Modix
Large 3D Printers

Technical Specifications

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General

Technology	FFF: Fused Filament Fabrication
Print volume metric (XYZ)	1,010x1,010x1,010 mm / ~40 x 40 x 40 inch
Machine size (WxDxH) with enclosure	1,300x1,470x1,830 mm / ~52x58x72 inch
Shipping weight	200 KG
Assembly	Self-Assembly
Closed print chamber	Included
Enclosure type	Aluminum composite panels (ACP), 3mm thick. Polycarbonate doors and top lid
Feet	Articulated leveling feet included Casters included

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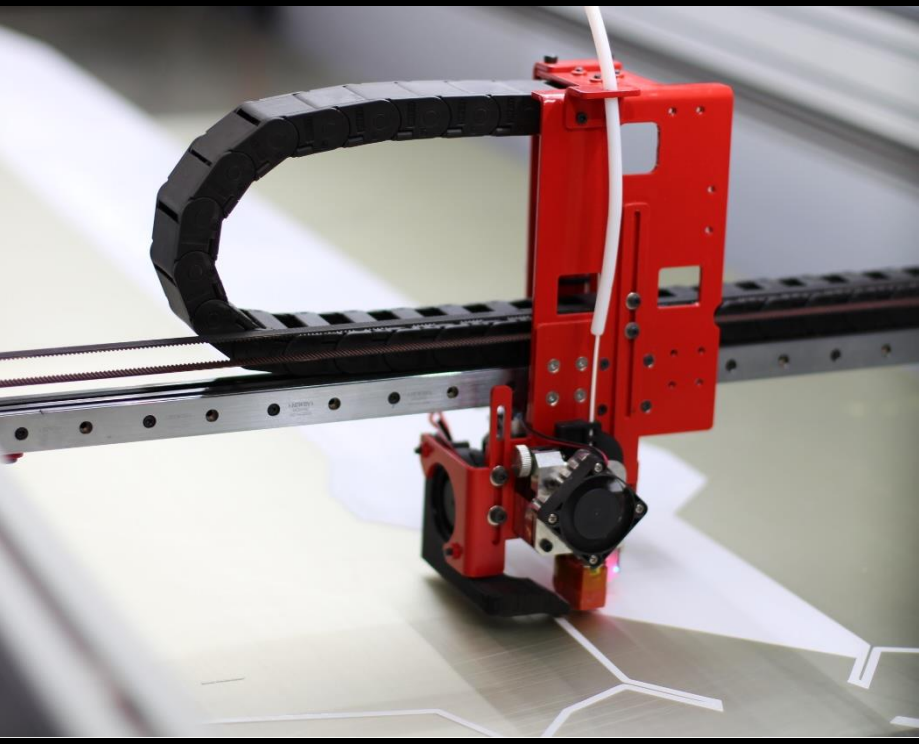

Print Head

Number of print heads	One print head is included, secondary - optional
Default filament diameter	1.75mm, can be converted to 3mm by the user
Extruder brand & model	E3D Aero Extruder (direct drive)
Hotend brand & model	E3D Volcano, optional add-ons: V6 (detailed) and E3D Super-Volcano (high flow)
Included nozzles (mm)	0.4, 0.6, 0.8 Primary hotend 0.4 for Secondary hotend
Hotend max. temperature	285°c
Optional max hotend temp.	500°c, requires PT100 thermistor add-on
Extruder motors	Motech MT-1703HS168A Direct drive extruders gear reduction of 1:3
Filament runout sensor	Dedicated sensor per extruder

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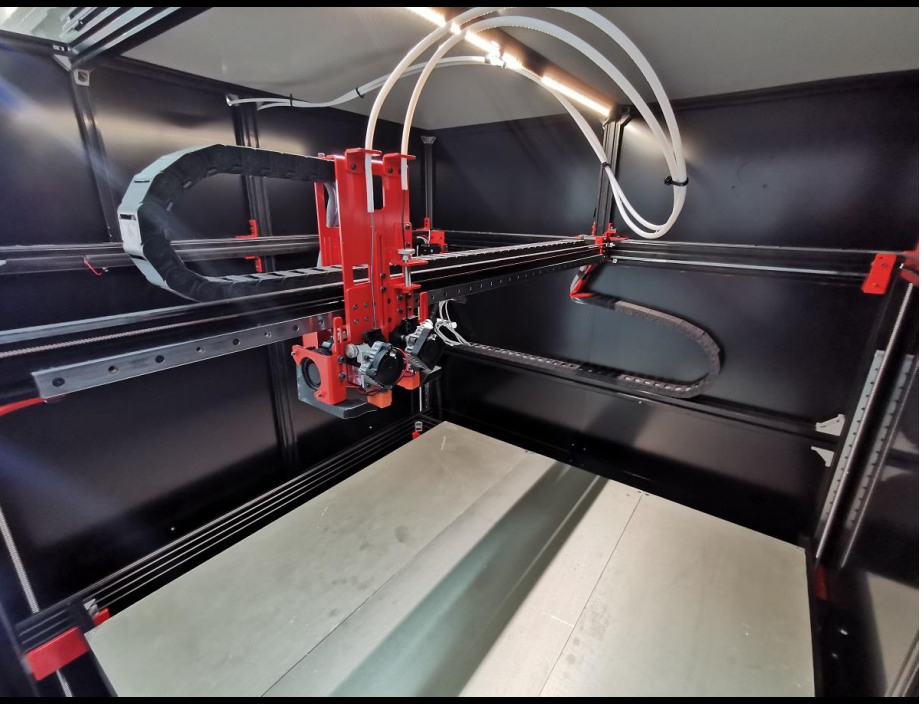

Motion

X & Y axis linear guides	HIWIN MGW9
Z axis guides	Smooth Rods included. HIWIN MGW9 optional
X & Y axis drive system	Gates GT2 width: 9mm, fiberglass reinforced
Z axis drive system	SFU1204 Ball screw 2:5 belt gear reduction
X axis motors	2 X Motech MT-1705HS200A
Y axis motor	1 X Motech MT-1705HS200A
Z axis motors	4 X Motech MT-1705HS200A
Resolution (XYZ)	4 X 4 X 0.5 micron
Printing speed	Up to 150mm/s Depends on nozzle & layer height
Printing acceleration	Up to 1000 mm/s^2

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Print Bed

Bed plate	Alcoa Mic-6, 6.35mm milled cast aluminum plate
Number of heaters	3 X AC heaters, 1,000 Watt each
Temperature controller	Autonics TCN4 PID controller
Maximum bed temperature	120^{o}c
Bed leveling probe	BL touch probe
Bed leveling	Automatic. Bed shape is measured by probing 100 different points.
Bed tilt leveling	Semi-Automatic, guided by an on-screen macro
Bed motion system	4 x ball-nut screws. Each screw is mounted to a dedicated stepper motor with a belt gear system

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Electronics

Electronic controller	Duet3D: Duet2 Wifi
User interface	7” Touch screen – PanelDue from Duet3D
Remote control (WiFi)	Upload Gcode files right from your desktop
Direct connectivity	SD Card, USB cable
Ethernet	Optional with Duet3D Ethernet board. Should be purchased and replaced by customer
Electronics (DC) power	Meanwell 24V/280Watt power supply powering the electronic and motion system. Universal AC input: 110-230V, 50/60 Hz
Bed heaters (AC) power	Minimal Electricity requirements: 32A, single phase, 208-240V: N. America customers: NEMA L6-30P outlet EU/AU/UK : IEC 309 32A Blue (2P+E) outlet