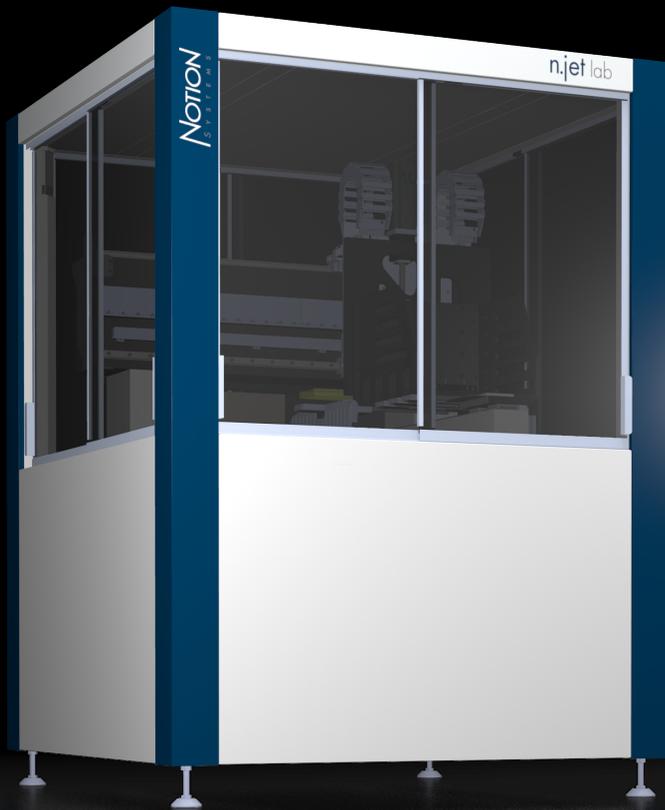


# n.jet lab

## R&D inkjet



# PRODUCT SPECIFICATION

## ADVANTAGES

- Smooth transfer from R&D scale to 24/7 industrial production systems
- Versatile applications with print heads from several manufacturers
- Fast and easy change between different heads & different inks
- Up to four different head/ink combinations in use simultaneously
- High precision mechanical design with self calibration including nozzle by nozzle calibration
- Easy to use graphical user interface
- Fun to work with

## MECHANICAL & INTERFACES

|                       |   |
|-----------------------|---|
| Stage size            | 156 x 156 mm, 305 x 305 mm & 400 x 400 mm |
| Substrate height      | Up to 80 mm                               |
| Substrate fixture     | Vacuum hold down                          |
| Print speed           | Up to 1330 mm/s                           |
| Self calibration      | Automated self calibration                |
| x & y axis type       | Ironless linear motor                     |
| x & y axis accuracy   | ±1 micron                                 |
| x & y repeatability   | ±0.8 micron                               |
| z axis type           | Servo motor spindle drive                 |
| z axis accuracy       | ±1 micron                                 |
| Dimensions (LxWxH)    | 1700 x 1600 x 1900 mm                     |
| Electrical interface  | 400V /16 A, 3 phases                      |
| Transformer           | Supplied by Notion Systems                |
| Power consumption     | < 1 kW                                    |
| CDA                   | 6.5 bar - 8.5 bar                         |
| CDA consumption       | < 1 liter per minute                      |
| Certificates & Safety | CE  |

## CAMERAS

|                        |                              |
|------------------------|------------------------------|
| Alignment cam type     | b/w CCD, 1624x1234 pixels    |
| Alignment precision    | ±2 micron                    |
| Alignment types        | 2...4 fiducial marks, edge   |
| Alignment light source | Selectable ring light source |
| Drop watch cam         | b/w CCD, 1388 x 1038 pixels  |
| Drop watcher           | Real time                    |
| Drop watcher measure   | Drop volume measurement      |

## SOFTWARE & DATA FORMATS

|                |                           |
|----------------|---------------------------|
| User Interface | Intuitive GUI             |
| Rasterizer     | Drop spread accounted for |
| Data formats   | Gerber, DXF, bitmap       |

## PRINT HEADS

|                     |  |
|---------------------|--|
| Number of heads     | 3 slots  |
| Head types          | Dimatix, Konica-Minolta, Kyoce-ra, Xaar, Xerox, Toshiba, Ricoh |
| Mixed head types    | Simultaneously up to 3   |
| Mounting            | Precision fast mount   |
| Calibration         | All nozzle positions calibrated better than 1 micron           |
| Print resolution    | Up to 5080 x 5080 dpi  |
| Drop placement      | ±3 micron  |
| Print repeatability | ±1 micron  |

## INK SYSTEM

|                         |                                |
|-------------------------|--------------------------------|
| Tank types              | Fluid, Hotmelt (up to 120 °C)  |
| Tank volume fluid S     | Cartridge 1.5...50 ml          |
| Tank volume fluid XL    | 400 ml                         |
| Tank volume Hotmelt     | 50 ml                          |
| Chemical compatibility  | Inert o-rings, high-resilience |
| Automated refill system | Optional                       |

## PRINT HEAD MAINTENANCE

|                       |                                 |
|-----------------------|---------------------------------|
| Automated cleaning    | Purge, seepage, standby jetting |
| Head cleaning types   | Wipe, Noncontact vacuum         |
| Simultaneous cleaning | Up to 3 heads simultaneously    |
| Capping               | Air tight capping as standard   |

## OPTIONS

|                        |                   |
|------------------------|-------------------|
| Built in UV curing     | Heated stage      |
| Built in NIR sintering | Automated loading |
| Adjustable head angle  | Roll to roll      |
| Rotation stage         | HEPA environment  |

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