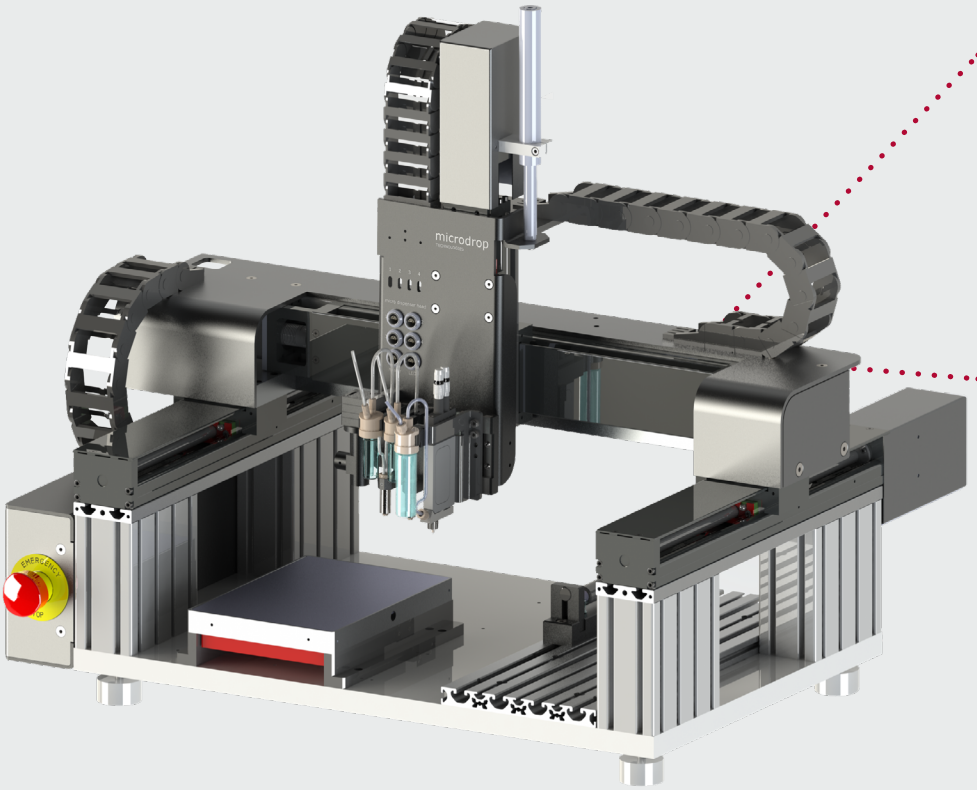
microdrop
TECHNOLOGIES

AD-P-9100

AUTODROP GANTRY II Customized

freely configurable for the Maximum Flexibility



ADVANTAGES

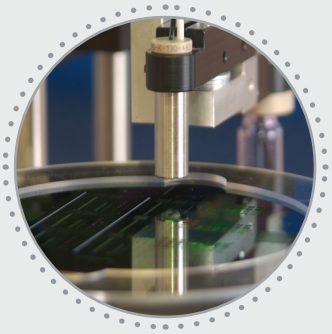
- dispensing from pico- to nanoliter
- inkjet printing and piezo valve jetting
- software controlled xyz-axis system
- wide viscosity range
- easy refilling and cleaning
- no disposable parts -> no follow on costs
- very good material resistance

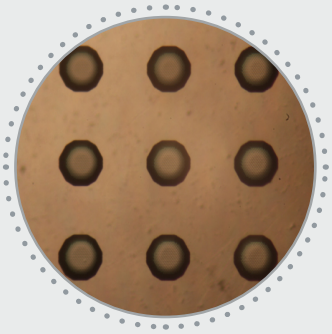
EXTEND IT WITH

- dispenser heads, pipettes or valves
- holder for well plates
- holder for glass slides
- vacuum plate, also heated or cooled
- humidifier
- customized substrate plates
- HEPA filter
- your ideas ... contact us.

A VERSATILE XYZ PLATFORM FOR MICRODISPENSING IN MULTIPLE FIELDS.

- drives up to 4x dispenser heads, pipettes or valves
- travel range of 300 mm x 300 mm in standard, but scalable
- contact-less dispensing in the pico- to nanoliter range
- free choice of assembly
- ready-to-use system including intuitve software
- positioning accuracy ±20 µm
- repetition accuracy ±5 µm
- wide range of optional items





Advancing the Art of Microdispensing

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TECHNICAL DATA OF THE AD-P-9100

Electronic control unit	BLDC motors, ball screws, x- and z-axis each 50 W, y-axis 2x 50 W
Travel range	x-axis 300 mm, y-axis 300 mm, z-axis 100 mm
Positioning accuracy	± 25 µm each axis
Repetition accuracy	± 5 µm each axis
Acceleration	maximum 1000 mm/s^2
Velocity	maximum 100 mm/s
Additional possible load of positioning unit	maximum 2.5 kg
Dimension without hood and underframe// Weight	W: 690 mm / D: 650 mm / H: 600 mm // ~50 kg
Dimension with hood and underframe	W: 780 mm / D: 760 mm / H: 1500 mm

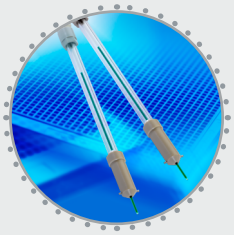
AUTODROP SOFTWARE

All control electronics are operated via the user interface of the included Autodrop Software
Short description Autodrop Software: - Setting and saving of dispensing parameter - Macroscript for programming automatic processes - Print types: Point to point, in flight, vector based graphics - Import and edit dxf files for printing curves and other structures (path control) - Observation of dispensing droplets in flight and determination of drop velocity and drop volume - Image recognition for substrate position and/or fiducial marks

USE THE SYSTEM WITH

• Autopipettes

Inner nozzle diameter	Standard: 50 µm or 70 µm
Droplet diameter	~70 µm up to 85 µm dispensed with pulse modulation mode, with standard pulse 70 µm up to 85 µm
Droplet volume	~180 pl up to 320 pl dispensed with pulse modulation mode, with standard pulse 180 pl up to 320 pl
Viscosity range	0.4 up to ~20 mPas



• Micro dispenser heads

Inner nozzle diameter	Standard: 50 µm, 70 µm, 100 µm, 120 µm, 140 µm
Droplet diameter	~65 µm up to 120 µm dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode
Droplet volume	~140 pl up to 900 pl dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode
Viscosity range	0.4 up to ~10,000 mPas

• Nanojet valves

Dispensable Quantity	starting at ~0.5nl
Viscosity range	low to high viscosity up to 2,000,000 mPas
Compatibility	all aqueous fluids, organic acids, weak acids and bases

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We are there for you. Contact us.

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