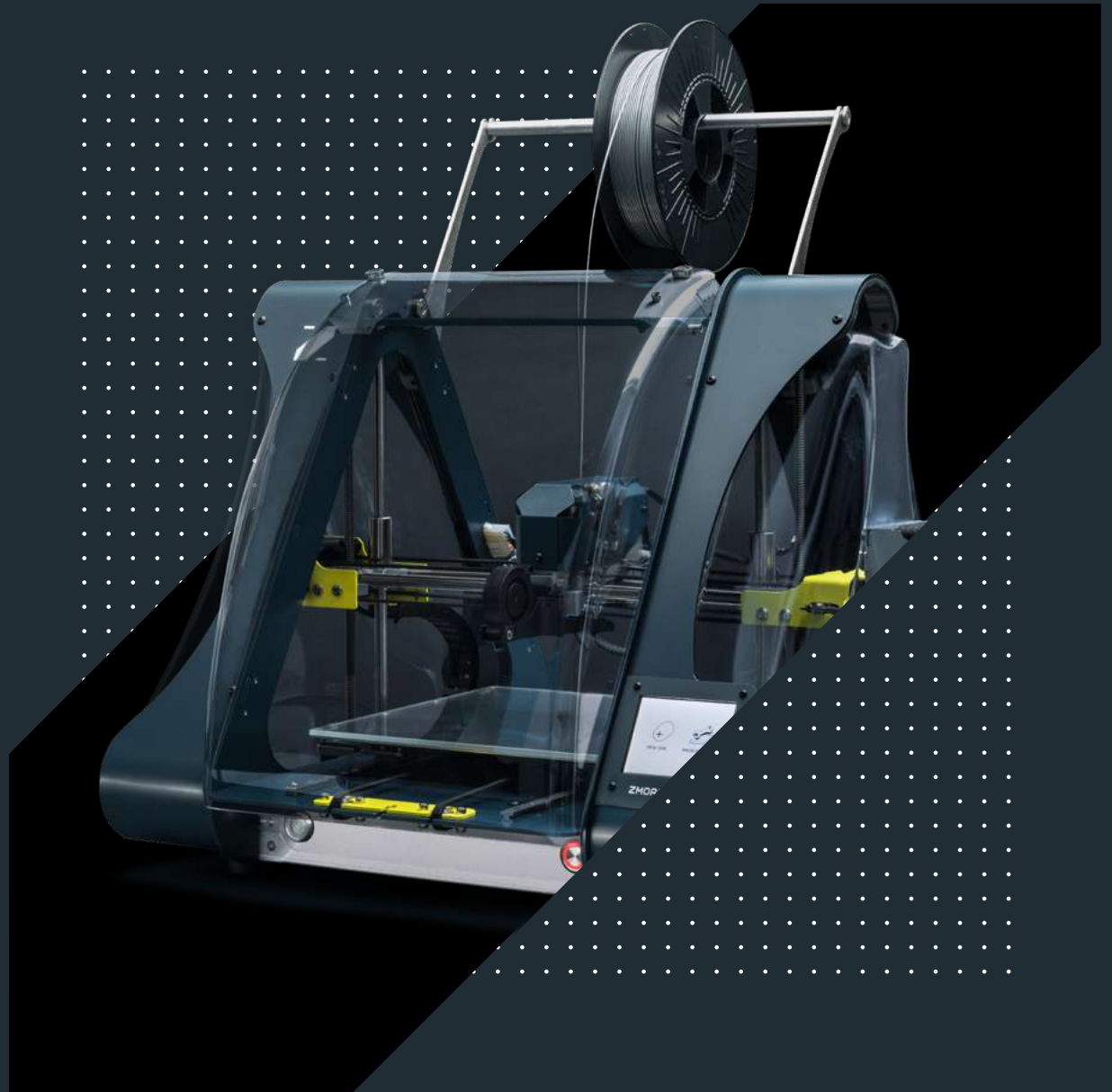


# ZMORPH FAB

All-in-One 3D Printer

DISCOVER  
ZMORPH FAB



# The Most Advanced All-in-One 3D Printer, Yet



# Three Tools in One Device for Learning and Prototyping



3D PRINTING



CNC MILLING



LASER CUTTING  
& ENGRAVING



Turn your desk into a workshop with Zmorph Fab All-in-One 3D Printer.

The interchangeable toolheads system and a wide variety of compatible materials make it the most versatile desktop 3D printer on the market.

Read further to learn about all its features and functions.

