

Catalina

Full-featured Benchtop Dispense System



- Automatic Vision
- Automatic Nozzle Calibration
- Automatic Nozzle Cleaning
- Laser Sensing & Profiling

A benchtop system does not mean “no features”. The Catalina benchtop system is a full-featured platform with these standard features: automatic vision, laser surface sensing, and nozzle alignment.

Our semi-automatic dispensing robot provides you with accurate and repeatable dispense results. Applications using conductive adhesives, solder pastes, glues, gasketing, and more benefit from the powerful system features.

- Easy to learn, computer-based software with Windows operating system
- Automatic alignment and positioning with high resolution camera.
- Create dispense paths using camera teach or on-screen graphic editing.
- Import DXF files for complex path programming.
- I/O ports provide the flexibility to add advanced features/equipment.

Standard Features

3D Dispensing

Laser traces the dispense path and measures surface variation, then adapts height of the dispense tip to maintain a consistent gap.

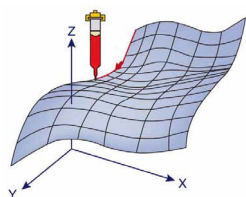
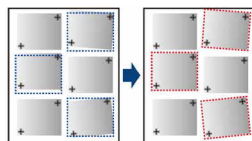


Image Alignment

Vision system locates alignment points to account for product rotation.

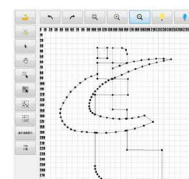


Automatic XYZ Nozzle Calibration

Locates dispense tip in X, Y, Z for accurate fluid placement.

Graphic Edit & DXF Support

User-friendly graphic editing to create a dispense path. 2D AutoCAD DXF files are supported.



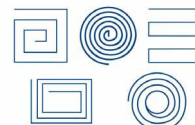
Matrix Dot Dispensing

Easily duplicate a common pattern in a matrix.



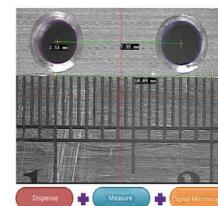
Fill Area

Multiple types of fill area and dispense patterns. Easy to teach.



Dispense | Measure | Vision

The combination of dispensing, measuring, and vision functions can reduce operating time. Distance can be measured between dots, circles, circle diameter, circle center, and stripe width.



Laser

Non-contact surface sensing.

Add-On Options

Common Options*	Description
FPC	Real time process control for pump(s).
Heated Work Table	For heating substrates up to 70° C (158° F).
Fluid Level Detect	Notifies operator when fluid level attains set point.

* Contact GPD Global about additional options and features.

Benchtop Manufacturing

Pump Compatibility

Application	Pumps / Accessories
Paste, glue, adhesive.	Precision Auger Pump
High speed, low viscosity.	Jetting Pump (NCM5000)
No drip, volumetric repeatability.	Volumetric Pump (PCD)
Simple liquid dispense applications, low-to-mid viscosity.	Time Pressure
Real time process control.	Fluid Pressure Control (FPC) for use with Precision Auger & Jetting (NCM5000) pumps, as well as Time Pressure Dispensing



Specifications

Capacity

Dispense pumps	Single pump
Component weight (maximum)	15 kg on Y-axis/sliding tray
Pump weight (maximum)	10 kg on Z-axis/gantry
Programming Method	PC Teach / Graphic Edit
Interpolation Function	3D Dispensing Path (3 axis)
Data Storage Type	HDD
Program Display	17" (or larger) LCD
Drive System.....	Micro Step Motor
User Input/Output	8 Inputs / 8 Outputs

Performance

Accuracy.....	±35 µm (0.0014")
Repeatability (per axis)	±20 µm (0.0008")
Speed:	
X&Y axes	600 mm/sec (24"/sec)
Z axis	500 mm/sec (20"/sec)
Acceleration	1 g

Dimensions & Weight

Work Area (X, Y, Z)	270 mm x 300 mm x 100 mm (10.6" x 11.8" x 3.9")
Footprint (W x D x H)	60 cm x 70 cm x 75 cm (23.4" x 27.5" x 29.5")
Weight (approximate).....	50 kg (110 lbs)

Power

Voltage.....	110-220 Volts AC, 1.5 A
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Environmental

Working Temperature	10-50° C
Working Relative Humidity	20-90%, no condensation

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