

# STALWART

**UV-VIS Spectrophotometer  
(Double Beam)  
STA-8200 Series**



## Introduction

The innovative optical layout and state of art mono-chromator with high grade blazed holographic grating ensure accuracy. Its integrated design assures long term stability and durability. The precisely aligned detector and quality deuterium and halogen lamps enhance the precision across the UV/VIS spectrum starting from 190nm and into the near-infrared 1100nm. Software upgrade capability (for stand-alone models) Full A4 print-out of graphs and tables of results with popular inexpensive printers. Real-time clock for date and time stamping of results Large LCD display (320\*240 Dots Matrix).

STA-8200 series are wide screen double beam spectrophotometers. They adopt double beam long light path design to ensure the stability and accuracy; they are the best choice of high quality spectrophotometers.

## Features

### Light Path Design: Double Beam

STA-8200 series' double light path design can prevent circuit fluctuation and stray light to ensure stability of the instrument.

### Long Path Light Design:

STA-8200 series' unique 520 mm long light path design greatly improved resolution and the bandwidth can reach 0.5 nm.

### 16 mm Optical Base:

STA-8200 series use a rigid 16 mm diecast aluminum base as their optical mount to ensure the stability and reliability.

### 6 inches LCD Display:

STA-8200 series have a 6 inches LCD display to show results and curves directly on the screen.

### Powerful Software Functions:

Multi functions like spectrum scanning standard curve, kinetic, multi wavelength scanning, DNA/Protein testing can be operated directly on the PC.

### Multi Function on Spectrophotometer:

Multi functions operated directly on the spectrophotometer and display the test results' curve and data: wavelength scanning, standard curve, kinetics, multi wavelength scanning, DNA/Protein test.

### Perfect Calibration System:

All baseline, wavelength, dark current can be calibrated automatically to keep good running conditions.

### Data Output:

STA-8200 series are equipped with USB port to connect with a PC; the software comes standard with instrument.

## Specification

Item	STA-8200F	STA-8200V	STA-8200
Optical System	Double Beam (1200 Lines/mm Grating)	Double Beam (1200 Lines/mm Grating)	Double Beam (1200 Lines/mm Grating)
Wavelength Range	190-1100nm	190-1100nm	190-1100nm
Bandwidth	1.8nm	0.5,1.0,2.0,4.0nm	1.0nm
Wavelength Accuracy	± 0.3nm	± 0.3nm	± 0.3nm
Wavelength Repeatability	0.2nm	0.2nm	0.2nm
Photometric Accuracy	± 0.3%T	± 0.3%T	± 0.3%T
Photometric Repeatability	0.2%T	0.2%T	0.2%T
Photometric Range	-0.3-3A, 0-200%T, 0-9999C	-0.3-3A, 0-200%T, 0-9999C	-0.3-3A, 0-200%T, 0-9999C

## Specification

Stability	$\pm 0.001A/h @ 500nm$	$\pm 0.001A/h @ 500nm$	$\pm 0.001A/h @ 500nm$
Baseline Flatness	$\pm 0.001A$	$\pm 0.001A$	$\pm 0.001A$
Noise	$\pm 0.001A$	$\pm 0.001A$	$\pm 0.001A$
Stray Light	$\leq 0.05\%T @ 220nm,$ 360nm	$\leq 0.05\%T @ 220nm,$ 360nm	$\leq 0.05\%T @ 220nm,$ 360nm
Data Output Port	USB	USB	USB
Printer Port	Parallel Port	Parallel Port	Parallel Port
Display	320*240 Dots LCD	320*240 Dots LCD	320*240 Dots LCD
Lamps	D2 Lamp & W Lamp	D2 Lamp & W Lamp	D2 Lamp & W Lamp
Detector	Silicon Photodiode	Silicon Photodiode	Silicon Photodiode
Power Requirements	AC 220V/50Hz	AC 220V/50Hz	AC 220V/50Hz
Dimension	625*430*206mm	625*430*206mm	625*430*206mm
Weight	32kg	32kg	32kg

## Standard Accessories

Sr#	Description	Quantity	Unit
1	1 cm Glass cuvette	4	Pcs
2	Power cord	1	Pcs
3	User's Manual	1	Pcs
4	1 cm quartz cuvette	2	Pcs
5	Dust cover	1	Pcs

## Spare Accessories

Item	Model No	Description	Unit
<b>Cell Holder</b>	100101	10mm single cell holder	Pcs
	100102	10mm 4-hole cell holder	Pcs
	100103	50mm 4-hole cell holder	Pcs
	100104	100mm 4-hole cell holder	Pcs
	100105	10mm 8-hole auto cell holder	Pcs
	100106	10mm single hole water jacketed ambiknt cell holder	Pcs
	100107	Adjustable cell holder for micro cuvettes	Pcs
	100108	Fixed Transparent film holder	Pcs
	100109	Test tube holder	Pcs
<b>Control Units</b>	200101	Peltier System	Pcs
	200102	Sipper system	Pcs
	200103	Peltier/sipper system	Pcs
	200104	Micro thermo printer	Pcs
<b>Lamps</b>	300101	W lamp 12V, 20W (Phillips)	Pcs
	300102	D2 lamp A510YXU (Millas)	Pcs



W lamp 12V, 20W  
(Phillips)



10mm 4-hole cell holder



Test tube holder



Micro thermo printer



Adjustable cell holder for  
micro cuvettes



Fixed Transparent  
film holder



10mm 8-hole auto  
cell holder



10mm single hole water  
jacketed ambient cell  
holder



D2 lamp A510YXU  
(Millas)



Peltier/sipper system