

B01- CT-8 Series Double Beam UV/Vis Spectrophotometer



Descriptions

- A. CT-8 Series are advanced double beam design consisting of four models; Stand-alone models: CT-8200 with 1.8nm fixed bandwidth and CT-8600 with 1.0 fixed bandwidth; PC models: CT-8100 with 1.8nm fixed bandwidth and CT-8700 with 1.0nm fixed bandwidth. (Other specifications of the four styles are almost the same except bandwidth)
- B. The two detectors are measuring sample and reference respectively and simultaneously for optimizing measurement accuracy. They provide accurate measurement in the range of 190nm to 1100nm.
- C. All instruments provide excellent performance for measurements:
 - To Stand-alone models, all software methods are included as built-in standard, thus eliminating the need for software options.
 - On-line software upgrade capability via Internet helps to keep your software up-to-date.
 - Data Download-to-PC software expands the data storage to unlimited.
- D. This spectrophotometer is suitable for pharmaceutical, biochemical and clinical lab applications as well as routine applications such as quantitative analyses, kinetics, spectrum scanning, multiple components and DNA/Protein analysis.
- E. PC Windows® application software and built-in software make this instrument versatile.

Features

- A. PC models and Stand-alone models with large graphic LCD display (320 × 240) to directly show graphs on the screen.
- B. Unique pre-aligned deuterium lamp for easy lamp replacement to avoid optical adjustment.
- C. GLP self-calibrated function can automatically check wavelength and photometric accuracy using validation report.
- D. Powerful integrated software for data acquisition:
 - Quantitative
 - Kinetics
 - Wavelength Scanning
 - Multi-Wavelength
 - DNA/Protein
- E. Other features include:
 - System examination: Automatic wavelength check, automatic light filter detection, automatic energy detection, and other automatic functions.
 - Photometric switch: Able to switch light source in the specific range.
 - Photometric cutoff: Automatic cutoff of deuterium lamp and halogen lamp to extend their durability.
 - Power failure protection: Research data can be saved and restored when there is power failure.
 - Software: Application software can be connected to computer to control equipment operation and analyze experimental data.

Specifications

Model	CT-8200	CT-8100	CT-8600	CT-8700
Optical System	Double Beam, Grating 1200 lines/mm			
Wavelength Range	190-1100nm		190-1100nm	
Spectral Bandwidth	1.8nm		1.0nm	
Wavelength Accuracy	±0.3nm			
Wavelength Repeatability	0.2nm			
Photometric Accuracy	±0.2% T			
Photometric Repeatability	0.15% T			
Stray Light	<0.05% T			
Baseline Stability	±0.0005 A/h			
Baseline Flatness	±0.0005 A (200-1000nm)			
Display	LCD (320 × 240) & PC Model	PC Model	LCD (320 × 240) & PC Model	PC Model
Photometric Mode	T, A, E			
Scanning Speed	High, Med., Low. , Max. 3000nm/min			
Wavelength Setting	Automatic			
Photometric Range	-0.3-3 A, 0-200% T, 0-9999 Conc.			
Detector	Si Photodiode			
Light Source	Halogen & Deuterium Lamp (pre-aligned)			
Keyboard	Membrane Keypad or PC			
Output	USB Port & Parallel Port (Printer)			
Power Requirement	AC 220V/50Hz or AC 110V/60Hz			
Dimensions (W × D × H)	600mm × 450mm × 200mm			
Weight	27Kg		27Kg	

Packing list

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass
	Set of 2, quartz
USB Cord	1
User Manual.....	1
UV-Vis Analyst Software.....	1
Software Manual.....	1

Optional accessories

SINGLE CELL HOLDER FOR 10MM SQU.CUVT.
CYLINDRICAL CELL HOLDER
TEST TUBE HOLDER (ø8-Ø22mm)
LONG PATH CELL HOLDER
MICRO CELL HOLDER
WATER-JACKETED CELL HOLDER
PELTIER/SIPPER SYSTEM
REFLECTANCE MEACHMENT ATTACHMENT
PRINTER

