

CNC MECHANICS

Machine size	540 mm (depth - Y) 410 mm (width - X) 400 mm (height - Z)
Axis	3 (X, Y, Z)
Motion Drive	trapezoidal lead screw, linear rods with ball bearings
Motors	Nema23
Movement resolution	0.01mm (theoretically achievable 0.001mm)
Maximal number of extruders*	3

*NOTE: Extruders can be mounted on any 3-axis CNC platform, therefore the working area and maximal number of extruders can be changed if needed.

EXTRUDER SPECIFICATIONS

Axis	2
Motion	Z - movement (optional) E - extrusion
Motors	Z - Nema11 E - Nema11 Planetary gearbox
Z-movement resolution	0.01mm (theoretically achievable 0.001mm)
Cartridge	5mL luer-lock syringes (PP)
Extrusion resolution	0.01mm (1.2 μ L for 5mL syringe)
Nozzle	Gauge needle
Heating	Room temperature - 250°C or to the capabilities of cartridge material (optional)

CONTROL ELECTRONICS

Controller	PlanetCNC Mk3 (9-axis)
Control Software	PlanetCNC CNC USB Controller
Power Requirements	230/110V AC
OS	Windows/Linux/RPi
Print file type	G-code

PRINTING PARAMETERS

Printing Volume (X x Y x Z)**	200mm x 300mm x 45mm
Printing Speed	Max 2600mm/min (typical 500mm/min)
G-code file	Generated by Slic3r software from STL file

**NOTE: Printing volume depends on the amount of extruders that are being used simultaneously

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