

# Temperature Controlled Cuvette Holders

## CUV-UV/VIS-TC



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  $-30^{\circ}\text{C}$  and  $+105^{\circ}\text{C}$  with an accuracy of  $0.05^{\circ}\text{C}$ .

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.



Monza (+39) 039.834.997  
Roma (+39) 06.8765.7838  
[www.optoprim.it](http://www.optoprim.it) [info@optoprim.it](mailto:info@optoprim.it)

### Technical Data

|                                      |   |
|--------------------------------------|---|
| <b>Cuvette Dimensions</b>            | 10 x 10 mm (lightpath)                          |
| <b>Fiber connection</b>              | 2 x COL-UV/VIS, SMA, 2 mirrors                  |
| <b>Temperature control (Peltier)</b> | $-30^{\circ}\text{C}$ to $+105^{\circ}\text{C}$ |
| <b>TE control accuracy</b>           | $\pm 0.05^{\circ}\text{C}$                      |
| <b>Stirring</b>                      | Variable speed magnetic stirring                |
| <b>Overall dimensions</b>            | 100 x 100 x 40 mm                               |
| <b>Control unit</b>                  | TE controller unit and circulation pump         |

### Ordering Information

|                             |   |
|-----------------------------|---|
| <b>CUV-UV/VIS-TC-ABS</b>    | • 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 |
| <b>CUV-UV/VIS-TC-FL</b>     | • 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  |
| <b>CUV-UV/VIS-TC-ABS/FL</b> | • 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                               |
| <b>CUV-UV/VIS-TC-AVXE</b>   | • Base plate and support with AR-coated fused silica lens pair for excitation using the Avalight-XE pulsed Xe light sources   |

### Accessories

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