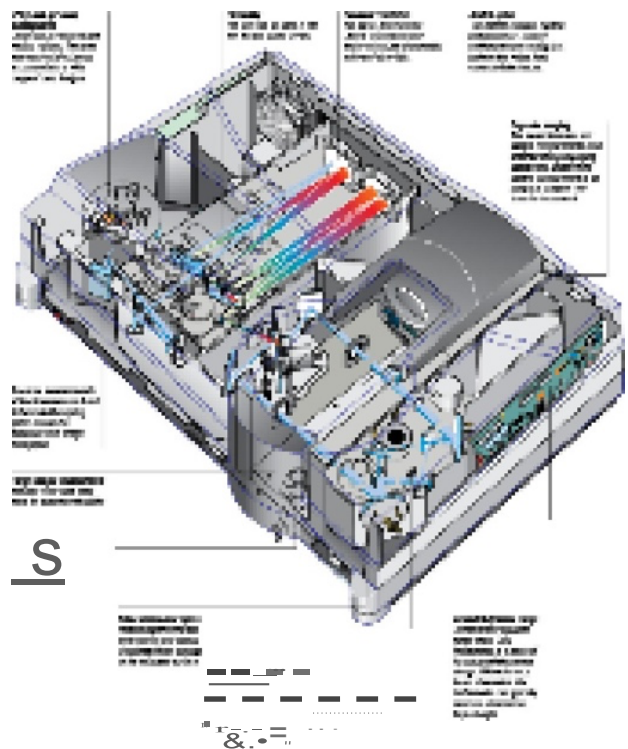


Spectrophotometer / spectrophotometer CARY 5000 UV-VIS-NIR

UV-Vis-NIR device, with high photometric performance, controlled by Cary WinUV modular software. It is equipped with an enlarged sample compartment, which can contain and interchange accessories for specular and diffuse reflectivity measurements, or solid or liquid sample holders for transmittance measurements.

Characteristics

- lamp: Deuterium, Tungsten, Mercury
- Spectral range: 175nm-3µm
- Monochromator: double, 1200 rpm (UV, Screw) 300tr/mm (NIR)
- Bandwidth (nm): variable, 0.01 to 5nm (UV/Vis) 0.04 to 20nm (NIR)
- Detector: PMT R928UV Screw, PdS close IR
- UV Vis resolution: <0.048 UV Vis, 0.2 near IR - Stray light rate: <0.00007%T at 220nm 10g/L KCl
- Stray light rate: <0.00002%T at 1420nm H₂O, TO 1cm
- Stray light rate: <0.00045%T at 2365nm CHCl₃, TO 1cm
- Wavelength accuracy: ±0.080nm UV Screw ±0.4nm Near IR
- Reproducibility in Screw
- wavelength: ≤0.005nm UV ≤0.02NIR (10 measurements)
- Photometric stability: ≤0.00018Abs/hr
- Photometric noise: <0.00003 at 0 Abs at 500nm <0.0001 to 2 Abs at 500nm

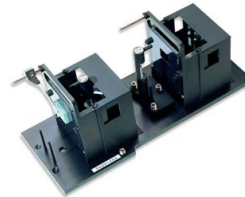




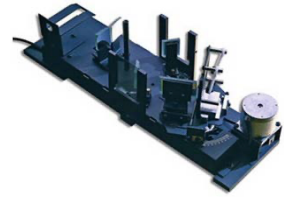
The solid sample holder is designed for transmission measurements of filters, glass, textiles and other solid samples when using UV-Vis- NIR spectrophotometers. It is attached to the optical rails, allowing the sample to be positioned anywhere in the beam, depending on the thickness of the sample.



Integration sphere designed with two measuring positions:
 - D: Specular excluded $0^\circ/D$
 - S: Specular includes $3^\circ 20'/D$
 This accessory allows relative measurements of diffuse, total and specular reflections by calculation. But also transmission and absolute measurements with standard, from liquid, solid and powder samples.



The VW specular reflectance accessory is designed to measure mirror-like reflectance on sample surfaces. Its applications include determining the degree of polish of an optical surface and measuring the film thickness of thin films. The unique bounce technique is used for maximum light throughput to measure samples with very low reflectance such as anti-reflective coatings. The data are corrected for the mirror contribution to the signal.



The Variable Angle Specular Reflectance Accessory (VASRA) measures reflectance at angles between 20° and 70° degrees. The VASRA features a sample translation mechanism that illuminates the same portion of the sample so that its measurements are compared at different angles of incidence.