SP-2102UV/UVPC Visible Spectrophotometer

Switchable spectral bandwidth especially suits for the analysis in drug control, pharmaceutics, and scientific research, and so on.

SP-2102UVPC spectrophotometer has been developed on the basis of SP-2102UV, which utilizes the abundant resources and functions of MS Windows platform. SP-2102UVPC is a new generation of UV/Vis Spectrophotometer with spectrum scanning function.

This model not only reaches the instrument technical index prescribed in Drug Codex, but also has a good many quantification and qualification functions, such as wavelength scanning, single wavelength, double wavelength, triple wavelength, or multiple wavelength measurement, as well as derivative spectrum analysis, four basic calculations of spectra.

Excellent instrument stability and sensitivity render itself to be the top one among the same class instruments. The performance of SP-2102UVPC competes that of double beams spectrophotometers.

Performance Specification

MODEL	SP-2102UV	SP-2102UVPC
Optic system	Littrow type optic system with 1200 grooves/mm diffraction grating monochromator.	
Light path	100mm	
Spectrum band width	2nm	
Wavelength range	190-1100nm	
Wavelength accuracy	±1nm	±0.5nm
Wavelength repeatability	0.5nm	0.2nm
Stray light	Ü0.1%T (at 220nm & 340nm)	
Photometric Mode	T, A, and C measurement	
Photometric Range	0-125.0%T, -0.097-3.000A	
Photometric accuracy	¤0.3%T	
Photometric repeatability	0.15%T	
Stability	¤0.001A/hr (at 500nm, after warming up for 1 hour)	
Baseline flatness		±0.002A

Main Specification

Display	2*20 characters LCD with blacklight function(SP-2102UV)
	128*64 LCD Displayer (SP-2102UVPC)
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-2102UVPC)

Basic instrument functions

Storage function	56 standard curves
100%T or 0%T setup	Automatic
System self-testing	Wavelength self-testing, light soures 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

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

Power cable, 1pcs

User manual, 1pcs

Operating protocol, 1pcs

Win-spec software 2.33EN, 1pcs

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.

Multiple wavelength analysis

Up to 20 wavelength points can be used for measuring sample's absorbance or transmittance. The background can be corrected by multiple wavelengths calculation to measure unknown samples, which great ly enhance test precision and speed. Besides, by inputting K factor, user can do multiple wavelengths programming to measure the concentration of unknowns.

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.