UV Vis Double Beam Spectrophotometer

IG-29DS

iGene Labserve

Innovative • Interactive • Intuitive

FEATURES & SPECIFICATIONS

DESCRIPTION

IG-29DS is the ideal 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

SPECIFICATIONS

Parameter	IG-29DS
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