



H301-ALPHA3-LARGE

H301-ALPHA3-LARGE is compatible with PhaseView Alpha³ Light Sheet microscope.

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1. Components and dimensions

H301-ALPHA3-LARGE includes the following components:

- Objective Collar, compatible with water immersion objective 21 mm diameter.
- Sample Arm Cover
- Chamber Lid
- Chamber Base

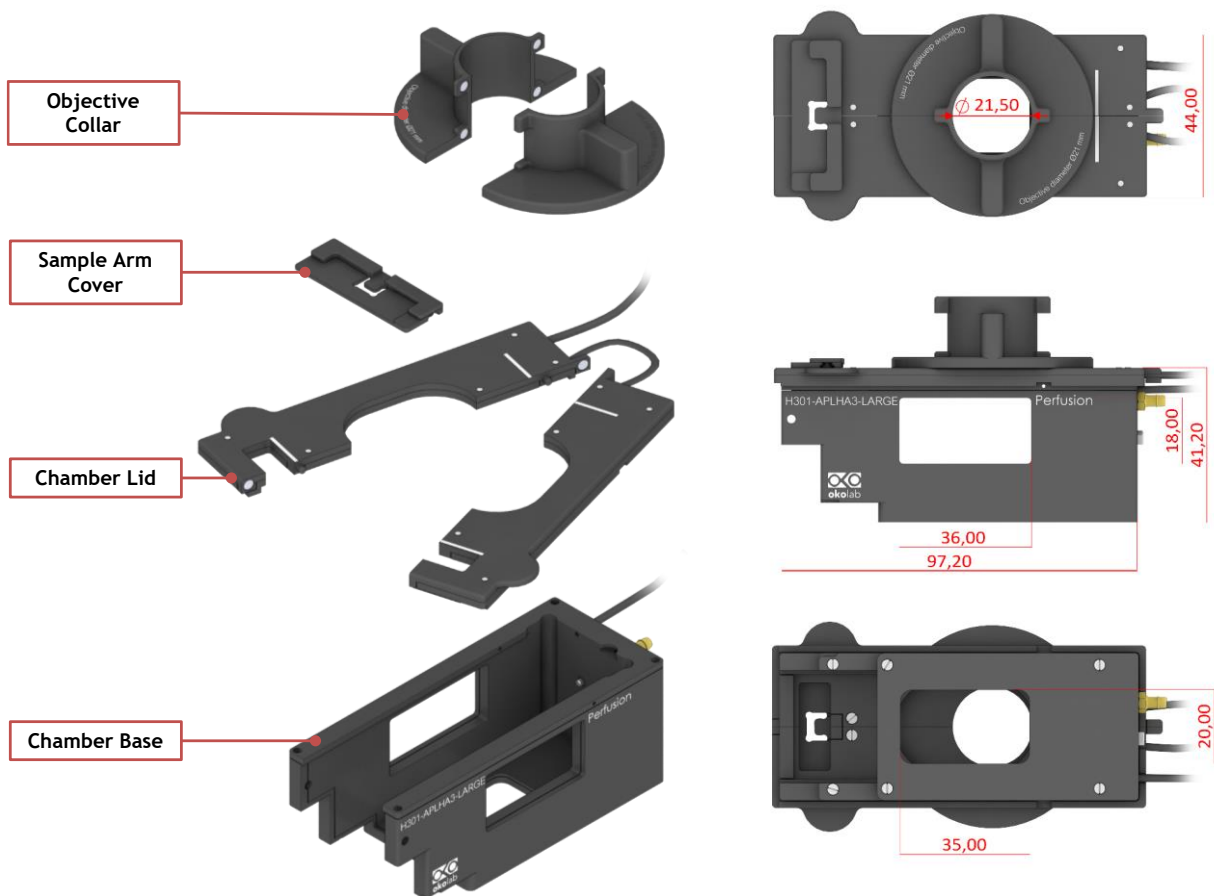


Figure 1. H301-ALPHA3-LARGE - Components and dimensions.

