

UV-Vis NIR Spectrophotometer



Introduction:

The UV-Vis NIR spectrophotometer is an instrument designed for continuous scanning across the ultraviolet, visible, and near-infrared spectral regions. Its applicable fields include building energy efficiency testing, construction engineering quality inspection, automotive safety glass testing, materials science research, and scientific research in higher education institutions.

Features:

- * Seven slit widths are available: 0.1nm, 0.2nm, 0.5nm, 1nm, 2nm, 5nm, and 10nm. Users can select any one according to their specific needs.
- * Featuring computer-based automatic control, automatic calibration upon startup, and automated data acquisition and processing. Dedicated to specific tasks for streamlined management.
- * Features a dual imported detector for the UV/Vis/NIR range, resulting in enhanced sensitivity for weak signals, reduced noise, and superior accuracy.
- * The control of the instrument (such as grating conversion, filter conversion, receiver conversion, wavelength scanning, etc.) is all controlled by the computer, and the interface is USB2.0. The connection of the instrument is simple, which greatly improves the communication speed.
- * The integrated optical test system software can be selected to automatically detect the visible light transmittance, direct sunlight transmittance, direct sunlight reflectance and other related parameters of building glass.
- * The total transmittance of solar energy and the shielding coefficient of various window glass components to solar radiation heat can be obtained by cooperating with the glass hemispherical emissivity detector.
- * Special sample test accessories can be selected.
- * The software sets the import function, which can import data in text format.
- * Real time measurement of sample data, test result data can be exported.
- * The software can run under WinXP and win7 systems.

Technical Parameters:

Model	BK-UN600PLUS
Optical System	Double beam
Light Source	Deuterium lamp, tungsten lamp
Detector	PMT, PbS
Optical System	Czerny-Turner
Wavelength Range	190~3200nm(Transmission and specular reflectance mode) 250~2500nm(Integrating sphere mode)
Stability	±0.002A/hr @500nm, 0A
Wavelength Accuracy	±0.5nm(UV/Vis) ±0.4nm(NIR)
Wavelength Repeatability	≤0.2nm(UV/Vis) ≤1nm(NIR)
Spectral Bandwidth	0.1~7nm(UV/Vis) 0.8~20nm(NIR)
Operate Mode	Transmittance, absorbance, reflectivity, energy
Raster	Diffraction grating 1200L/mm(UV/Vis) 300L/mm(NIR)
Photometric Accuracy	±0.3%T(0~100%T)
Photometric Repeatability	≤0.2%T
Stray Light	≤0.2%T(360nm, 420nm)
Sampling Interval	0.1nm, 0.2nm, 0.5nm, 1nm, 1.5nm, 2nm, 5nm, 10nm
Photometric Range	0~3A
Baseline Flatness	±1%T(190~3200nm, after 30min warm-up) ±0.5%T(200~2500nm, after 30min warm-up)
Host Interface	USB2.0
Power Supply	AC 110/220V, 50/60Hz
Standard Accessory	Operational software
Optional Accessory	Integrating sphere accessory(60/100/150mm); transmission accessory; reflection accessory(Only the 60mm integrating sphere accessory, transmission accessory, and reflection accessory are configurable simultaneously)
External Size(W*D*H)	760*605*300mm
Package Size(W*D*H)	870*750*505mm
Net Weight	48kg
Gross Weight	69kg