

Micro10x™

Robotic Reagent Dispenser

Compact 8- and 12-Channel High-Throughput, Accurate Bulk Reagent Dispenser for Microplates

The Micro10x provides a combination of fast filling speeds, high accuracy and extreme flexibility not found in other benchtop reagent dispensers. It never needs calibration because its positive-displacement pump head is adjustable in 10nL increments. The leading competitor needs constant calibration and the purchase of replacement dispensing cassettes. The Micro10x accurately dispenses volumes down to 2uL per channel, and provides features to ensure a clean, full dispense of various liquids.

The Micro10x can be loaded and operated without a computer, but is also fully-compatible with robot arm systems, such as Hudson's PlateCrane™, or track-based microplate delivery systems, such as Hudson's LabLinx, for unparalleled throughput and ease of setup.

What makes us different than other (considerably cheaper) reagent dispensers?

We use a positive displacement ceramic pump rated at 5MM cycles, as opposed to peristaltic pumps and consumable tubing sets. Speed, precision, and accuracy over the life of the unit are vastly better than peristaltic pump based reagent dispensers that pinch the tubing sets with rollers and cause rapid tubing wear. This wear changes the volume pushed with each pass of a roller, and causes a drop in volume, affecting both precision (repeatability) and accuracy.

Also, our ceramic piston pump's motion opens and closes ports without active valves, eliminating another potential source of failure. We can run the pump in reverse to back precious reagents out of the manifold and tubing to return it to the reservoir if desired.

This design allows us to use materials that are compatible with a wide range of chemicals including all life science buffers and a wide pH range of reagents.



Micro10x™ - Fast, Compact, Accurate Benchtop Instrument for Reliable & Automated Reagent Dispensing into all Microplates

The Micro10x brings various advantages to lab applications:

- Conserves bench space with its small, 7"x10" footprint.
- Graphical Image Row Selection to control the dispensing pattern.
- 96-, 384-, 1536- filling, up to 55mm in height.
- Tip Touch to reduce droplets.
- Pairable with multi-channel valves for automated liquid switching and flushing.
- Autoclavable fluid path assures sterility.

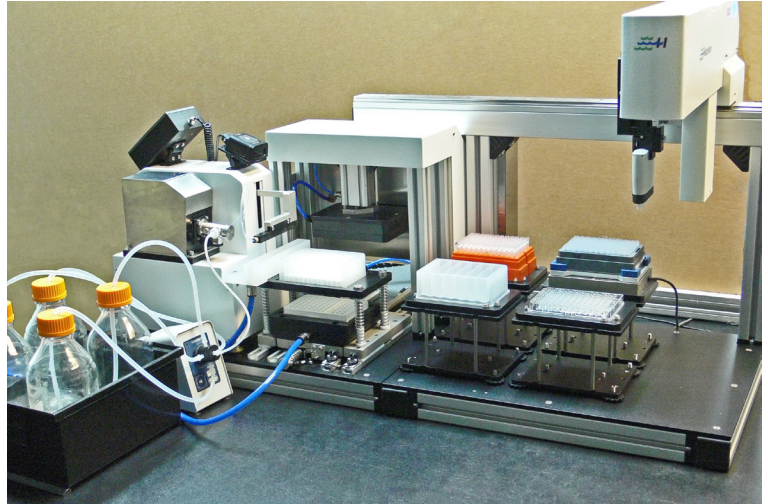
DNA Extraction/Purification Workcell

Includes a Micro10x Reagent dispenser, SOLO automated Pipettor, and Filter-Press

The Micro10x is a small, dependable tool for quickly adding all types of liquids evenly across standard microplates. When connected to the Hudson SOLO robotic pipettor, which can add different samples into each well, virtually any assay can be prepared. Built to be modular, the Hudson family of instruments can be combined with a wide variety of readers, magnetic bead nests, automatable centrifuges and incubators.

ELISA Workcell

When paired with the SOLO Automated pipettor and RapidWash microplate washer, the Micro10x is perfect for ELISA applications as a dispenser of conjugate and stop solutions. Its high speed and robot compatibility make it ideal for ELISAs that require consistent processing of many hundreds of plates. Its self-priming feature allows it to maintain clear dispense nozzles even during long plate incubation times.



Specifications

Dispense Volumes	5µL and up - below 3% CV; 2-5µL - below 5% CV
Electrical	115/220 VAC, 0.5 Amps
Calibration	Holds factory calibration for > 50 million cycles
Sterilization	A fully-autoclavable liquid path
Configuration	Available in both landscape (12-nozzle dispensing) and portrait (8-nozzle dispensing) style
Size (W x D x H)	7.0" (17.8 cm) x 10.1" (25.7 cm) x 15.8" (40.1 cm)
Typical Dispense Times for an Entire Plate	<ul style="list-style-type: none"> • 15 seconds - 96 well plate, 100µL per well • 24 seconds - 384 well plate, 25µL per well

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