ZMorph VX Multitool 3D Printer Technical Specification

Weight and physical dimensions

Printer without a spool holder 520x500x450 [mm]

Printer with a spool holder 520x500x570 [mm]

Dimensions of the transport box 600x600x570 [mm]

Full set weight 28.50 [kg]

Printer weight 14.25 [kg]

Single-material head weight 0.64 [kg]

Dual-material head weight 1.00 [kg]

CNC head weight 0.90 [kg]

Laser head weight 0,32/[kg]

Thickpaste weight 0.60 [kg]

Electrical parameters

AC Input 100VAC ~ 4A 50/60Hz 240VAC ~ 2A 50/60Hz"

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]

Machine parameters (3D printing)

Printing technology FFF - (eng. Fused Filament Fabrication)

Single-material 1.75 [mm], Dual-material 1.75 [mm], Toolhead

Single-material 3.00 [mm] *

Layer resolution 0.05 - 0.4 [mm] **

Minimum wall thickness 0.4 [mm] **

+/- 0.2 [mm] Dimensional accuracy

Work area leveling method Automatic, Manual

Work area 235x250x165 [mm]

Material container Reel

Material diameter 1.75, 3.00 [mm]

Nozzle diameter 0.2, 0.3, 0.4, [mm]

Mechanically removed printed with the same material as the model and chemically removed with dissolvable materials PVA Support structures

and HIPS

USB, Ethernet, SD card Connectivity

PLA, ABS, PET-G, Nylon, HIPS, ASA, PMMA, TPE, PC, PC/ABS, PP, Available Materials

PVA, ASAX

External Materials Applicable

Work speed $0.1 \sim 40 \text{ [mm/s]}$

Travel speed 120 [mm/s]

Temperature parameters

Maximum Printing Temperature (extruder) 250 [°C]

Maximum Printing Temperature (Bed) 125 [°C]

15 - 30 [°C] **Ambient Operation Temperature**

0-35 [°C] Storage Temperature

Machine parameters (milling)

Toolhead CNC spindle

Spindle max power 300 [W]

Noise 70 [dB]

Work area leveling method Manual

Work area 235x250x85 [mm] ***

Work speed $0.1 \sim 20 \text{ [mm/s]}$

Travel speed 120 [mm/s]

ABS, Nylon, HDPE, PTFE, PC, PP, POM, PMMA, PVC, HIPS, LDPE,

PET, Carbon, CCL FR4, Dibond, TCF, Wood, Plywood, Wood fibre

boards, Aluminum, Brass, Copper, Cardboard, Machining Wax,

Modelling Board, Styrodur

Collet ER-11

Machine parameters (laser engraving)

Available Materials

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 235x250x85 [mm]

Work speed 0.1 ~ 15 [mm/s]

Travel speed 120 [mm/s]

Available Materials

Leather, Felt, Laser Foil, Cardboard, Foamiran, Wood fibre boards, Plywood, Wood, EPP, EVA Foam

Software

Software Bundle

Voxelizer

Supported File Types

.stl, .obj, .step, .dxf, .png, .bmp

Supported Operating Systems

Windows 7/10 / Mac OS / Linux

- * Available on special order
- ** Depending on the diameter of the nozzle
- *** depending on the mounted endmill