B01- CT-5, CT-6 Series Single Beam UV/Vis Spectrophotometer



Descriptions

- A. CT-5, CT-6 Series are advanced single beam design consisting of 10 models. Different one with different bandwidth and wavelength accuracy. All of them provide excellent performance for measurement in the range of 190nm to 1100nm.
- B. CT-5, CT-6 series can be divided into two types—PC Models and Stand-alone Models, separately offer excellent performance.
 - To Stand-alone models, all software methods are included as built-in standard, thus eliminating the need for software options.
 - Online software upgrade via Internet helps to keep your software up-to-date.
 - Data Download-to-PC software expands the data storage to unlimited.
- C. The CT-5, CT-6 series are suitable for clinical lab applications, pharmaceutical and biochemical as well as routine applications such as quantitative analyses, kinetics, wavelength scanning, multiple components and DNA/Protein analysis.
- D. PC Windows® application software and built-in software make this instrument versatile.

Features

- A. PC models and Stand-alone models with large graphic LCD display (320 × 240) to directly show graphs on the screen.
- B. Unique pre-aligned deuterium lamp for easy lamp replacement to avoid optical adjustment.
- C. GLP self-calibrated function can automatically check wavelength and photometric accuracy using validation report.
- D. Powerful integrated software for data acquisition:
 - Quantitative—Establish or use stored calibration equation to measure the concentration of unknowns.
 - Kinetics—Measurement of absorbance changing vs. time with reaction rate calculation function.
 - Wavelength Scanning—Spectrum scan of sample at any selected wavelength range with choice of scanning speed and wavelength interval.
 - Multi-Wavelength—Measurement at multiple wavelengths to analyze and determine the composition of mixtures.
 - DNA/Protein—Calculation of concentration and DNA purity. Ratio at other wavelengths can be measured.
- F. Other features include:
 - System examination: Automatic wavelength check, automatic light filter detection, automatic energy detection, and other automatic functions.
 - Photometric switch: Able to switch light source in the specific range.
 - Photometric cutoff: Automatic cutoff of deuterium lamp and halogen lamp to extend their durability.
 - Power failure protection: Research data can be saved and restored when there is power failure.
 - Software: Application software can be connected to computer to control equipment operation and to analyze experimental data.

Specifications

Model	CT-5000 CT-5100	CT-5600 CT-5700	CT-6200 CT-6100	CT-6400 CT-6300	CT-6600 CT-6500
Optical System	Single Beam, Grating 1200 lines/mm				
Wavelength Range	190-1100nm				
Spectral Bandwidth	4.0nm	2.0nm	1.8nm	0.5/1.0/2.0/4.0nm	1.0nm
Wavelength Accuracy	±0.5nm		±0.3nm		
Wavelength Repeatability	0.3nm		0.2nm		
Photometric Accuracy	±0.3% T		±0.2% T		
Photometric Repeatability	0.2% T		0.15% T		
Stray Light	<0.05% T				
Baseline Stability	±0.002 A/h		±0.001 A/h		
Baseline Flatness	±0.002 A (200-1000nm)		±0.001 A (200-1000nm)		
Display	LCD (320 × 240) / PC Model (Please see page 28)				
Photometric Mode	T, A, E				
Scanning Speed	High, Med., Low., Max. 3000nm/min				
Wavelength Setting	Automatic				
Photometric Range	-0.3-3 A, 0-200% T, 0-9999 Conc.				
Detector	Si Photodiode				
Light Source	Halogen & Deuterium lamp (pre-aligned)				
Keyboard	Membrane Keypad (CT-5000, CT-5600) Membrane Keypad or PC (CT-5100, CT-5700, CT-6100, CT-6200, CT-6300, CT-6400, CT-6500, CT-6600)				
Output	USB Port & Parallel Port (Printer)				
Power Requirement	AC 220V/50Hz or AC 110V/60Hz				
Dimensions (W × D × H)	480mm × 360mm × 160mm		600mm × 450mm × 200mm		
Weight	16Kg		25Kg		

Packing list

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass Set of 2, quartz
USB Cord	1
User Manual.....	1
UV-Vis Analyst Software.....	1
Software Manual.....	1
* CT-5000 and CT-5600 do not include the software and USB.	

