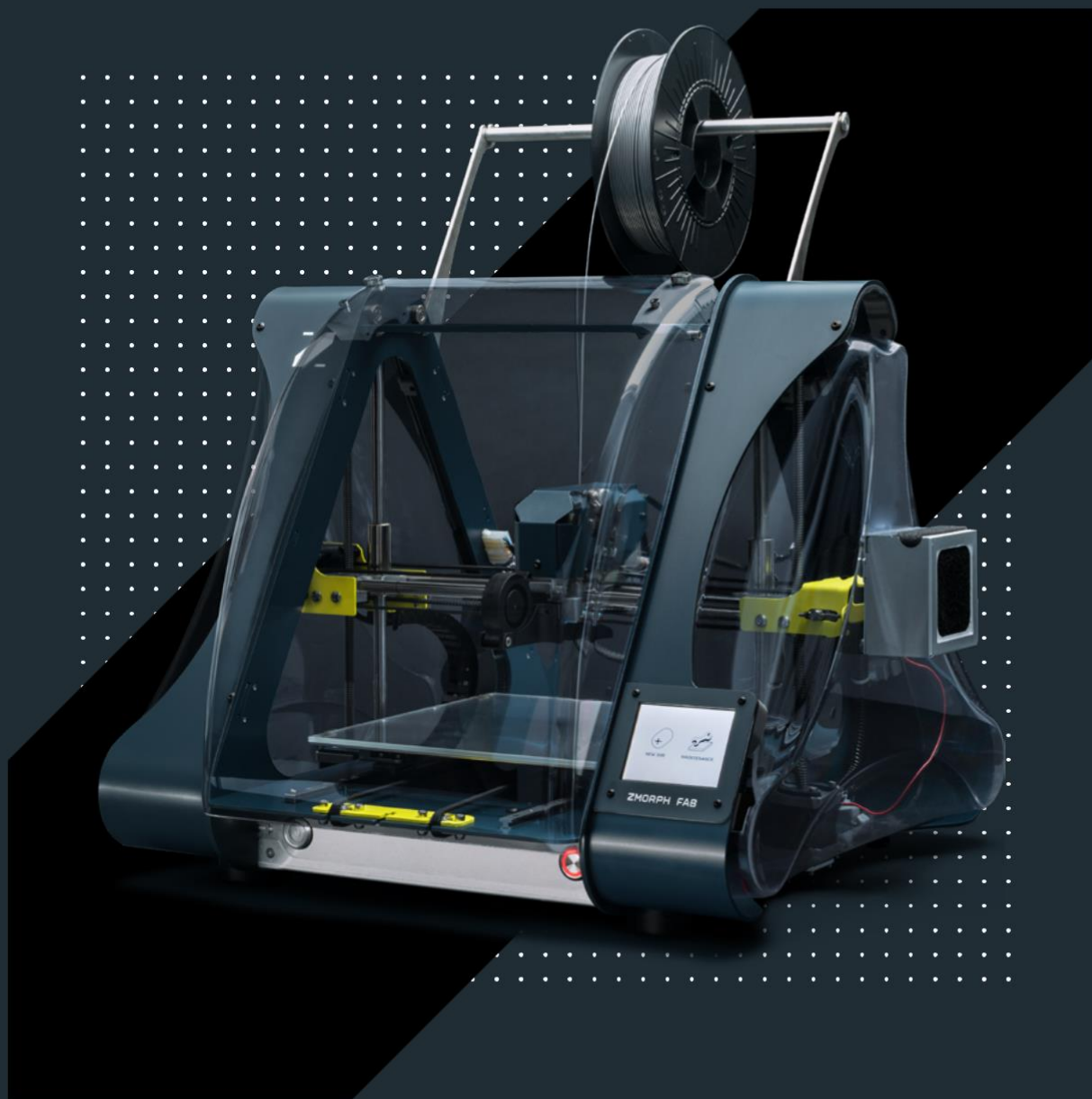




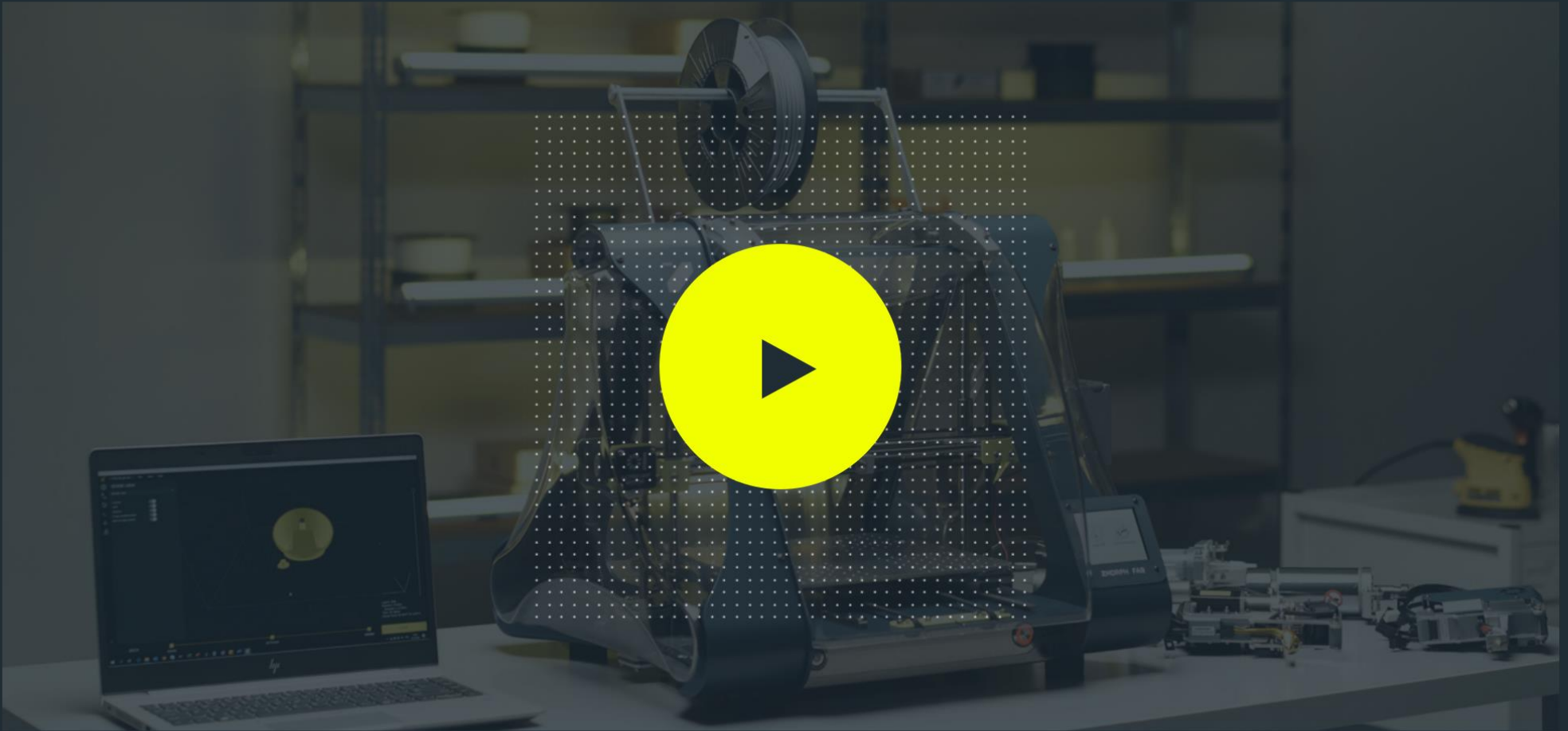
# ZMORPH FAB

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

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- 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

