

SP 2000UV/UVPC Visible Spectrophotometer

Can you believe? An UV-Vis spectrophotometer costs less than ten thousand, but with power on self-testing, automatic wavelength calibration, light source auto- switching, PC controlled, etc. In the past, it might cost several ten-thousand even decuple with these advanced functions.

SP-2000UV UV-Vis spectrophotometer takes use of high precision sine mechanism as a wavelength driver. Program control, wavelength accuracy, and the linearity over the full wavelength are obviously better than those of the congener instruments in which gear and rack is used as a wavelength driver, and a gauge dial is used for wavelength display.

Specification:

MODEL	SP-2000UV	SP-2000UVPC
Optic system	Littrow type optic system with 1200 grooves/mm diffraction	
Light path	100mm	
Spectrum band width	5nm	
Wavelength range	200-1000nm	190-1100nm
Wavelength accuracy	±2nm (automatic system calibration)	
Wavelength repeatability	1.0nm	
Stray light	≤0.5%T (at 220nm & 340nm)	
Photometric mode	T, A, and C measurement;	
Photometric range	0-125.0%T, -0.097-3.000A, 0-9999C, 0-9999F	
Photometric accuracy	±0.5%T	
Photometric repeatability	0.3%T	
Stability	±0.003A/hr (at 500nm, after warming up for 1 hour)	
Baseline flatness	±0.004A	



Standard configuration:

10mm manual four-cell holder, 1pcs
 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

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-2000UVPC)

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 option 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 characteristic 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.