

OLIS CLARITY VF UV Spectrophotometer

The CLARITY VF UV is designed for protein characterization studies in the UV where light scatter negatively affects data from a traditional 1 cm² instrument. Second derivative spectra of proteins adsorbed to aluminum salts are successfully obtained and correspond within 95% to calculated results. Studies of nucleic acids in liposomes are also possible. Automated Peltier temperature control is provided.

- Obtain accurate absorbance on all samples, not just reduced and purified clear solutions
- Thus, minimal sample disruption and minimal sample preparation are required
- Sensitivity up to 30x higher than with a traditional 1 cm² spectrophotometer

SYSTEM ATTRIBUTES

- Immunity to scatter caused by turbid adjuvants
- Integrating cavity of 150 μ L, 1 mL or 8 mL volume rather than a 1 cm² cuvette
- Nanomolar sensitivity
- Entire sample used in measurement
- Dual Deuterium source for maximum UV intensity
- Single grating monochromator with 75 mm focal length
- Photon counting PMT detector



Applications include:



- ✓ Protein Characterization
- ✓ Second Derivative UV spectra
- ✓ Proteins adsorbed to Al⁺ salts
- ✓ Nucleic Acids in Liposomes
- ✓ and thermal melts

TECHNICAL SPECIFICATIONS

- **Wavelength range:** 230 nm – 650 nm
- **Resolution:** 0.125 nm
- **Dynamic Range:** 400-fold, (0.0004 to 0.16 AU)
- **Wavelength Accuracy:** \pm 0.2 nm
- **Spectral Bandwidth:** 0.5 nm – 25 nm
- **Signal to Noise:** 50 @ 280 nm and 70 @ 430 nm for an AU of 1 and a 0.5 sec integration time