



# Picoliter to Microliter Dispensing

Fast. Reproducible. Accurate.

M2-Automation delivers volumes from **picoliter to microliter**, with **contact and non-contact** options for biomolecules, reagents, cells, and particles. **Tool-free switching** between **three dispensing technologies** supports flexible pL, nL, and  $\mu$ L workflows. Developed and manufactured in Germany.

Grow with your application

From compact, entry-level R&D to high-throughput applications.



iFOUR  
entry-level



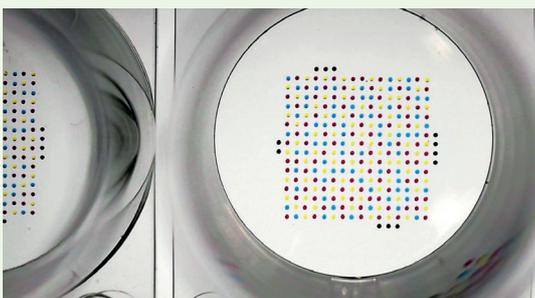
iTWO  
R&D + small batches



iONE  
batch production



iZERO  
in-line manufacturing



## Key benefits at a glance

- ◆ Save your precious samples
- ◆ Achieve high reproducibility
- ◆ Scale from benchtop to in-line production
- ◆ Switch dispensing technologies across systems
- ◆ Accelerate setup with vision guidance

## Performance specs

- ◆ **Droplet size:** 10 pL to 5  $\mu$ L
- ◆ **Dispensing speed:** up to 1000 Hz
- ◆ **Volume precision:** CV <2%
- ◆ Select the ideal dispenser for your workflow and switch tool-free in seconds.



Scan to book a live demo or request a feasibility test.

Need technical advice or want to discuss a project? **Talk to our team.**



MODEL	iFOUR	iTWO	iONE - 600 / 1200	iZERO
Level	Compact Entry-Level	R&D and Academic	Batch Production	In-Line Automated
Dimensions (W/D/H) & Weight	50 x 50 x 50 cm approx. 50 kg	110 x 75 x 110 cm approx. 150 kg	150/200 x 80 x 180 cm approx. 250 kg	85 x 151 x 248 cm approx. 500 kg
Built-in Windows PC	The built-in Windows PC with InDot Software is integrated as standard in all devices.			
Head-Camera	The Head Camera for in-line QC is integrated as standard in all devices.			
Washing Station	The Washing Station is integrated as standard in all devices.			
Travel Range	X 205 mm Y 200 mm Z 40 mm	X 250 mm Y 300 mm Z 100 mm	X 600 or 1200 mm Y 320 mm Z 44 mm	X 370 mm Y 398 mm Z 80 mm
Spottable Area	X 115 to 165 mm Y 195 mm	X 155 to 185 mm Y 300 mm	X 500 or 1100 mm Y 320 mm	X 370 mm Y 310 mm
Axis Resolution	< 0,5 µm	1 µm	1 µm	1 µm
Axis Type	Belt-drives (XYZ)	Spindle drives (XYZ)	Linear drives (XYZ)	Linear drives (XYZ)
Position Repeatability	< +/-10 µm	+/-5 µm	+/-3 µm	+/-3 µm
Droplet Imaging	2D	2D	2D / 3D	2D / 3D
Humidity Control	✓	✓	✓	✓
Vacuum Table	✓	✓	✓	
Drying Station	✓	✓	✓	✓
HEPA Filter System with Flow Control		✓	✓	✓
De-Ionizer		✓	✓	✓
Cooling / Heating of source and target		✓	✓	✓
Orbital Shaker for source plates		✓	✓	✓
Ultrasonic Wash Station		✓	✓	✓
On-the-fly dispensing			✓	✓
Analytical Balance for volume control			✓	✓
Tray System			✓	✓
Source Options				
96, 384, 1536- MTP	1	2	Up to 10	Up to 4
3x8 positions for PCR tubes (100 or 200 µL)	1	2	Up to 10	Up to 4
Reagent vials of 0.5 to 1.5 mL	2	Up to 6	Up to 30	Up to 12
Custom holders	✓	✓	✓	✓
Target Options				
MTP Holder	2 plates	4 plates	10 or 22 plates	9 plate trays
Glass slide adapter for MTP holder (4 slides per MTP)	✓	✓	✓	✓
Planar Target Holder / Vacuum Table	Up to 10 slides (depending on customized target size)	Up to 28 slides (depending on customized target size)	Up to 176 slides (depending on customized target size)	Up to 65 slides (depending on customized target size)

# iFOUR

The compact benchtop microdispenser



The entry-level instrument for R&D applications



Tool-free dispenser switching



Multiple source and target options

# iTWO

The R&D and small batch production system



Optional high-duty mobility table



Cooling / Heating of source and target



Various substrate holders

# iONE

The high-capacity production system



Available in two different sizes (iONE 600 or 1200)



High speed XYZ axes, top speed: 1000 mm/s



Optional tray system for ease-of-use

# iZERO

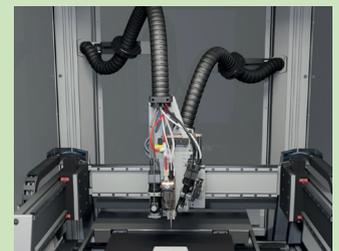
The scalable high-throughput production line



Expandable modular production line to meet all needs



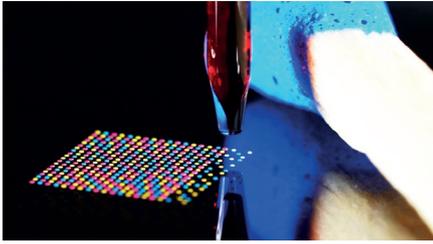
Integrated via Reel-to-Reel or conveyor belts



Each module performs partial spotting

# Three dispensing technologies

Tool-free switching across all instruments



## PDMD

Piezo-driven | non-contact

10 pL to 8 nL

Up to 1000 Hz | CV <2%

**Best for:** ultra-low volume dispensing



- ◆ Different orifice diameters
- ◆ Inert borosilicate glass
- ◆ Robust design for reliable operation



## M2MD

Valve-driven | non-contact

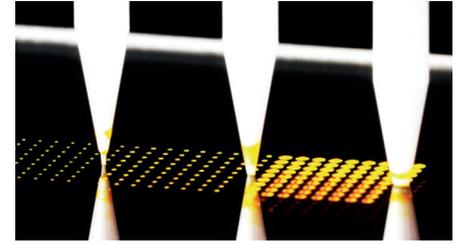
8 nL to 5 µL

Up to 50 Hz | CV 2-5%

**Best for:** reliable nL to µL droplet dispensing



- ◆ Bulk dispensing or Aspirate/Dispense
- ◆ Interchangeable glass capillary/plastic tips



## Pin-DMD

Pin-driven | contact-based

350 pL to 35 nL

6x6, 2x8, 4x12, 10x10, ...

**Best for:** simultaneous spotting of multiple samples



- ◆ Capillary or blunt
- ◆ 80 µm to 500 µm tips
- ◆ Chemical inertness



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