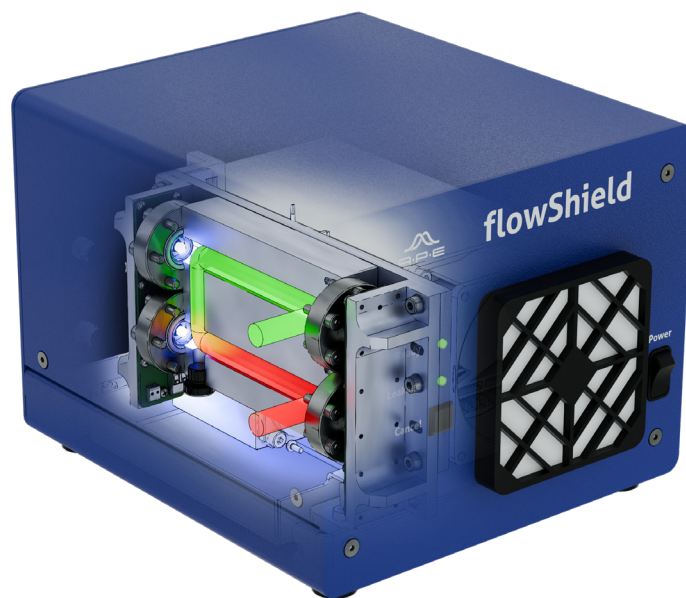


# Quick Installation Guide

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## flowShield



APE Angewandte Physik und Elektronik GmbH

Plauener Str. 163-165 | Haus N | 13053 Berlin | Germany

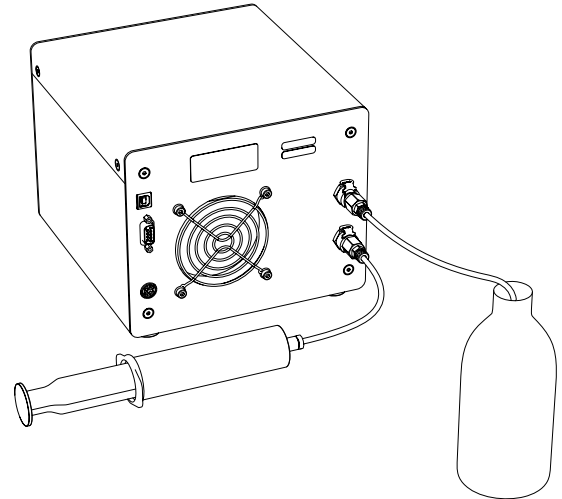
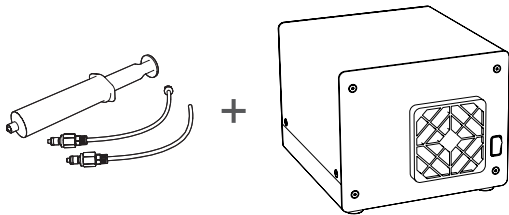
T: +49 30 986 011-30

[www.ape-berlin.de](http://www.ape-berlin.de)



# 01 Initial Cleaning

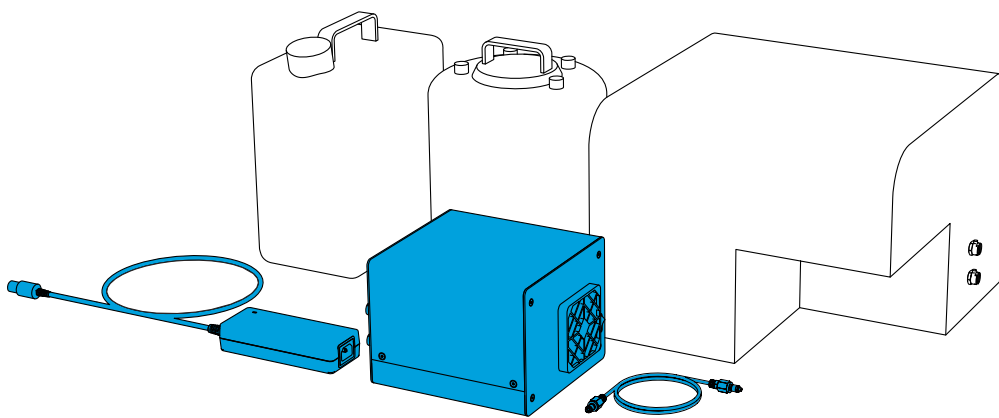
Connect to Input: tube with connector Luer - CPC (male)  
 Connect to Output: tube with connector CPC (male) - none



