

## sciFLEXARRAYER Ultra-Low Volume Dispensers



### The sciFLEXARRAYER SX

- sciFLEXARRAYER SX is the compact, automated solution for high throughput production from SCIENION's sciFLEXARRAYER product line
- large dispense area enables printing on up to 140 slides or 27 MTPs
- liquid dispense volumes range from pL to  $\mu$ L
- printing targets include MTPs, biosensors, glass slides, membranes etc.
- fully automated / walk-away system
- produce multiplex tests for diagnostics and life science research

The sciFLEXARRAYER SX . . . *High-End Solution for batch production*



# The sciFLEXARRAYER SX

## Product Description & Benefits

The sciFLEXARRAYER SX is a fully automated non-contact dispensing system for ultra-low volumes. The SX has been designed and optimized for high scale batch production. It can be equipped with a pico or a nano dispensing unit for liquid handling of picoliter to microliter volumes.

- Optimal batch size to performance ratio results in maximum flexibility for targets e.g. wafers
- Non-contact technology allows dispensing of droplets into small cavities
- Most accurate positioning of dispensed lines and drops on the target
- Consistent and highly reproducible results by the use of programmed parameters and re-spotting capability
- Compact all-in-one design for manufacturing needs
- User friendly through auto-drop function and walk-away system

## Technical Information

Dispensing technology:	Non-contact, drop-on-demand
No. of dispense capillaries:	1-8 (in any combination)
Distance of dispense capillaries:	4.5 or 9 mm increments
Precision (mechanical):	< 3 µm
Spot positioning (standard):	< 6 µm (20 µm)
Typical spot pitch (spacing):	300 µm (freely scaleable)
Dispense control:	Integrated horizontal CCD camera
Spottable area:	800 x 360 mm
Capacity:	140 slides (76,2 x 25,4 mm)
	27 microtiter plates
Software:	On-board (Win7 based)
Dimensions (L, W, H) with enclosure (mm) & weight:	1674 x 780 x 1710, 450 kg
Voltage:	115/230 VAC, 60/50Hz

	sciDROP PICO	sciDROP NANO
Dispense volume:	50-80 µl per drop	30-200 nL per drop
Capillary orifice:	50-110 µm	150 / 300 µm
Capillary material:	borosilicate glass	stainless steel, corundum
Typical spot size:	80-250 µm	250-2000 µm

## Applications

- Production of large single batch size of DNA, protein, glycan or cell transfection arrays for commercial purposes or research
- High throughput biosensor loading
- MALDI-MS sample preparation and target loading
- Printing chemical libraries
- Spotting onto disc format (round targets) and customized targets e.g. wafers
- Microarray-based analysis

## Options & Software

- Humidity and dew point control
- Cooling unit for source plate and targets
- Integration of third party components
- Clean room compatible unit
- Variety of target holders available (incl. vacuum target holder) for slides, wafers, biosensors, etc.
- Deionizer
- Software options for full online QC
- Software supported fiducial target recognition and alignment
- Spot-on-the fly tool to speed up array processing
- Easy setup of user defined spotting routines
- Password protected access level

## Services & Support

- Training of operation and maintenance
- Service contracts (on-site support in 48 hours)
- FDA Part 11 implementation
- Hotline & online support

## Related Products

- sciCONSUMABLES
- sciSERVICES
- sciREADER

For additional information of the sciFLEXARRAYER SX, please contact us by email at: [support@scienion.de](mailto:support@scienion.de)

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