2. Installation of the Chamber around the sample holder.

To install the H301-ALPHA3-LARGE around the sample holder, please follow the steps below:

1. Insert the chamber base by sliding into place as shown in image 1 and 2 in Figure 2.
Note: Please pay attention to the sample holder glass.
2. Tighten the captive screw M2 to fix the chamber base around the sample holder by using the provided 1.5 mm hexagonal key (see image 2 in Figure 2).
3. Place the magnetic lid on the chamber base (see image 3 in Figure 2).
4. Insert the sample arm cover (see image 4 in Figure 2), and close it (see image 5 in Figure 2). It allows to reduce the brightness into the sample.
5. Place the magnetic objective heater in place as shown in image 6 in Figure 2.

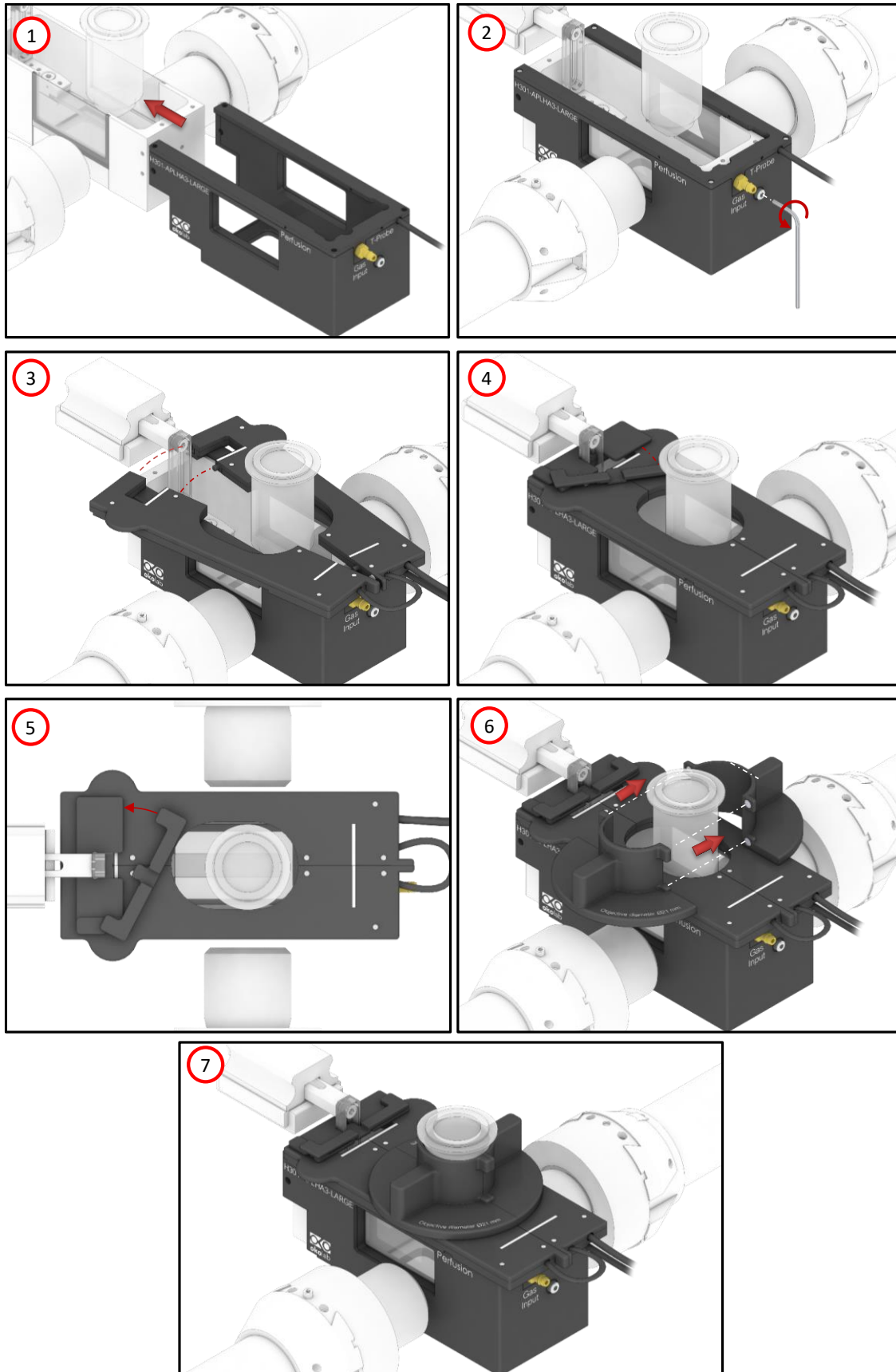


Figure 2. Chamber installation around the sample holder.

