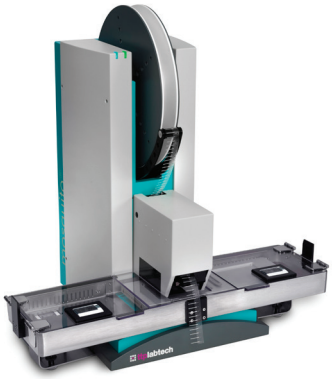
mosquito®

active humidity chamber

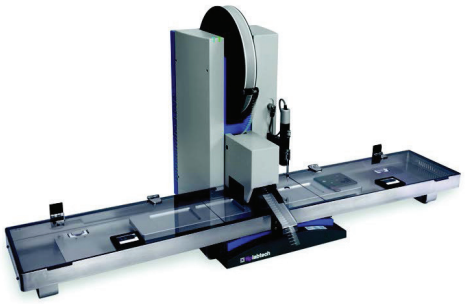
Sample evaporation can be a problem when dispensing very low volumes or volatile samples, causing inconsistent drop volumes, especially when environmental conditions and local humidity vary.

mosquito's active humidity chamber 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.



2 plate position mosquito Crystal with active humidity chamber



4 plate position mosquito LCP with active humidity chamber

humidity control at your fingertips

- The chamber takes only a few minutes to reach high levels of relative humidity (80-90% RH).
- The level of humidity is adjustable and set in the mosquito software.
- Pre-fill time and humidity level during a run may be easily configured on a 'per protocol' basis.
- Different users can fine-tune settings to suit their particular humidity requirements.

how it works

The small humidifiers are filled with deionised water and positioned underneath the chamber, filling the chamber with a cool mist 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 3-5 minutes.

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

A red light on the humidifiers indicates when they are empty and need to be refilled.

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

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

"We now reach 80% humidity readings at both ends within minutes (starting from ~ 50% room humidity). Our smallest aqueous drops (40 nL + 40 nL) are assembled properly in typical 70% humidity runs, subsequently delivering positive crystallisation results."

- Armando Villaseñor, Research Scientist at Gilead Sciences

FAQs

What are the OS and software requirements?
Windows 7 and mosquito software v3.8 onwards.

Which chambers are upgradable?
The new-style chambers made with a metal base: this includes all mosquito LCP chambers.

What is the installation procedure?
A TTP Labtech support engineer must carry out installation or upgrades.

get in touch

TTP Labtech Ltd
Melbourn Science Park, Melbourn,
Hertfordshire SG8 6EE, United Kingdom
Tel: +44 (0) 1763 262626 Fax: +44 (0) 1763 261964

TTP Labtech Inc
One Kendall Square, Suite B2303
Cambridge MA 02139-1594, United States
Tel: +1 (617) 494 9794 Fax: +1 (617) 494 9795