PEAK INSTRUMENTS

Spectrophotometers

Variety&Reliability

PEAK Instruments Inc.

About Us

PEAK Instruments Inc. is located in Houston, TX-77084, where our warehouse and service center are also located, which is a high tech enterprise integrated with R&D, production, sales and service of spectrophotometers, which have wide applications in the following areas: metallurgy, pharmacy, food, health, institutes, biological chemistry, life science, petrochemical industry, quality control, environmental protection, etc..

We adopt the newest microcomputer technology and electronic control system, optimize optical system and structure which can both extend new functions and ensure the accuracy, sensitivity, stability and durability. We have all kinds of spectrophotometers like UV, visible, single beam, double beam, adjustable slit, xenon and big capacitive touch screen with high resolution(1024*600) and high sensitivity.

We have professional teams for management, R&D, production, QC, sales and technical support, which make sure to provide excellent products, good prices and efficient service for our global customers. We have obtained 46 patents and CE, ISO9001, ISO14001 certificates driven by innovation and joint efforts of all staff.

We continuously absorb new ideas, promote product quality and improve our service in accordance with the concept of Innovation, quality and service. We have steady growth and good reputation in the markets of more than 20 countries, like USA, Mexico, Argentina, India, Thailand, UAE, Turkey, South Africa and Russia.

- Our Promise
  Answer customers and provide solutions within 24 hours.

- Our Mission
  Provide high quality products and services.

- Our Vision
  To be a well-known brand for analytical instruments.

PEAK Instruments Inc. looks forward to cooperating with you.

E-1000 Series

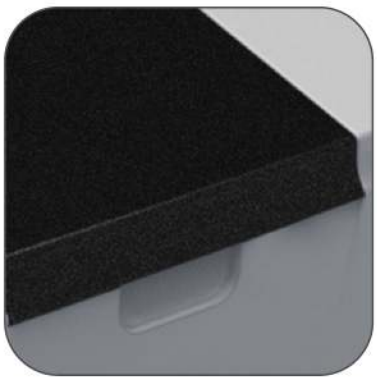
Introduction

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

Main Features

- 70*40 mm blue 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 output port, optional printer and professional analysis software UV-PRO1.0 with the functions of quantitative analysis and dynamic measurement.
- Automatic lamp switches and manual wavelength setting.
- Save and read out the test data and values of K and B.

E-1000 Series



Specifications

MODEL	E-1000V	E-1000UV
Standard Accessories	Lamp, Cuvette Holder and 10mm Glass Cuvettes	Lamp, Cuvette Holder and 10mm Quartz Cuvettes
Display	70*40mm blue backlit LCD	
Wavelength Range	320 - 1020nm	190 - 1020nm
Slit Width	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	
Shipping Dimensions And Weight	530*460*320mm, 9 kg	

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 sensitive silicone buttons.
- Support USB storage and different data formats such as Excel, txt and photos(*.csv, *.qua,*.txt,*.bmp). Users can output test data to flash memory, open and edit them on computers directly without any auxiliary software.
- Strong extended capability: Standard 8GB memory can store huge test data and equipped with RS232, HOST USB port and standard USB interface.
- High-efficiency holographic grating of 1200 lines/mm and ultra-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 can realize scanning function.

Specifications

MODEL	C-7000V	C-7000UV
Standard Accessories	Lamp, Cuvette Holder and 10mm Glass Cuvettes	Lamp, Cuvette Holder and 10mm Quartz Cuvettes
Display	7-inch TFT screen	
Wavelength Range	320 - 1100nm	190 - 1100nm
Slit Width	2nm	2nm
Wavelength Accuracy	±0.3nm	±0.3nm
Wavelength Repeatability	≤0.2nm	
Photometric Accuracy	0.3%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	≤0.05%T@220 nm, 360nm	
Stability	±0.001 A/h@500nm	
Baseline Flatness	±0.0015A	±0.001A
Noise	±0.0005A	
Working Mode	T,A,C,E	
Wavelength Setting	Automatic	
Photometric Range	0-200%T, -0.3 - 3A	
Detector	Solid Silicon Photodiode	
Software	Optional with scanning function	
Printer	Optional	
Keypad	Silicone Buttons	
Data Port	USB	
Light Source	Tungsten Halogen Lamp	Tungsten Halogen/Deuterium Lamp
Power Requirements	110-220V, 50-60Hz	
Humidity Range	Less than 85%	
Shipping Dimensions and Weight	770*630*340mm, 27kg	

