UV-VIS NIR Spectrophotometer LD-LUVS-A10

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Overview

UV-VIS NIR Spectrophotometer is a high-performance instrument designed for spectral analysis across a wide wavelength range of 190–2800 nm. Featuring a double-beam optical design, it effectively minimizes background interference to enhance measurement precision. The system is equipped with integrated optical testing software that automates parameter measurement and supports USB 2.0 connectivity for fast and reliable data transfer.

Features:

- Utilizing a double grating and dual-receiver system, the LD-LUVS-A10 enables continuous scanning across the entire UV, visible, and near-infrared spectrum (190–2800 nm), with seamless switching between modes for optimal performance
- The optical system employs high-efficiency diffraction gratings and a double-beam design, significantly reducing background interference and enhancing measurement accuracy
- Internal components are computer-controlled, minimizing mechanical errors
- Built-in software supports wavelength correction to further improve precision
- All key components, including the light source and detectors, use high-quality imported parts to ensure durability and stable performance
- Supports various measurement modes including transmission, reflection, and diffuse reflection
- Comes with optional accessories tailored to specific testing needs, such as building glass and coating material analysis
- Specialized software enables real-time data acquisition and analysis
- Results can be exported, imported in text format, and test reports can be printed, including both graphical and data outputs
- Customizable settings support a range of applications and facilitate efficient data management
- The instrument supports transmission, reflection, and diffuse reflection measurements, with a range of interchangeable test accessories available to suit various application needs
- The specialized data software enables real-time sample analysis, data export, text format imports, and test report printing with both graphs and numerical data
- It also includes dedicated functions for building glass and coating measurements
- Compatible software Windows XP and 7

Applications:

UV-VIS NIR Spectrophotometer is ideal for evaluating optical and thermal properties of building and automotive glass. It is ideal for energy-saving analysis, quality inspection, and material research.

Specifications:

Bandwidth	UV-VIS: 0.2 to 5 nm NIR: 1 to 20 nm
Net Weight	65 kgs
Stray Light	? 0.2% t (220 nm, Na I)
Light Source	Deuterium lamp, Tungsten Bromide lamp

Operating Modes	Transmittance, Reflectivity, Spectral Energy, Absorbance
Wavelength Range	190 to 2800 nm
Baseline Flatness	± 0.004 a (200 to 2500 nm, after preheating for 30 minutes)
Overall Dimension	830 × 600 × 260 mm
Photometric Range	0 to 2.5 A
Sampling Interval	0.1 nm, 0.2 nm, 0.5 nm, 1 nm, 1.5 nm, 2 nm, 5 nm, 10 nm
Wavelength Accuracy	UV-VIS: ± 0.5 nm NIR: ± 4 nm
Sample Room Dimension	120 × 240 × 200 mm
Transmittance Accuracy	± 0.3% T
Wavelength Repeatability	UV-VIS: ? 0.3 nm NIR: ? 2 nm (NIR)
Test sample specification	30 to 110 mm, Thickness up to 20 mm
Transmission repeatability	? 0.2% T