

# VERSA® 1100 LLE (Liquid-Liquid Extraction) Automated Liquid Handling Workstation

The VERSA® Liquid-Liquid Extraction (LLE) Workstation is a liquid handling solution that is dedicated to performing LLE techniques with high precision, throughput, and accuracy.

With built-in temperature-controlled reservoirs for storage of solvents and reagents, on-deck vortex mixing, bulk solution dispensing capabilities, and custom modules to fit any vial size, the VERSA 1100 LLE platform provides unparalleled options for automating the extraction process. Sample and solvent additions, vortexing, selective phase aspirating, sample drying and reconstituting in GC-MS and LC-MS compatible solvents, all can be performed on the VERSA 1100, one of the most versatile LLE platforms available today.

Our VERSA LLE Workstation conserves expensive reagents, eliminates volumetric variations caused by manual handling errors, and automates all repetitive pipetting protocols, streamlining your sample prep and freeing up staff time.



Solvent  
Addition & Mixing

Aspiration of  
Desired Layer

Fraction  
Collection &  
Derivatization

Drying &  
Reconstitution

## Features

- **Shaker-heater** - (up to 3000 rpm, RT to 90°C) enables efficient sample pre-processing and derivatization
- **Heater-assisted evaporator** - easy sample drying and reconstitution for downstream analysis
- **Reagent cooler block** - on-deck chilling, down to 4°C
- **Liquid dispensing module** - bulk dispenses up to 8 different reagents without the use of pipette tips
- **Versatile labware** - adaptors available for virtually any shape and size (microcentrifuge tubes, test tubes, vials, etc.)

## Applications

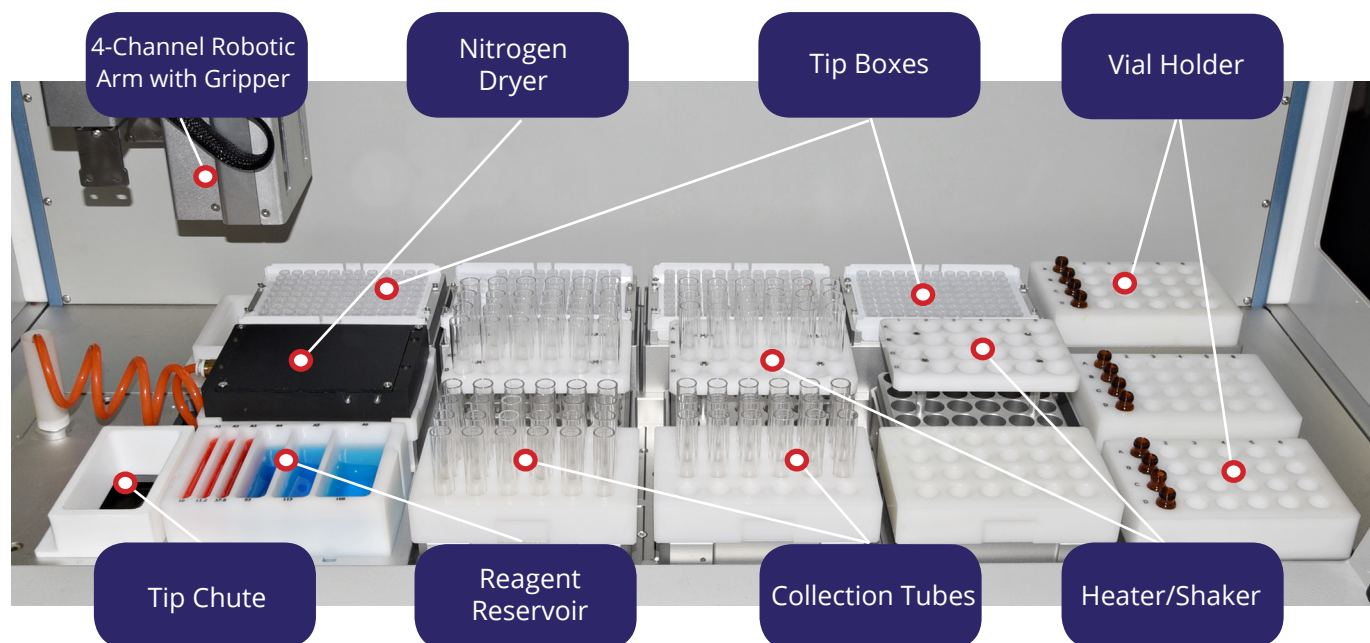
### Selected Validations

- 25-hydroxy vitamin D from whole blood
- Phytoestrogens from plant and animal tissue
- $\beta$ -carotene extraction from spiked samples
- Bligh-Dyer/Folch method for lipid extractions

### Also possible on the VERSA 1100

- Solid-phase extraction (SPE) protocols
- Cherry picking and reagent pooling
- Serial and parallel dilution
- Custom applications and protocols

## Sample Deck Layout



## Specifications

Volume	1 $\mu$ L to 1000 $\mu$ L
Pipetting head	4 or 8 channel with single channel functionality, liquid-level sensing option available
Pipette tips	Disposable tips or stainless steel probe
Deck capacity	15 positions
Precision	Syringe pipettor - CV Value <5% at 5 $\mu$ L
On-deck features and options	<ul style="list-style-type: none"> <li>Vials or tube racks for nearly any size/shape</li> <li>96 deep well plates</li> <li>Cooling/Heating Block (4 - 90°C)</li> <li>On-deck sample drying and reconstitution</li> <li>Please contact Aurora for a full list of modules</li> </ul>
Bulk reagent dispensing	5 or 8 dispensing heads
Software	Customized user-friendly VERSAware software featuring simple drag-and-drop programming interface, easy to develop new workflows
Dimensions	L/W/H 99/75/108 cm (39/30/46 in)
Weight	225 kg (496 lbs)