Optional accessories

SINGLE CELL HOLDER FOR 10MM SQU.CUVT.
CYLINDRICAL CELL HOLDER
TEST TUBE HOLDER (ø8-Ø22mm)
LONG PATH CELL HOLDER
4-CELL HOLDER FOR UP TO 50MM SQU.CUVETTE
4-CELL HOLDER FOR UP TO 100MM SQU.CUVETTE
MICRO CELL HOLDER
WATER-JACKETED CELL HOLDER
PELTIER/SIPPER SYSTEM
8-POSITION AUTO CELL CHANGER
REFLECTANCE MEASUREMENT ATTACHMENT
PRINTER
DONGLES FOR 31.61 APPLICATION SOFTWARE (CT-5000 and CT-5600)

B01- CT-2500~CT2800 Series Spectrophotometer



Descriptions

- A. CT-2500~CT-2800 Series are developed for precise test for its stray light is only 0.05%T.
- B. This series have benefits of flexible, user-friendly, and maximized value. The value is evident from the performance provided every day.
- C. The local stand-alone software provides functions of basic model, quantitative test, kinetics, and system utilities.
- D. System can save research results up to 200 group of data and 200 curves in the RAM for random check and reload.

Features

- A. Large graphic LCD display (128 × 64) to directly show graphs on the screen, displaying a total of 200 groups of data, 5 groups per screen.
- B. Pre-aligned deuterium lamp for easy lamp replacement to avoid optical adjustment.
- C. Automatically check wavelength and photometric accuracy using validation report.
- D. Powerful integrated software for data acquisition:
 - Quantitative
 - Kinetics
 - Wavelength Scanning
- F. Other features include:
 - System examination: Automatic wavelength check, automatic light filter detection, automatic energy detection, and other automatic functions.
 - Photometric cutoff: Automatic cutoff of deuterium lamp and halogen lamp to extend their durability.
 - Power failure protection: Research data can be saved and restored when there is power failure.
 - Software: Application software can be connected to computer to control equipment operation and to analyze experimental data.

Specifications

Model	CT-2500	CT-2700	CT-2600	CT-2800
Optical System	Single Beam, Grating 1200 lines/mm			
Wavelength Range	320-1100nm		190-1100nm	
Spectral Bandwidth	4nm	2nm	4nm	2nm
Wavelength Accuracy	±0.8nm			
Wavelength Repeatability	0.5nm			
Photometric Accuracy	±0.3% T			
Photometric Repeatability	0.2% T			
Stray Light	0.05% T (360nm)		0.05% T (220nm, 360nm)	
Baseline Stability	±0.002 A/h (500nm)			
Display	LCD (128 × 64)			
Photometric Mode	T, A, E			
Wavelength Setting	Automatic			
Photometric Range	-0.3-3 A, 0-200% T			
Detector	Si Photodiode			
Light Source	Tungsten lamp		Tungsten & Deuterium	
Keyboard	Membrane Keypad			
Output	USB Port & Parallel Port (Printer)			
Power Requirement	AC 220V/50Hz or AC 110V/60Hz			
Dimensions (W × D × H)	470mm × 370mm × 180mm			
Weight	14Kg		16Kg	

Packing list of CT-2600 and CT-2800

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass Set of 2, quartz
User Manual.....	1

Packing list of CT-2500 and CT-2700

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass
User Manual.....	1

Optional accessories

SINGLE CELL HOLDER FOR 10MM SQU.CUVT.	
CYLINDRICAL CELL HOLDER	
TEST TUBE HOLDER (ø8-Ø22mm)	
LONG PATH CELL HOLDER	
4-CELL HOLDER FOR UP TO 50MM SQU.CUVETTE	
4-CELL HOLDER FOR UP TO 100MM SQU.CUVETTE	
MICRO CELL HOLDER	
WATER-JACKETED CELL HOLDER	
PELTIER/SIPPER SYSTEM	
PRINTER	
COMMON SOFTWARE FOR 1600 AND 1800	
ADVANCED PC WINDOW SOFTWARE	

B01- CT-2300/CT-2400 Series Spectrophotometer



Descriptions

- A. CT-2300 and CT-2400 series spectrophotometer have attractive performance for general data. As long as you use your standard sample solution, you can get a standard curve on the large LCD screen by local control software. In addition, you can print the curve through USB or analog port.
- B. Functions of this instrument include:
- Basic model—Absorbance, transmittance, or concentration measurement.
 - Quantitative
 - a) Standard Curve—At least 9 standard samples can be used to establish a standard curve. The curve and the curve equation will be displayed on the screen simultaneously to measure concentration of unknown solutions by the curve.
 - b) Coefficient Method—If you have known the coefficient of k & b of the formula $C=kA+b$, you can input the value and then test the unknown solutions.
- C. This instrument has been widely used in colleges and enterprises for general quantitative analysis and experiments.

