Large Particle Sampler with Dispenser



Gentle sampling and re-dispensing of zebrafish larvae with multiwell plates



The Large Particle Sampler, **LP Sampler**[™], module is the only automated sample introduction system designed specifically for the 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 systems 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 drug screens and longitudinal studies can be performed by aspirating, imaging, and returning larva from the wells of a source plate to the corresponding wells of a daughter plate for continue study.

The LP Sampler with Dispenser is an automation device. Rapid sample introduction, positioning, imaging and dispensing with a VAST system makes "walk away" operation possible.

The LP Sampler with Dispenser module works seamlessly with VAST software. Customizable scripts allow the operator to configure operational parameters such as 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.

The LP Sampler with Dispenser can be used with VAST BioImager[™] and VAST FluoroImager[™] systems



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

Typical Operational Performance for VAST with LP Sampler with Dispenser

Wild-type healthy Ze	brafish 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

Installation Specifications

- Instrument size: 21" deep x 36" wide x 21" height [53 cm x 92 cm x 53 cm]
 Workspace: 2' deep x 5.5' wide x 2' height (with microscope & PC)
- Workspace: 2 deep x 5.5 wide x 2 height (with microscope & PC) [60 cm x 170 cm x 60 cm]
- Power: 100-240 VAC, 50/60 Hz
- Instrument Weight: LP Sampler with Dispenser 45 lbs [20 kg] VAST - 30 lbs [13.6 kg]