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

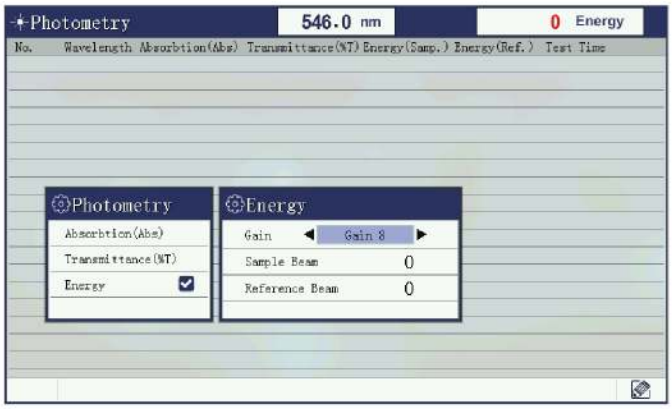
- 7 inch TFT screen and long life, more comfortable and sensitive silicone buttons. The instrument can show various scanning curves and charts for users to complete various tests without computers.
- Support USB storage and different data formats such as Excel, txt and photos(*.csv, *.qua,*.txt,*.bmp）. 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 ultra-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.
- Strong extended capability: Standard 8GB memory can store huge test data and equipped with RS232, HOST USB port and standard USB interface.

C-7100/7200 Series

Specifications

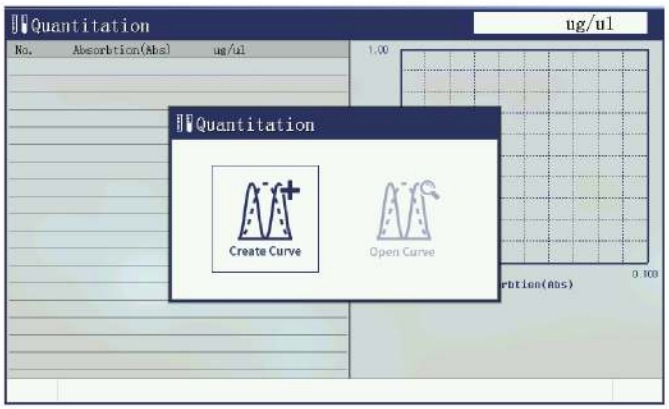
MODEL	C-7100	C-7100S	C-7100A	C-7200	C-7200S	C-7200PC	C-7200A
Standard Accessories	Lamps, Cuvette Holder and 4 PCS of 10mm Glass Cuvette and 2 PCS of 10mm Quartz Cuvettes						
Display	7 inch TFT					No Screen	7 inch TFT
Keyboard Control	Silicone Buttons					No Buttons	Silicone Buttons
Optical System	Single Beam			Double Beam			
	Holographic grating, 1200 lines/mm						
Slit Width	2nm	1nm	0.5,1,2, 4,5nm	2nm	1nm	2nm, 1nm	0.5,1,2, 4,5nm
Wavelength Range	190 - 1100nm						
Wavelength Accuracy	±0.3nm						
Wavelength Repeatability	≤0.1nm						
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	±0.001A/h@500nm						
Photometric Range	0-200%T, -0.3-3.0A, 0-9999C(0-9999F)						
Baseline Flatness	±0.0015A (200-1000nm)						
Noise	0.0003A@500nm						
Working Mode	T,A,C,E						
Wavelength Setting	Automatic						
Scanning Speed	High, Medium and Low						
Detector	Solid Silicon Photodiode						
Light Source	Tungsten Halogen/Deuterium Lamp						
Data Output	RS232C Serial, USB Drive, USB HOST						
Processor	Cortex_M3, 120Mhz						
Power Requirements	AC 110-220V 50-60Hz						
Shipping Dimensions and Weight	770*630*340mm,						880*690*530mm,
	27kg		30kg	27kg			45kg

