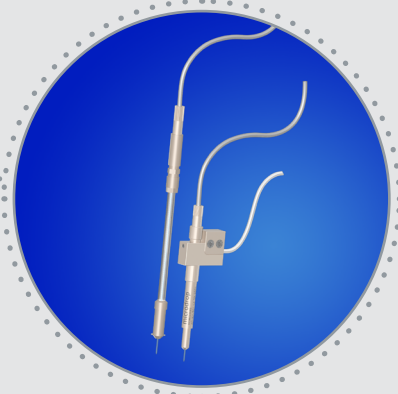


MD-E-4000

MICRODROP OEM CONTROLLER

to use with Micro dispenser heads or Autopipettes



OUR SYSTEM MD-E-4000

Designed as a cartridge housing for 19" subracks, the MD-E-4000 controls 1x or 2x of:

- all of our Microdrop dispenser heads
- all of our Autopipettes.

Control the system

- manually with Microdrop Software via user interface or
- externally via appropriate commands.



ADVANTAGES

- Non-Contact dispensing
- Wide range of dispensable liquids and materials (0.4 to ~10,000 mPas)
- Precise and repeatable single droplet with a diameter of 45 μm up to 120 μm^*

- Reliable single droplet spotting by using visual control of parameter settings
- Only high inert materials are in contact with the liquid
- Integration into existing positioning system possible



DISPENSABLE LIQUIDS

- Aqueous (protein) liquids
- Medical coatings
- Cell suspensions

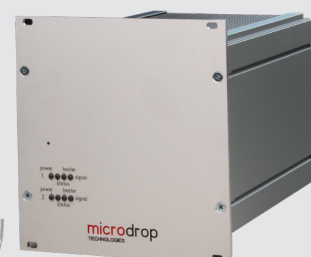
- Conductive inks
- Adhesives
- Lubricants



MICRODROP OEM CONTROLLER

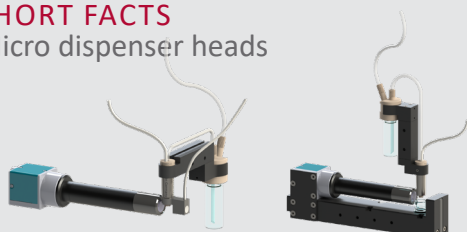
TECHNICAL DATA OF THE MD-E-4000

Versions	to drive 1x or 2x Micro dispenser heads or Autopipettes - option of pulse modulation mode - option of pressure control unit
Dimension	MD-E-401x (optional with pressure control): 3HE/12TE; MD-E-402x: 3HE/24TE
Weight	~ 3 kg

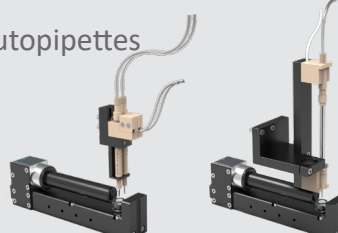


SHORT FACTS

Micro dispenser heads



Autopipettes



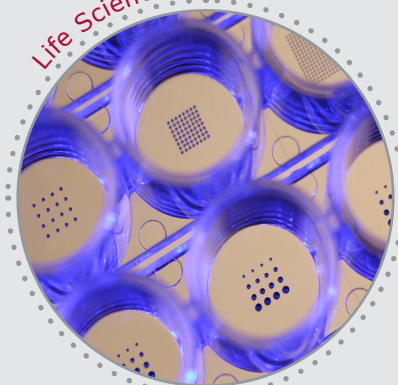
Liquid viscosity	0.4 - 10,000 mPas
Inner nozzle diameter (Standard)	50 μ m, 70 μ m or 100 μ m
Droplet diameter in flight	~45 - 120 μ m* dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode
Single droplet volume	~50 - 900 pl* dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode

Liquid viscosity	0.4 - 20 mPas
Inner nozzle diameter (Standard)	50 μ m or 70 μ m
Droplet diameter in flight	~45 - 90 μ m* dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode
Single droplet volume	~50 - 380 pl* dispensed with standard pulse, can be reduced up to 50% by using pulse modulation mode

* depending on the liquid

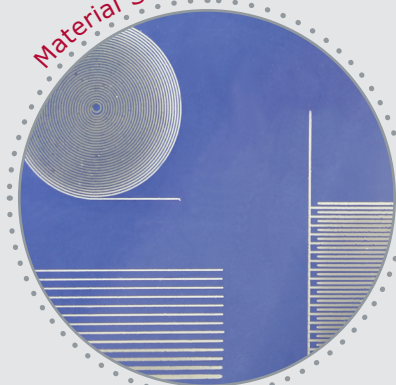
COMMON APPLICATION FIELDS

Life Science



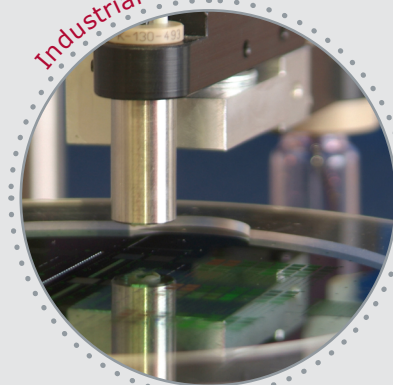
- Biosensors & Biochips
- Lateral Flow
- Lab-on-a-Chip
- Microarray Printing

Material Science



- Printed Electronics
- Functional Polymers
- 3D Structures

Industrial Science



- Wafer marking
- Microlubrication
- Microbonding

08/2023

We are there for you. Contact us.

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