

PRODUCT SHEET

Ginolis Kaste Multipump Rack

High-precision dispensing



Kaste Rack Precision Dispensing At Scale

Kaste – the Finnish word for dew, aptly represents our dispensing solution. Like tiny droplets glistening in the morning sun, our Kaste enlivens the applications it enables.

Kaste Rack – Expandable and versatile design supports up to 8 Kaste Nano Dispensers for scalable microfluidics. Seamlessly integrates with Ethernet/EtherCAT controllers and the full Ginolis software ecosystem. Ideal for benchtop use or fully automated production cells with robotic positioning systems.

Specifications

- Dispenser Capacity: Supports up to Kaste Nano I/II Dispensers in a single rack.
- Connectivity: Compatible with Ethernet and EtherCAT hardware controllers.
- Software Integration: Fully compatible with Ginolis firmware and software eco-systems
- Deployment Options: Designed for benchtop use and robotic system integration for fully automated production cells.

8 Dispensers

Serialize up to 8 Kaste Nano I/II dispensers in a single

1 nL

Extremely low dispensing volumes, think a drop in a stadium

1500 μ L

Precise enough to a one small squeeze of an eye-dropper

1 %

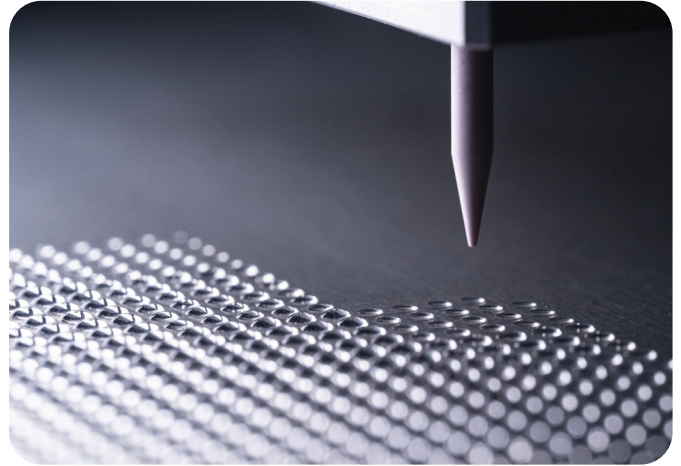
Ultra-precise Coefficient of Variability (CV), one-hundredth of a nanoliter that you can't distinguish under a microscope.

What are the benefits



Drive Scalable Automation

Designed for seamless integration into both Ginolis and third-party systems, the rack supports up to 8 Kaste Nano Dispensers for high-throughput, multi-agent dispensing. With Ethernet and EtherCAT compatibility, it minimizes setup time, enables parallel dispensing, and supports fully automated workflows, making it ideal for efficiently scaling microfluidics production.



Dispensing technology

The pump uses a mechanically actuated bellows system to deliver defined liquid volumes with high accuracy. Combined with a solenoid valve and ceramic tip, it enables rapid dispensing up to 100 drops per second, with full software control over volume and timing.

Technical data

The Kaste Nano is a compact, high-precision dispensing unit designed for both standalone use and seamless integration into automated platforms.

Dispenser Support

Dispenser Capacity

Dimensions (mm)

Weight (kg)

Power

Communication

Dispensing Range

Dispensing Accuracy

Interface

Auxiliary

Software Interface

Kaste Nano I and Kaste Nano II

Supports up to 8 Kaste Nano I/II Dispensing units

H 446.5 W 599 D 412.4

37 kg (4 pumps) / 41 kg (8 pumps)

1-phase 100-240 VAC/ 60 Hz, 10A

LAN

1nl - 190/1500 ul - Dependent on Kaste Nano I/II

<1% CV (>50 nl) <3% CV (@50 nl) <8% (@2,5 nl)

Ethernet/EtherCAT

Digital input and output

Compatible with Ginolis Ginger Software