

## **UV-Vis NIR Spectrophotometer**



**BK-UN600** 



## Introduction:

UV-Vis NIR spectrophotometer is a dual-beam spectrophotometer capable of continuous scanning across the ultraviolet, visible, and near-infrared wavelength ranges. 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:

- \* Featuring computer-based automatic control, automatic calibration upon startup, and automated data acquisition and processing. Dedicated to specific tasks for streamlined management.
- \* BK-UN600PLUS: Features a dual imported detector for the UV/Vis/NIR range, resulting in enhanced sensitivity for weak signals, reduced noise, and superior accuracy. BK-UN600: Utilizes a dual-receiver system consisting of a broadband imported photomultiplier tube (PMT) and a lead sulfide (PbS) detector.
- \* 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-UN600	BK-UN600PLUS
Wavelength Range	250~2500nm	190~3200nm(250~2500nm in integrated sphere)
Wavelength Accuracy	±0.5nm(UV/Vis)	±0.5nm(UV/Vis)
	±2nm(NIR)	±4nm(NIR)
Wavelength Repeatability	≤0.3nm(UV/Vis)	≤0.3nm(UV/Vis)
	≤1nm(NIR)	≤2nm(NIR)
Spectral Bandwidth	0.2~5nm(UV/Vis)	0.2~5nm(UV/Vis)
	0.8~20nm(NIR)	1~20nm(NIR)
Operate Mode	Transmittance, reflectivity,	Transmittance, absorbance, reflectivity, energy
	spectral energy, absorbance	
Raster	Diffraction grating 1200L/mm(UV/Vis)	
	300L/mm(NIR)	
Transmittance Accuracy	±1%T	±0.3%T
Transmission Specific	≤0.5%T	≤0.2%T
Gravity Refolding		
Stray Light	0.2%T(360nm, 420nm)	≤0.2%T(220nm, NAI)
Sampling Interval	0.1nm, 0.2nm, 0.5nm, 1nm, 2nm, 5nm, 10nm	0.1nm, 0.2nm, 0.5nm, 1nm, 1.5nm, 2nm, 5nm, 10nm
Photometric Range	0~2.5A	0~3A
Baseline Flatness	±0.01A	±0.004A
		(200~2500nm, after preheating for 30 minutes)
Host Interface	USB2.0	
Power Supply	AC 220V, 50/60Hz(Standard); 110V, 50/60Hz(Optional)	
Standard Accessory	Operational software	
Optional Accessory		Integrating sphere accessory(60/100/150mm);
	Integrating sphere accessory(60mm);	transmission accessory; reflection accessory
	universal reflectance/transmittance accessory	(Only the 60mm integrating sphere accessory,
	(Cannot be configured simultaneously)	transmission accessory, and reflection accessory
		are configurable simultaneously)
External Size(W*D*H)	600*500*260mm	700*600*260mm
Package Size(W*D*H)	860*730*400mm	
Net Weight	35kg	50kg
Gross Weight	50kg	75kg