3. Connection of the Gas Supply

A single silicon tubing carries output gas from the Okolab Gas Controller to H301-ALPHA3-LARGE. Silicon tubing connects to a gas input - brass opening - located on a corner of the H301-ALPHA3-LARGE (see Figure 3). Connect by gently pushing silicon tubing onto brass opening.



Figure 3. Connection with gas supply.

4. Working with perfusion

The Chamber H301-ALPHA3-LARGE features 2 perfusion holes on the sides for the insertion of perfusion tubing up to 1 mm in outer diameter. Follow the instruction below to work with perfusion:

6. Use the supplied Stainless Steel Perfusion Tubes. Attach a Silicon tubes O.D. 1,6mm I.D. 0,8mm (not supplied) to the Stainless Steel Perfusion Tubes (see image 1 in Figure 4).
7. Insert the Stainless Steel Perfusion Tubes in the perfusion holes (see images 2 and 3 in Figure 4).
Insert a Silicon tubes O.D. 1,6mm I.D. 0,8mm (not supplied) to the free end of the Stainless Steel Perfusion Tubes (see image 4 and 5 in Figure 4).

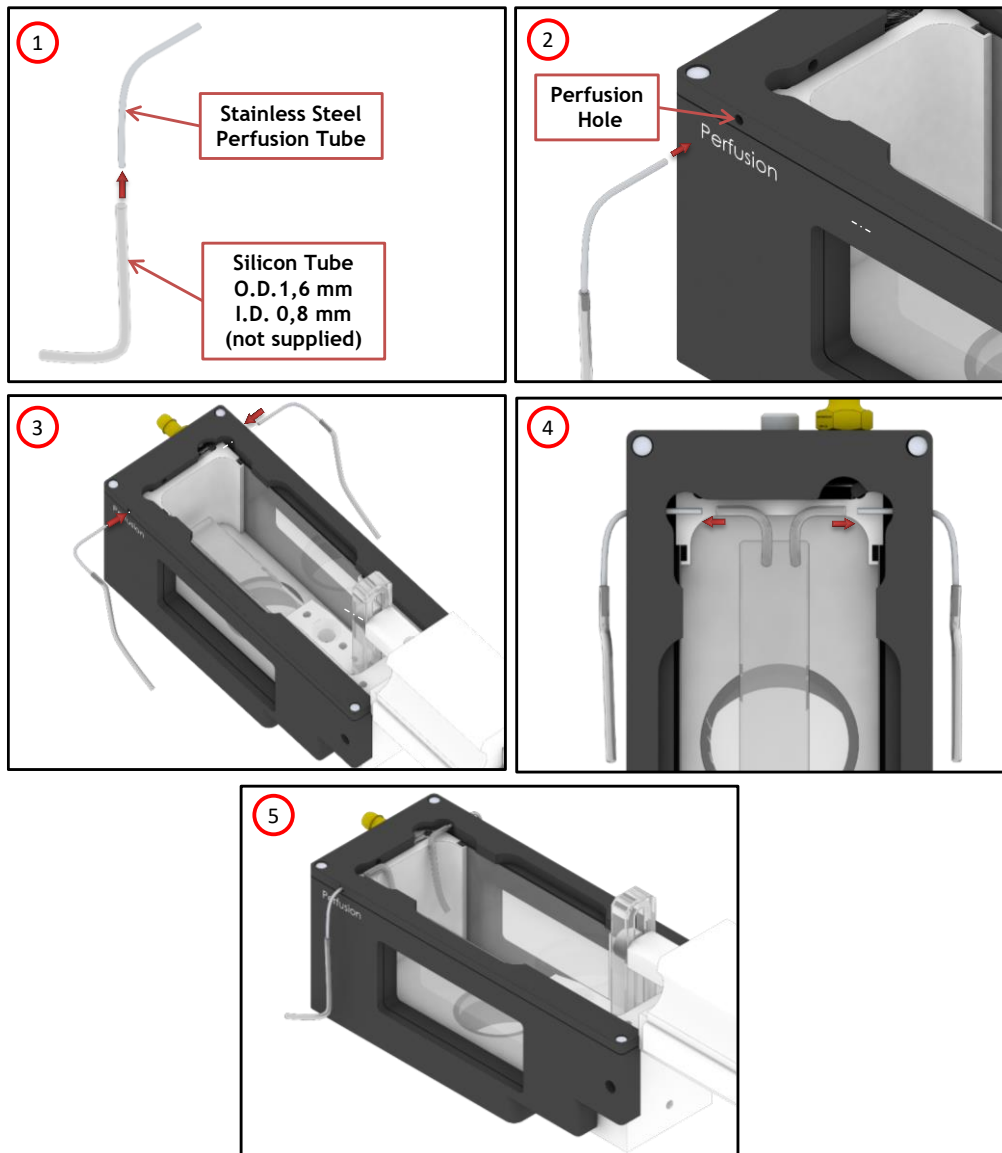


