

## NanoGenizer Laboratory-scale High Pressure Homogenizer, "Plug & Play" Unit

The NanoGenizer-30K from Genizer is an electric benchtop, laboratory-scale, high-pressure homogenizer, which has been developed specifically for bacterial and cell lysis (such as yeasts and E. coli). It aids laboratory research and development and small-scale production at ultra-high pressure (maximum pressure up to 45,000 psi/3,000 bar), and there is no requirement for hydraulic oil or compressed air. It is available in both the 3D-printing and stainless versions.



### Main Features of the NanoGenizer:

- Diamond interaction chamber technology
- Flow rate: ~ 100 ml/minute @ 30,000 psi
- Pressure: 25,000 psi, 30,000 psi and 45,000 psi
- Weight: approximately 35 kg
- Minimum sample volume: 5 ml
- Precision sampling as accurate as 0.1ml resolution
- Touch screen, PLC control panel
- Application: Nano emulsions, liposomes, fat emulsions, nano dispersion, cell disruption, deagglomeration, graphene, and carbon nanotube

The NanoGenizer features a microfluidics Diamond Interaction Chamber with nano-size microchannels inside the chamber where your formulation is subjected to forces of high shear and strong impact and result in nano particle dispersion and nano cell disruption. Using the Diamond Interaction Chamber technology, the NanoGenizer can be widely used in the pharmaceutical, biochemical, cosmetics, food and dairy industries among others. It can also support experimentations from particle size reduction to cell disruption, nano emulsions, nano dispersions, liposome and more.



**Technical Data:**

Catalog No.	NanoGenizer-25K	NanoGenizer-30K	NanoGenizer-45K
Flow rate (water value)	100mL/min	100mL/min	60mL/min
Min. Sample	5mL	5mL	5mL
Max. Pressure	25,000psi (1,725 bar)	30,000psi (2,068 bar)	45,000psi (3,102 bar)
Dimensions (cm)	70×36×30		
Weight	35 kg (77 lbs)		
Max. Temp.	80°C (176°F)		
Power	110V/220V		
Cleaning	Flush to clean		
Features	Digital display of pressure or pressure gauge		