# Hassle-Free 3D Printing



## 3D PRINTING

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- 01 The new Single Extruder Toolhead features filament sensor for easier maintenance, and improved airflow for faster overhangs 3D printing.
- 02 Autocalibration makes 3D printing easy and fast, even for beginners.
- 03 Super-flat borosilicate 3D printing bed heats up to 115°C, which improves the first layer adhesion in more advanced materials such as ABS or TPE.
- 04 Zmorph Fab works with almost every plastic filament available on the market. Multi-material capabilities let you 3D print with water-soluble supports.

# Precise CNC Milling for Professionals



## CNC MILLING



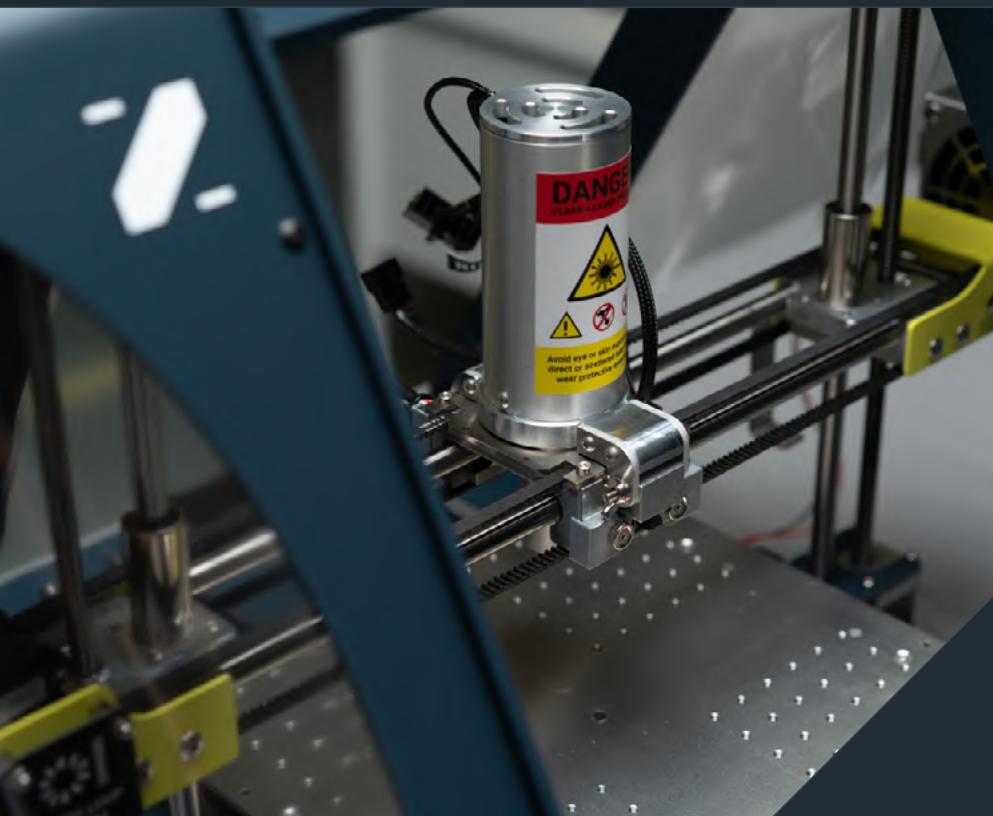
- 01 Heavy-duty aluminum plates provide amazing rigidity and keep electronics safe from dust and leftovers from CNC machining.
- 02 The sturdy construction is designed to deliver both 3D printing and withstand CNC operations.
- 03 Reinforced Cartesian XZ-head motion system doubled up with dual glass-fiber-reinforced belts.
- 04 Support for a wide variety of engineering materials - wood, composites, soft plastics, even soft metals.
- 05 The all-new CNC worktable offers a convenient materials mounting system, great stability, and is open for custom user designs.



# Clean Laser Cuts and Engravings



## LASER ENGRAVING AND CUTTING



- 01 2.8 W blue laser diode.
- 02 Light and compact design with CNC-cut aluminum body.
- 03 Easy to use, especially with the all-new CNC worktable. Safely set up materials of different dimensions and thickness with the new mounting system.
- 04 Great toolhead for in-house PCBs production.
- 05 Use the laser workflow for art, decorations, educational materials, signage, and customization.

