DOUBLE BEAM UV-VIS SPECTROPHOTOMETER

ALS-INS045

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DESCRIPTION

ALS-INS045 is the ideal DOUBLE BEAM UV-VIS SPECTROPHOTOMETER for laboratory use. It uses latest advanced PID based double beam Ultra Violet Visible technology with dual detector which also comes with optional Bluetooth connectivity.

FEATURES

- Auto wavelength selection and correction based on D2 peaks
- Individual control over D2 and Visible lamps to extend lifetime
- Pre-aligned optics allow easy lamp change operation
- Large sample compartment to accommodate various path length cuvettes
- Configurable scan wavelength from 0.1nm to 5nm for accurate/faster analysis
- Analysis applications supports the following modes:
    - Photometric
    - Quantization
    - Multi-wavelength* Scan Spectrum
    - Time scan Kinetics
    - DNA/Protein analysis

TECHNICAL SPECIFICATIONS	
Model	ALS-INS045SPE
Wavelength range	190.0 nm to 1,100.0 nm
Spectral bandwidth	Fixed – 1 nm (190 to 1,100 nm)
Wavelength display	0.5nm increments
Wavelength setting	0.5nm increments (0.1nm increments when setting scanning range)
Wavelength accuracy	±0.5 nm at D2 peak 656.1 nm ±0.5 nm for entire range (190 to 1100 nm)
Wavelength repeatability	±0.1 nm
Wavelength slew rate	About 6,000 nm/min
Wavelength scanning speed	3,600 to 2 nm/min
Lamp interchange wavelength	Automatic changeover of wavelength with configurable wavelength.
Stray light	Less than 0.02% T at 220 nm (10 g/l NaI) Less than 0.02% T at 340 nm (50 g/l NaNO2) Less than 1.0% T at 198 nm (12 g/l KCl)
Photometric system	Double beam optics
Photometric readability range	Absorbance: -4.00 to 4.00 Abs Transmittance: 0% to 400%
Photometric accuracy	±0.002 Abs at 0.5 Abs ±0.004 Abs at 1.0 Abs ±0.006 Abs at 2.0 Abs
Photometric repeatability	Less than ±0.001 Abs at 0.5 Abs Less than ±0.001 Abs at 1 Abs Less than ±0.003 Abs at 2 Abs
Baseline stability	Less than 0.0002 Abs/Hr @ 700 nm (one hour after light source ON)
Baseline flatness	Less than ±0.0002 Abs (avg. of points) (1,100 to 190 nm, one hour after light source switched ON)
Noise level	Less than 0.00005 Abs (700 nm)
Light source	Plug- in pre-aligned Halogen lamp and Deuterium lamp.
Monochromator	Blazed holographic grating in Czerny-Turner mounting
Detector	Dual Silicon photodiode
Sample compartment	Internal dimensions: 115 (W) x 250 (L) x 90 (H) mm Distance between light beams: 80 mm
Power requirements	AC 230 +10% with proper ground.50Hz, 160 VA.
Environmental requirements	Temperature: 15oC to38oC Humidity: 30% to 80%
Dimensions	430 (W) x 560 (L) x 195 (H) mm
Weight	22Kg
Optional Accessories	8 cell auto samplers, Variable Slit 0.5nm to 5.0nm, Microcell, Long path 20, 40, 50, 100 mm cell, Constant Temperature attachment.
Software	software compatible with Microsoft Windows 7 & above)
Validation	Semi-automatic measurement and pass/ fail evaluation and printing of results