

VERSA 110 Microarray Spotter

Automated Liquid Handling Workstation

The study of protein-protein interaction is an essential part of understanding the molecular underpinnings of various diseases as well as characterizing the relationship between an antigen and its antibody. An effective method to identify and characterize antibodies, antigens, and other protein binding sites is through peptide microarray printing. Automation greatly improves the experimental efficiency, while reducing experimental costs and increasing sample throughput.

The Versa® 110 Peptide Microarray Spotter workstation can streamline workflows in epitope mapping, biomarker identification, enzyme-substrate profiling, and drug development. The NanoPipettor is capable of repeatedly pipetting submicroliter volumes of amino acids for synthesis of high-density microarrays, in either simple or complex user-defined patterns. The customizable deck layout supports printing on diverse substrates, including filter papers, cellulose membranes, glass slides, silicon chips, and microwell plates.



Activated amino acids placed in the reagent block

NanoPipettor spots amino acid on the membrane

Peptides are generated via solid phase synthesis

Membrane treated with antibody, enzyme, drug, etc

Features

- Spotting volumes starting at 40 nL and up to 300 µL
- Accurate dispensing with <5% CV at 100 nL, and with <0.5 mm positioning error
- Flexible contact and single spotting by robotically controlled arm that can move in 3D
- Peptide sequences import and export function for ease of automation programming
- Repeat spotting available for maximum efficiency
- Optional temperature and humidity control to maximize yield and reproducibility
- Optional UV HEPA filtered enclosure to minimize risk of sample contamination
- Open system allows for incorporation
- Fully configurable to your workflow and microarray procures

Applications

Synthesis of peptide microarrays

- Solid-phase peptide synthesis
- Biomarker identification
- Epitope mapping
- Enzyme-substrate profiling
- Vaccine and Drug discovery/development

VERSA Spotter Workstations

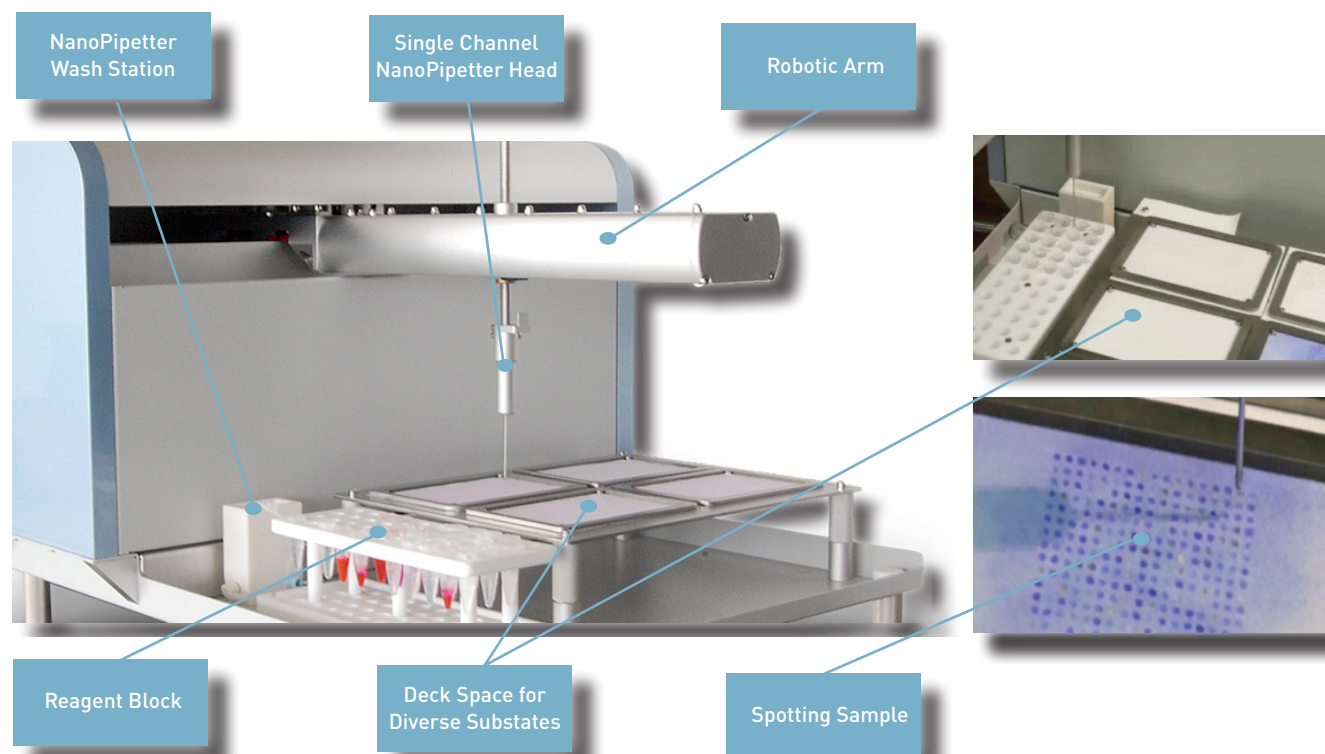
Alternative Applications

- DNA microarray and CHIP production
- Tissue microarray
- Cellular microarray



PEPTIDE MICROARRAY AUTOMATION FOR YOUR PROTOCOLS

Aurora Biomed believes that automation should give you the freedom to walk away from your protocols. Aurora's dedicated team of engineers and researchers work closely with each client to determine the best solution to fit their needs. The VERSA series are built to meet your specific requirements, and its diversity array of modular adaptors and accessories offer the flexibility to perform numerous laboratory applications



Specifications

VERSA110	Specifications
Spotting	Contact
Volume	40 nL to 300 µL
Precision [CV]	< 5% for 100 nL
Arm Precision (XYZ)	(±) 9 µm
Spot Separation	100 µm (center to center)
Deck Capacity	- Four (4) SBS format deck positions for array surfaces - One (1) rack position for reagent vials/tubes
Pipette Head	Single channel NanoPipettor with stainless steel probe
Wash Station	- Equipped with one flushing station and one washing station - Optional sonicating wash station available
Software	Customized user-friendly VERSAware software featuring simple drag-and-drop programming interface, easy to develop new workflows
Accessory Options	- Adaptors available for diverse substrates - HEPA/UV/Fluorescent light enclosure - Humidity/temperature
Length x Depth x Height	60 x 60 x 90 cm 24 x 24 x 35 in
Weight	90 kg / 132 lbs