

Raise3D E2CF Technical Specifications

Raise3D E2CF is an IDEX 3D printer optimized for 3D printing carbon fiber reinforced filaments. Carbon fiber reinforced filaments have the advantages of low density, high strength, corrosion resistance, static resistance, and high temperature resistance, making E2CF a potential for a wide range of applications within industries that require a considerable strength-to-weight ratio in their solutions.

Printer	Raise3D E2CF		
Build Volume (W × D × H)	Single Extruder Print		Dual Extruder Print
	330 × 240 × 240 mm (13 × 9.4 × 9.4 inch)		295 × 240 × 240 mm (11.6 × 9.4 × 9.4 inch)
Machine Size (W × D × H)	607 × 596 × 465 mm (23.9 × 23.5 × 18.3 inch)		
Weight (Raise3D Filament Dry Box not included)	Net Weight	Gross Weight (Carton Only)	Gross Weight (Carton with Pallet)
	36.6 kg (80.7 lbs)	43.1 kg (95.1 lbs)	50.6 kg (111.6 lbs)
Electrical	Power Supply Input	100-240 V AC, 50/ 60 Hz 230 V @ 2 A	
	Power Supply Output	24 V DC, 350 W	
General	Print Technology	Fused Filament Fabrication (FFF)	
	Print Head System	IDEX Independent Dual Extruders	
	Filament Diameter	1.75 mm	
	XYZ Step Size	0.78125, 0.78125, 0.078125 micron	
	Print Head Travel Speed	15-150 mm/s	
	Build Plate	Flexible Steel Plate with BuildTak	
	Max Build Plate Temperature	110°C	
	Heated Bed Material	Silicone	
	Build Plate Leveling	Mesh-leveling with Flatness Detection	
	Filament Run-out Sensor	Available	
	Layer Height	The E2CF is compatible with 0.4, 0.6 and 0.8 mm nozzles, and the layer height can vary between 0.1-0.5 mm. To achieve stable print results, when using 0.4 mm nozzles, we recommend using a layer height between 0.1-0.3 mm.	
	Nozzle Diameter	0.4 mm (Default), 0.6/ 0.8 mm (Available)	
	Hot End	V4P	
	Max Nozzle Temperature	330°C	
	Connectivity	Wi-Fi, LAN, USB Port, Live Camera	
	Noise Emission (Acoustic)	< 50 dB (A) When Building	
	Operating Ambient Temperature	15-30°C, 10-90% RH, non-condensing	
Storage Temperature	-25°C to +55°C, 10-90% RH, non-condensing		
Filter	HEPA Filter with Activated Charcoal		
Material	Material Type	PLA/ ABS/ ASA/ PETG/ PC/ PA12 CF/ PA12 CF+/ PET CF/ PET GF/ PPA CF/ PPA GF/ PETG ESD/ PVA+/ PA12 CF Support/ PET Support/ PPA Support	
	Third Party Material	Supported by Raise3D OFP (Open Filament Program)*	
Software	Slicing Software	ideaMaker	
	Supported File Types	STL/ OBJ/ 3MF/ OLTP	
	Supported OS	Windows/ macOS/ Linux	
	Machine Code Type	GCODE	
Printer Controller	User Interface	7-inch Touch Screen	
	Network	Wi-Fi, Ethernet	
	Power Loss Recovery	Available	
	Screen Resolution	1024 × 600	
	Motion Controller	Atmel ARM Cortex-M4 120 MHz FPU	
	Logic Controller	NXP ARM Cortex-A9 Quad 1 GHz	
	Memory	1 GB	
	Onboard Flash	16 GB	
	OS	Embedded Linux	
Ports	USB 2.0 × 2, Ethernet × 1		

*For detailed information and slicing profiles of the materials supported by Raise3D OFP, please visit <https://www.ideamaker.io/>.