Features

- A. Large graphic LCD display (128×64) to directly show graphs on the screen, displaying a total of 50 groups of data and being able to save the research data.
- B. Pre-aligned deuterium lamp for easy lamp replacement to avoid optical adjustment.
- C. Power failure protection: Research data can be saved and restored when there is power failure.
- D. Automatically check wavelength and photometric accuracy using validation report.
- E. Powerful integrated software for data acquisition for basic measurement and analysis.
- F. Other features include spectrum test, wavelength check, standard curve, and application software.

Specifications

Model	CT-2300	CT-2400
Optical System	Single Beam, Grating 1200 lines/mm	
Wavelength Range	325-1000nm	200-1100nm
Spectral Bandwidth	4nm	
Wavelength Accuracy	±1nm	
Wavelength Repeatability	1nm	
Photometric Accuracy	±0.5% T	
Photometric Repeatability	0.3% T	
Stray Light	0.3%T	
Baseline Stability	±0.004 A/h (500nm)	
Display	LCD (128 × 64)	
Photometric Mode	T, A, E	
Wavelength Setting	Automatic	
Photometric Range	-0.097-2.5 A, 0-125% T	
Detector	Si Photodiode	
Keyboard	Membrane Keypad	
Light Source	Tungsten lamp	Tungsten & Deuterium
Output	USB Port & Parallel Port (Printer)	
Power Requirement	AC 220V/50Hz or AC 110V/60Hz	
Dimensions (W × D × H)	470 × 370 × 180mm	
Weight	12Kg	12Kg

Packing list of CT-2400

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass
	Set of 2, quartz
User Manual.....	1

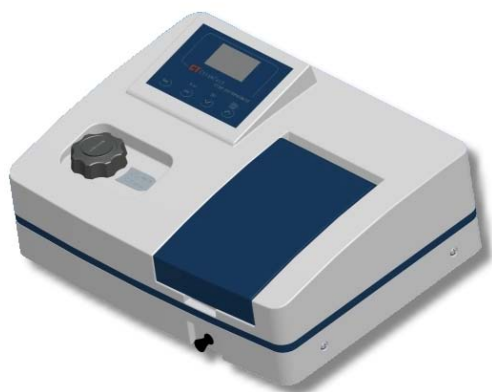
Packing list of CT-2300

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass
User Manual.....	1

Optional accessories

SINGLE CELL HOLDER FOR 10MM SQU.CUVT.
CYLINDRICAL CELL HOLDER
TEST TUBE HOLDER (ø8-Ø22mm)
LONG PATH CELL HOLDER
4-CELL HOLDER FOR UP TO 50MM SQU.CUVETTE
4-CELL HOLDER FOR UP TO 100MM SQU.CUVETTE
PRINTER
COMMON SOFTWARE

B01- CT-1500/CT-2200 Spectrophotometer



CT-1500



CT-2200

Descriptions

- A. CT-1500 is the only style of manual-setting wavelength function among CT spectrophotometers. Its precise design and high quality components ensure excellent performance.
- B. Because of its convenience this instrument has been widely used in high schools and colleges for general analysis and experiments.

Features

- A. High quality silicon photometric diode detector and 1200 lines/mm grating ensure high accuracy and precision.
- B. Digital display for easy readout.
- C. Pre-aligned deuterium lamp for easy lamp replacement to avoid optical adjustment.
- D. Auto zero setting for easy use and simple switch to transmittance, absorbance and concentration models.
- E. With RS-232C port, data can be exported to printer directly.
- F. Optional software based on Windows® can extend the application to standard curve and kinetics through the RS-232C port.