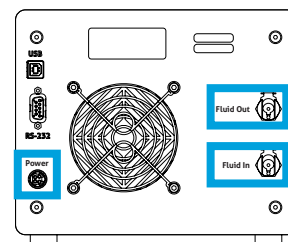
Use 3% Hydrogen Peroxide or BD FACSClean®.  
 Connect syringe (60ml) and inject cleaning agent (180 ml).

1. Incubate for 5 min for each 60 ml.
2. Rinse with sterile water (180 ml).
3. Ensure that no potentially contaminated fluid flows through when flowShield is off.

# 02 Connect Power and Tubings



1. Switch off flow cytometer.
2. Connect power supply to power input.
3. Switch on flowShield.
4. Connect tubings according the desired position of the flowShield (see right side).
5. Switch on flow cytometer and check if connections are tight and do not leak.



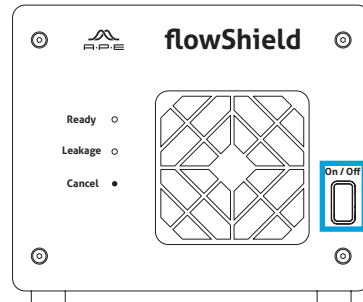
For a more detailed description please refer to user manual. You can find the user manual on the USB stick or in the user software under „Help“ -> Manual.

# 03 Operation and Status

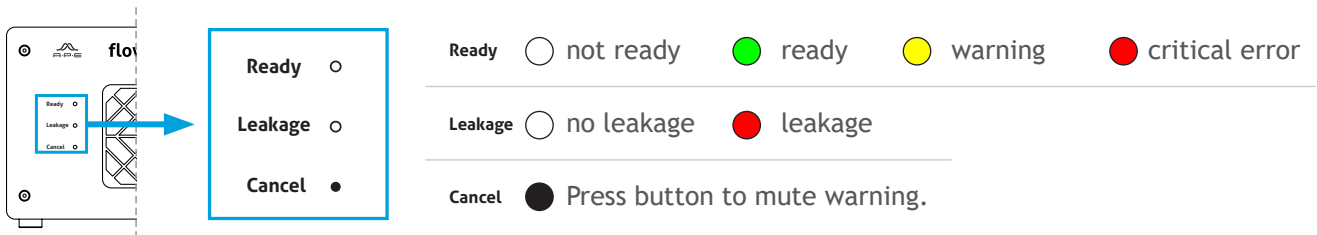
Turn on the flowShield using the power switch.  
It will start with the following default values

- Default target temperatur: 17°C
- Default UV output power: maximum

After power on, the flowShield will start cooling down, this may take up to 5 min. During the start-up phase the temperature may not be stable.



