

LP Sampler™ Specifications

The Large Particle LP Sampler module is an automated sample introduction system designed specifically for gentle handling of large fragile objects including large cells/clusters and model organisms. It is capable of aspirating samples from the wells of multiwell plates and delivering them intact to Union Biometrica's BioSorter or VAST BioImager systems. Software for seamlessly integrating the LP Sampler unit with these other systems is included. Sample object size can range from 10 to 1500 microns in diameter. This high-throughput device is capable of processing multiple samples simultaneously for continuous sample introduction.

The LP Sampler module operates using an editable, script-based program. Scripts can be customized based upon the type of organism or particle that is being sampled. Performance specifications for common application running "standard" scripts are below. Scripts can be edited to change the time devoted to flushing, analyzing or other steps based upon need.

C. elegans, 96-well, Operational Specifications:

- Speed: 34 sec/well
- Reanalysis Yield: >65% re-analyzed from original well
<10% missed events / well
<10% remaining in well after aspirating
<15% carry over well-to-well

Drosophila 1st & 2nd Instar, 96-well, Operational Specifications:

- Speed: 30 sec/well
- Reanalysis Yield: >50% re-analyzed from original well
<10% missed events / well
<20% remaining in well after aspirating
<15% carry over well-to-well

Zebrafish larvae 6-7 dpf, 96-well, Operational Specifications:

- Speed: 20 sec/well
- Reanalysis Yield: >65% re-analyzed from original well
<10% missed events / well
<10% remaining in well after aspirating
<15% carry over well-to-well

Installation Specifications

- Instrument size: 21 in deep x 18 in wide x 21 in tall
(53 cm x 46 cm x 53 cm)
- Workspace recommendation: 2 feet deep x 3 feet wide x 2 feet tall
(60 cm x 90 cm x 60 cm)
- Power: 100-240 VAC, 50/60 Hz
1.5A @ 220v
4 A @ 110v
- Instrument Weight: 45 lbs (20 kg)

