

Zephyr | Compact Liquid Handler

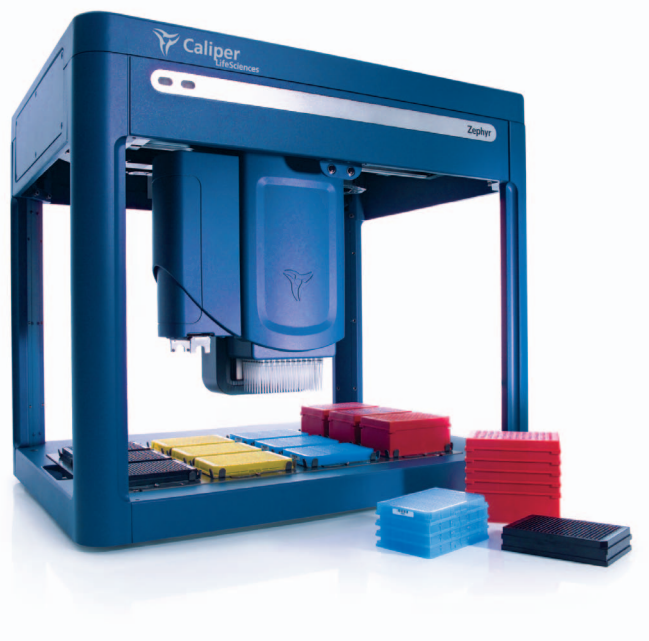
96 and 384 Multi-channel pipetting at the size and price of an 8-channel system

Zephyr is a benchtop 96 or 384 channel liquid handler powered by Maestro, an easy to use, graphical software for assay development and execution. Zephyr is ideal for plate preparation, replication or reformatting, serial dilutions, cell based and genomics assays as well as numerous other drug discovery and research applications.

Applications and Features

Too often, researchers are forced to make trade-offs between footprint, capability and price when choosing a liquid handler. Usually, the only thing tighter than lab space is budget. Zephyr is a direct result of market demand for a compact, cost-effective, multi-channel liquid handler. Zephyr is an ideal tool for key applications in compound management, HTS, genomics, proteomics and bio-analytical assays. Such applications include:

- DNA / RNA clean-ups
- PCR setup
- Protein precipitation
- Solid Phase Extraction (SPE)
- Protein purification
- Solubility assays
- Plate prep
- Kinase assays
- Cell based assays



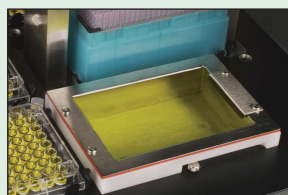
Zephyr offers many of the features found in larger, high-end liquid handlers yet in a benchtop form factor - and at dramatically lower costs. Zephyr's small footprint makes it ideal for workbench operation, while the convenient deck design provides ready access to consumables and accessories from all four sides. Zephyr offers unlimited flexibility and expandability to adapt to your current and future needs:

- Changeable 96 (1-200 μ L) or 384 (0.5-25 μ L) heads
- Fixed canula or disposable tip arrays
- 12 Deck locations for accessories and consumables
- Offset gripper (std feature) provides ability to move consumables or hold lids while pipetting
- Partial tip loading
- Row-wise and column-wise serial dilutions
- Barcode reading
- Seamless integration of Twister II, the industry's most popular plate handler
- Deck options for filtration, heating, cooling, shaking, tip washing, reservoirs ...and more!

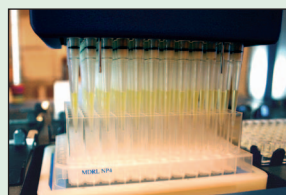
Unique Accessories to Enable Full Walk Away Automation



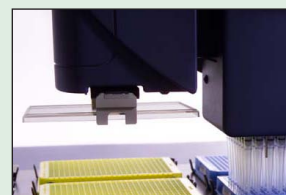
MICROPLATE SHAKER



ULTRASONIC WASH STATION



VACUUM FILTRATION



GRIPPER



TEMPERATURE CONTROLLED LOCATORS



NESTED TIP RACKS

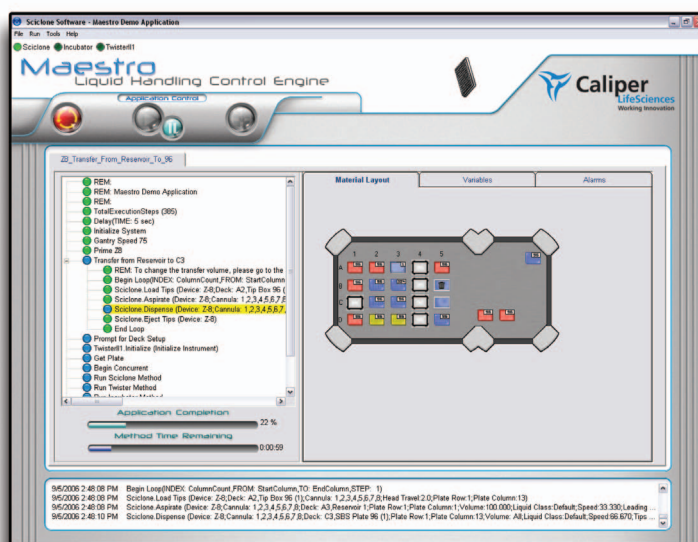


HYPERSTAK PLATE/TIP DISPENSE



Software

Maestro Liquid Handling Software - With point and click method development, a comprehensive yet simple operator interface, and enhanced error recovery, Maestro software provides scientists the ability to easily create and run automated liquid handling methods. Maestro provides real-time dialog between the liquid handler and the user, including both programmable and unanticipated notifications. In the event of an error, Maestro can recommend a step-by-step recovery procedure to ensure sample preservation and data integrity.



