

CUVETTE HOLDER ACCESSORIES

Operation and Installation Manual



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1. Cuvette Holder Operating Manual

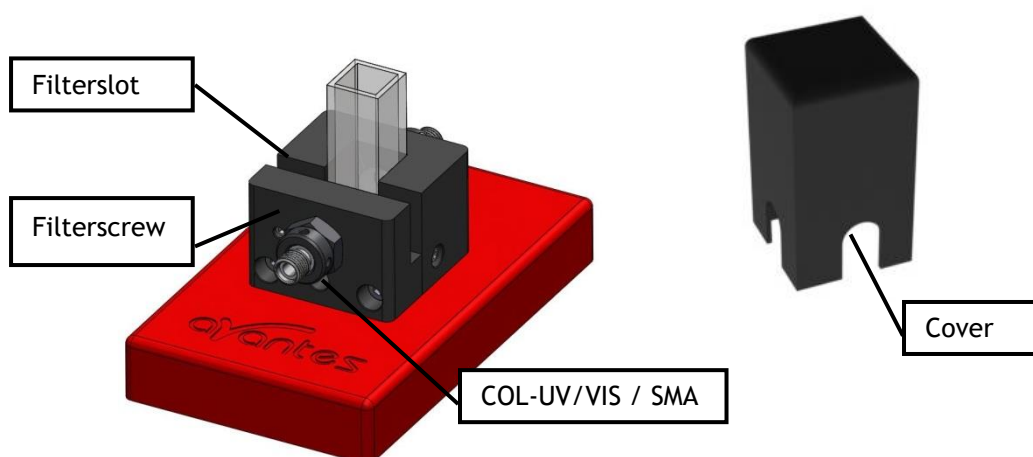
1.1 Parts included

1. Cuvette Holder CUV-UV/VIS, CUV-FL-UV/VIS or CUV-ALL-UV/VIS
2. Cuvette Holder Cover
3. 1.27mm Wrench Allen Key
4. The Cuvette Holder Operating manual

All types cuvette sample holders are designed for transmission/fluorescence measurements using a 10 x 10 mm cuvette. They feature adjustable clamping to hold non-uniform cuvettes at a repeatable location. All cuvette sample holders have 5 mm wide slit for filters.

In the following paragraphs the operation instructions for the different cuvette holders are given.

2. CUV-UV/VIS



The CUV-UV/VIS comes with 2 COL-UV/VIS focusing collimating lenses to maximize the light throughput. It also comes with a cover to prevent ambient light entering the light path.

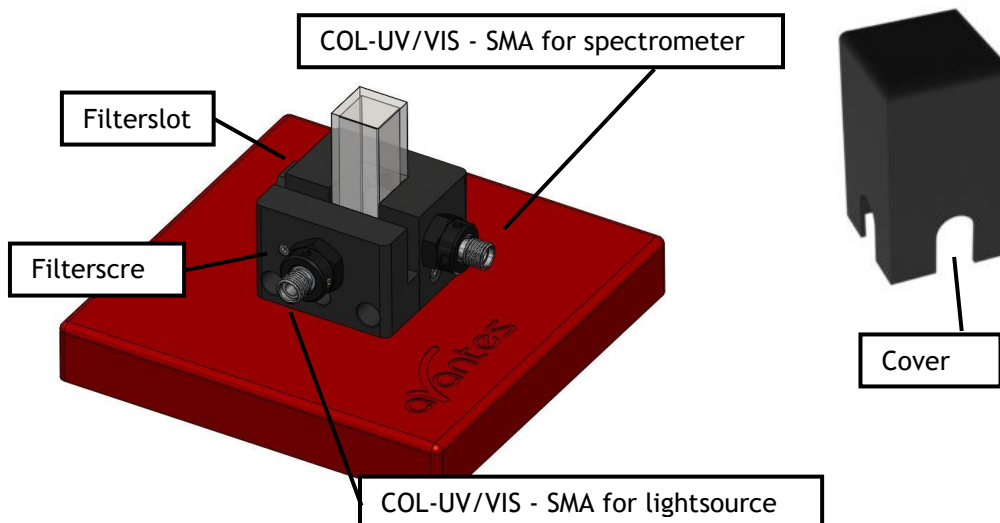
Operating instructions:

1. Attach an SMA terminated optical fiber between the cuvette holder and the light source
2. Attach an SMA terminated optical fiber between the cuvette holder and the spectrometer
3. Optionally install a filter by loosening the filter screw and insert the filter into the filter slot, max filter size is 5 mm.
4. The cuvette holders are designed to hold 10 mm cuvettes, 2 ball plunger screws can be adjusted to secure an optimal reproducible cuvette position
5. Focusing of the 2 lenses: Loosen the set screw of the collimating lens with the Allen Wrench key 1.27 mm on the barrel and slide the inner barrel until you see the optimal signal for your spectrometer in raw data intensity counts.
6. Place cover over sample to prevent ambient light entering the light path.

