VERSA Microarray Spotter
Automated Liquid Handling Workstation

VERSA® Microarray Spotter workstation can streamline automation of proteomic and genomic workflows for applications such as drug screening, tissue engineering, bio-diagnostics, vaccine development, cancer research etc. The robotic arm of the workstation is capable of repeatedly pipetting sub-microliter volumes of samples like peptides, nucleic acids, organic compounds etc. in parallel for synthesis of high-density microarrays in simple or complex user defined patterns. The customizable deck layout of the workstation can support printing on diverse substrates like filter papers, cellular membranes, glass slides, silicon chips, micro well plates etc. In comparison to manual methods, automation reduces the possibility of human errors, while saving valuable time, experimental costs and increasing research throughput.

VERSA 10 Spotter Workstation

Features

- **Contact spotting and suitable for various sample microarray onto different carriers.**
- **Flexible single spotting and the robotic arm controlled by the computer which could move in 3D direction. Accurate positioning with no more than 0.5mm error and repeat spotting on same position is available.**
- **Spotting volume from 40 nL to 100 µl**
- **Optional upgrade to sonicating washstation for spotter pin cleaning and drying.**
- **Piping would be resistant to various organic solvents**
- **Various adapters available for flexibility in sample containers and printing platforms.**
- **Optional temperature regulation block suitable for larger spotting volume or difficult volatilization of reagents.**
- **Peptide sequences available to import and export, resulting in microarray automation according to sequence.**
- **Optional UV HEPA filtered enclosure to eliminate potential cross contaminant**

Applications

Gene Microarray:
- Arraying of DNA/RNA
- Mastermix distribution for PCR and sequencing
- Reagent addition
- Crystalization

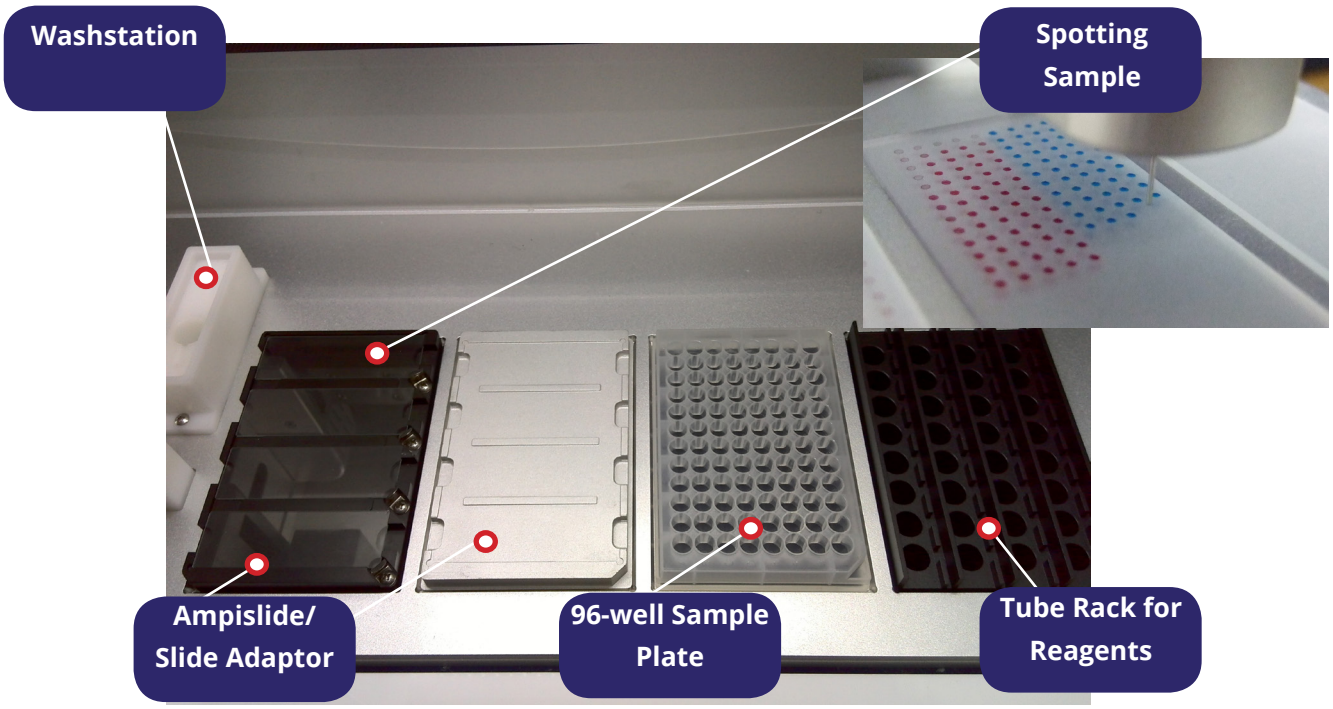
Protein Microarray:
- Arraying of proteins, antibodies and peptides
- Solid-phase peptide synthesis
- Crystalization
- MALDI-TOF sample preparation
- Mastermix Preparation and Distribution

Cell Microarray:
- Arraying cells or cell lysate
- Spotting of cells on arrayed antibody/lectins

Biological Sensor:
- Low density biochip arraying
- Layering of salts and metal colloids

Aurora
ILLUMINATING SOLUTIONS

Deck Layout



Specifications

	Contact	Non-Contact
Volume	40 nL ~ 300 µL	100 nL and up
Precision (CV)	5% for 100 nL	5% for 100 nL
Arm Precision (XYZ)	±9 µM	
Distance between spots	100 - 900 µM (center to center)	
Deck capacity	• 4-15 SBS format deck positions for array surfaces • One reagent vial/tube rack	• 4-15 SBS format deck positions for array surfaces • One reagent cooler block (0-70 °C) (Optional)
Pipetting head	Single channel NanoPipettor with one (1) single channel stainless steel probe	Single channel NanoPipettor with optional one or two channel ReagentDrop
Washing Station	Equipped with one flushing station and one washing station. Optional sonicating washstation available	
Accessory options	• Adaptors available for diverse sub-strate • HEPA/UV/Fluorescent light enclosure • Humidity & Temperature Control Unit	• Shaker(s) with or without cooler/heater • Plate cooler/heater • Adaptors available for diverse substrate • HEPA/UV/Fluorescent light enclosure • Humidity & Temperature Control Unit