

Temperature Controlled Cuvette Holders

For extra stability during demanding measurements such as fluorescence, Avantes offers the CUV-UV/VIS-TC, a temperature controlled cuvette holder. The temperature can be set anywhere between -30°C and +105°C with an accuracy of 0.05°C.

Other features include magnetic stirring, slit attenuation kit and fused-silica lens systems with SMA fiber-optic connectors. It can be combined with any AvaLight light source or AvaSpec spectrometer to create a powerful measurement system.

The CUV-UV/VIS-TC is available in fluorescence, absorption or combined fluorescence/absorption configurations. A special direct-

attached fluorescence configuration is available for coupling the Avalight-XE pulsed Xenon source for maximized fluorescence excitation energy.

Application areas enabled by the CUV-UV/VIS-TC series include DNA melting and annealing, protein thermodynamics, fluorophore characterization, enzyme kinetics and online thermocycling of biological particles.

CUV-UV/VIS-TC



Technical Data

Cuvette Dimensions	10 x 10 mm (lightpath)
Fiber connection	2 x COL-UV/VIS, SMA, 2 mirrors
Temperature control (Peltier)	-30°C to +105°C
TE control accuracy	± 0.05 °C
Stirring	Variable speed magnetic stirring
Overall dimensions	100 x 100 x 40 mm
Control unit	TE controller unit and circulation pump

Ordering Information

CUV-UV/VIS-TC-ABS	• Temperature controlled cuvette holder absorbance Kit, includes sample compartment, Temperature-Controller, two QIL-UV imaging lenses, BATH 100 submersible pump, QSLITS optical slits, cover with access cap, tubing, cables and a stir bar
CUV-UV/VIS-TC-FL	• Temperature controlled cuvette holder fluorescence Kit, same as CUV-UV/VIS-TC-ABS but with two QIL-UV imaging lens assemblies and two QMP mirror plugs
CUV-UV/VIS-TC-ABS/FL	• Temperature controlled cuvette holder fluorescence & absorbance kit, same as CUV-UV/VIS-TC-ABS, but with two QIL-UV imaging lens assemblies, two QCL-UV collimating lens assemblies, and two QMP mirror plugs
CUV-UV/VIS-TC-AVXE	• Base plate and support with AR-coated fused silica lens pair for excitation using the Avalight-XE pulsed Xe light sources

Accessories

CUV-TC-QCL-UV	• Extra AR-coated UV/VIS collimating lens for CUV-UV/VIS-TC
CUV-TC-QIL-UV	• Extra AR-coated UV/VIS imaging lens for CUV-UV/VIS-TC
CUV-TC-QMP	• Spherical mirror plate with steering plate for CUV-UV/VIS-TC
CUV-TC-QFH	• Filter holder for CUV-UV/VIS-TC
CUV-10-4	• Quartz Cuvette 10 mm, 4 windows, 3.8 ml