

Dilase 3D

3D High Resolution Direct Laser Printer

*High resolution 3D lithographic laser system, the Dilase 3D offers the possibility to work in 3 dimensions. The Dilase 3D is the very first 3D printer able to produce **large objects** while still offering **micrometric resolution**.*

It is a perfect system for **fast prototyping**, allows to write as easily in thick layers as thinner layers with the **same verticality of edges** and **minimal roughness**, thanks to the **great depth of focus** resulting from the specific optical processing developed by Kloe.



Technological breakthroughs

High resolution objects with a great volume

100 x 100 x 50mm³

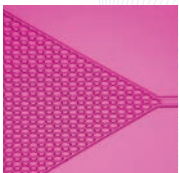
Two writing heads

One **micro-metric head** for high resolution.
One **head with a large diameter** to cover large surfaces at high writing velocities.

Writing modes: vector, scanning

Vectorial writing mode ensures a **perfect rendering of edges** without stitching nor roughness.

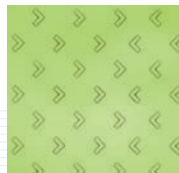
Related applications



Microfluidics



3D Biotechnology



Surface functionalization

Dilase 3D

3D High Resolution Direct Laser Printer

Performances

Beam size	5µm standard Until 2µm optional
Minimum Z-step	1µm
Linear writing speed	≥ 100mm.s ⁻¹
Address grid	100nm
Repeatability	100nm
Absolute positioning precision	3µm / 100mm
Orthogonality	<1mRad
Operating temperature	22°C +/- 2°C

Laser source

Wavelength	375nm or 405nm
Beam size available	1 or 2
Laser beam width combination available	2µm with 10µm 5µm with 20µm or 10µm with 60µm
Laser diode lifetime	Over 10 000 hours

Working/Writing surfaces

Sample holder	25 x 25mm ² , 50 x 50mm ² , 100 x 100mm ²
Working surface	Planar substrates up to 100 x 100mm ²
Thickness surface	Until 50mm
Volume object	100 x 100 x 50mm ³
Accepted substrate thickness	250µm to 10mm

Other features

- Size: 544(L) x 703(W) x 865(H)mm
- Weight: 140kg / 308lbs
- Writing modes: vectorial and scanning
- Power supply: 100V/240V - 50Hz/60Hz
- Accepted files format: STL
- Integrated design software: 3D Slicer and DilaseSoft
- Motorized focal length
- Writing step adjustable

