

# CUV-UV-10, CUV-VIS-10 Cuvette Holders

The **CUV-UV-10** and **CUV-VIS-10 CUVETTE HOLDERS** for 10-cm cuvettes couple to our spectrometers and light sources to create spectrophotometric systems for absorbance and transmission measurements of aqueous solutions and gases for UV-VIS-NIR (~200-1100 nm) or VIS-NIR (~360-1100 nm) applications.

### **Parts Included**

- Cuvette Holder assembly for holding 10-cm cuvettes
- Black Cover for eliminating ambient light
- Two Barbed Fittings for connecting a temperature stabilizing water source
- Allen wrench for adjusting collimating lenses

## Operation

#### **Attaching the Fibers**

- 1. Attach one end of a SMA-terminated optical fiber to one of the collimating lenses. Attach the other end of this fiber -- the illumination fiber -- to a light source.
- 2. Attach another SMA-terminated optical fiber to the second collimating lens. Attach the other end of this fiber -- the read fiber -- to the spectrometer.

#### **Using the Fiber Supports**

- 1. Snap the clamps around the fibers after the fibers are screwed into the light source and spectrometer.
- 2. Lift the clamps until they support the fibers. To remove the fibers, simply unsnap the clamps.

#### **Installing Filters**

- 1. Tighten the thumb wheel completely when not using a filter.
- 2. Loosen the thumb wheel on the left side of the cuvette holder, creating enough space for the filter.
- 3. Insert the filter into the filter slot, which can hold filters up to 6 mm thick, and tighten the thumb wheel.

#### **Using the Temperature Stabilization Feature**

This feature is used to heat or cool the cuvette holder base and cuvette.

- 1. Remove the two plugs from the top side of the base. (The plug on the right side of the base should stay in place but may require thread tape.)
- 2. Replace the plugs with the two barbed fittings (or any 1/8" NPT Pipe thread fittings). Thread tape may be required on the fittings.
- 3. Connect the fittings to a water source. Water will circulate through the base.

### **Specifications**

Collimating lenses (VIS-NIR):	BK 7 glass (~360 nm - 2 μm*), 5 mm diameter
Collimating lenses (UV-VIS-NIR):	Dynasil 1100 quartz (200 nm - 2 μm*), 5 mm diameter
Base material and length:	Aluminum, 5.5"
Water input fittings:	1/8" NPT pipe thread

 $^{*}$  Though the VIS-NIR lens is optimized for use to 2  $\mu$ m, it can be configured to "see" only to 1100 nm with our S2000 spectrometer.