

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	305 x 305 mm (larger on req.)
Substrate height	Up to 40 mm
Substrate fixture	Vacuum hold down
Print speed	Up to 900 mm/s
Self calibration	Automated self calibration
x & y axis type	Ironless linear motor
x & y axis accuracy	±1 micron
x & y repeatability	±0.3 micron
z axis type	Servo motor spindle drive
z axis accuracy	±1 micron
Dimensions (LxWxH)	1860 x 1350 x 2000 mm
Electrical interface	400 V /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	4 slots
Head types	FujiFilm, Kyocera, Xaar, Xerox, Toshiba, Ricoh
Mixed head types	Simultaneously up to 4
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...10 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 4 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