Figure 4. Working with Perfusion

5. Insertion of the Sample Feedback Temperature Sensor

Insert the Sample Feedback Temperature Sensor through the dedicated opening located in the H301-ALPHA3-LARGE (see Figure 5).

To read the temperature of the culture medium and realize a self-calibration of the chamber, fix the Temperature Sensor tip with adhesive tape on the sample holder inside the H301-ALPHA3-LARGE. For more information about the self-calibration, please refer to the User Manual of the Okolab Controller in use.

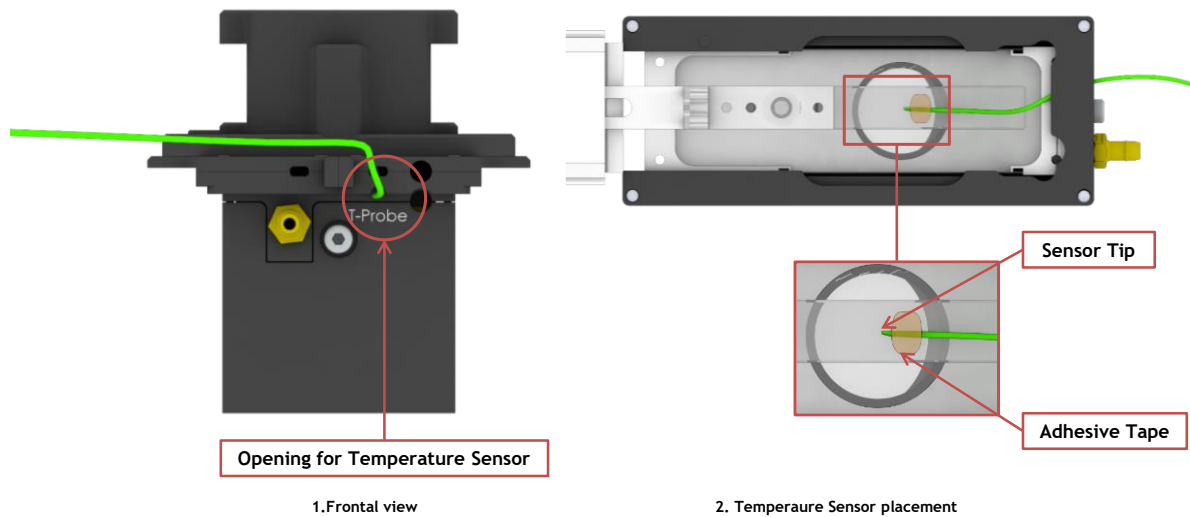


Figure 5. Insertion of the temperature sensor inside the chamber.

6. Cleaning

- Unplug all electrical cables.
- Remove the chamber lid from the chamber main body, and keep it separate from the chamber base while the chamber cools down.
- To clean the body of the chamber, wipe with a soft micro-fiber cloth. For stubborn smudges, you can damp the soft micro-fiber cloth with ethyl alcohol (product code UN1170). Do not put any liquid directly on the chamber.