Super Inkjet printer（SIJ-S030）

◇Super fine patterning
Droplet volume：0.1fl (femtoliter) ～10pl (picoliter)

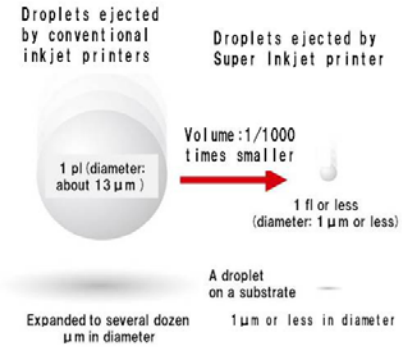
◇Wide range of viscosity
Viscosity range：0.5～10,000cps (non-heated)

◇Large variety of usable fluids

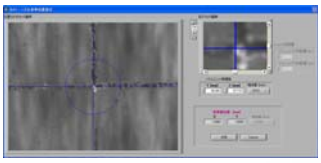
Technical summary

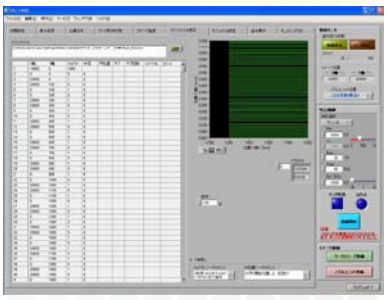
■ Super Inkjet technology developed by the National Institute of Advanced Industrial Science and Technology (AIST) allows the ejection of super-fine droplets much smaller than the droplets ejected by a conventional inkjet printer – 1/10 smaller in size and 1/1000 smaller in volume.

■ Super Inkjet printer is compact and can be placed on a desktop. The printer allows single micron scale patterns comparable to the photolithographic methods to be drawn directly under normal temperature and normal atmospheric pressure.



Usability





■Software：Easily programmable for printing

■Nozzle：Disposable, Low cost, easily-exchangeable

■Camera：Real-time observation, You can see what's going on the substrate！

Specification

Type	SIJ-S030 (desktop system) ※includes PC, monitor and software
Data format	Vector form data
Patterning design	Arbitrary shape (dot, line, circle, polygonal shape)
Patterning area	30×30mm
Number of nozzles	Single nozzle
Repeatability of work stage	±0.2μm
Fiducial camera	Real-time observation camera×1, Alignment camera×1
Power	AC100-120V 50/60Hz ※A transformer is necessary by some areas.
Body size	620(W)×880(D)×690(H) mm
Weight	Approximately 64Kg
Customization	On your request.

AIST Start-Up
SIJTechnology, Inc.

ADDRESS
AIST Tsukuba Center 5,1-1-1 Higashi, Tsukuba, Ibaraki 305-8565,Japan

TEL／FAX	E-mail	URL
+81-29-855-7057	info@sijtechnology.com	www.sijtechnology.com/

Super Inkjet printer（SIJ-S030）

Example of Application

■Advanced technology　・Printable electronics　・Solar-cells　・Touch panels　・LEDs

■Alternative technology　・Partial platings　・Resists coating　・Bumps forming　・Dispenser devices

■Optics technology　・Photomasks　・Microlenses　・Microfilters

■Biotechnology　・Pipetting device of protein material　・Cell scaffolds　・Microarrays

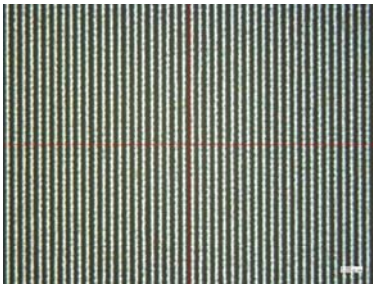
Features

■Droplet volume：0.1fl (femtoliter)～10pl (picoliter)，Line width 0.5μm ～ several dozen μm Smallest droplet volume！

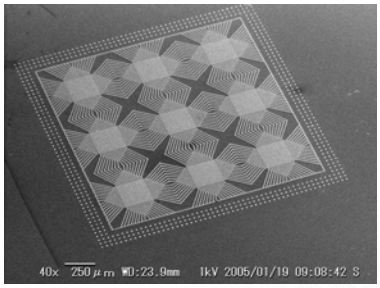
■Viscosity range ：0.5～10,000cps (non-heated) Wide range of viscosity！

■Large variety of usable fluids：Conductive ink, Insulating ink, Resist ink, UV ink, Solvent ink, Protein material, etc No special ink！

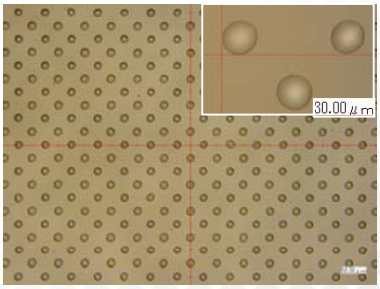
Patterning Example



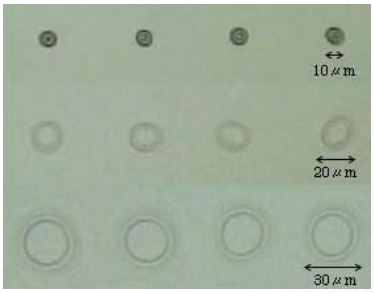
Silver ink, L/S=1μm



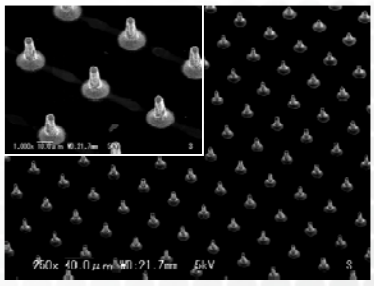
Circuit pattern



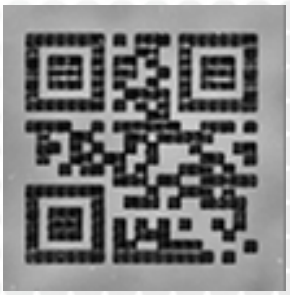
Microlens（resin ink）



Protein material （albumin）



Microbump
Diameter=5μm, Height=20μm



Micro QRcode（750μm×750μm）

AIST Start-Up
SIJTechnology, Inc.

ADDRESS
AIST Tsukuba Center 5,1-1-1 Higashi, Tsukuba, Ibaraki 305-8565,Japan

TEL／FAX	E-mail	URL
+81-29-855-7057	info@sijtechnology.com	www.sijtechnology.com/