

SP-2100UV/UVPC Visible Spectrophotometer

SP-2100UV is an intelligent UV-Vis spectrophotometer, which has various functions as well as advanced instruments. The instrument contains features such as high automatization, various functions, strong plasticity, and so on. Connecting to PC, and various application functions that offered by Win-spec software, which enable the instrument to be a peripheral equipment of your computer. User can realize diversified functions by PC, such as instrument control, data sampling, data processing, and teletransmission. Moreover, special designed system of detecting light path that makes the sample testing with micro volume be possible, which takes an important part in biochemical analysis, life sciences research, especially in DNA quantitative analysis.

SP-2100UV/SP-2100UVPC

Model	SP2100UV	SP-2100UVPC
Optical system(nm)	Littrow type optic system with 1200 grooves/mm diffraction grating monochromator.	
Measurement Path length	100mm	
Spectral slitwidth(nm)	4nm	
Wavelength range(nm)	190-1000	190-1100
Wavelength accuracy(nm)	±1nm (System Auto Calibration)	
Wavelength Repeatability	0.5nm	
Stray light	< 0.3%T (at 220nm and 340nm)	
Photometric mode	T, A, and C measurement	
Photometric Range	0-125.0%T, -0.097-3.000A	
Photometric accuracy	±0.5%T	
Photometric Repeatability	0.3%T	
Stability	<0.002A/hour after 1 Hour warm up	
Baseline flatness		±0.002A



Standard configuration:

10mm manual four-cell holder, 1pcs
 10*10*45 mm standard glass cuvettes, 4pcs
 10*10*45 mm standard quartz cuvettes, 2pcs
 RS-232C connection cord, 1pcs
 User manual, 1pcs
 Operating protocol, 1pcs
 Win-spec software 2.33EN, 1pcs

Main Specification

Display	2*20 characters LCD with backlight function
Light Source	6V10W Halogen Lamp(2000 hours) Deuterium lamp(1000 hours)
Sample Compartment	100mm Optical Path
Standard Cell Holder	10mm
Standard Cell Configuration	10mm Glass cell(4pcs)
Power Requirement	110/220VAC , 50/60Hz,±10%

Basic testing mode

Basic measurement	Photometric measurement,(A/T) Concentration measurement (C)
Concentration measurement	Slope method (C=K*A) Standard curve method (C=K*A+b)
Software functions	Win-spec workstation, SP-2.33EN
Photometric analysis	T, A, and C measurement
Quantitative analysis	Standard curve measurement;
Kinetic analysis	Measurement with time-scanning.
Spectrum scan analysis	Spectrum scan function (Only SP-2100UVPC)

Basic instrument functions

100%T or 0%T setup	Automatic
System self-testing	Wavelength self-testing, light sources self-testing, filter switching, energy calibrating.
Light source switching	The switching point can be set at any position at the wavelength range of 325-355nm to improve testing accuracy.
Light source management	Light source on/off status can be controlled to elongate its working life.
Signal output	RS-232C, Analog
Communication function	Intercommunication can be realized after connecting to PC

Extended function (Accessories or workstation software should be chosen.)

Automatic multi-cells holder	Auto-sorting or manual-sorting test, 4 cells and 6 cells for choice.
Micro-volume testing	100μl, as the minimum volume. (Special cell holder and cuvette should be used.)
Constant temperature testing	Testing samples under the condition of constant temperature. This function is especially suit for kinetic analysis. Electronic constant temperature accessory or water cycling constant temperature accessory should be chosen.
USB communication	USB Port for choice, which fits the developmental tide of modern computer.

Spectral scanning

In the instrument's wavelength range, run spectra scanning for sample according to the setting wavelength range, get the curve of Absorption/Transmittance vs. wavelength to analyze the spectrum character istic and identify the maximum absorbance peak. User can do spectrum smoothing, peak or valley detecting, and overlap several spectrum curves to do four basic calculations, print and save the data.

Note: There may not be special notifications when the technical specification, profile and configuration changed. Please, the products will be in agreement with the real models.