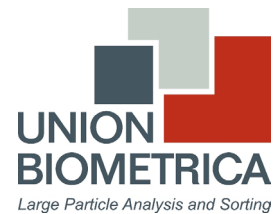


VAST BioImager Accessory:

LP Sampler with Dispenser



Gentle sampling and re-dispensing of zebrafish larvae back into multiwell plates.



LP Sampler with Dispenser configured for VAST BioImager.

The Large Particle Sampler (LP Sampler™) module is the only automated sample introduction system designed specifically for gentle handling of large, fragile objects such as zebrafish larvae. The LP Sampler is capable of gently aspirating larvae from multiwell plates and delivering them intact to the VAST BioImager™ system for automated imaging. It has the flexibility to handle a variety of standard or deep well plates including 24, 48 and 96-well configurations.

The expanded **LP Sampler with Dispenser** instrument allows you to deposit each larvae into the corresponding well of a daughter plate after imaging is complete. In this way, for example as part of a drug screen, you can remove a larva from one well, image it and return it to the corresponding well of a daughter plate to continue incubation.

The LP Sampler with Dispenser is an automation device. Rapid sample introduction, positioning, imaging and dispensing with the VAST BioImager™ system makes “walk away” operation possible.

The LP Sampler with Dispenser module works seamlessly with VAST BioImager software. Customizable scripts allow the operator to change, for example, the time devoted to flushing, analyzing or other steps based upon need.

This autosampler includes an on-board wash and waste station to reduce carryover between samples. The unit has four reservoirs, two of which are used for waste and the wash water. The other two can be utilized for dispensing additional liquids for flushing wells or for addition of reagents in kinetic studies.

Typical Operational Performance for VAST and LP Sampler with Dispenser

Wild-type healthy Zebrafish larvae 4-7dpf, 96-well plate, 1 fish per well:

Speed: 1 min / well

Re-analysis yield: ~ 95% loaded from original well and imaged

~ 90% loaded, imaged and dispensed into destination well



|←----- Approximately 48" (122 cm) with a microscope ----->|
(or 36" (92 cm) without a microscope)

The LP Sampler with Dispenser module can be used either with VAST BioImager on a bench top using the on-board camera or with VAST mounted on a high resolution fluorescence microscope.

Installation Specifications

- Instrument size: 21 in deep x 36 in wide x 21 in tall
(53 cm x 92 cm x 53 cm)
- Workspace recommendation: 2 feet deep x 5.5 feet wide x 2 feet tall
(with microscope & PC) (60 cm x 170 cm x 60 cm)
- Power: 100-240 VAC, 50/60 Hz
2 A @ 220v
4 A @ 110v
- Instrument Weight: LP Sampler/dispenser -- 45 lbs (20 kg)
VAST -- 30 lbs (13.6 kg)

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