UI Design(Silicone Buttons)



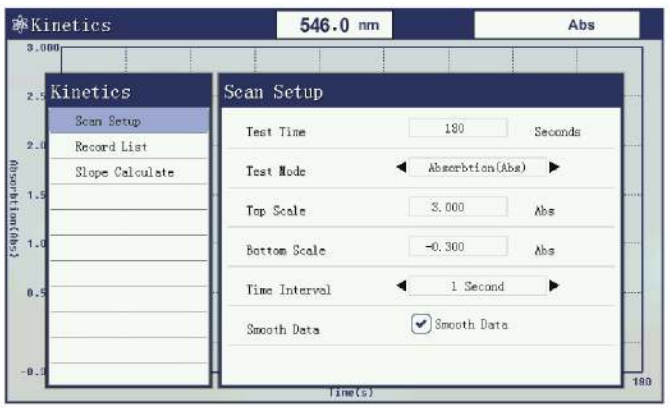
Absorbency and transmittance test

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.

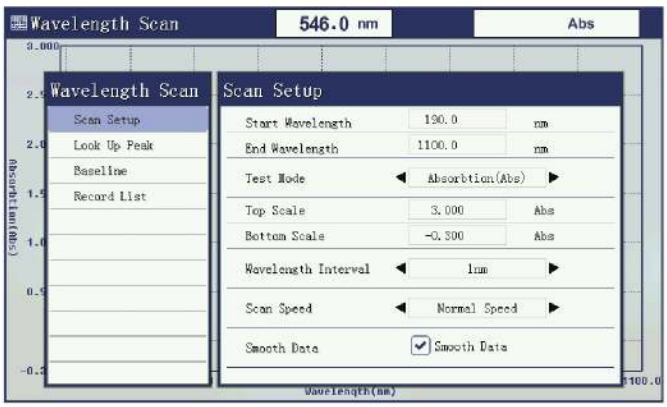
Quantitative Measurement



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.

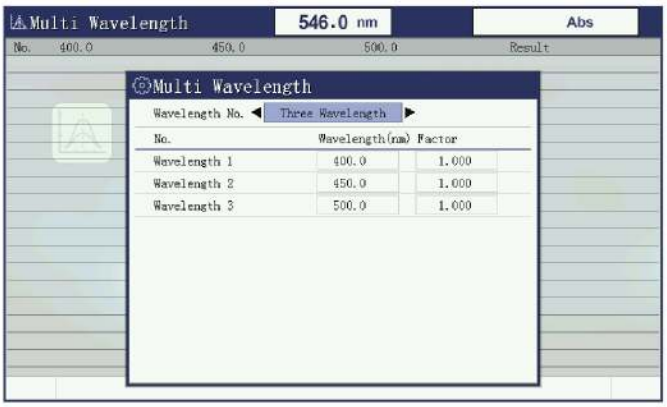
Kinetics Measurement(Time Scanning)

UI Design(Silicone Buttons)



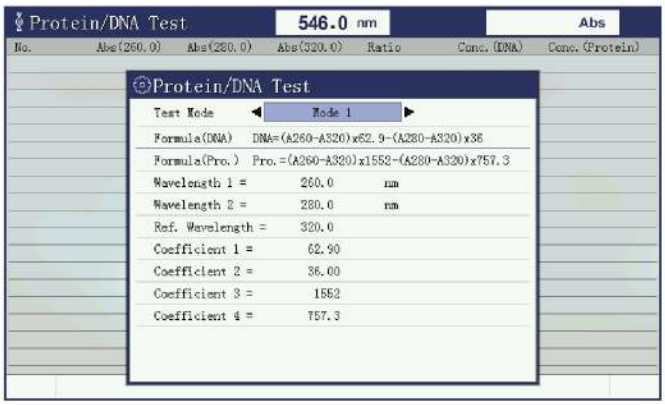
Wavelength Scanning(Qualitative Test)

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.

