



GANTRY II P



PRODUCTION UNIT

APPLICATIONS

Diagnostic Cartridges
POCT
DNA / Protein / Cell Microarrays
Multiplex Immunoassays
Lateral Flow Applications
Biosensors
Lab-on-a-Chip
Diagnostic Biomarkers
Drug Discovery
Microlibrication of Watches
Polymer Functionalisation
Stent Surface Activation
Spotting to custom-specific targets
Wafer Marking & Inking



**STANDALONE
OR
SERIAL**



KEY ADVANTAGES



Production System and Production Line
Flexible amount of dispensers
Up to 8 different dispensers
Spot on the Fly, Fiducial autocorrection
QC on the Fly
No system liquids, no sample dilution
No cross contamination
Recovery of biological samples
Any target, any pattern, Any viscosity

**MICRODROP.
THE DIFFERENCE.**

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HIGH PRECISION MICRODISPENSING INSTRUMENT SYSTEM DESCRIPTION

- Customised designed system for Production
- Configuration depends on customer's applications
- Dispensing from pl to low μ l volumes with piezo electric driven microdispensers
- Flexible amount of dispensers for any viscosity and any surface
- Spot-on-the-Fly, fiducial auto-correction, QC on the fly, interior climate control

SOFTWARE

INTUITIVE FROM THE FIRST CLICK

- Setting individual dispensing parameters for each sample
- Import **EXCEL** or **DXF** files for structure information
- Point to point, Drop on Demand, Spot-on-the-Fly, QC on-the-Fly
- Image recognition, Fiducial marking, Positioning correction and Path compensation

All control electronics are operated via the user interface of the included Autodrop Software.

DISPENSERS		Inner nozzle diameter	Droplet diameter	Droplet volume	Viscosity range
Autopipettes		30 μ m, 50 μ m, 70 μ m, 100 μ m or customized	~50 μ m up to 90 μ m dispensed with standard pulse*	~65 pl up to 380 pl dispensed with standard pulse*	0.4 up to ~50 mPas
Microdispenser heads		30 μ m, 50 μ m, 70 μ m, 100 μ m, 120 μ m, 140 μ m	~50 μ m up to 120 μ m dispensed with standard pulse*	~65 pl up to 900 pl dispensed with standard pulse*	0.4 up to ~10,000 mPas
Piezovalves		100 μ m, 200 μ m, 500 μ m	N/A - jet ejection	minimum 5 nl per cycle	up to 2.000000 mPas
Nanojet		50 μ m, 100 μ m, 200 μ m, 500 μ m	N/A - jet ejection	<50 nl	0.4 up to ~50 mPas

* can be reduced up to 50% by using pulse modulation mode

OPTIONAL EXTENSION

- dispenser heads or piezo pipettes
- coolable & heatable dispensers
- coolable & heatable or vacuum holders
- source & target holders
- humidity & DEW point control
- customized substrate trays
- UV shield protection
- and more

YOUR
IDEAS?

CONTACT
US

TECHNICAL DATA

Electronic control unit	BLDC motors, ball screws, x- and z-axis each 50 W, y-axis 2x 50 W
Travel range	Basic model: x-axis 400 mm, y-axis 400 mm, z-axis 100 mm Large scale model: x-axis 600 or 1000 mm, y-axis 400 mm, z-axis 100 mm and custom size
Repetition accuracy	$\pm 5 \mu$ m each axis
Resolution	0.1 μ m
Acceleration	maximum 1000 mm/s ²
Velocity	maximum 500 mm/s ²
Dimension WxDxH /weight	Basic model 1500 x 900 x 1700 mm/ 200 kg