# Lots of Reasons in One Device



## CNC Environment

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Zmorph Fab is equipped with a professional CNC worktable with a simple solution for materials mounting. The software features CAM-standard workflow for CNC procedures with STEP operations, ability to change the tool within one G-code, and path visualisation.



## Seamless UI

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Accessible and intuitive user interface is designed for both professionals and first-timers. Effortlessly maneuver through the menu.



## Voxelizer

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The all-in-one software for 3D printing, CNC milling, and laser engraving and cutting. Voxelizer has an optimized workflow for Zmorph 3D printers ensuring the best and fastest results.



## SMART Toolheads

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Changing workflows in Zmorph Fab is fast and easy with the automatic toolhead detection. Switching tools takes just a few easy steps and no more than a minute.



## Quiet Work

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Behind the quiet work stands the design of the 3D printer enhanced by high-quality electronics and carefully programmed drivers.



## Air Filtration

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Removable Carbon/HEPA filters disintegrate semi-toxic fumes and particles released by melted filaments during 3D printing and during laser engraving. Zmorph Fab will let you know when the filters need to be changed.

# Voxelizer Software

Get the most out of Zmorph Fab with the dedicated slicing software.

Voxelizer covers all workflows available in Zmorph All-in-One 3D Printers in one software.

Use materials presets for Zmorph Fab or make your own.



Work with upgraded CAM-standard CNC workflow with STEP operations, ability to change the tool within one G-code, and path visualisation.

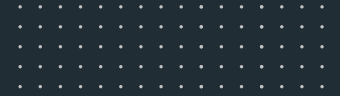
Control your designs with local settings and advanced support structures.

GET VOXELIZER →



# Materials

Zmorph Fab opens unlimited possibilities unavailable for single-purpose 3D printers. Choose from over 50 materials like plastic filaments for 3D printing, soft metals for CNC milling, and textile materials for laser engraving. Zmorph Fab can do it all.



## 3D PRINTING MATERIALS



## CNC MILLING MATERIALS



## LASER ENGRAVING MATERIALS



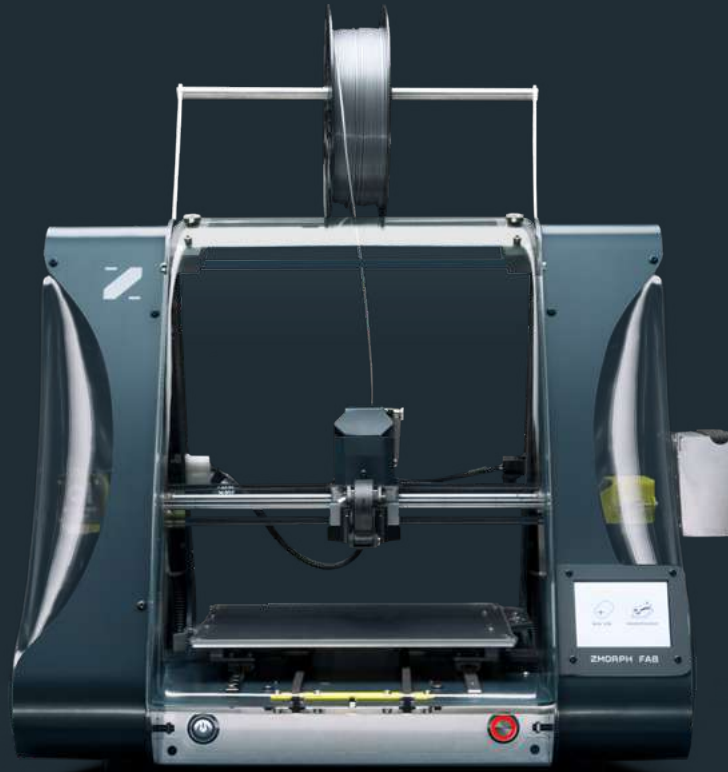
# | Designed for Reliability



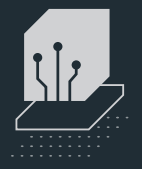
**HASSLE-FREE  
3D PRINTING**



**STELLAR BUILD  
QUALITY**



**ALL-IN-ONE  
SOFTWARE**



**INDUSTRY-STANDARD  
ELECTRONICS**

# Products Trusted by Educators, Designers and Engineers



A beast of a machine  
in more ways than one

A113DP



The all in one tool for  
workshops, schools and  
FabLabs

3D Printing Industry



A prototyping Holy Grail

3D Maker Noob

# | Available All Over the World



## RESELLERS

Zmorph Fab is available worldwide through a network of authorized companies that distribute Zmorph machines, branded materials, accessories and spare parts.

