

**TWO TECHNOLOGIES**

**ONE DISPENSE HEAD**

sciDROp PIC  / sciDROp NAN 

Enabling precision dispensing versatility through wide volume range

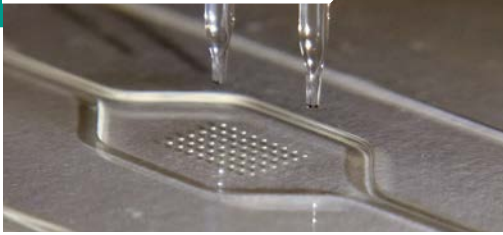


- Up to 8 fluidic channels in standard configuration
- Visual detection of single droplets and liquid jets
- Volume control through the optical detection or flow sensors
- Outstanding reproducibility of dispensed volumes (typically below 2%)
- Freely adjustable configuration and many software options
- From R&D to high-throughput production environment
- Both technologies can be installed in one sciFLEXARRAYER

**HIGH REPRODUCIBILITY, UNSURPASSED PRECISION & ACCURACY**

# sciDROPT TECHNOLOGY

## sciDROPT PICO



**sciDROPT PICO** meets the requirements of most sophisticated applications in R&D and manufacturing. High reproducibility of droplet volumes combined with unsurpassed precision, accuracy and multiple hardware & software options deliver seamless spotting performance during short and long printing runs.

## sciDROPT NANO



**sciDROPT NANO** is the perfect choice for printing larger spots, lines and coatings. Bulk dispensing or aspirate/dispense working mode can be employed depending on the application. Online volume measurement and control, quick and easy exchange of sample reservoirs and accurate positioning and stability underpin its performance.

Both technologies are **compatible with all sciFLEXARRAYER models** and can be both installed in a **single instrument**, covering a full range of precision dispensing applications

10 pL 100 µL  
Full volume range with sciDROPT PICO & NANO combined

	sciDROPT PICO	sciDROPT NANO
<b>Dispense Technology</b>	Non-contact piezo-acoustic dispensing	Non-contact dispensing with fast-response electromagnetic microvalve
<b>Dispense Mode</b>	Stop-and-spot, spot-on-the-fly, line printing, and predefined patterns	
<b>Volume</b>	10 pL* - 800 pL per single droplet	25 nL - 1 µL per single jet (flow rate 1.5 µL / cm)
<b>Individual Volume Range</b>	10 pL* - 70 nL	25 nL - 100 µL
<b>Combined Volume Range</b>	10 pL - 100 µL when both technologies are installed in one instrument	
<b>Volume Control</b>	Online optical detection	Online optical detection and flow sensor
<b>Viscosity Range</b>	0.4 - 20 mPas*	up to 25 mPas
<b>Spotting Frequency</b>	1 - 1500 Hz	1 - 50 Hz
<b>Dispensed Volume Reproducibility</b>	CV typically below 0.5%	CV typically below 2%
<b>Dispense Capillaries</b>	Medical-grade borosilicate glass with special coatings (depending on sample properties)	Medical-grade borosilicate glass with special coating
<b>Capillary Coatings</b>	Various coatings to ensure stable production runs. Optimal coating type will be determined in a demo.	Special capillary coating to ensure stable jet dispensing.
<b>Popular Substrates</b>	<ul style="list-style-type: none"> <li>• Biosensors</li> <li>• Microcantilevers</li> <li>• Microfluidic chips</li> <li>• LoAC &amp; POC devices</li> <li>• Microplates</li> <li>• Membranes</li> <li>• Glass &amp; polymer slides</li> </ul>	<ul style="list-style-type: none"> <li>• Biosensors</li> <li>• Microfluidic cartridges</li> <li>• Microplates</li> <li>• Microwells</li> <li>• Nitrocellulose sheets</li> <li>• Lateral flow membranes</li> <li>• Microneedles</li> </ul>

\*results obtained with optimized samples and configuration

Contact us for your free demo

Our team of experts will determine the optimal solution for your applications

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