single	7 inch	2 nm	±0.3 nm	≤0.2 nm	≤0.05%T	Tungsten Halogen Lamp					
C-7000UV	UV	Sirigie	TFT	2 11111	±0.3 IIIII \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	@220nm,360nm	Tungsten Halogen /Deuterium Lamp	11/12					
E-1000V	Vis.	Single	70*40mm	4 nm	±2 nm	≤1 nm	≤0.15%T@360nm	Tungsten Halogen Lamp	13/14				
E-1000UV	UV	Sirigie	LCD	7 11111	± ८ 11111	- 1 11111	<u>-0.10701@30011111</u>	Tungsten Halogen /Deuterium Lamp	13/14				



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