

## *H301-PRIOR-NZ100-H107*

### Compatible with the following Z piezo stages

- Prior: Prior NZ100; NZ 200 in H107

### Compatible with the following Okolab Controllers

- H301-T-BL-PLUS
- UNO-COMBINED-CONTROLLER
- H401-T-DUAL

**Index**

|   |   |
|---|---|
| 1. Components and dimensions.....                           | 3 |
| 2. Insertion of the Sample Feedback Temperature Sensor..... | 4 |
| 3. Working with 35 mm Petri Dish- .....                     | 4 |
| 4. Working with 1”x3” and 1”x2”chamber slides.....          | 5 |
| 5. Connection of the Gas Supply .....                       | 6 |
| 6. Working with Perfusion .....                             | 6 |
| 7. Connection of the Chamber with Z piezo stage .....       | 7 |
| 8. Cleaning .....   | 8 |

## 1. Components and dimensions

H301-PRIOR-NZ100-H107 includes the following components:

- Chamber main body with embedded temperature sensor
- Lid with Indium Tin Oxide (ITO) conductive coating and embedded temperature sensor
- Chamber riser. It is a removable frame increasing the height of the chamber from 20 to 25 mm

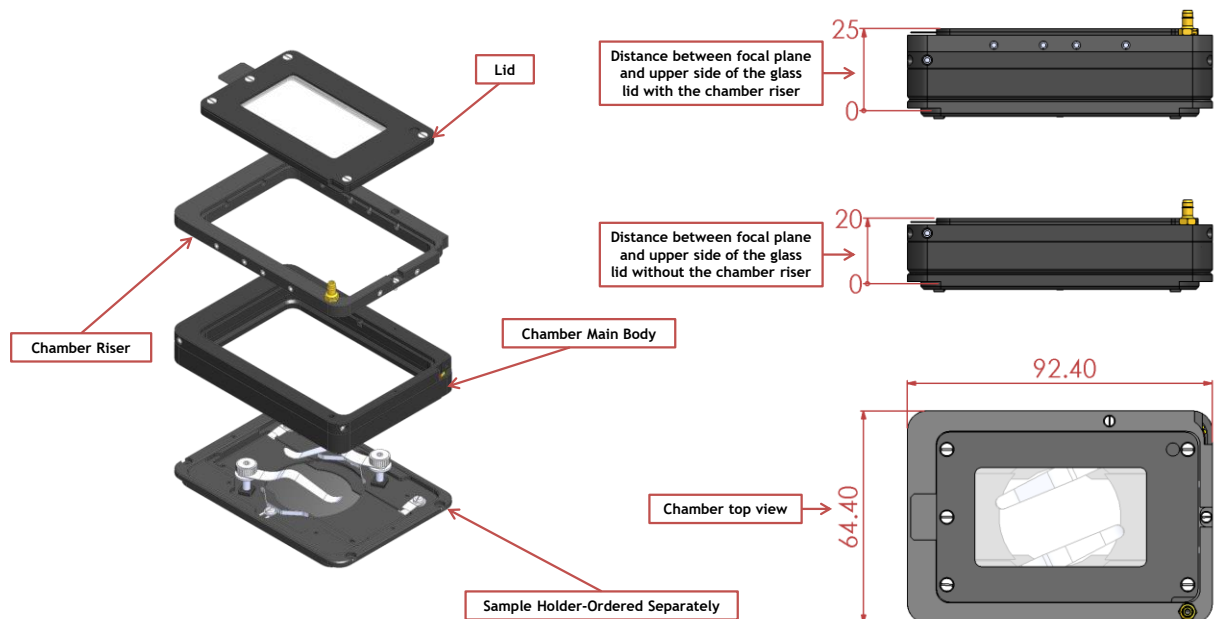


Figure 1. H301-PRIOR-NZ100-H107 Components and Dimensions.

## 2. Insertion of the Sample Feedback Temperature Sensor

Insert the Sample Feedback Temperature Sensor through the dedicated opening located in the H301-PRIOR-NZ100-H107 chamber riser (see Figure 2, Frontal and 3D views).