Besides features mentioned above, CT-2200 contains other features include:

- A. Large LCD display (128 × 64)
- B. Able to display and save 50 groups of data, 3 groups per screen.
- C. Data can be saved and restored when there is sudden power failure.
- D. Three-point method to measure concentration of unknown samples.
- E. Automatic cutoff of deuterium lamp and halogen lamp to extend their durability.

Specifications

Model	CT-1500	CT-2200
Optical System	Single Beam, Grating 1200 lines/mm	
Wavelength Range	325-1000nm	200-1000nm
Spectral Bandwidth	5nm	
Wavelength Accuracy	±2nm	
Wavelength Repeatability	1nm	
Photometric Accuracy	±0.5% T	
Photometric Repeatability	0.3% T	
Stray Light	0.5% T	
Baseline Stability	±0.004 A/h (500nm)	
Display	3.5 bits LCD	LCD (128 × 64)
Photometric Mode	T, A, E	
Wavelength Setting	Manual	Automatic
Photometric Range	-0.097-1.999 A, 0-125% T	
Detector	Si Photodiode	
Light Source	Tungsten lamp	Tungsten & Deuterium
Keyboard	Membrane Keypad	
Output	RS-232C Port	USB Port & Parallel Port (Printer)
Power Requirement	AC 220V/50Hz or AC 110V/60Hz	
Dimensions (W × D × H)	480mm × 360mm × 160mm	470mm × 370mm × 180mm
Weight	8Kg	12Kg

Packing list of CT-2200

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass Set of 2, quartz
User Manual.....	1

Packing list of CT-1500

Spectrophotometer.....	1
Mains Lead.....	1
Cuvettes.....	Set of 4, glass
User Manual.....	1

Optional accessories

SINGLE CELL HOLDER FOR 10MM SQU.CUVT.	
CYLINDRICAL CELL HOLDER	
TEST TUBE HOLDER (ø8-Ø22mm)	
LONG PATH CELL HOLDER	
4-CELL HOLDER FOR UP TO 50MM SQU.CUVETTE	
4-CELL HOLDER FOR UP TO 100MM SQU.CUVETTE	
PRINTER	
COMMON SOFTWARE	

Model	Optical System	Wavelength Range	Spectral Bandwidth	Kinetics	DNA/Protein	Scanning	Display	PC Software
CT-8600	Double Beam	190~1100nm	1nm	○	○	○	LCD 320*240	○
CT-8700	Double Beam	190~1100nm	1nm	○	○	○	X	○
CT-8200	Double Beam	190~1100nm	1.8nm	○	○	○	LCD 320*240	○
CT-8100	Double Beam	190~1100nm	1.8nm	○	○	○	X	○
CT-6600	Single Beam	190~1100nm	1nm	○	○	○	LCD 320*240	○
CT-6500	Single Beam	190~1100nm	1nm	○	○	○	X	○
CT-6400	Single Beam	190~1100nm	0.5/1.0/2.0/4.0nm	○	○	○	LCD 320*240	○
CT-6300	Single Beam	190~1100nm	0.5/1.0/2.0/4.0nm	○	○	○	X	○
CT-6200	Single Beam	190~1100nm	1.8nm	○	○	○	LCD 320*240	○
CT-6100	Single Beam	190~1100nm	1.8nm	○	○	○	X	○
CT-5600	Single Beam	190~1100nm	2nm	○	○	○	LCD 320*240	X
CT-5700	Single Beam	190~1100nm	2nm	○	○	○	LCD 320*240	○
CT-5000	Single Beam	190~1100nm	4nm	○	○	○	LCD 320*240	X
CT-2800	Single Beam	190~1100nm	2nm	○	X	X	LCD 128*64	X
CT-2600	Single Beam	190~1100nm	4nm	○	X	X	LCD 128*64	X
CT-2400	Single Beam	200~1100nm	4nm	X	X	X	LCD 128*64	X
CT-2200	Single Beam	200~1100nm	5nm	X	X	X	LCD 128*64	X
CT-2700	Single Beam	320~1100nm	2nm	○	X	X	LCD 128*64	X
CT-2500	Single Beam	320~1100nm	4nm	○	X	X	LCD 128*64	X
CT-2300	Single Beam	325~1000nm	4nm	X	X	X	LCD 128*64	X
CT-1500	Single Beam	325~1000nm	5nm	X	X	X	3.5 bits LCD	X