2.1 Technical Data

Cuvette Dimensions	10 x 10 mm
Fiber connection	2 x COL-UV/VIS, SMA
Filter slit	Max 5 mm wide
Overall dimensions	100 x 60 x 40 mm
Cover	Black anodized aluminum, 45 x 45 x 80 mm

3. CUV-FL-UV/VIS



The CUV-FL-UV/VIS has 2 focusing lenses, under 90 degrees for fluorescence measurements as well as 2 SiO₂ coated mirrors.

Operating instructions:

1. Attach an SMA terminated optical fiber between the cuvette holder and the light source
2. Attach an SMA terminated optical fiber between the 90° port on the side of the cuvette holder and the spectrometer
3. Optionally install a filter by loosening the filter screw and insert the filter into the filter slot, max filter size is 5 mm.
4. The cuvette holders are designed to hold 10 mm cuvettes, 2 ball plunger screws can be adjusted to secure an optimal reproducible cuvette position
5. Focusing of the 2 lenses: Loosen the set screw of the collimating lens with the Allen Wrench key 1.27 mm on the barrel and slide the inner barrel until you see the optimal signal for your spectrometer in raw data intensity counts.
6. Place cover over sample to prevent ambient light entering the light path.

3.1 Technical Data

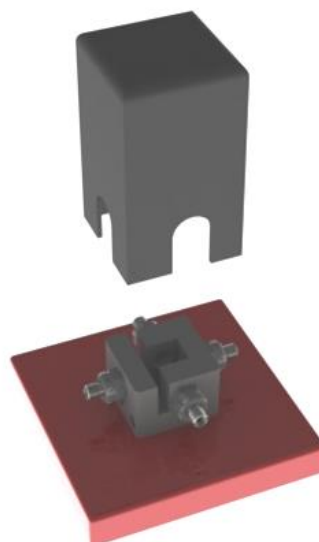
Cuvette Dimensions	10 x 10 mm
Fiber connection	2 x COL-UV/VIS, SMA
Filter slit	Max 5 mm wide
Overall dimensions	100 x 100 x 40 mm
Cover	Black anodized aluminum, 45 x 45 x 80 mm

4. CUV-ALL-UV/VIS

The CUV-ALL-UV/VIS has 4 collimating lenses, 4 x COL-UV/VIS in 2 optical paths. The CUV-ALL can be used to do simultaneously measurements with a dual channel spectrometer, such as AvaSpec-2048-2.

Operating instructions:

1. Attach an SMA terminated optical fiber between the port of the cuvette holder and the light source.
2. Attach an SMA terminated optical fiber between the opposite port the cuvette holder and the spectrometer's master channel.
3. Attach an SMA terminated optical fiber between the other port of the cuvette holder and the light source.
4. Attach an SMA terminated optical fiber between the opposite port the cuvette holder and the spectrometer's slave channel.
5. Optionally install a filter by loosening the filter screw and insert the filter into the filter slot, max filter size is 5 mm.
6. The cuvette holders are designed to hold 10 mm cuvettes, 2 ball plunger screws can be adjusted to secure an optimal reproducible cuvette position. Focusing of the 2 lenses: Loosen the set screw of the collimating lens with the Allen Wrench key 1.27 mm on the barrel and slide the inner barrel until you see the optimal signal for your spectrometer in raw data intensity counts.



The CUV-ALL-UV/VIS can be used for fluorescence applications as well, for fluorescence follow these instructions:

1. Attach an SMA terminated optical fiber between the cuvette holder and the light source
2. Attach an SMA terminated optical fiber between the 90° port on the side of the cuvette holder and the spectrometer
3. Optionally install a filter by loosening the filter screw and insert the filter into the filter slot, max filter size is 5 mm.
4. The cuvette holders are designed to hold 10 mm cuvettes, 2 ball plunger screws can be adjusted to secure an optimal reproducible cuvette position
5. Focusing of the 2 lenses: Loosen the set screw of the collimating lens with the Allen Wrench key 1.27 mm on the barrel and slide the inner barrel until you see the optimal signal for your spectrometer in raw data intensity counts.

4.1 Technical Data

Cuvette Dimensions	10 x 10 mm
Fiber connection	4 x COL-UV/VIS, SMA
Filter slit	Max 5 mm wide
Overall dimensions	100 x 100 x 40 mm
Cover	Black anodized aluminum, 45 x 45 x 80 mm