OPTOSKY Spectroscopy Solutions

Datasheet

UV-VIS-NIR Spectrophotometer

UV3620

Product Features

- Super powerful precision and stability:dual gratings design,dual-beam optical system monitoring to ensure the high precision and long-term stability of instrument during data acquisition.
- Equipped with two high performance detectors,PMT is used in the UV-VIS region, and PbS is used in the near-infrared region, possessing extremely high sensitivity.
- The measurable wavelength range can reach 190–3200 nm.
- The light source uses imported halogen lamps and deuterium lamps (socket type) for easy replacement.
- Automatic six-position carousel: can hold 6 samples at a time, greatly improving sample analysis speed.
- Dual Monochromator Design
- Ultra-low Stray Light
- High speed Data Acquisition,capable of acquiring substantial spectra data precisely and rapidly.
- Concise and intuitive，User-friendly full Chinese analysis software

Product Applications

- Scientific Institute Research
- Bioscience
- Medical Analysis
- Agriculture and Food Inspection
- Environmental Science
- Water Quality Analysis
- Textile Industry
- Material Development

Product Description

The UV3620 is an ultraviolet-visible-near infrared spectrophotometer that adopts a design concept featuring double beams, double gratings, and double detectors, allowing continuous acquisition of spectral signals in the 190–3200 nm range. It is equipped with two detectors: PMT and PbS, which detect the UV-VIS and NIR regions, respectively, achieving optimal sensitivity and signal-to-noise ratio. The UV3620 can provide precise transmittance or reflectance measurements across the ultraviolet to near-infrared range.

The instrument uses imported halogen and deuterium lamps (socket type), achieving excellent measurement performance, while being easy to replace and reducing the inconvenience caused by disassembly.

The UV3620 is equipped with a USB data output interface, enabling connection to a computer and facilitating more convenient data handling.

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1503 Bld. A04, 3rd Software Park, Jimei, Xiamen, 361005, China
Tel: +86-592-6102588

1. Performance Parameter

Figure 1 UV3620 Performance Parameter

Model	UV3620-25	UV3620 Plus
Wavelength Range	190-3200nm	
Optical System	Dual-beam	
Number of Sample Cell Channels	Single channel, upgradable to multi-channel	
Metering Type	Absorbance (Abs), Transmittance (%), Energy, Reflectance (used with an integrating sphere)	
Light Source	Deuterium-Halogen Combination Lamp	
Detector	PMT、PbS	
Wavelength Accuracy	UV-VIS：±0.5nm，NIR：±2.0nm；	UV-VIS：±0.3nm，NIR：±1.0nm；
Wavelength Repeatability	UV-VIS：≤0.3nm，NIR：≤1nm	UV-VIS：≤0.2nm，NIR：≤0.5nm
Spectral Bandwidth	Ultraviolet-visible region: 0.1-5 nm, near-infrared region: 0.8-20 nm	
Photometric Accuracy	±0.4%T(0-100%T)	±0.3%T(0-100%T)
Photometric Repeatability	≤0.3%T	±0.2%T
Stray Light	0.2%T	≤0.1%T
Baseline Straightness	±0.003Abs（190-3200nm） ±0.003Abs（200-2500nm）After a 30-minute warm-up	±0.002Abs（190-3200nm） ±0.002Abs（200-2500nm）After a 30-minute warm-up
Luminosity Range	-5-5Abs	
Light Source Stability	The light source has stable luminous intensity, a long service life, and can meet the requirements for long-term detection.	
Operating Temperature	15-35°C	
Operating Humidity	30% ~ 80%	

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2. Product appearance diagram



Figure 1 UV3620 Appearance diagram of UV-VIS-NIR Spectrophotometer

3. Accessories Selection

Figure 2 UV3620 Standard and optional

Configuration List	
1	UV-Vis-NIR Spectrophotometer Main Unit
2	Main Control Circuit Board
3	A/D Circuit Board
4	Detector Circuit Board
5	Accessories

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