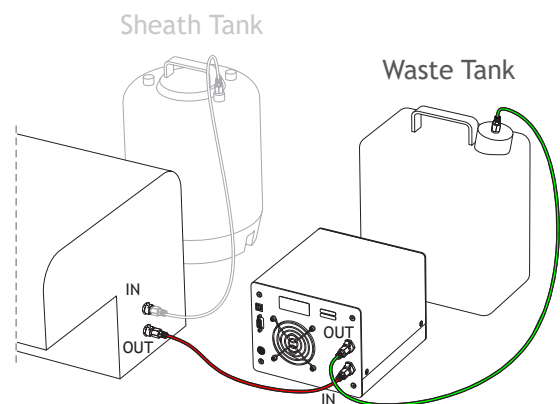
### Status Indicator LED:



## ...Choose the Position

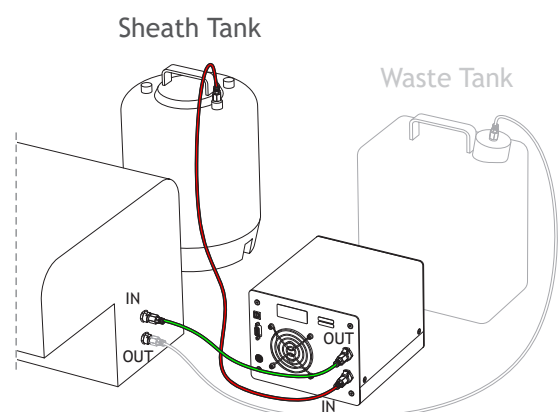
### Waste Position:

1. Waste position (both analyzers and cell sorters).
2. Switch off flow cytometer.
3. Switch on flowShield.
4. Detach Waste fluid line from Waste tank.
5. Connect Waste fluid line to flowShield IN.
6. Connect flowShield OUT to waste tank with the tubing.
7. Switch on flow cytometer and follow startup recommendation from the manufacturer.
8. Check if connections are tight and do not leak.



### Sheath Position (only for cell sorters):

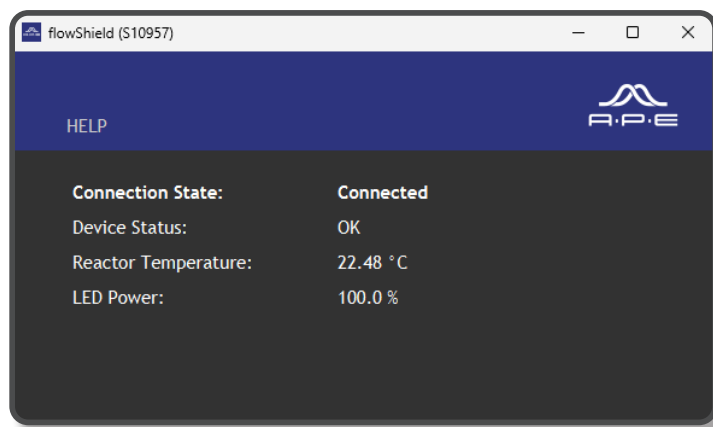
1. Switch off flow cytometer.
2. Switch on flowShield.
3. Make sure that no pressure is on the fluidic system.
4. Detach Sheath fluid line from cell sorter.
5. Connect Sheath fluid line to flowShield IN.
6. Connect flowShield OUT with cell sorter (Sheath in), use supplied tubing.
7. Switch on cell sorter and run the startup procedure as recommended by the manufacturer.
8. Check if connections are tight and do not leak.



## 04 Software



1. Insert the USB Stick and copy the software to the computer.
2. Connect your flowShield via USB and switch on the device.
3. Start flowShield software. The serial number of your device will be displayed in the software window.



For more details please consult the PDF manual which is stored on the provided USB stick.

The PDF manual provides essential steps for installing and maintaining the flowShield. For detailed procedures and safety information, refer to the complete user manual. You can open the PDF manual from the software: "HELP -> Manual"

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## 05 Maintenance

### User maintenance

If a contamination of the flowShield is suspected, repeat „01 Initial Cleaning“.

### Annual maintenance

An annual maintenance and recalibration of the UV-LEDs is mandatory. This can only be done by trained service personal. Please contact APE to schedule your annual maintenance date.

### Technical Support

Contact: [service@ape-berlin.de](mailto:service@ape-berlin.de)  
Phone: +49 30 98601130  
Website: <https://www.ape-berlin.de>