

Raise3D E3 Technical Specifications

Printer	Raise3D E3		
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	Net Weight	Gross Weight (Carton Only)	Gross Weight (Carton with Pallet)
	33.3 kg (73.4 lbs)	42 kg (92.6 lbs)	49.5 kg (109.1 lbs)
General	Print Technology Fused Filament Fabrication (FFF) Print Head System IDEX Independent Dual Extruders Filament Diameter 1.75 mm Max Printing Speed 200 mm/s Max Volumetric Speed 16 mm³/s Build Plate Flexible Double-sided PEI Build Plate (Default), Flexible Steel Plate with BuildTak (Available) Build Plate Leveling Mesh-leveling with Flatness Detection Heated Bed Material Silicone Max Build Plate Temperature 110°C Nozzle Diameter 0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available) Max Nozzle Temperature 330°C Layer Height The E3 is compatible with 0.2, 0.4, 0.6, 0.8 and 1.0 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. Surface Roughness Ra < 2 μm (Hyper Speed PLA Pro Filament, Ironing enabled) Filament Run-out Sensor Available Filter HEPA Filter with Activated Charcoal 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		
Electrical	Power Supply Input	100-240 V AC, 50/ 60 Hz 230 V @ 2 A	
	Power Supply Output	24V DC, 350 W	
Material	Raise3D Material	Hyper Core: PPA CF/ PPA GF/ ABS CF Hyper Speed: PLA/ ABS/ PETG CF/ PET CF/ PLA Pro Industrial: PPA CF/ PPA GF/ PET CF/ PET GF/ PETG ESD/ PET Support/ PPA Support/ PPS CF Premium: PLA/ ABS/ ASA/ PETG/ PC/ TPU-95A/ PVA+	
	Flexible and Elastic Material	When equipped with the Flexible Filament Auxiliary Feeder, the E3 is compatible with TPE (TPU, TPE-A, TPE-S, TPE foam filaments, etc.), Shore (A) hardness between 95A and 80A (e.g. TPU-95A, 90A, 80A), as well as all Shore (D) hardness filaments.	
	Third Party Material	Supported by Raise3D OMP (Open Material Program)*	
Software	Slicing Software	ideaMaker	
	Supported File Types	STL/ OBJ/ 3MF/ OLTP/ STEP/ STP/ IGES/ IGS	
	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 120MHz FPU	
	Logic Controller	NXP ARM Cortex-A55 Quad 2 GHz	
	Memory	2 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 OMP, please visit <https://www.ideamaker.io/>.