

Precision microdispensing that scales with your need

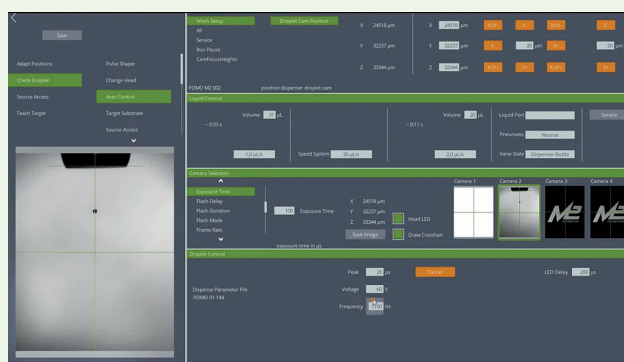
axiVEND supplies M2-Automation microarray spotters and spotting services in North and South America, positioning the M2 platform as a path from compact R&D systems to high-speed manufacturing. The current M2 instrument family is presented as a scalable range that spans iFOUR for entry-level use, iTWO for R&D and small-batch production, iONE for higher-capacity production, and iZERO for in-line automated production.

The central value proposition is flexibility without forcing users into a single deposition method. M2 systems are designed to use interchangeable dispensing approaches on the same platform, including non-contact picoliter, nanoliter, and microliter dispensing plus contact pin dispensing, which is highly relevant for protein arrays, DNA arrays, biosensor coating, lateral flow strip patterning, and microfluidic loading.



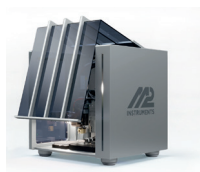
Same software for all spotters

Easily control your instruments with the intuitive and user-friendly InDot software. No programming language - just drag and drop tiles to form a sequence and loops.



Vision-guided dispensing and inline QC features are integrated across the product family.

Applications include multiplex immunoassays, protein, aptamer, and DNA microarrays, biochip sensor coating, microwell filling, and cell dispensing

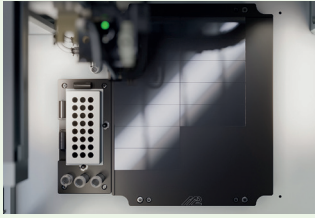


MODEL	iFOUR	iTWO	iONE - 600 / 1200	iZERO
Level	Compact Entry Level	R&D and Academic	Batch Production	In-Line Automated
Dimensions (W/D/H) & Weight	50 x 50 x 50 cm appr. 50 kg	110 x 75 x 110 cm appr. 150 kg	150/200 x 80 x 180 cm appr. 250 kg	85 x 151 x 248 cm appr. 500 kg
Built-in Windows PC	The built-in 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 or 400 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			✓	✓
Conveyor / reel-to-reel				✓
Source Options				
96, 384, 1536- MTP	1	2	Up to 10	Up to 4
3x8 postions for PCR tubes (100 or 200 µL)	1	2	Up to 10	Up to 4
Reagent vials of 0.5 to 1.5 mL	Up to 4	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)

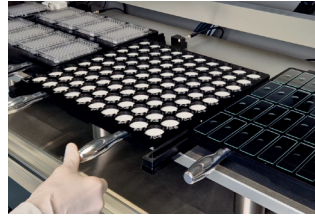
Unlimited sources / targets types



Easy-to-swap
Dispenser Types



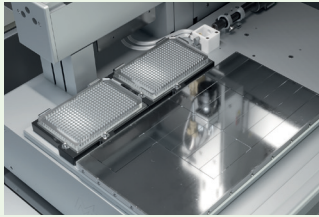
Multiple source
and target options



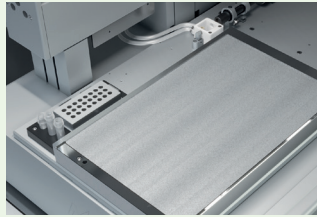
Optional tray system
for ease-of-use



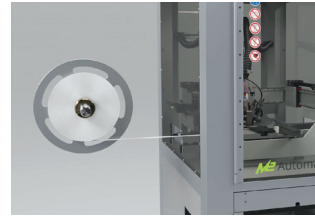
High speed XYZ axes,
top speed: 1000 mm/s



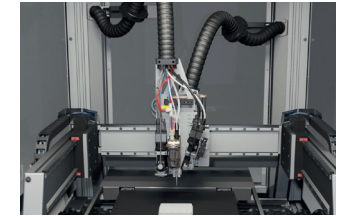
Cooling / Heating of
source and target



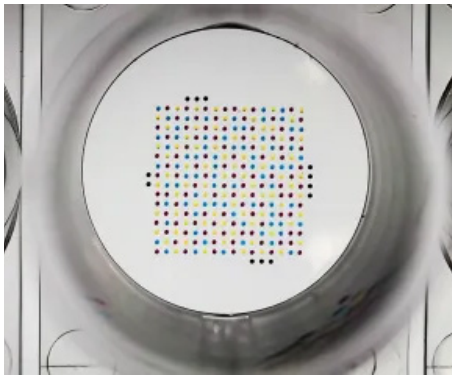
Various flat substrate
Vacuum Tables



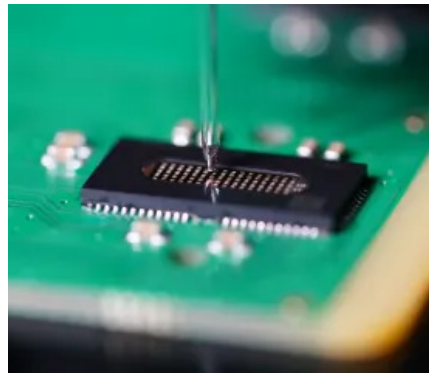
Integrated via Reel-to-Reel
or conveyor belts