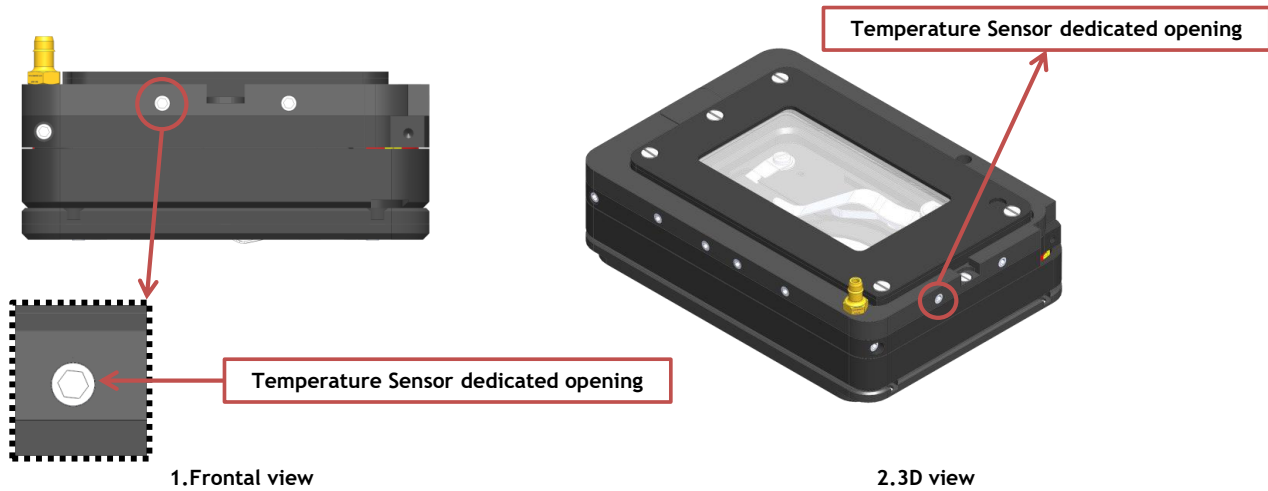


Figure 2. Insertion of the temperature sensor inside the chamber.

## 3. Working with 35 mm Petri Dish-

Flat springs prevent movement of 35 mm Petri dishes inside of the sample holder (See Figure 3).



Figure 3. Plate adapter for 35mm Petri-dish holder.

#### 4. Working with 1"x3" and 1"x2" chamber slides

Flat springs prevent movement of 1"x3" and 1"x2" chamber slides inside of the sample holder.

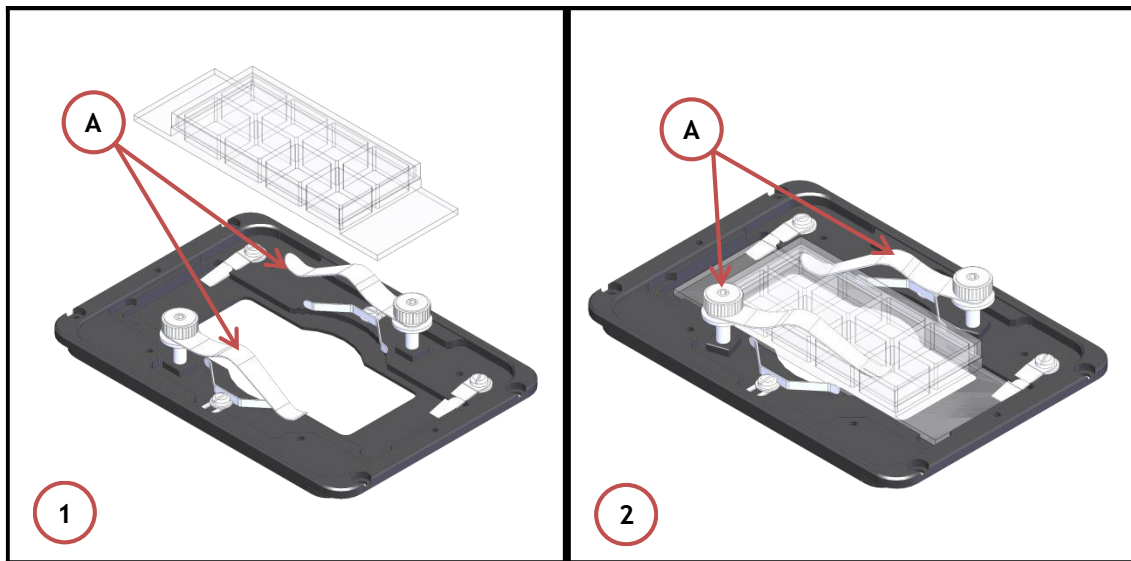


Figure 4. Sample holder for 1"x3" chambered cover glass holder.

