

Multichannel Dispensing System

MULTI-MATERIAL, MULTICHANNEL, DISPENSING SYSTEM



Automated high throughput 8-channel picolitre dispensing system.

Designed for high throughput manufacturing applications, the multichannel dispensing system has 8 independently operated picolitre dispensing channels. The liquids are aspirated out of a standard 96-well plate into each of the 8 disposable dispensing cartridges.

Each channel is calibrated for the particular liquid being dispensed and any liquid may be dispensed from any channel as required by your application. Dispensing cartridges come in boxes of 96 units. Applications include manufacturing of sensors and Lab-on-a-Chip (LoC) devices.

FEATURES & BENEFITS

Patented disposable dispensing cartridge technology

No cross-contamination by design, change fluids in a matter of minutes, no wastage of precious fluids, with a nozzle anti-clogging feature.

High precision positional accuracy and repeatability

State-of-the-art robotics platform designed for high throughput and high repeatability. (Resolution 1µm; XY precision +/-5µm)

Ultra-low volume dispensing

Single microdrop volumes can be programmed to be any volume in the range of 5pl to 120pl (contingent on well-engineered fluids).

High precision target alignment vision system

High resolution image processing optics and software align the dispensed liquids with target locations on the substrate.

High Dispensing Speed

Typical dispense rate (fluid dependent) 1,000 microdrops per second.

Robust, reliable dispensing system.

Dedicated industrial automation robotics platform built for a 10 year+ operational life in a 24/7 operating environment.

Ongoing software upgrades

Keep up to date with the latest features and capabilities. (Optional).

These high throughput production systems are bespoke configurations designed to meet your specific application requirements



SPECIFICATIONS

Robotics Accuracy	Resolution 1µm; XYZ precision +/-5µm
Speed	1.5m/s
Dimensions	Application Specific
Weight	500kg +
Enclosed	Fully Enclosed
Working Area	Application Specific

APPLICATIONS & MATERIALS

Our micro dispensing system is proven to deliver for a wide range of applications and materials, including:

- ✓ Active Pharmaceutical Ingredients
- ✓ Sensor manufacture
- ✓ Conductive inks
- ✓ LoC device manufacture
- ✓ Proteins / Antibodies
- ✓ Diagnostic device manufacture
- ✓ DNA / RNA
- ✓ Adhesives
- ✓ Nano-materials
- ✓ Coatings