Visit our website to find the nearest Zmorph reseller.

[FIND RESELLERS](#) →

# Technical Specifications

## 3D PRINTING

3D printing technology	FFF (Fused Filament Fabrication)
Toolheads	Single Extruder Toolhead 1.75, Dual Extruder Toolhead
Layer resolution	0.05 - 0.4 [mm] *
Maximum printing temperature	250 [°C]
Work area	235 x 250 x 165 [mm]
Maximum bed temperature	115 [°C]
Minimum wall thickness	0.4 [mm] *
Dimensional accuracy	+/- 0.2 [mm]
Work area leveling method	Automatic, Manual
Material container	Spool, reel
Material diameter	1.75, 3.00 [mm]
Nozzle diameter	0.3, 0.4, 0.6 [mm]
Support structures	Mechanically and chemically removed - printed with the same material as the model
Connectivity	USB, Ethernet, SD card
Available Materials	PLA, ABS, PET, Nylon, PVA, HIPS, ASA, TPE, PP, PC, PMMA, PC/ABS
Third party materials	Applicable
Work speed	40 [mm/s]
Travel speed	120 [mm/s]

## CNC MILLING

Toolhead	CNC spindle
Spindle max power	300 [W]
Noise	70 [dB]
Work area leveling method	Manual
Work area	235 x 250 x 85 [mm] **
Work speed	0.1 ~ 20 [mm/s]
Travel speed	120 [mm/s]
Available Materials	ABS, Nylon, HDPE, PTFE, PC, PP, POM, PMMA, PVC, HIPS, LDPE, PET, Carbon, CCL FR4, Dibond, TCF, Wood, Wood-like, Aluminum, Brass, Copper, Cardboard, Wax, Modeling board, Styrodur
Tool holding	ER-11 collet

## LASER ENGRAVING / CUTTING

Toolhead	Laser
Laser spot size for 50mm	0.1 x 0.1 [mm]
Laser spot size for 80mm	0.1 x 0.18 [mm]
Wavelength	450 [nm]
Laser class	4
Laser power	2.8 [W]
Noise	40 [dB]
Work area leveling method	Manual
Work area	235 x 250 x 85 [mm]
Work speed	15 [mm/s]
Travel speed	120 [mm/s]
Available Materials	Wood, wood-like, leather, EPP, paper, cardboard, felt, foil, laminate, EVA Foam, CCL FR4***

# Technical Specifications

## WEIGHT AND PHYSICAL DIMENSIONS

Printer without a spool holder	520 x 500 x 450 [mm]
Printer with a spool holder	520 x 500 x 570 [mm]
Printer with a HEPA filter	570 x 500 x 570 [mm]
Dimensions of the transport box	600 x 600 x 570 [mm]
Full set weight	28.70 [kg]
Printer weight	14.45 [kg]
Single Extruder Toolhead 1.75 weight	0.70 [kg]
Dual Extruder Toolhead	1.00 [kg]
CNC Milling Toolhead	0.90 [kg]
Laser Toolhead	0.32 [kg]
Thick Paste Extruder Toolhead	0.60 [kg]

## ELECTRICAL PARAMETERS

AC Input	100 [VAC] ~ 4 [A] 50/60 [Hz] 240 [VAC] ~ 2 [A] 50/60 [Hz]
Maximum Power Consumption	350 [W]
Power Consumption with single-head extruder	220 [W]
Power Consumption with Dual-head extruder	230 [W]
Power Consumption with CNC toolhead	330 [W]
Power Consumption with Laser toolhead	80 [W]

## SOFTWARE

Software Bundle	Voxelizer
Supported File Types	.stl, .obj, .step, .dxf, .png, .bmp
Supported Operating Systems	Windows 7/10 (64 bit) or higher macOS 10.13 or higher

## FILTRATION PARAMETERS

Filter type	HEPA/Carbon
Ventilation power	1.54 [W]
Filter dimensions	80 x 80 x 25 [mm]
Filter system dimensions	85 x 85 x 50 [mm]
Filtration control	Temperature

## TEMPERATURE PARAMETERS

Ambient Operation Temperature	15 ~ 30 [°C]
Storage Temperature	-10 ~ 40 [°C]



# | Contact



[T] +48 71 33 68 923

[M] [sales@zmorph3d.com](mailto:sales@zmorph3d.com)

[www.zmorph3d.com](http://www.zmorph3d.com)