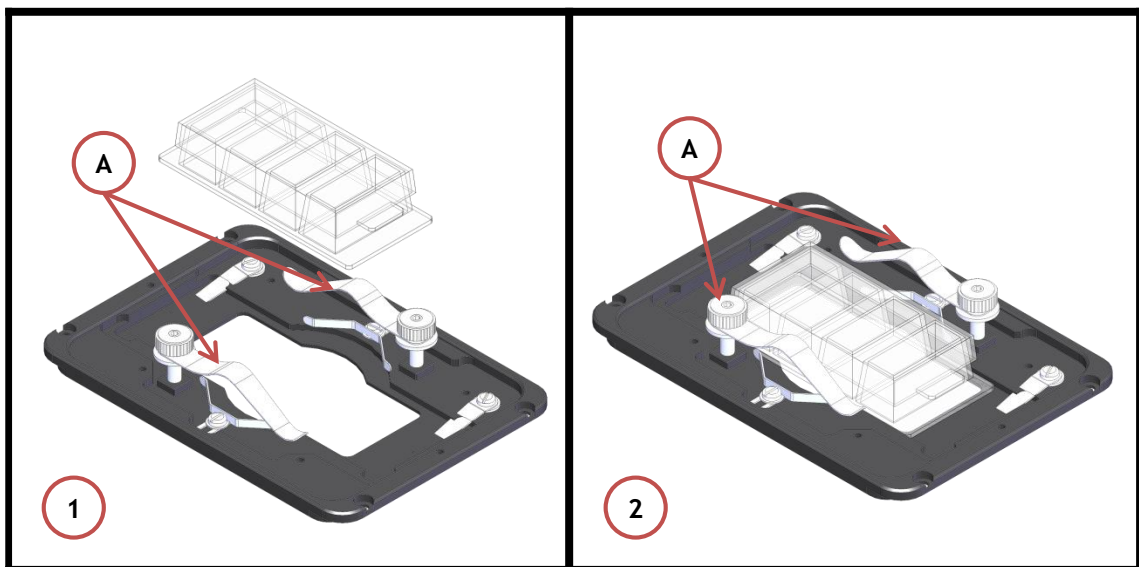


Figure 5. 1 Sample holder for 1"x2" chambered cover glass holder.

## 5. Connection of the Gas Supply

A single silicon tubing carries output gas from the Okolab Gas Controller to the H301-PRIOR-NZ100-H107. Silicon tubing connects to a gas input - brass opening - located on a corner of the H301-PRIOR-NZ100-H107. See Figure 6. Connect by gently pushing silicon tubing onto brass opening.



Figure 6. Connection with gas supply.

## 6. Working with Perfusion

The Chamber Riser included with H301-PRIOR-NZ100-H107 features 12 perfusion holes for the insertion of perfusion tubing up to 2.5 mm in outer diameter. Small screws plug the perfusion holes when not in use. (Grub screws M3x6). Remove small screws as necessary before introducing perfusion tubing.

Figure 7 shows location of perfusion holes.



