AD3050

RESEARCH & DEVELOPMENT SYSTEM

FEATURES AND BENEFITS

Speed

- "On-the-Fly" dispensing
- Non-contact mode reduces wash time

Footprint

- Small design to accommodate research environment

Multi-Mode Dispensing

- BioJet Plus Non-contact Dispenser
  - Aspirate and dispense
  - Continuous dispense

PERFORMANCE

Accuracy of Dispense Volume

- ± 5% of Target

Precision of Dispense Volume

- ≤10% CV at 20 nL

Total System Positional Accuracy

- ±150 µm (typically ±75 µm)
- SD 50 µm (typically ≤ 25 µm)

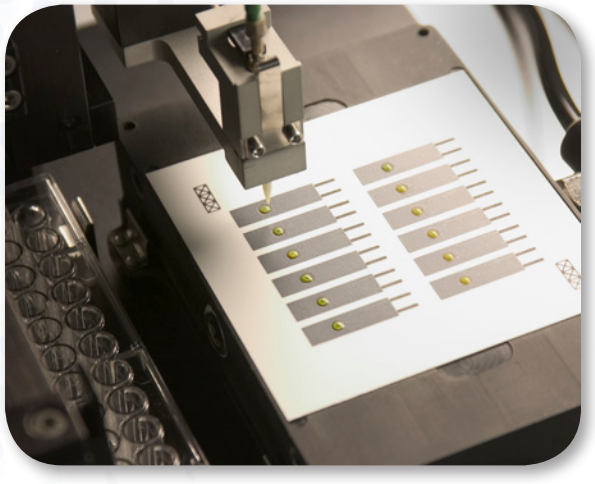
Humidity

- 60 ± 5% RH

The AD3050 is a tabletop workstation designed for high speed aspirating and dispensing to a biosensor card or membrane. Its compact footprint and up to four BioJet Plus Pumps makes it ideal for a research laboratory to investigate biosensor applications.

Using the PC Controller and AxSys™ Software, both biological and chemical reagents can be dispensed with the proprietary BioJet technology. The three components synchronized together result in a precise, non-contact, low volume delivery system.

AD3050 RESEARCH & DEVELOPMENT SYSTEM



AD3050 shown with a Glucose Biosensor Card.

OPTIONS

- Up to 4 BioJet Plus Pumps
- Humidity Control
- Substrate Nest
  - Magnetic Hold Down Nest
- Vacuum Pump
- In Line Degasser

SPECIFICATIONS

Dimensions (L x W x H)

- 355 mm x 431 mm x 406 mm

Weight

- 85 lb (38.6 kg)

Power Requirement

- 110/220 VAC; 50/60 Hz

Vacuum Requirement

- Vacuum Wash Station: 2.1 CFM (~60 CL)

DISPENSING SPECIFICATIONS

Dispense Modes

- Aspirate/Dispense (source to destination)
- Continuous (bulk reservoir to destination)

Dispense Area

- 450 mm x 70 mm

System Precision

- X, Y and Z-axis are ± 25 µm (although typically < 10 µm)
- Manual Nest: ± 250 µm
- Shuttle Nest: ± 25 µm

Z-Axis Height

- Top Plate: ± 127 µm
- MTP: ± 127 µm
- Slide: ± 127 µm

XY Axis Squareness

- 90.000 deg ± 0.050 deg

Nest to Axis Parallelism

- X-Axis: ± 127 µm
- Y-Axis: ± 127 µm

Motion Speed

- X-Axis: 10.0 ± 0.5 mm/sec
- Y-Axis: 10.0 ± 0.5 mm/sec
- Z-Axis: 10.0 ± 0.5 mm/sec

BIODOT

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