

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 <small>(Raise3D Filament Dry Box not included)</small> | Net Weight | Gross Weight <small>(Carton Only)</small> | Gross Weight <small>(Carton with Pallet)</small> |
| | 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 | 0.1-0.5 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/>.