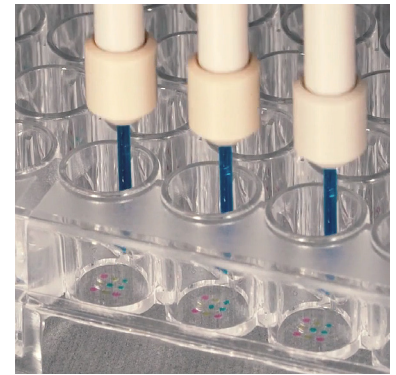
Each module performs
partial spotting



Print in microtiter plates

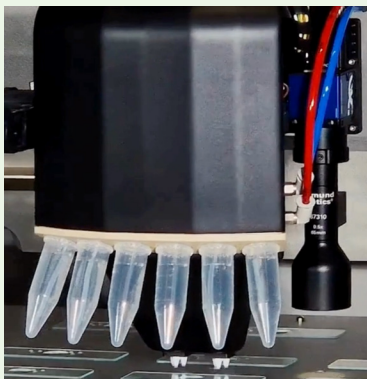


Deposit on biosensors

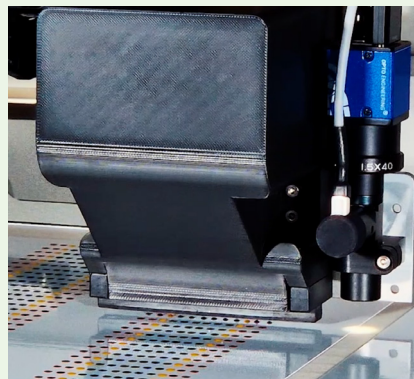


Multichannel dispensing

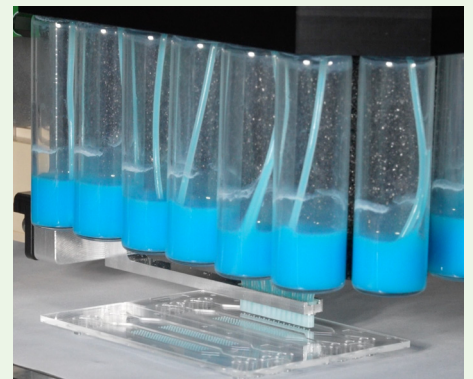
Custom multichannel heads



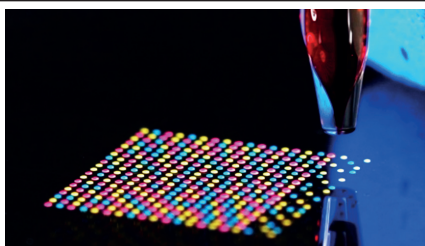
6-channels (2x 3 custom geometry)



12-channels (1x 12 inline)



14-channels (2 x 7 inline)



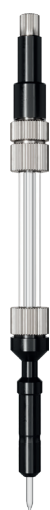
PDMD

PIEZO-DRIVEN

10 to 500 pL **NEW: 0.5 to 8 nL**



Standard



Large

- ◆ 1 - 1000 Hz dispensing
- ◆ Volume CV < 2 %
- ◆ Different orifice diameters
- ◆ Inert borosilicate glass
- ◆ Robust construction for easy operator handling
- ◆ **NEW:** Up to 40 mg/mL protein dispensing capability



M2MD

VALVE-BASED

8 nL to 5 µL

NEW: 3 ch



Bulk
dispenser

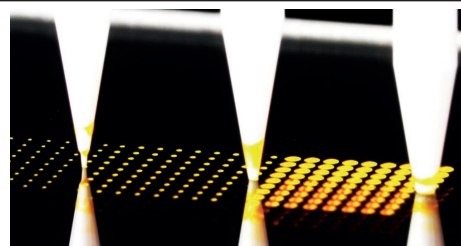


Aspirate/
Dispense
dispenser



3ch
dispenser

- ◆ Up to 50 Hz dispensing
- ◆ Volume CV 2 % to 5 %
- ◆ Bulk or Aspirate / Dispense
- ◆ Interchangeable tips:
 - » Glass tips
 - » Low volume plastic tips
 - » EP10 tips
- ◆ **NEW:** Multichannel standard & custom heads



Pin-DMD

PIN-DRIVEN

350 pL to 35 nL **NEW: 1x1**



- ◆ Multiple configurations:
 - » 6x6, 2x8, 4x12, 1x1 ...
- ◆ Capillary or Solid (blunt)
- ◆ 80 µm to 500 µm tips
- ◆ Chemical inert ceramic tips
- ◆ Low cost metal pins available
- ◆ Matching wash stations
- ◆ **NEW:** single pin for quick tests

