# Aurora

## VERSA IIO Liquid-Liquid Extraction Workstation

The VERSA™ 110 Liquid-Liquid Extraction (LLE) workstation is a compact, dedicated automated liquid handling workstation designed to perform common liquid-liquid extraction (partition chromatography) techniques with high precision, throughput and accuracy.

With a built-in temperature-controlled reservoir for storage of solvents and reagents and a shaker block for sample vortex mixing, the VERSA110 LLE workstation automates protocols from sample addition to aqueous/organic phase partitioning for downstream applications.

The VERSA 110 LLE conserves expensive reagents, eliminates concerns associated with volumetric variations caused by manual handling errors, and automates all repetitive pipetting protocols. In addition, the software offers researchers the flexibility of customizing their own extraction applications.

While this system is dedicated for liquid-liquid extraction applications, the underlying versatility of the workstation allows it to perform fractionation and many generic liquid handling tasks such as serial dilution, cherry picking, plate reformatting and plate replication.

# VERSA 110 Liquid-Liquid Extraction Workstation LIQUID HANDLING MODULE Unique Dual Module Manifold

### **FEATURES**

- Programmable tip height adjustment for aqueous or organic phase aspiration
- Powerful shaker for vortex mixing organic solvents and aqueous samples
- Unique liquid handling module with single-channel dual SyringePipettor and two channel ReagentDrop for all extraction steps
- Reagent cooler / heater block with six slots for holding 100 mL reagent tubes
- User friendly software interface
- Nitrogen manifold option for drying samples
- Plate cooling / heating block option
- Automated disposable tip changer
- Open system, compatible with third party labware, kits and reagents
- Integrated time controlled sample mixing and liquid handling

### **APPLICATIONS**

- Diagnostics
  - 25-hydroxy vitamin D
- Forensics
  - Drugs of abuse
    - Metanephrine
    - Opiates
- Environmental applications
  - Anatoxin-α in water
- Food applications
  - Melanin in milk
  - Aflatoxin in fish
  - B-carotene
- Sample preparation for LC/MS applications
- General liquid handling
  - · Cherry picking and reagent pooling
  - Serial and parallel dilution



Aspirating Partitioned Organic Phase

**DECK MODULES** 





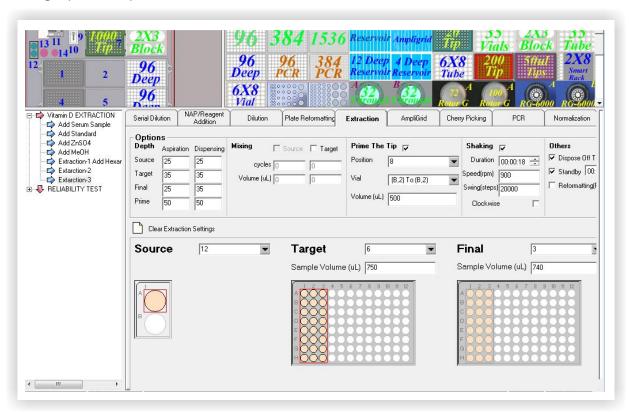




LLE Plate Shaker

### **SOFTWARE & DECK**

Various tabs within the VERSAware software window enhance the underlying versatility of the workstation by allowing the user to perform diverse liquid handling functions. Customized methodologies are easy to create and load into the library of stored protocols using import and export functions within the software.



### **SPECIFICATIONS**

VOLUME	1 μL to 1000 μL
PRECISION	CV value $<5\%$ at 1 $\mu$ L, $<3\%$ at 2 $\mu$ L (SyringePipettor); CV Value $<3\%$ at 2 $\mu$ L (Reagent Drop)
DECK CAPACITY	<ul> <li>Four 24 / 32 / 35 / 48 vial or tube racks or 96 deep well plates</li> <li>Reservoir (4°C)</li> </ul>
	<ul><li>Shaker – used as vial / tube / plate nest</li><li>Three tip-box positions</li></ul>
PIPETTE TIPS	20 μL, 50 μL, 200 μL and 1000 μL standard (96-well racked)
PIPETTING HEAD	Dual module manifold with single channel dual SyringePipettor and 4-channel ReagentDrop
SOFTWARE	Customized user-friendly VERSAware software featuring simple on-screen prompts, drop down menus, and stored protocols.
COMPUTER SYSTEM	Desktop PC with LCD monitor and Windows operating software
DIMENSIONS	W 55 x L 55 x H 55 cm
WEIGHT	32 kg

NOTE: Instrument specifications may change without notice as an ongoing effort of product improvement.

For North American Sales:

Aurora Biomed Inc.

1001 East Pender Street Vancouver BC Canada V6A 1W2 Phone: 1.800.883.2918; 604-215-8700 • Fax: 604-215-9700

Email: info@aurorabiomed.com • website: www.aurorabiomed.com

For International Sales:

Aurora Instruments Ltd.

1001 East Pender Street Vancouver BC Canada V6A 1W2

Phone: 604-215-8700 • Fax: 604-215-9700

 $Email: info@aurora-instr.com \bullet website: www.aurora-instr.com$