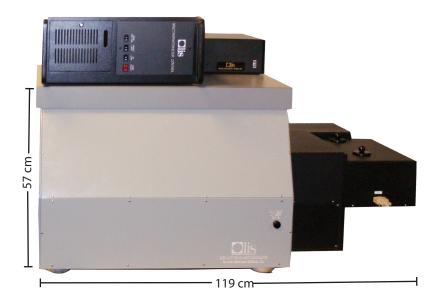
# **CLARITY 17**

### **Upcycled Cary 14/17 UV/Vis/NIR absorbance (fluorescence optional)**

For laboratories which prioritize NIR measurements, this is the first and best choice. For CLARITY studies, useful from 240-1100 nm; for solution absorbance studies, 185-2600 nm. Optics are classic Cary prism grating double monochromator with immeasurably low stray light, high photometric precision, computer-controllable slit widths during scanning, angstrom spectral resolution throughput range (0.1 nm in UV/Vis and 0.3 nm in NIR).



## **Standard Acquisition Modes:**

**CLARITY Absorbance** 

#### **Enhancements Supported:**

Fluorescence
Circular Dichroism
Circularly Polarized Luminescence
Phosphorescence Lifetime
Peltier Thermal Control
Diffuse Reflectance
Specular Reflectance
Stopped Flow
Thin Film Holder
Titrator

#### **CLARITY 17 SPECIFICATIONS**

Light Source	50 or 100 watt tungsten (Vis/NIR), 30 watt deuterium (UV)
Spectral Range	185 - 800 nm
Mechanical Range	185 - 2600 nm
Interrogation Method	Dual beam
Dispersive Elements	Prism + grating
Number of Scans per Second	Less than 1
Kinetic Fitting Methodology	Global fits using Matheson's Simplex Method and Matrix Exponentiation
Slew Rate	2000 nm/minute
Scan Rate	Entirely variable, up to 2000 nm/minute.
Wavelength Accuracy	<0.05 nm to 800 nm
Slits	Automatic and continuously variable from 0-3 nm to provide constant bandpass
Spectral Bandpass	Automatic and continuously variable up to 20 nm
Autoscale	Arbitrary
Baseline Stability	<0.1 m <sup>o</sup> per day
Integration Time	0.001 to 64,000 per datum
Absorption Range	0.0001 - 100 Abs Units/cm based on chosen DSPC
Absorbance Mode	Single or dual beam