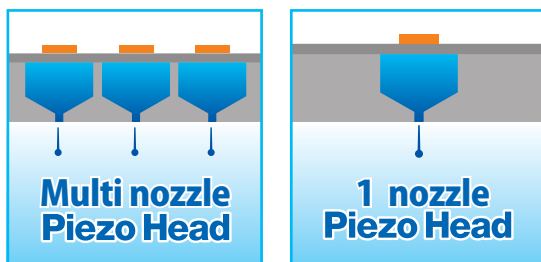


BioPrinter-1000[®]

Piezo-Inkjet type bio printer

Patterning of both biomaterials (cell and DNA etc.)
and electronic materials (Ag ink etc.)

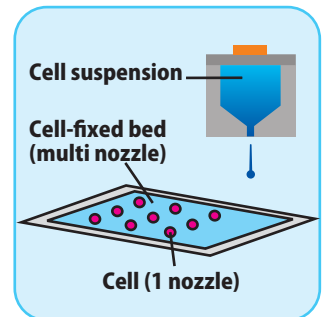


Features

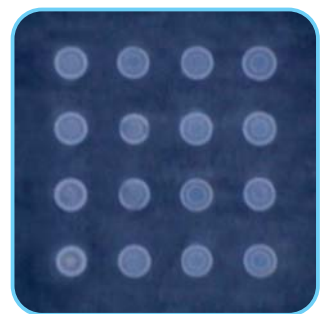
- 1 Equipped with the head which is suitable for Bio- materials, or electronics respectively
- 2 Head for high viscosity liquid, sucking trace amount of liquid, high surface tension liquid
- 3 Mountable both multi nozzle head and single nozzle head simultaneously
- 4 Mountable up to 5 inkjet head units
- 5 Customization of device depend on the purpose of experiment

Applications

- Cell patterning
- Trial production of DNA -protein chip
- Spotting of anti-body, enzyme
- Trial production of Bio-censer
- Patterning of nano metal ink



Example of sample production



Example of chip production

※ Stable dispensing depends on fluid type.
 ※ Actual equipment might vary from the picture
 ※ Specifications are subject to change without notice

Piezo-Inkjet type bio printer BioPrinter-1000 specifications

MICROJET

Model	BioPrinter-1000
Device configuration	Patterning device, electric BOX, control PC (PC not included) application software ※ IEEE-1284 for connection with PC
Mounted head	Piezo-inkjet type ※ Choose single nozzle or multiple nozzle
Number of mounted head	Multiple nozzle head: 1 Single nozzle head: up to 4
Dispensing fluid volume	0.005~1nl/droplet ※ Depending on head type and fluid to be used
Size	W950 × D810 × H1500[mm]
Device activating axes	X·Y·Z· θ automatic control Fixed-table type
Patterning types	Spotting, dispensing, dot, line, circle, square, painted patterns, bitmap drawing
Patterning area	150 × 300[mm]
Patterning accuracy	XY repetition alignment accuracy: within $\pm 5 \mu\text{m}$
Droplet flight monitoring function	Light-emitting component, light-emission controller, CCD camera, zoom lens
Table observation function	CCD mounted (for droplet dropped-point and table observation), light, lens, CCD camera
Number of well plates to mount	96 holes, up to 4 plates

Mounted head

Head types	Features	Head heater	Applicable viscosity [mPa·s]	Dispensing fluid volume [nl/droplet]
Multiple nozzle head	High-speed dispense of small droplets from 128 nozzles	None	5~20	0.005~0.1
IJHB series	Dispenses low viscosity fluid and high surface tension fluid	None	0.5~10	0.005~1
IJHD series	Dispenses high viscosity fluid without heating	None	0.5~40	0.005~1
IJHE series	Dispenses heated high viscosity fluid	Mounted	0.5~40 (non-heated) 20~200 (heated)	0.005~1

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※ Depending on fluid type, stable dispensing may not be available.

※ Applicable viscosity varies by fluid volume.

※ Specifications are subject to change without notice.