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

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



## Voxelizer

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

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

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



## Air Filtration

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

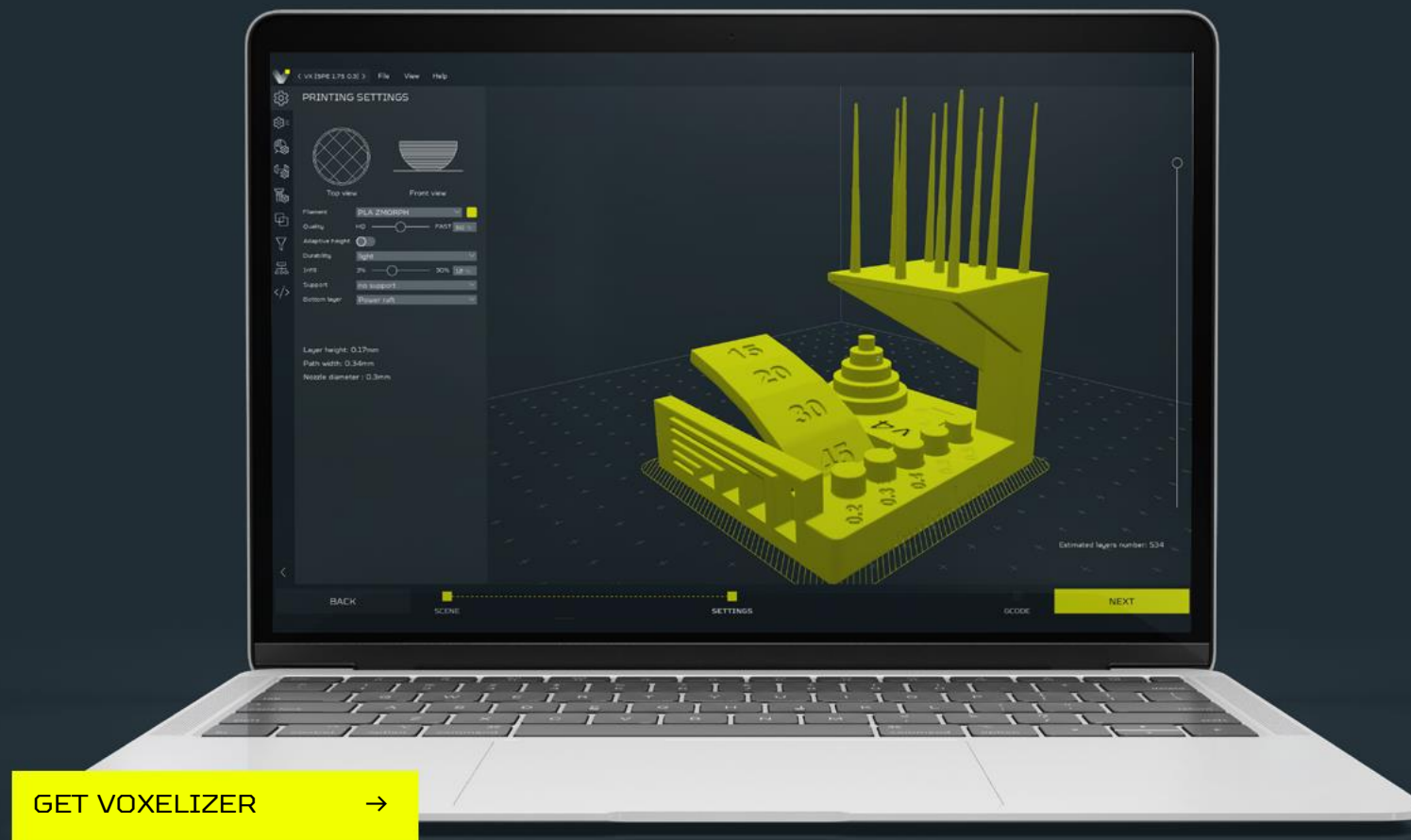
Zmorph Fab or make your own.

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

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Control your designs with local settings and advanced support structures.



