PerkinElmer®
For the Better

SP-UV 300

UV-VIS Spectrophotometer

Spectrum Instruments
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▷ SP-UV 300

Basic Instrument Functions

Mode of operation	Photometric measurement,(A/T) Concentration measurement(C)
Concentration measurement	Slope method (C=K*A) Standard curve method (C=K*A+b)
Photometric analysis	T, A, and C measurement
Quantitative analysis	Standard curve measurement
Kinetic analysis	Measurement with time-scanning
Spectrum scan analysis	Spectrum scan function
Multiple wavelength analysis	Measurement with many wavelengths
DNA / Protein analysis	Automatic calculation of the purity and concentration of nucleic acid
Storage function	128 standard curves in the instrument
System self-testing	Wavelength self-testing, light sources self-testing, energy calibrating.
Light source switching	Automatic switching at 325nm (can select upto 370nm)
Light source management	Light source on/off status can be controlled to elongate its working life.
Instrument control	Standalone or PC Software
Signal output	Printer Port

PC Mode (additional function using Win-spec Software)

Software function	Validation (GLP/GMP) and a lot of other functions

Performance Specification

ITEM	SP-UV 300	
Optical system	1200 lines/mm diffraction grating monochromator	
Optic type	Split (Dual) beam	
Light path	10mm-100mm	
Spectral bandwidth	2nm	
Wavelength range	190-1100nm (0.1nm increment)	
Wavelength accuracy	±0.5nm	
Wavelength repeatability	±0.3nm	
Stray light	≤0.05%T (at 220nm NaI & 340nm, $NaNO_2$)	
Photometric mode	T, A, and Conc. measurement	
Photometric range	0-300.0%T, -3.000 to 4.000A , 0.000-9,999 Conc.	
Photometric accuracy	±0.3%T	±0.004A (0-0.5A) ±0.008A (0.5-1.0A) ±0.01A (1.0-2.0A)
Photometric repeatability	±0.2%T	±0.002A (0-1.0A) ±0.006A (1.0-2.0A)
Baseline stability	±0.001A/hr (at 500nm, after lamp turned on for 1 hour)	
Baseline flatness	±0.002A (200-1100nm)	
Noise level	±0.001A or ≤ 0.0002 RMS (at 0A, 500nm)	
Light source	Tungsten-Halogen & Deuterium	
Detector	2 Silicon Photodiodes	

Accessories available

- 10mm lightpath, 6 cell auto cuvette holder.
- Peltier single cell holder system (Used for example : kinetic analysis.)
- Sipper system
- Sipper with adjustable temperature cuvette holder.
- Multipurpose cuvette holder for both 10mm light path cuvette and Ø8-Ø22 round tube
- 16 mm round tube holder for COD test
- Thin film test holder
- Reflectance holder for glass filter sample

Scope of supply

- 10mm manual four-cell holder 1pcs
- 10×10×45 mm standard glass cuvettes 4pcs
- 10×10×45 mm standard quartz cuvettes 2pcs
- USB connection cord 1pcs, Power cable 1pcs
- User manual 1pcs

Main Specification

Display	8 inches Color Touchscreen
Sample compartment	100mm Optical Path
Standard cell holder	10mm
Power requirement	110/220VAC, 50/60Hz, ±10%
Size	470(W)×440(D)×244 (H) mm
Net weight	12Kg
Gross weight	15Kg