





Raise3D 3D Printers Comparison Sheet

Item		Pro3 <small>(NEW)</small>	Pro3 PLUS <small>(NEW)</small>	E2CF <small>(NEW)</small>	E2	Pro2	Pro2 Plus	
								
CONSTRUCTION	Build Volume (WxDxH)	Single Extruder Print	11.8*11.8*11.8 in / 300*300*300 mm	11.8*11.8*23.8 in / 300*300*605 mm	13*9.4*9.4 inch / 330*240*240 mm	13.0*9.4*9.4 inch / 330*240*240 mm	12*12*11.8 inch / 305*305*300 mm	12*12*23.8 inch / 305*305*605 mm
		Dual Extruder Print	10*11.8*11.8 in / 255*300*300 mm	10*11.8*23.8 in / 255*300*605 mm	11.6*9.4*9.4 inch / 295*240*240 mm	11.6*9.4*9.4 inch / 295*240*240 mm	11*12*11.8 inch / 280*305*300 mm	11*12*23.8 inch / 280*305*605 mm
	Machine Size (WxDxH)	24.4*24.6*29.9 in / 620*626*760 mm	24.4*24.6*43.5 in / 620*626*1105 mm	23.9*23.5*18.3 inch / 607*596*465 mm	23.9*23.5*18.3 inch / 607*596*465 mm	24.4*23.2*29.9 inch / 620*590*760 mm	24.4*23.2*43.5 inch / 620*590*1105 mm	
	Net Weight	52.5 kg	61.15 kg	32.4 kg <small>(Raise3D Filament Dry Box not included)</small>	35 kg	50.2 kg	59.3 kg	
	Gross Weight (Carton Only)	76.6 kg	87.45 kg	36.7 kg <small>(Raise3D Filament Dry Box not included)</small>	41.3 kg	62.7 kg	71.8 kg	
ELECTRICAL	Power Supply	Input	100-240 V AC, 50/60 Hz 230 V @3.3 A	100-240 V AC, 50/60 Hz 230 V @3.3 A	100-240 V AC, 50/60Hz 230 V @ 2A	100-240 V AC, 50/60 Hz 230 V @2A	100-240 V AC, 50/60 Hz 230 V @3.3A	100-240 V AC, 50/60 Hz 230 V @3.3A
		Output	24 V DC, 600 W	24 V DC, 600 W	24 V DC, 350 W	24 V DC, 350 W	24 V DC, 600 W	24 V DC, 600 W
PRINTER	Print Technology	FFF	FFF	FFF	FFF	FFF	FFF	
	Print Head System	Dual-head with electronic lifting system	Dual-head with electronic lifting system	IDEX Independent Dual Extruders	IDEX Independent Dual Extruders	Dual-head with electronic lifting system	Dual-head with electronic lifting system	
	Filament Diameter	1.75 mm	1.75 mm	1.75 mm	1.75 mm	1.75 mm	1.75 mm	
	XYZ Step Size	0.78125, 0.78125, 0.078125 micron	0.78125, 0.78125, 0.078125 micron	0.78125, 0.78125, 0.078125 micron	0.78125, 0.78125, 0.078125 micron	0.78125, 0.78125, 0.078125 micron	0.78125, 0.78125, 0.078125 micron	
	Print Head Travel Speed	30 - 150 mm/s	30 - 150 mm/s	30 - 150 mm/s	30 - 150 mm/s	30 - 150 mm/s	30 - 150 mm/s	
	Build Plate	Flexible Steel Plate with Buildtak	Flexible Steel Plate with Buildtak	Flexible Steel Plate with Buildtak	Flexible Steel Plate with Buildtak	Heated aluminum build plate with magnetic holding	Heated aluminum build plate with magnetic holding	
	Max Build Plate Temperature	120 °C	120 °C	110 °C	110 °C	110 °C	110 °C	
	Heated Bed Material	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone	
	Build Plate Leveling	Mesh-leveling with Flatness Detection	Mesh-leveling with Flatness Detection	Mesh-leveling with Flatness Detection	Mesh-leveling with Flatness Detection	Pre-calibrated leveling	Pre-calibrated leveling	
	Filament Run-out Sensor	Available	Available	Available	Available	Available	Available	
	Supported Materials	PLA / ABS / HIPS / PC / TPU / TPE / PETG / ASA / PP / PVA / Nylon / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill	PLA / ABS / HIPS / PC / TPU / TPE / PETG / ASA / PP / PVA / Nylon / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill	PA12 CF, PA12 F Support, OGP Certified Third-Party Filaments	PLA / ABS / HIPS / PC / TPU / TPE / PETG / ASA / PP / PVA / Nylon / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill	PLA / ABS / HIPS / PC / TPU / TPE / PETG / ASA / PP / PVA / Nylon / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill	PLA / ABS / HIPS / PC / TPU / TPE / PETG / ASA / PP / PVA / Nylon / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill	