GET VOXELIZER

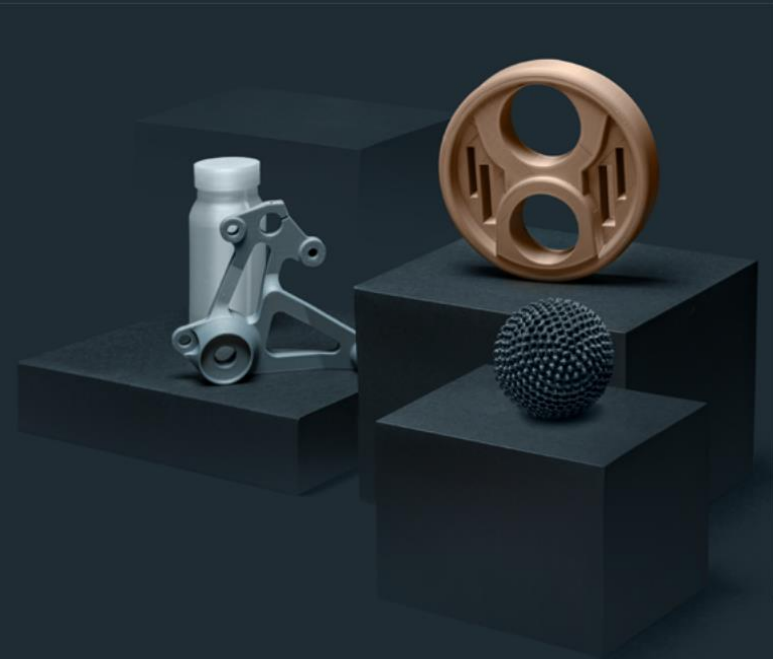


# Materials

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



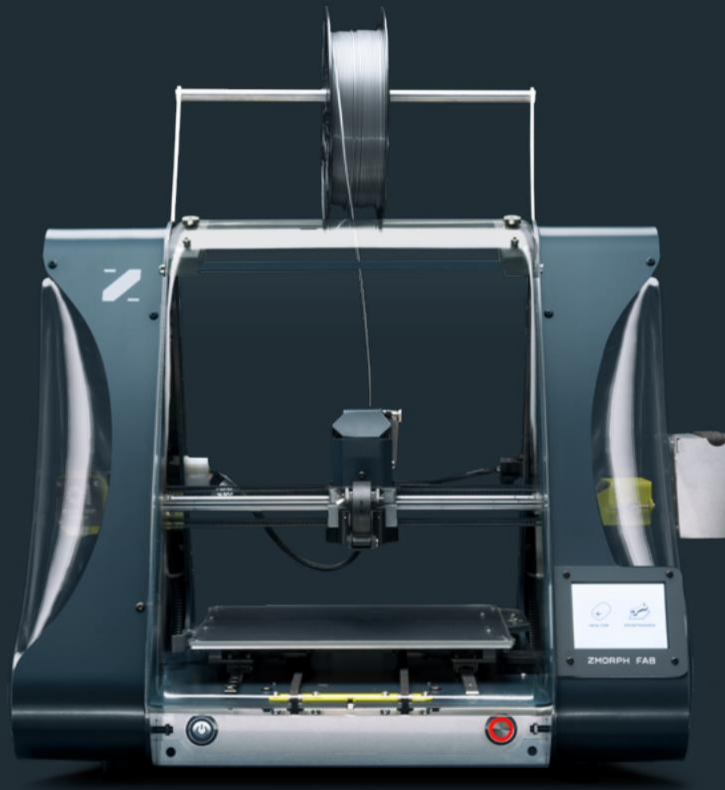
# | Designed for Reliability



**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**

AIIDP



The all in one tool for  
workshops, schools and  
**FabLabs**

3D Printing Industry



A prototyping Holy Grail

3D Maker Noob

## A world map with a dark blue background and light gray country borders. Twenty countries are highlighted with yellow squares. The highlighted countries are: United States, Mexico, Canada, Brazil, Argentina, Chile, Spain, Portugal, France, Germany, Poland, Czech Republic, Slovakia, Austria, Hungary, Switzerland, Italy, Greece, Turkey, Russia, China, India, Japan, South Korea, Taiwan, Hong Kong, Singapore, Malaysia, Indonesia, Philippines, Vietnam, Laos, Cambodia, Thailand, Myanmar, Bangladesh, Pakistan, Afghanistan, Iran, Iraq, Saudi Arabia, United Arab Emirates, Qatar, Oman, Yemen, Oman, Kuwait, Bahrain, Brunei, and Australia.

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.

→

# 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]<br>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<br>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] (02) 4721 6500

[M] [sales@torstar.net.au](mailto:sales@torstar.net.au)

<https://torstar.net.au>