Figure 7. Perfusion

## 7. Connection of the Chamber with Z piezo stage

Follow the steps shown in the images of Figure 8 and listed below in order to correctly connect the chamber with Z piezo stage:

1. Place the sample holder on the stage and tighten the four M2x3 Pan head screws, as shown in Figure 8 Image 1
2. Place the chamber main body on the stage and tighten the two M2x3 Pan head screws, as shown in Image 2 and 3 Figure 8
3. Place the lid on the chamber, as shown in Image 3 of Figure 8

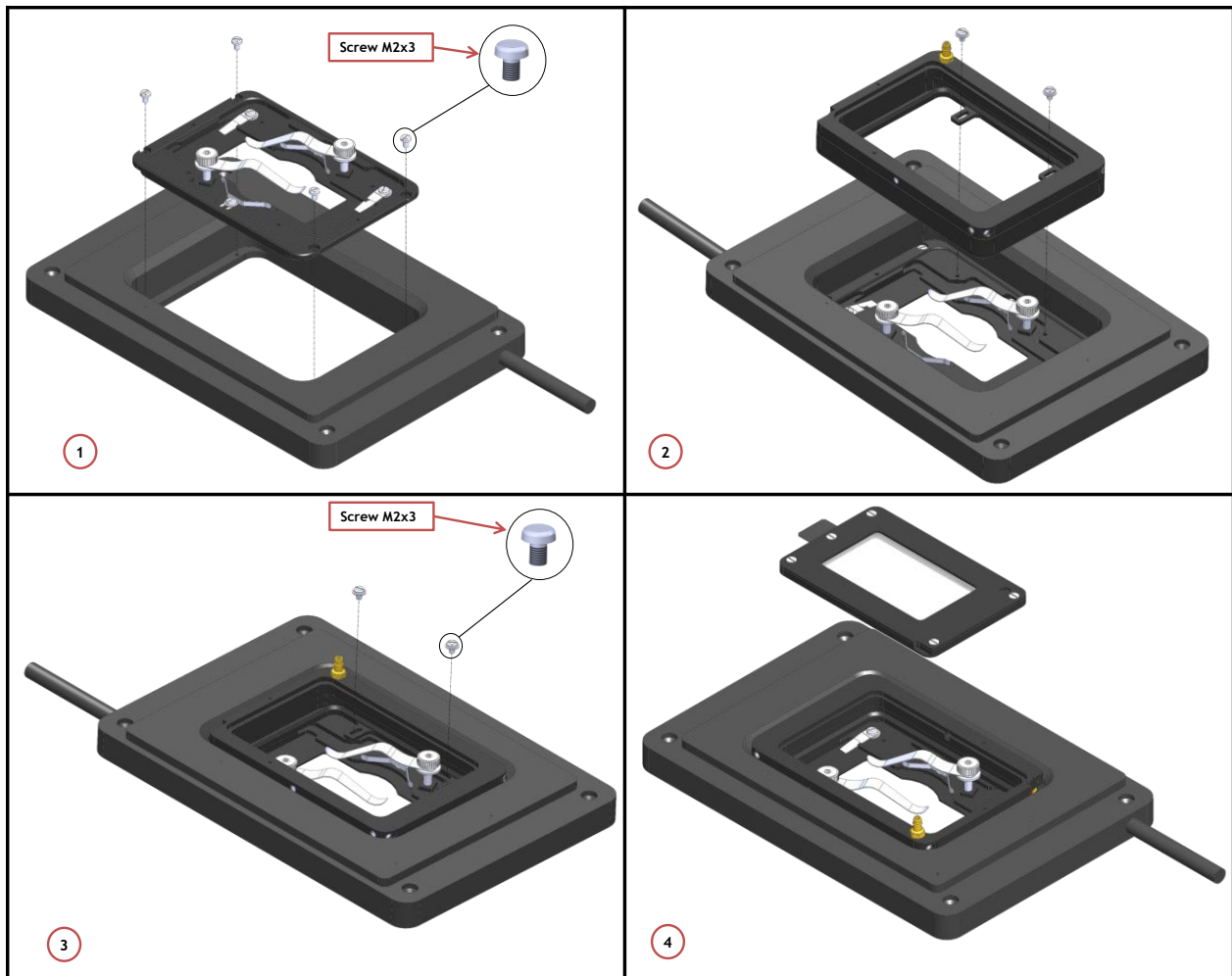


Figure 8. How to assemble the chamber to the stage.

## 8. Cleaning

- Turn the system off and pull the mains plug out the socket
- Remove the lid from the chamber main body, and keep it separate from the chamber main body while the chamber cools down.
- To clean the body and the glass lid 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. While cleaning the glass lid, do not apply strong force to the surface of the glass lid because it can be damaged.