mosquito®

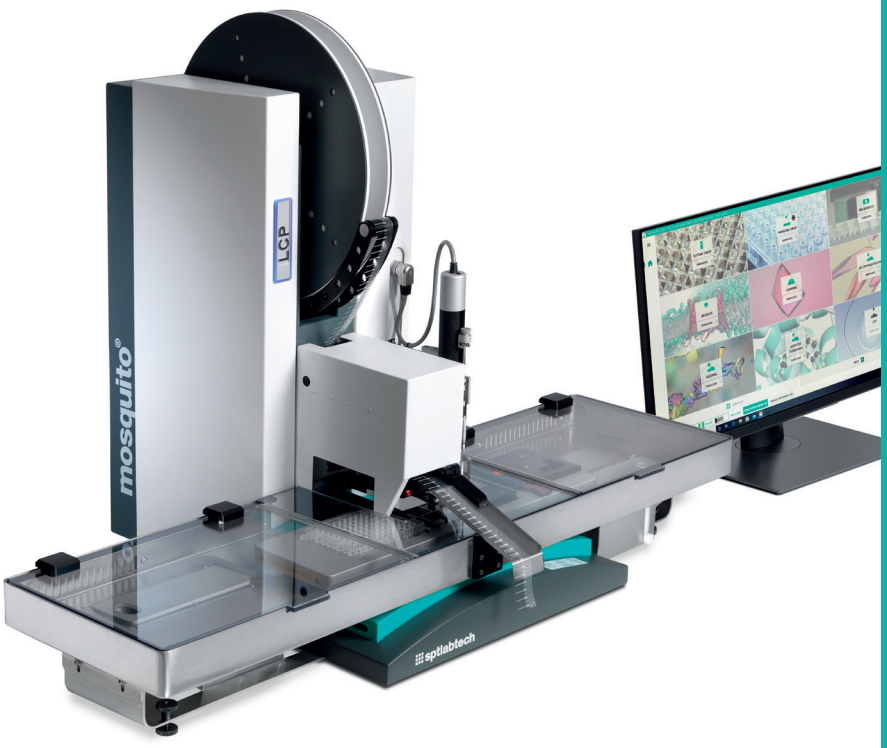
Precise Humidity Chamber

Sample evaporation can be a problem when dispensing very low volumes or volatile samples, causing inconsistent drop volumes, especially when environmental conditions and local humidity vary.

mosquito's precise humidity chamber (PHC) reduces experimental inconsistencies caused by variation in the humidity in the environment, by allowing users to control the relative humidity (RH) of each experiment. The humidity chamber enables up to a 90% reduction in drop evaporation.

humidity control at your fingertips

- The chamber takes less than 2 minutes to reach high levels of relative humidity (80-90% RH).
- Full feedback tight humidity control during experiment with set point accuracy of +/- 5% RH.
- Rapid recovery time following lid opening to 85% <120 sec
- New software displays - set point, humidity, temperature and water levels.
- Pre-fill time and humidity level easily configured on a 'per protocol' basis.
- Different users can fine-tune, save and recall settings to suit their experimental requirements.
- New humidifier modules designed for easy fill and cleaning.



▲ mosquito LCP 2 position with precise humidity chamber fitted

how it works

The in-built humidifiers are filled with deionised water and positioned underneath the chamber, filling the chamber with a cool vapour through the inlets.

These two ultrasonic vaporisers, one located at each side, fill the chamber with cool, humid air. This provides up to 90% adjustable humidity within a few minutes.

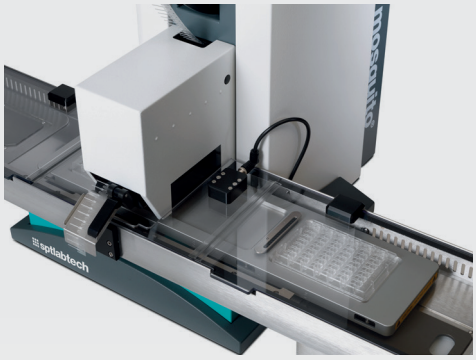
The system is directly controlled by the mosquito software. This allows automatic pre-filling of the chamber prior to a run; maintenance of a set RH during a run and auto shut-off at the end.

The mosquito software monitors the humidifiers and indicates when they are empty and need to be refilled via a traffic light system.

Up to 90% reduction in drop evaporation in an LCP experiment can be achieved under the following conditions:

- drop volume: 800 nL
- chamber RH: 80%
- ambient RH: 30%
- time elapsed: 5 minutes

Ambient room humidity needs to be at least 30%RH to achieve full functional range



FAQs

What are the OS and software requirements?

Windows 7 and mosquito software v3.14 onwards.

Which mosquitos can use the PHC chamber?

The PHC is compatible with all mosquito Xtal3, 2 position LCP and 4 position LCP systems only.

What is the installation procedure?

A SPT Labtech support engineer must carry out installation or upgrades.

get in touch

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