	Layer Height	0.01-0.25 mm	0.01-0.25 mm	0.1 - 0.25mm	0.02-0.25 mm	0.01-0.25 mm	0.01-0.25 mm	
	Nozzle Diameter	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)	0.4 mm (Default), 0.6/ 0.8 mm (Available)	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)	
	Max Nozzle Temperature	300 °C	300 °C	300 °C	300 °C	300 °C	300 °C	
	Connectivity	Wi-Fi, LAN, USB port, Live camera	Wi-Fi, LAN, USB port, Live camera	Wi-Fi, LAN, USB port, Live camera	Wi-Fi, LAN, USB port, Live camera	Wi-Fi, LAN, USB port, Live camera	Wi-Fi, LAN, USB port, Live camera	
	Noise Emission (Acoustic)	<55 dB(A) when building	<55 dB(A) when building	<50 dB(A) when building	<50 dB(A) when building	<50 dB(A) when building	<50 dB(A) when building	
	Operating Ambient Temperature	15-30 °C, 10-90% RH non-condensing	15-30 °C, 10-90% RH non-condensing	15-30 °C, 10-90% RH non-condensing	15-30 °C, 10-90 % RH non-condensing	15-30 °C, 10-90 % RH non-condensing	15-30 °C, 10-90 % RH non-condensing	
	Storage Temperature	-25 to +55°C, 10-90% RH non-condensing	-25 to +55°C, 10-90% RH non-condensing	-25 to +55°C, 10-90% RH non-condensing	-25 to +55°C, 10-90% RH non-condensing	-25 to +55°C, 10-90% RH non-condensing	-25 to +55°C, 10-90% RH non-condensing	
	Filter	HEPA filter with activated charcoal	HEPA filter with activated charcoal	HEPA filter with activated charcoal	HEPA filter with activated charcoal	HEPA filter with activated charcoal	HEPA filter with activated charcoal	
	Technical Certifications	N/A	N/A	N/A	CB, CE, FCC, RoHS, RCM	CB, CE, FCC, RoHS	CB, CE, FCC, RoHS	
SOFTWARE	Slicing Software	IdeaMaker	IdeaMaker	IdeaMaker	IdeaMaker	IdeaMaker	IdeaMaker	
	Supported File Types	STL/ OBJ/ 3MF / OLTP	STL/ OBJ/ 3MF / OLTP	STL/ OBJ/ 3MF / OLTP	STL/ OBJ/ 3MF / OLTP	STL/ OBJ/ 3MF / OLTP	STL/ OBJ/ 3MF / OLTP	
	Supported OS	Windows/ macOS/ Linux	Windows/ macOS/ Linux	Windows/ macOS/ Linux	Windows/ macOS/ Linux	Windows/ macOS/ Linux	Windows/ macOS/ Linux	
	Machine Code Type	GCODE	GCODE	GCODE	GCODE	GCODE	GCODE	
PRINTER CONTROLLER	User Interface	7-inch Touch Screen	7-inch Touch Screen	7-inch Touch Screen	7-inch Touch Screen	7-inch Touch Screen	7-inch Touch Screen	
	Network	Wi-Fi, Ethernet	Wi-Fi, Ethernet	Wi-Fi, Ethernet	Wi-Fi, Ethernet	Wi-Fi, Ethernet	Wi-Fi, Ethernet	
	Power Loss Recovery	Available	Available	Available	Available	Available	Available	
	Screen Resolution	1024*600	1024*600	1024*600	1024*600	1024*600	1024*600	
	Logic Controller	NXP ARM Cortex-A9 Quad 1 GHz	NXP ARM Cortex-A9 Quad 1 GHz	NXP ARM Cortex-A9 Quad 1 GHz	NXP ARM Cortex-A9 Quad 1 GHz	Freescall i.MX6, Quad core 1GHz ARM processor	Freescall i.MX6, Quad core 1GHz ARM processor	
	Memory	1 GB	1 GB	1 GB	1 GB	1 GB	1 GB	
	Onboard Flash	8 GB	8 GB	8 GB	8 GB	8 GB	8 GB	
	OS	Embedded Linux	Embedded Linux	Embedded Linux	Embedded Linux	Embedded Linux	Embedded Linux	
Ports	USB 2.0*2, Ethernet*1	USB 2.0*2, Ethernet*1	USB 2.0*2, Ethernet*1	USB 2.0*2, Ethernet*1	USB 2.0*2, Ethernet*1	USB 2.0*2, Ethernet*1		

*RED is the difference