ZMorph 2.0 VX

Construction

- Frame made out of high quality aluminum 4 mm and 3 mm (precise and very rigid), stainless steel 2 mm and 3 mm. Covers made from 3mm PET.
- High precision sliding rails on X and Y axis, made from structural steel. Omron end stops.
- Precisely machined aluminum X carriage, rigid and durable.
- Interchangeable nozzles: 0.2 mm, 0.3 mm, 0.4 mm.
- Interchangeable tool heads.
- Interchangeable worktables: 3D printing worktable and CNC/laser worktable.
- Non-slip trapezoidal nuts on Z axis made out of high quality POM
- Heated worktable: super-flat, precisely machined working table with exchangeable borosilicate glass sheets. Temperature up to 100C.
- CNC worktable: durable and rigid, machined in aluminum, equipped with pre-set holes and clamps for material positioning.
- Add-on slot.

Dimensions

- Working area: 250 x 235 x 165 mm (tool head dependent).
- Dimensions: 530 x 555 x 480 mm.
- Weight: 20 kg with packaging (Printing Set).
- Mechanical positioning precision
- 14 microns for X and Y axes, 0.6 microns for Z axis.

Layer resolution

- 50 - 400 microns.

Electronics

- Sunbeam 3.0 with ARM LPC1769 processor, equipped with 5 stepper motor drivers. Internal disc drive accessible via USB.
- Silent X and Y stepper drivers - reducing motor noise by 50%
- Tensometric autocalibration.
- LCD color touchscreen.

Communication

- USB. Standalone printing supported via panel + internal SD card.

Software

- Compatible with: Voxelizer, Simplify3D, Cura, Slic3r.

Other

- ER-11 collet in CNC Pro Toolhead
- Maximum 3D printing temperature: 250 C

Laser PRO

- Laser class: class 4
- Construction: High quality CNC-milled aluminum
- Laser type: 2.8W Blue Laser
- Default work speed: 15 mm/s
- Max work speed: 120 mm/s
- Work area: 250 x 235 x 85 mm
- Recommended cutting depth: 1 mm for cardboard
- Max cutting depth: 5 mm for cardboard
- Dimensions: 90 x 55 x 165 mm

CNC PRO

- Construction: Stainless steel housing
- Spindle motor: DC motor
- Hot End: ER-11 COLLET
- Power: 300 W
- Default work speed: 5 mm/s
- Max work speed: 120 mm/s
- Work area: 250 x 235 x 85 mm
- Recommended cutting depth: 0.5 mm for soft wood and polymers
- Max cutting depth: 15 mm for ø 3 mm bit
- Dimensions: 90 x 55 x 175 mm

DUAL PRO

- Construction: High-quality 3 mm aluminum frame
- Hot End: interchangeable Mixer Hotend
- Temperature control: 1 thermistor
- Temperature range: 0 – 250C
- Nozzle: 0.4 mm
- Motor: Nema 11 stepper with planetary gear x2
- Extrusion: Direct Drive
- Work area: 250 x 235 x 165 mm
- Recommended printing resolution: 0.2 mm
- Supported printing resolution: 0.025 – 0.4 mm
- Extruder dimensions: 170 x 115 x 70 mm

1.75 mm Plastic Extruder

- Construction: High-quality 3 mm aluminum frame
- Hot End: ZMorph interchangeable nozzle 1.75 mm
- Temperature control: 1 thermistor
- Temperature range: 0 – 250C
- Nozzles: 0.2, 0.3, 0.4 mm
- Motor: Nema 17 stepper
- Extrusion: Direct Drive
- Work area: 250 x 235 x 165 mm
- Recommended printing resolution: 0.2 mm
- Supported printing resolution: 0.025 – 0.4 mm
- Extruder dimensions: 135 x 115 x 55 mm

Thick Paste Extruder

- Construction: High-quality 3 mm aluminum frame
- Nozzle: 2 mm, 4 mm
- Motor: Nema 17 stepper
- Default work speed: 10 mm/s (depends on the material)
- Extrusion: Direct Drive
- Work area: 250 x 235 x 165 mm (without covers)
- Recommended printing resolution: 2 mm layer height (2000 microns)
- Supported printing resolution: 0.5 - 4 mm layer height (500 - 4000 microns)
- Material capacity: 100 ml
- Dimensions: 90 x 55 x 271 - 380 mm