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.

Main Features

- 7 inch TFT screen and long life, more comfortable and sensitive 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 photos(*.csv, *.qua,*.txt,*.bmp）. 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 ultra-low stray light.
- The equipment has Long-life socket type xenon lamp which can work up to 5000 hours. 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.
- Strong extended capability: Standard 8GB memory can store huge test data and equipped with RS232, HOST USB port and standard USB interface.

X-8200

Specifications

MODEL	X-8200	X-8200S	X-8200A	X-8200T	X-8200TS	X-8200TA
Standard Accessories	Lamps, Cuvette Holder and 4 PCS of 10mm Glass Cuvette and 2 PCS of 10mm Quartz Cuvettes					
Display	7 inch TFT			7 inch TFT		
Keyboard Control	Silicone Buttons			Touch Screen		
Optical System	Double Beam					
	Holographic grating, 1200 lines/mm					
Slit Width	2nm	1nm	0.5,1,2, 4,5nm	2nm	1nm	0.5,1,2, 4,5nm
Wavelength Range	190 - 1100nm					
Wavelength Accuracy	±1nm					
Wavelength Repeatability	≤0.5nm					
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	±0.001A/h@500nm					
Photometric Range	0-200%T, -0.3-3.0A, 0-9999C (0-9999F)					
Baseline Flatness	±0.0015A (200-1000nm)					
Noise	0.0003A@500nm					
Working Mode	T,A,C,E					
Wavelength Setting	Automatic					
Scanning Speed	High, Medium and Low					
Detector	Solid Silicon Photodiode					
Light Source	Xenon Lamp					
Data Output	RS232C Serial, USB Drive, USB HOST					
Processor	Cortex_M3, 120Mhz					
Power Requirements	AC 110-220V 50-60Hz					
Shipping Dimensions and Weight	770*630*340mm		880*690*530mm,	770*630*340mm		880*690*530mm,
	27kg		45kg	27kg		45kg

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
Standard Accessories	Lamps, Cuvette Holder and 4 PCS of 10mm Glass Cuvette and 2 PCS of 10mm Quartz Cuvettes			
Display	7 inch TFT colored capacitive touch screen			
Wavelength Range	190 - 1100nm			
Optical System	Single Beam	Double Beam		
Spectral Bandwidth	2nm	2nm	1nm	0.5,1,2,4,5nm
Wavelength Accuracy	±0.5nm	±0.5nm	±0.3nm	±0.3nm
Wavelength Repeatability	≤0.2nm	≤0.2nm	≤0.1nm	≤0.1nm
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	High, Medium and Low			
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, SD Card			
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

Automatic long optical path 5-postion 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	Ligh 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-1000U	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				0.5,1,2,4,5nm					
C-7200		Double		2 nm			≤0.03%T @220nm,360nm		
C-7200S				1 nm					
C-7200A				0.5,1,2,4,5nm					
C-7200PC				1, 2nm					
X-8200	UV	Double	7 inch FTF	2 nm	±0.3 nm	≤0.1 nm	≤0.03%T @220nm,360nm	Xenon Lamp	9/10
X-8200S				1 nm					
X-8200A				0.5,1,2,4,5nm					
X-8200T			Touch Screen	2 nm					
X-8200TS				1 nm					
X-8200TA				0.5,1,2,4,5nm					
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				0.5,1,2,4,5nm					

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