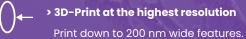
micrelight30

µFAB-3D

OPEN 3D-MICROFABRICATION PLATFORM BASED ON THE TWO-PHOTON POLYMERIZATION TECHNOLOGY







> A reliable technology

Achieve the highest performance with a compact, flexible and long-lasting industrial laser (no need for yearly maintenance).



> Print the most complex structures

Take advantage of a unique "real 3D printing" strategy thanks to our dedicated softwares.

> Adaptive resolution

Adapt the resolution during the fabrication. Use a big voxel to print faster, and a small one for the complex features.

> Align and print on optical fibers

Align and print on structured substrates, or on the tip of optical fibers of various dimensions.



> Upgrade from Standard to Advanced

Tight budget? No problem. Start with **µFAB-3D Standard**, upgrade easily to **µFAB-3D Advanced** later on.

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> MICROFABRICATION SYSTEM

Writing resolution, in the plane (XY) (voxel diameter)	Adjustable from 0.2 to 3 µm
Writing resolution, vertically (Z) (voxel height)	Adjustable from 0.6 to 10 µm
XYZ high-resolution writing-range (without stitching)	100 to 300 µm
Stitching & replication area (X,Y)	100 x 75 mm²
Maximum object height (Z)	Up to 20 mm (with long-range Z option)
Surface roughness	Down to 20 nm (with anti-vibration bench)
Writing speed	100 μm/s at high resolution 5 mm/s at lower resolution
Laser wavelength	532 nm
Compact system	W x L x H = 50 x 50 x 90 cm ³

> 3D SOFTWARE PACKAGE

PC and flat screen	Windows 11, 64 bits
Luminis software	Intuitive and powerful slicing tool for laser 3D-path optimization dedicated to TPP technology
Lithos-software	Machine control, replication, autofocus, alignment and other features

> OPTIONS AND ACCESSORIES

Printing materials

• Range of 10 proprietary photoresists (high resolution and high performance polymers, hydrogels, biocompatible materials...)

• Compatible with various commercial materials (Ormocomp, NOA, Formlabs resins...)

Long-range Z for printing up to 20 mm high structures

Custom sample holders: multiple samples, 2"/3"/4" wafers, multi-well plates, optical fiber ferrule...

Additional laser:

- 1064 nm Infrared laser
- Custom laser on demand

Anti-vibration bench



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