Email Notification - Maestro methods can create an email or page messenger that can be sent automatically as the method progresses, allowing manual replenishment of reagents or to ensure prompt intervention and error recovery.

Integrated Support for Visual Basic for Applications

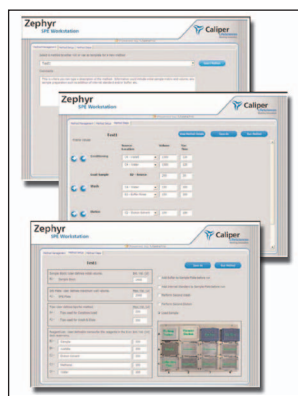
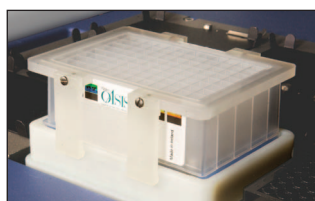
By embedding advanced Microsoft VBA scripting, Maestro offers the ability to create highly customized applications using this powerful development environment.

Example uses include; bar code confirmation in real-time, calculation of normalization concentrations and volumes dynamically or customized hit-picking.

Compliance and User Levels - Built-in user identification tools restricts access to methods and helps to prevent accidental alteration of validated processes. In addition, compliance optional with the 21 CFR part 11 regulation ensures data integrity.

Worldwide Service and Support

Every Caliper product is backed up by professional worldwide service and the support of specialists who understand your business and can ensure your success and satisfaction. We invite you to learn more about Caliper Life Sciences and our other lab automation and microfluidic platforms by visiting us at www.CaliperLS.com.

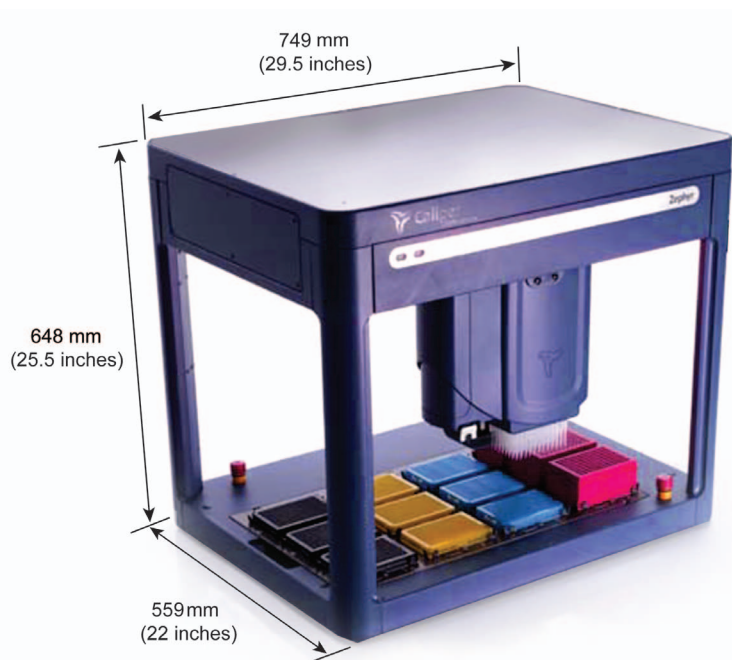


Performance

Liquid Handling Option	Volume Range	Characteristic Performance*	Tip Options
HV Pipetting Head (96 Channels)	1-200 μ L	1-5 μ L: CV < 5% 5-200 μ L: CV < 2%	100 or 200 μ L disposable tips
LV Pipetting Head (384 Channels)	0.5-25 μ L	0.5-2 μ L: CV < 8% 2-25 μ L: CV < 5%	96,384 deep, or 384/1536 fixed cannula arrays 96 or 384 mandrel arrays for disposable tips Custom V&P Scientific Pin tools

* Based upon Caliper application studies using liquid dispense methods with either water or DMSO & Tartrazine dye. Application notes available upon request.

Dimensions	Height: 648 mm (25.5 inches) Width: 749 mm (29.5 inches) Depth: 559 mm (22 inches)
Weight	182 lbs (Base Unit) (202 lbs with environmental enclosure)
Operating Temperature	15 - 35 °C (59 to 95 °F)
Operating Humidity	0 - 85% RH, non-condensing
Air Supply	Regulated 65 psi
Power Input	115 VAC, 50/60 Hz, 1000 VA max. or 230 VAC, 50/60 Hz, 1000 VA max.



Corporate Headquarters
68 Elm Street
Hopkinton, MA 01748-1668
Tel: 1.508.435.9500
Email: cust.support@caliperLS.com
www.caliperLS.com

©2009 Caliper Life Sciences, Inc. All rights reserved. Caliper, the Caliper logo, Twister, Maestro and Zephyr are tradenames and/or trademarks of Caliper Life Sciences, Inc. All other names are trademarks of their respective companies.

ZH-BR-01 Nov 09