






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 (W x D x H) | Single Extruder Print 11.8 x 11.8 x 11.8 inch/ 300 x 300 x 300 mm Dual Extruder Print 10 x 11.8 x 11.8 inch/ 255 x 300 x 300 mm | 11.8 x 11.8 x 23.8 inch/ 300 x 300 x 605 mm 10 x 11.8 x 23.8 inch/ 255 x 300 x 605 mm | 13 x 9.4 x 9.4 inch/ 330 x 240 x 240 mm 11.6 x 9.4 x 9.4 inch/ 295 x 240 x 240 mm | 13.0 x 9.4 x 9.4 inch/ 330 x 240 x 240 mm 11.6 x 9.4 x 9.4 inch/ 295 x 240 x 240 mm | 12 x 12 x 11.8 inch/ 305 x 305 x 300 mm 11 x 12 x 11.8 inch/ 280 x 305 x 300 mm | 12 x 12 x 23.8 inch/ 305 x 305 x 605 mm 11 x 12 x 23.8 inch/ 280 x 305 x 605 mm |
| | Machine Size (W x D x H) | 24.4 x 24.6 x 29.9 inch/ 620 x 626 x 760 mm | 24.4 x 24.6 x 43.5 inch/ 620 x 626 x 1105 mm | 23.9 x 23.5 x 18.3 inch/ 607 x 596 x 465 mm | 23.9 x 23.5 x 18.3 inch/ 607 x 596 x 465 mm | 24.4 x 23.2 x 29.9 inch/ 620 x 590 x 760 mm | 24.4 x 23.2 x 43.5 inch/ 620 x 590 x 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 |
| | Gross Weight (Carton with Pallet) | 84.55 kg | 95.4 kg | 45.4 kg <small>(Raise3D Filament Dry Box not included)</small> | 50 kg | 70.5 kg | 79.6 kg |
| ELECTRICAL | Power Supply | Input 100-240 V AC, 50/ 60 Hz 230 V @ 3.3 A Output 24 V DC, 600 W | 100-240 V AC, 50/ 60 Hz 230 V @ 3.3 A 24 V DC, 600 W | 100-240 V AC, 50/ 60 Hz 230 V @ 2 A 24 V DC, 350 W | 100-240 V AC, 50/ 60 Hz 230 V @ 2 A 24 V DC, 350 W | 100-240 V AC, 50/ 60 Hz 230 V @ 3.3 A 24 V DC, 600 W | 100-240 V AC, 50/ 60 Hz 230 V @ 3.3 A 24 V DC, 600 W |
| | Print Technology | FFF | FFF | FFF | FFF | FFF | FFF |
| PRINTER | 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 | Raise3D Industrial PA12 CF, Raise3D Industrial PA12 CF Support (PPA CF, PPS CF and PET CF Coming soon) | 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), 0.2/ 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°C to +55°C, 10-90% RH non-condensing | -25°C to +55°C, 10-90% RH non-condensing | -25°C to +55°C, 10-90% RH non-condensing | -25°C to +55°C, 10-90% RH non-condensing | -25°C to +55°C, 10-90% RH non-condensing | -25°C 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 |
| Supported File Types | | 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 | |
| Machine Code Type | | 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 | |
| | Network | Wi-Fi, Ethernet | Wi-Fi, Ethernet | Wi-Fi, Ethernet | Wi-Fi, Ethernet | Wi-Fi, Ethernet | |
| | Power Loss Recovery | Available | Available | Available | Available | Available | |
| | Screen Resolution | 1024 x 600 | 1024 x 600 | 1024 x 600 | 1024 x 600 | 1024 x 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 | NXP I.MX6, Quad core 1 GHz ARM processor | NXP I.MX6, Quad core 1 GHz ARM processor |
| | Memory | 1 GB | 1 GB | 1 GB | 1 GB | 1 GB | |
| | Onboard Flash | 16 GB | 16 GB | 16 GB | 16 GB | 16 GB | |
| | OS | Embedded Linux | Embedded Linux | Embedded Linux | Embedded Linux | Embedded Linux | |
| Ports | USB 2.0 x 2, Ethernet x 1 | USB 2.0 x 2, Ethernet x 1 | USB 2.0 x 2, Ethernet x 1 | USB 2.0 x 2, Ethernet x 1 | USB 2.0 x 2, Ethernet x 1 | USB 2.0 x 2, Ethernet x 1 | |

*RED is the difference