

# I.DOT L

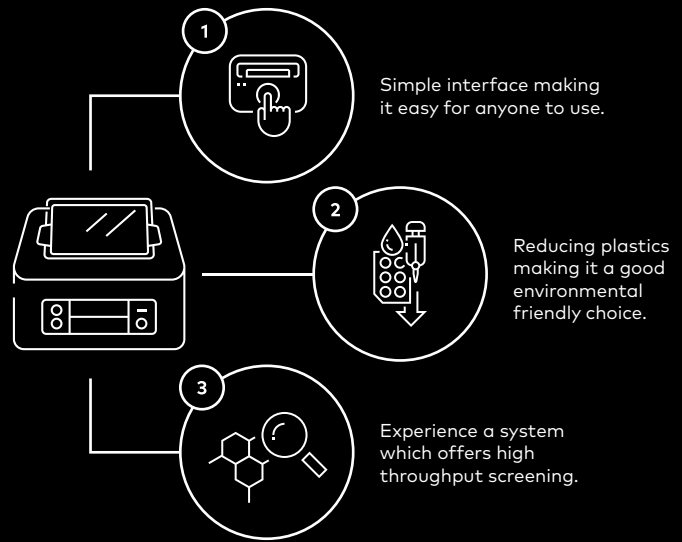
Fast. Accurate. Traceable.

Overview Brochure



## Latest technology in noncontact dispensing for fast and reproducible results every time.

The I.DOT is a liquid handler<sup>1</sup> that anyone can use regardless of automation experience. The instrument transfers volumes as low as 17,9 nL with unrivaled precision and speed while dramatically reducing your laboratory's plastics and reagent consumption<sup>2</sup>. Whether you are dispensing enzymes for NGS or qPCR or adding cells, compounds, and buffers for Assay Development or High-throughput Screening, the I.DOT offers high<sup>3</sup> precision and ease of use for efficient and reproducible sample preparation.



## The latest Version - L

The I.DOT L has all the features from the regular I.DOT with a few key additional benefits.



## OUR STORY

### Premier provider of non-contact liquid handling

DISPENDIX GmbH, the premier provider of noncontact liquid handling solutions in the nano to microliter range, started out in 2016 as a spin-off from the Fraunhofer Institute for Manufacturing Engineering and Automation (IPA) in Stuttgart, Germany.

In 2018, DISPENDIX joined the world's leading bio convergence company BICO, which now encompasses 900+ colleagues and 11 companies, offering a portfolio of technologies, products and services to create the future of health. Part of that portfolio is DISPENDIX's patented and widely recognized technology, the I.DOT, which brings intuitive automation, precision and speed to every lab, allowing scientists to optimize liquid handling workflows and accelerate their research in a range of applications.

# Key Benefits

1.

## Extend your source volume throughput!

From 80  $\mu$ l to 500 $\mu$ l per single source well, we increased the total dispensing volume from 7680  $\mu$ l to 48000  $\mu$ l. A more than 6-fold increase! This allows to dispense from ultra-low volumes up to high liquid transfers.

2.

## Automated liquid class creation

Creating your custom liquid class has never been easier!

With the liquid class creation wizard, simply dispense a predefined protocol and fit your custom liquid class perfect to your dispensed reagents.

3.

## Missing a droplet?

The real time quality control feature of the drop detection together with the software realizes where and how many droplets have been missed and lets the user re-dispense this right after the dispense run. To ensure correct liquid transfers down to the nanoliter level.

4.

## Optimized for automation

The I.DOT L can be integrated in fully automated workstations via its API. With the extension of the source volume, less source plates are needed to fill more destination plates without human interference.

