

Bambu Lab X1-Carbon

Technical Specifications

| Technology | | X1-Carbon |
|--------------------------------|---------------------------------------|---|
| | | Fused Deposition Modeling |
| Body | Build Volume(W×D×H) | 256 x 256 x 256 mm ³ |
| | Chassis | Steel |
| | Shell | Aluminum & Glass |
| Tool Head | Hot End | All-Metal |
| | Extruder Gears | Hardened Steel |
| | Nozzle | Hardened Steel |
| | Max Hot End Temperature | 300 °C |
| | Nozzle Diameter (Included) | 0.4 mm |
| | Nozzle Diameter (Optional) | 0.2 mm, 0.6 mm, 0.8 mm |
| | Filament Cutter | Yes |
| | Filament Diameter | 1.75 mm |
| | Hot bed | Build Plate |
| Build Plate Surface (Included) | | Bambu Cool Plate, Bambu Engineering Plate |
| Build Plate Surface (Optional) | | Bambu High Temperature Plate |
| Max Build Plate Temperature | | 110°C @220 V, 120°C @110 V |
| Speed | Max Speed of Tool Head | 500 mm/s |
| | Max Acceleration of Tool Head | 20 m/s ² |
| | Max Hot End Flow | 32 mm ³ /s @ABS (Model: 150 x 150 mm single wall; Material: Bambu ABS; Temperature: 280°C) |
| Cooling | Part Cooling Fan | Closed Loop Control |
| | Hot End Fan | Closed Loop Control |
| | Control Board Fan | Closed Loop Control |
| | Chamber Temperature Regulator Fan | Closed Loop Control |
| | Auxiliary Part Cooling Fan | Closed Loop Control |
| | Air Filter | Activated Carbon Filter |
| Supported Filament | PLA, PETG, TPU, ABS, ASA, PET | Yes |
| | PA, PC | Ideal |
| | Carbon/Glass Fiber Reinforced Polymer | Ideal |
| Sensors | Bambu Micro Lidar | Yes |
| | Chamber Monitoring Camera | 1920 x 1080 Included |
| | Door Sensor | Yes |
| | Filament Run Out Sensor | Yes |
| | Filament Odometry | Optional with AMS |
| | Power Loss Recover | Yes |
| Physical Dimensions | Dimensions | 389 x 389 x 457 mm ³ |
| | Net Weight | 14.13 kg |
| Electrical Requirements | Voltage | 100-240 VAC, 50-60 Hz |
| | Max Power | 1000 W @220 V, 350 W @110 V |
| Electronics | Display | 5-inch 1280 x 720 Touch Screen |
| | Connectivity | Wi-Fi, Bambu-Bus |
| | Storage | 4 GB EMMC and Micro SD Card Reader |
| | Control Interface | Touch Screen, APP, PC Application |
| | Motion Controller | Dual-Core Cortex M4 |
| | Application Processor | Quad ARM A7 1.2 GHz |
| | Neural-Network Processing Unit | 2 Tops |
| Software | Slicer | Bambu Studio Support third party slicers which export standard G-code such as Superslicer, Prusaslicer and Cura, but certain advanced features may not be supported. |
| | Slicer Supported OS | MacOS, Windows |