

# I.DOT L

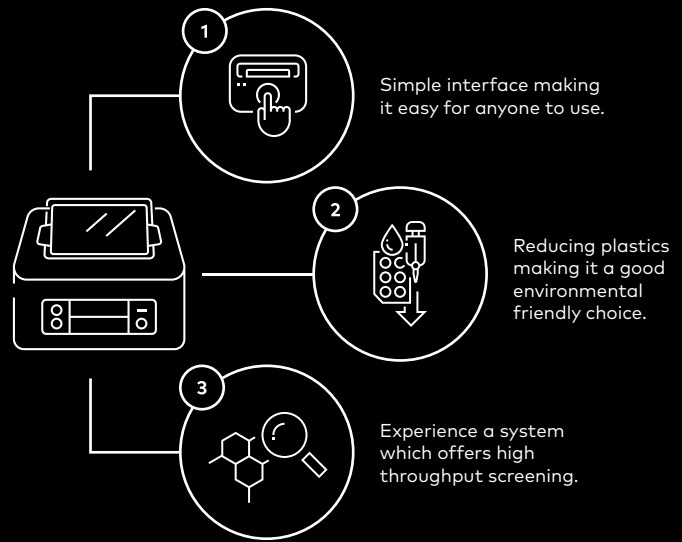
Fast. Accurate. Traceable.

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.

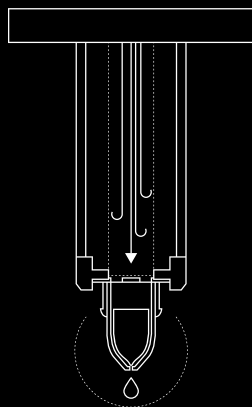
## Plates to meet your low- and high-throughput needs

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.

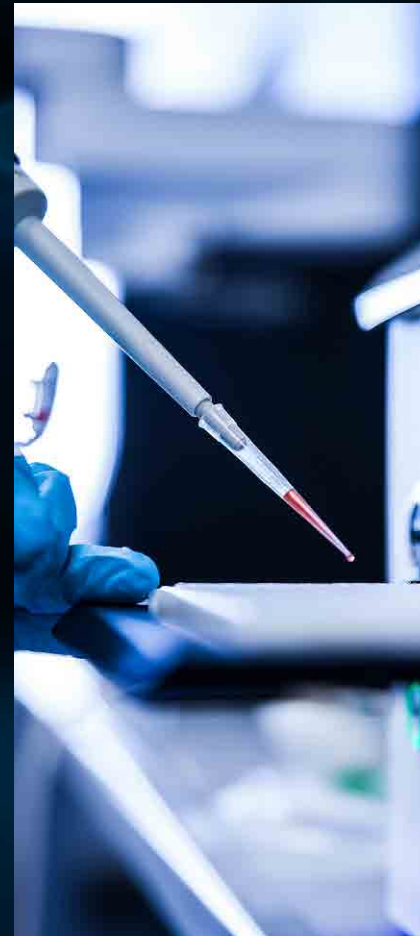
#### Ideal for:

- 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)



©2021 BICO AB. All rights reserved. Duplication and/or reproduction of all or any portion of this document without the express written consent of BICO is strictly forbidden. Nothing contained herein shall constitute any warranty, express or implied, as to the performance of any products described herein. Any and all warranties applicable to any products are set forth in the applicable terms and conditions of sale accompanying the purchase of such product. BICO provides no warranty and hereby disclaims any and all warranties as to the use of any third-party products or protocols described herein. The use of products described herein is subject to certain restrictions as set forth in the applicable terms and conditions of sale accompanying the purchase of such product. BICO may refer to the products or services offered by other companies by their brand name or company name solely for clarity and does not claim any rights to those third-party marks or names. BICO products may be covered by one or more patents. The use of products described herein is subject to BICO's terms and conditions of sale and such other terms that have been agreed to in writing between BICO and user. All products and services described herein are intended FOR RESEARCH USE ONLY and NOT FOR USE IN DIAGNOSTIC PROCEDURES.

The use of BICO products in practicing the methods set forth herein has not been validated by BICO, and such nonvalidated use is NOT COVERED BY BICO'S STANDARD WARRANTY, AND BICO HEREBY DISCLAIMS ANY AND ALL WARRANTIES FOR SUCH USE. Nothing in this document should be construed as altering, waiving or amending in any manner BICO's terms and conditions of sale for the instruments, consumables or software mentioned, including without limitation such terms and conditions relating to certain use restrictions, limited license, warranty and limitation of liability, and nothing in this document shall be deemed to be Documentation, as that term is set forth in such terms and conditions of sale. Nothing in this document shall be construed as any representation by BICO that it currently or will at any time in the future offer or in any way support any application set forth herein.