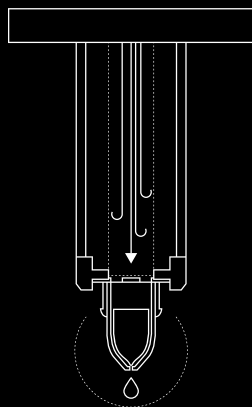
## Plates to meet your low- and high-throughput needs

I.DOT L Plates are comprised of an SBS-compatible polystyrol frame with 96 individual polypropylene wells.

|                            |   |
|----------------------------|---|
| Dispensing Nozzle          | 100 $\mu$ m   |
| Dispensing volume per well | 17,9 nl to 500 $\mu$ l                                |
| Well material              | Polypropylene   |
| Material frame             | Polystyrol  |
| Source plate format        | 96 single wells                                       |
| Target plate               | Can accommodate plates ranging from 0-50 mm in height |
| Dead volume                | <1 $\mu$ l for H <sub>2</sub> O                       |
| Accuracy                   | < $\pm$ 8% $\geq$ 50 nl (H <sub>2</sub> O)            |
| Precision                  | < $\pm$ 8% $\geq$ 50 nl (H <sub>2</sub> O)            |

## How does the I.DOT L work?

The I.DOT L's carries out precise and accurate noncontact liquid handling tasks. The system uses eight individually controlled positive pressure channels to generate droplets from 17,9 to 50 nanoliters from a small nozzle at the bottom of each well. Each channel can generate up to 100 droplets per second giving control and speed to the users all while eliminating cross contamination.



# I.DOT L automates life science workflows and executes them more efficiently.

## 1.

### Genomics & proteomics

- The I.DOT L enables you to do sample preparation for single cell proteomics for a deep resolution of the proteome.
- Enhance NGS Library Prep and leverage miniaturization, low-volume dispensing and low dead volume.
- Dispense high-viscosity solutions with ease and reduce time.

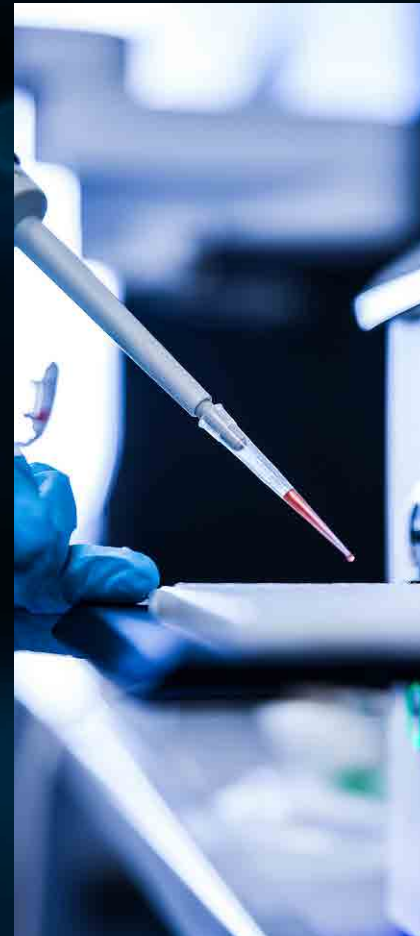
#### Ideal for:

- Indexing for NGS
- Genomics
- Pooling libraries
- CRISPR reactions
- PCR setups (Parallel analysis of a multitude of genes in high throughput PCR plate preparations)

## 2.

### Assay Development

- Miniaturize your cellular assays into a 1536 plate.
- Dispense up to 96 different source liquids using a different volume in each well with I.DOT L's DoE-friendliness.
- Ideal for:
  - Assay development
  - Synthetic biology
  - Compound dispensing
  - Cell dispensing
  - High-throughput screening



## Assay Studio streamlines your workflow

I.DOT's software Assay Studio optimizes protocol creation, and users can easily import CSV files to create more complex protocols. It is automation-friendly and integrates with any third-party scheduler.

- Touch screen, user-friendly software
- Fast, intuitive, and CSV-friendly setup
- Multiwell and custom formats
- No programming or looping needed
- Improve processes and data quality

## We are here for you.

DISPENDIX's global team of applications specialists are ready to provide support when you need it, and multiple support packages are available to meet your needs.

A member of our team can reach out within hours of receiving your request. We are happy to work by phone, over email, through video chat and on-site to perform installations, repairs or other services.

Email us anytime at [support@dispenix.com](mailto:support@dispenix.com)



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