

FIBER™

Printer specifications

Fiber™ is the only composite 3D printer to use micro automated fiber placement (μAFP)—unlocking unparalleled composite part strength for a desktop printer. Featuring closed loop heat control, the μAFP head constructs a high-density, continuous fiber reinforcement while the FFF printhead enables a high-resolution exterior shell.

Utilizing tapes made with 12k continuous fiber tows, up to 60% fiber volume fraction, and exceptional resin impregnation, Fiber™ is able to achieve continuous fiber reinforcement with less than 1% porosity—delivering parts with 2x the strength of steel at 1/2 the weight of aluminum.

TECHNOLOGY	Print technologies	Micro Automated Fiber Placement (μAFP) Fused filament fabrication (FFF)
	Print system	CoreXY with automatic tool changer
PERFORMANCE	Max build rate	20 cm ³ /hr 1.2 in ³ /hr
	Layer height	<ul style="list-style-type: none"> • 50-200 μm • 100 μm <small>Default</small>
	Max build weight <small>for all parts in job</small>	10 kg 22 lbs
PHYSICAL	External dimensions	586 x 620 x 863 mm 23.0 x 24.4 x 34.0 in
	Weight	60 kg 132 lbs
	Build envelope	310 x 240 x 270 mm 12.2 x 9.4 x 10.6 in (FFF only) 290 x 210 x 270 mm 11.4 x 8.3 x 10.6 in (μAFP-reinforced)
	Build plate	Heated, up to 149 °C 300 °F
	Print sheets	Coated 1075 Spring Steel <small>Magnetic</small> 0.45mm 0.018in
	Nozzle diameter	0.40 mm
	Power requirements	100-120 VAC, 50/60 Hz, 15 A, 1-phase
	Onboard control	7-inch touchscreen display
MEDIA	FFF build media	Thermoplastic filament / Chopped fiber 1.75 mm diameter 0.07 in
	μAFP build media	Thermoplastic μAFP prepreg tape / Continuous fiber 3 mm wide 0.12 in
PLATFORM	Network connectivity	Ethernet, USB
	Software	Fabricate™ software; runs on Windows 8 or 10, Mac OSX 10.11.x or higher, Linux
	Browser requirements	Accessible via any web browser
	Supported file types	STL, IGES, JT, STEP, OB, SAT and native file types (SolidWorks, ProE, Autodesk, CATIA, etc.)

DIMENSIONS

