

COPAS *Infinity*



Increased sensitivity in a smaller footprint



COPAS Infinity Large Particle Flow Cytometer with Sorting

The COPAS Infinity platform is designed for the measurement of objects ranging in size from 2-1500 microns in diameter. Each of the four COPAS Infinity models features an optimized fluidic path, flow cell and optics engineered for a specific subset of the size range delivering maximum sensitive, speed, accuracy and throughput. Instruments can dispense objects either into bulk receptacles or multiwell plates.

Each COPAS Infinity system can be equipped with up to three lasers. Six optical detectors measure up to 31 different fundamental parameters per each object in a sample. PIN diode detectors measure size, optical density and forward scattered light.

Four PMT detectors measure side scatter and fluorescence emissions.

The real-time analysis of these measured parameters is used to make sort decisions. Only those objects meeting the user selectable sort criteria are gently dispensed into multiwell plates or tubes. Those objects not meeting the sort criteria are diverted by a puff of air to a sample recovery container where they may be recaptured, unharmed and viable. The sorting chamber is enclosed providing aerosol containment and UV sterilization to enhance biosafety and sterility.

All this is packaged in a chassis that fits conveniently in a bio-safety hood.

Note: COPAS Infinity, OSIS and LP Sampler are trademarks of Union Biometrica, Inc.

Sample Introduction Choices



Sample Cups -- Samples are introduced via a standard 50 ml conical tube (40 ml working volume) with a gentle, suspended stirring mechanism. For larger samples the optional 750 ml and 1.5 liter sample cup options are available.



OSIS – Oscillating Sample Introduction System. For handling extremely delicate samples, samples that tend to either float or sink with traditional stirring agitation; and samples that benefit from disposable containers and tubing (sterility).



The LP Sampler is a large particle autosampler capable of sampling from multiwell plates. It is the only automated sample introduction system designed specifically for gentle handling of large, fragile objects such as:

- delicate cells/clusters (stem cell clusters, neurospheres, organoids, tumor spheroids)
- viable small multicellular model organisms (nematodes, Drosophila, zebrafish larvae)
- beads used as micro-carriers for clonal libraries
- seeds and fragile plant tissue

The LP Sampler is ideal for objects ranging from 10 to 1500 microns in diameter. It has the flexibility to handle a variety of standard or deep well plates including 24, 96 and 384 well formats

Instrument Size: 22 x 26 x 18 inches (56 x 66 x 44 cm) depth x width x height

See "COPAS Infinity Specifications" document for additional details.

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