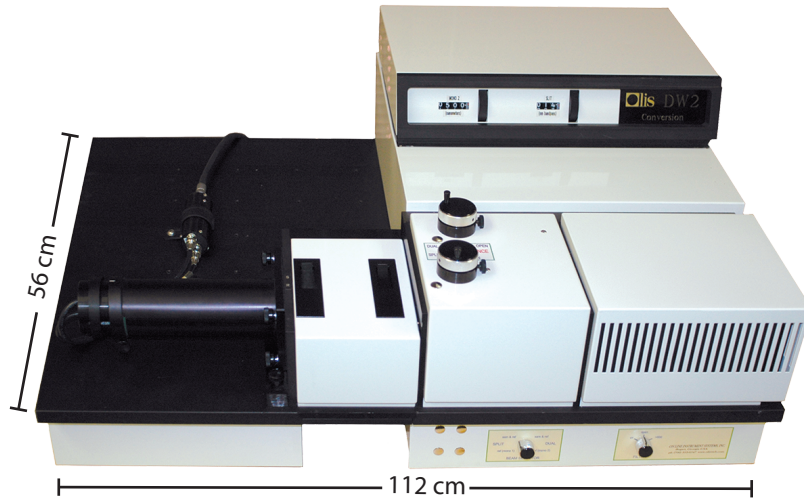# OLIS UPCYCLED AMINCO DW2/DW2000

aka, Johnson Foundation dual wavelength UV/Vis

This hybrid model combines the dual wavelength method pioneered by Professor Britton Chance at the University of Pennsylvania Johnson Foundation with elegant Windows 10 electro-mechanical hardware and OLIS SpectralWorks software. If you are fortunate enough to own an original model, we will upcycle yours; you can also purchase the complete system from us.

Standard Acqusition Mode:
Absorbance

Enhancements Supported:
Peltier Thermal Control
Stopped Flow
Titrator

OLIS UPCYCLED AMINCO DW2/DW2000 SPECIFICATIONS

Monochromators	Holographic, dual gratings, Czerny-Turner mountings with 1200 grooves/mm Five-phase step motor control with minimum step size of 0.05 nm.
PMT	Hamamatsu R562HA or equivalent
Wavelength Readability	<± 0.05 nm
Wavelength Range	190 - 900 nm
Wavelength Accuracy	< ± 0.2 nm
Wavelength Precision	< ± 0.1 nm
Wavelength Resolution	< 0.3 nm (measured at the half-peak height of 486 nm deuterium emission line)
Slit Width Range	< 0.01 nm to 15.0 nm, continuously variable
Stray Light	< 0.02% at 200 nm; < 0.03% at 300 nm; < 0.01% at 700 nm
Photometric Ranges	**Absorbance Range:** -3.0 to 3.0 AU; maximum sensitivity: 0.001 AU full scale; baseline offset: 0 to 100% **Transmittance Range:** 0 to 100%; maximum sensitivity: 0 to 0.1% full scale; baseline offset: 0 to 100%
Photometric Accuracy	**Deuterium Lamp Supply:** Current-regulated pulse width modulator with full line isolation. Automatic warm up cycle and regulated two-stage DC filament source for use with 10 V filament, 35 W Hamamatsu deuterium lamps. RMS ripple at 60 Hz: 0.01%; RMS noise at 29 kHz: 0.008% **Tungsten-Iodide Lamp Supply:** High stability linear element regulator with soft-start capability. Voltage sensed regulation. RMS ripple at 60 Hz: 0.008%; RMS noise at <60Hz: 0.008%
Signal to Noise Ratio	<± 0.0005 AU; at 2 A: < ± 0.001 AU peak to peak; at 3 nm slit, 450 nm, slow filter; at 0 A
Photometric Stability	< 0.004 AU/hour, double beam mode at 550 nm, 3 nm slit
Wavelength Scanning Speed	0.1 nm/sec to 20 nm/sec
Repetitive Scanning	Arbitrary number of repetitions
Baseline Flatness	< ± 0.001 AU throughout the wavelength range, computer corrected in double beam mode