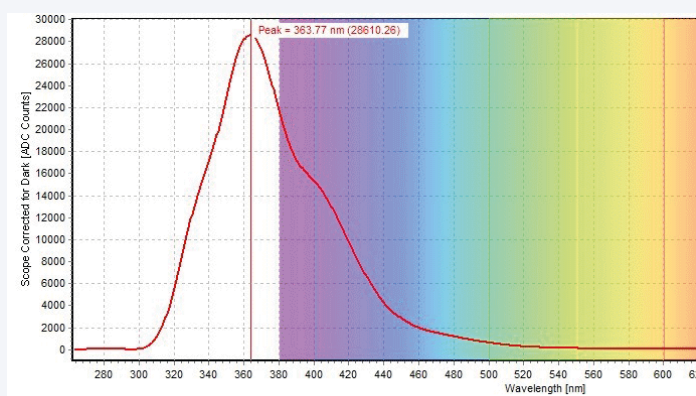


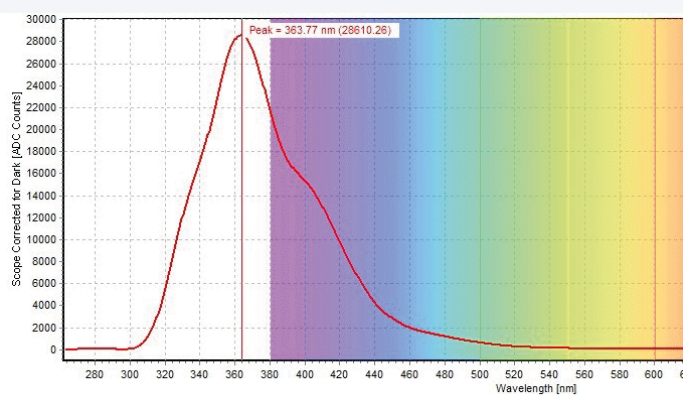
DATASHEET

The Avantes Chemistry absorbance bundle is the ideal system configuration for a variety of labs, including, research, teaching, and industrial. The system is configured for UV/VIS/NIR measurements from 200-1100 nm and provides spectral resolution as low as 1 nm (FWHM). The system includes a high-speed CMOS detector spectrometer, deuterium halogen light source, cuvette holder, fiber optic cable, and quartz cuvette cells. The spectrometer includes our exclusive replaceable slit technology allowing for user changeable slits to optimize performance between resolution or throughput (sensitivity). Avantes AvaSoft software facilitates measurements in absorbance, transmission, reflection and two types of irradiance for a variety of applications. Additional software features support many output file formats (Excel, JCAMP ASCII), FWHM and peak tracking, and time series (kinetics) functions. The modularity of the Avantes system provides for the use additional of probes and other sampling accessories to suit the requirements of each use case.

FLUORESCENCE SPECTRA



ABSORBANCE SPECTRA



KEY FEATURES

Range: 200-1100 nm
Resolution: 1.0 nm to 9.2 nm (Slit Dependent)
Integration Time: 9 Microseconds to 59 Seconds
Signal to Noise: 300:1

INSTRUMENT DETAILS

Spectrometer: 2048 Pixel CMOS Spectrometer with replaceable slit for maximum flexibility
Light Source: Deuterium Halogen Light Source & 1 cm Cuvette Holder

APPLICATIONS IN CHEMISTRY

Chemometrics

Fluorescence on Liquids

Beer Lambert
Concentration Experiments

Titration Experiments

Spectroelectro-
chemistry

UV Peptide Measurements

Time Services/
Kinetics Experiments

Dissolution Measurements

STANDARD CHEMISTRY ABSORBANCE SETUP

PART NUMBER	DESCRIPTION
AVA-CHEM-KIT	<p>AvaSpec-ULS2048CL-EVO-RS-UA Ultra-low stray light fiber optic UV/VIS/NIR spectrometer with replaceable slit, 2048 pixel/14x200 μm CMOS detector, grating UA (200-1100 nm), DCL-UV/VIS-200, OSC-UA, USB3 powered, high speed USB3 and ETH interface. Includes AvaSoft-Full and slit kit SMA (slit 25-RS pre-installed; 50, 100 and 200 μm in box).</p> <p>AvaLight-DHc Compact Deuterium-Halogen light source 200-2500 nm with TTL-shutter, needs PS-12V/1.0A (not included)</p> <p>PS-12V/2.08A Power Supply for AvaLight-HAL-(S)-Mini and AvaLight-XE-HP</p> <p>IC-DB26-2 Interface cable AvaSpec-USB2/EVO platform to DB15 for AvaLight-S with shutter for auto save darks & lamp off, AvaLight-XE control, 2 m</p> <p>CUV-DA SMA screw-on 10 mm cuvette holder for AvaLight-DHc/XE/LED, including COL-UV/VIS lens and 2 mirrors.</p> <p>CUV-COVER-DA Cover for Direct Attached cuvette holders. Suitable for CUV-ATT-DA(-HAL-MINI) & CUV-DA(-HAL-MINI)</p> <p>FC-UVIR400-1-ME Fiber cable, 400 μm fiber, broadband UV/VIS/NIR (200-2500 nm), 1 m, SMA terminated; ME metal jacketing</p> <p>CUV-10-2 Quartz cuvette 10 mm, 2 windows, 3.5 ml; 2 pieces</p> <p>Resolution/Range: 200-1100 nm; Resolution as low as 1 nm</p>



OPTIONS FOR FLUORESCENCE SETUPS

With additional accessories, the absorbance systems' functionality can be expanded and reconfigured for fluorescence. The high-powered pulsed xenon source provides for up to 6 Watts of optical power for fluorescence excitation, allowing for stronger emission and greater overall sensitivity. The FH-DA filter holder allows for filtering of the Xenon light output to a specific fluorescence excitation wavelength.



PART NUMBER	DESCRIPTION
AvaLight-XE-HP	6W Xenon light source (200-1000 nm) with Y cable for power and trigger connection to AvaSpec-EVO, needs extra PS-12V/2.08A power supply
FH-DA	Direct-attach filter holder for 13 mm or 1/2" diameter filters, 1-8 mm thick, including one UV/VIS collimating lens for AvaLight-DHc/XE/LED mounting
CUV-10-4	Quartz cuvette 10 mm, 4 windows, 3.8 ml; 2 pieces

Immersion dip probe and Temperature Controlled Cuvette Holder Options

PART NUMBER	DESCRIPTION
FDP-2UVIR200-2-5-mini	Dip Probe: 1/8" mini dip probe, 5 mm spacing, 10 mm path length, broadband UV/VIS/NIR (200-2500 nm), 2 m
CUV-UV/VIS-TC-ABS/FL	Temp-Controlled Cuvette Holder: Absorbance & fluorescence kit. Price includes q-pod sample compartment, TC 125 temperature controller, two QCL-UV collimating lenses, 2 QILUV imaging lenses and 2 QMP mirror plugs and 2 QMP mirror plugs, BATH 100 submersible pump, QSLITS optical slits, cover with access cap, tubing, cables and a stir bar, and Q-Blue control software

