

XYZ Batch Dispensing: Precision Dispensing Systems

Simplify Product Development

Improve Product Quality

Applications

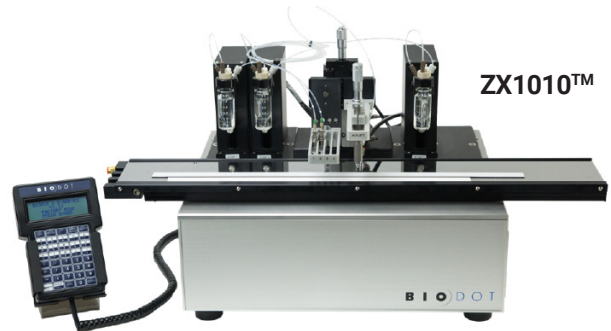
- Lateral flow and flow through tests
- Biosensors
- Immunoblots
- Dry chemistry
- Custom applications

Batch Dispensing Systems

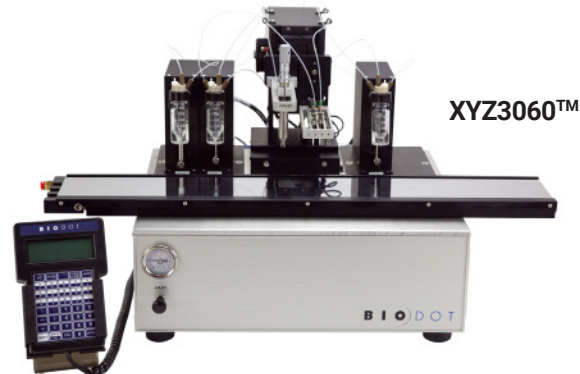
BioDot's XYZ workstations dispense lines and/or dots onto membranes and other surfaces for the development and production of diagnostic tests.

These high quality production machines offer superior dispensing technologies, positioning controls, and easy to use software.

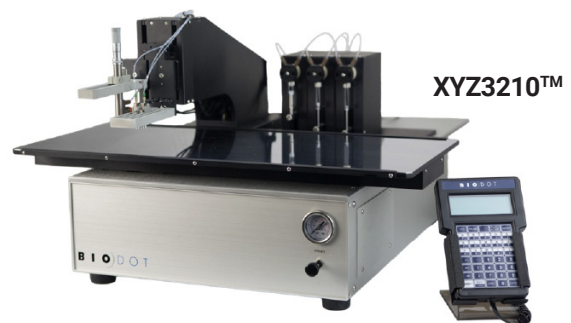
Choose the number and type of dispenser(s) on the system to meet your application needs and optimize your work flow. Custom nests can also be designed to hold your parts.



ZX1010™



XYZ3060™



XYZ3210™

Dispensing/Coating Options

Lines/Dots



BioJet



AirJet



μAirJet

Contact Lines



FrontLine

Dots



PolyDrop

only four AirJets

Features/Benefits

- Simultaneous quantitative dispensing
- Independent volume control for each dispenser
- Flexible design for multiple processes
- R&D to moderate production throughput
- Easy to set up, operate and maintain
- Programmable line and drop volumes
- Data storage for multiple applications
- Low dead/swept volume
- Systems can be upgraded after purchase*
- Compact footprint

*System Configuration Dependent

General Specifications

Dimensions (L x D x H)

- ZX1010: 43 cm x 36 cm x 40 cm
- XYZ3060: 43 cm x 36 cm x 40 cm
- XYZ3210: 74 cm x 74 cm x 46 cm

Dispense Area (L x D)

- ZX1010: 495 mm x 85 (manual)
- XYZ3060: 495 mm x 75 mm
- XYZ3210: 495 mm x 265 mm

Rapid Lateral Flow Test

System Operation

- ZX1010: Manual Y, Pneumatic Z w/ micrometer adjustment and Programmable X
- XYZ3060 & XYZ3210: Programmable X, Y, & Z-Axis

System Precision

- X, Y and Z-Axis typically < 10 µm (XYZ models)

Weight

- ZX1010 & XYZ3060: 25 kg
- XYZ3210: 50 kg

Facilities Requirements

- Power: 110/220 VAC; 50/60 Hz (all models)
- Air: 60-125 psi (for ZX1010 Z-Axis and AirJets)
- Vacuum: 60 L/min - 2.1 CFM, (for vac nest)

Technical Specifications

Dispensers

- Up to 8 dispensers (up to 4 AirJets)

Available nests

- ZX1010 & XYZ3060 - Vacuum/magnetic
- XYZ3210 - Magnetic
- Custom - User defined

Optional Humidity Chamber

Optional Vacuum Pump



Sensors

Dispensing Technologies Available for XYZ Workstations

Feature	µAirJet	AirJet	BioJet	FrontLine	PolyDrop
Type of Dispensing	Aerosol, non-contact	Aerosol, non-contact	Drop on demand, non-contact	Contact tip	Drop on demand semi-contact
Type Application	Conjugate lines and coating	Conjugate lines and coating	Reagent lines and dots	Reagent lines	Reagent dots
Line Volume*	0.5 - 12 µL/cm	0.1 - 24 µL/cm	0.5 - 3.0 µL/cm	> 0.5 µL/cm	—
Drop Volume*	—	—	2.6 nL - 2.0 µL (single drop)	—	> 25 nl
Typical Line Width*	0.5 to 6 mm	0.5 to 10 mm	0.25 to 2.5 mm	0.25 to 2.5 mm	—
Accuracy* (% of target)	+/- 5%	+/- 5%	+/- 5%	+/- 5%	—

*Table speed, material and/or reagent dependent

Fully Programmable Low Volume

For over 25 years, BioDot has been providing dispensing, laminating and cutting systems in the rapid test market. Our long-lasting relationships with customers are built on precision products and quality service around the world.



Rapid Lateral Flow Test

To learn more about the XYZ, scan this QR code with your smart device:

