

Consumer  
3D Printer

# Bambu Lab X1 Series

A Leap in 3D Printing



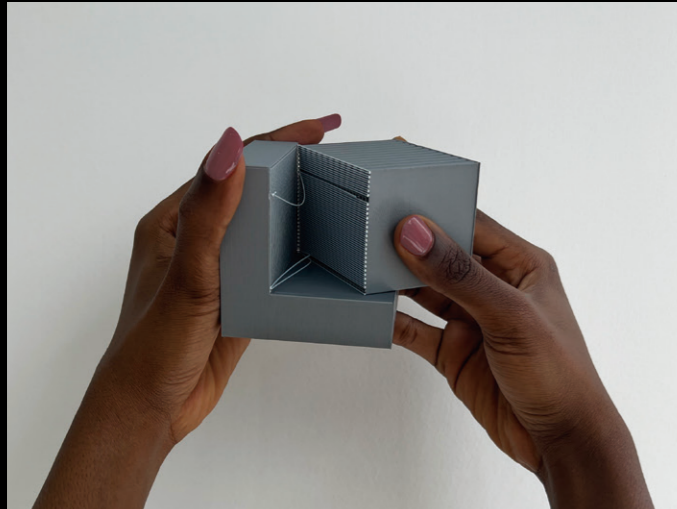
**Technology Education Concepts**

**www.TECedu.com | 800-338-2238**

**info@TECedu.com**

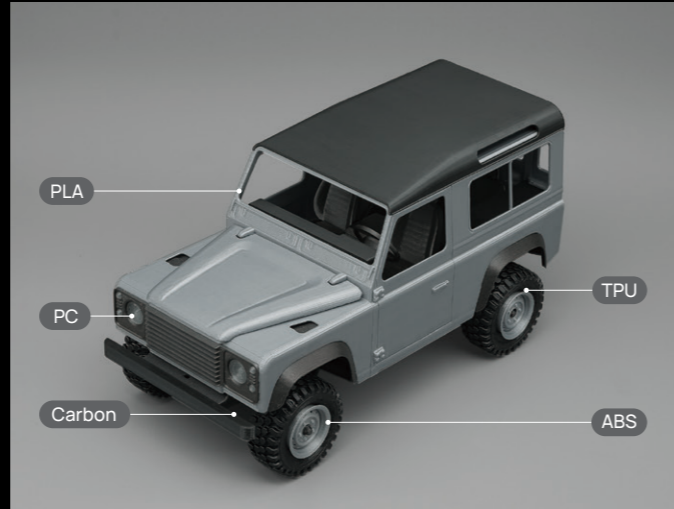
## Print Multi-material with AMS

Up to 4 AMS systems allow for printing in 16 colors simultaneously. With AMS, you can freely print in various colors and choose from multiple materials, including easy-to-peel and dissolvable support materials for hassle free support removal.



## Advanced Filaments Empower Advanced Projects

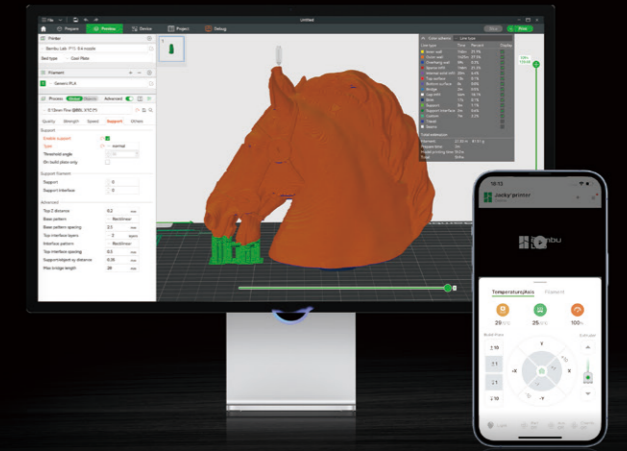
Breaking through the limitations of conventional materials, X1's advanced structural design and sophisticated thermal control technology enable it to print challenging engineering plastics like nylon and polycarbonate easily and reliably.



## A Printer for Everyone

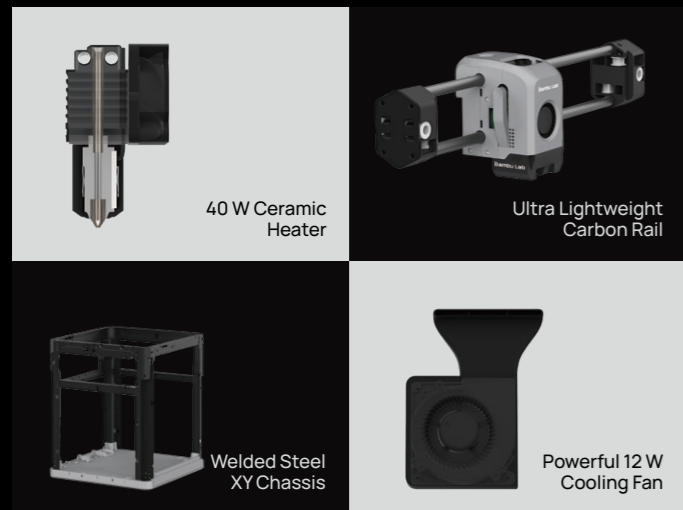
Ready to use out of the box, no need for adjustments before starting to print. It also supports desktop software and mobile apps, enabling cloud printing anytime, anywhere.

\*It also supports LAN printing and offline printing initiated via an SD card.



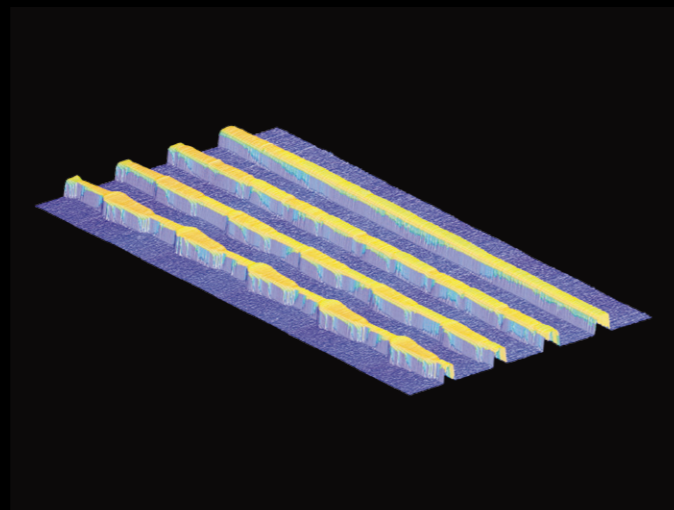
## Designed for Speed

With the ultra lightweight carbon rail, welded steel XY Chassis, 40 W Ceramic Heater and powerful 12 W cooling fan, you get top-notch extrusion efficiency. Higher quality printing with less time and lower power consumption.

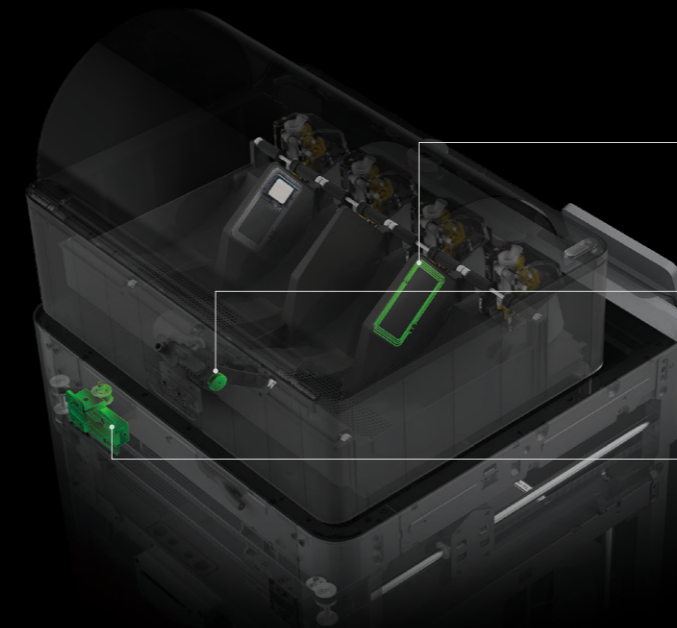


## AI-Powered Evolution

Bambu Micro Lidar introduces micrometer-level precision to 3D printing, enabling flow calibration, automatic bed leveling, AI first-layer inspection, and spaghetti detection. The possibilities are endless.



## Health Management System



### RFID

The X1 uses RFID to detect what filament you're using and automatically apply the best settings for your material.

### Filament Odometer

The filament odometer on the X1 can even let you know how much filament you have used and how much you have left.

### Belt Tensioning

The X1 detects when your belt tension is off and alerts you, so you can activate its semi-automatic belt tensioner.

### Chamber Temperature Sensor

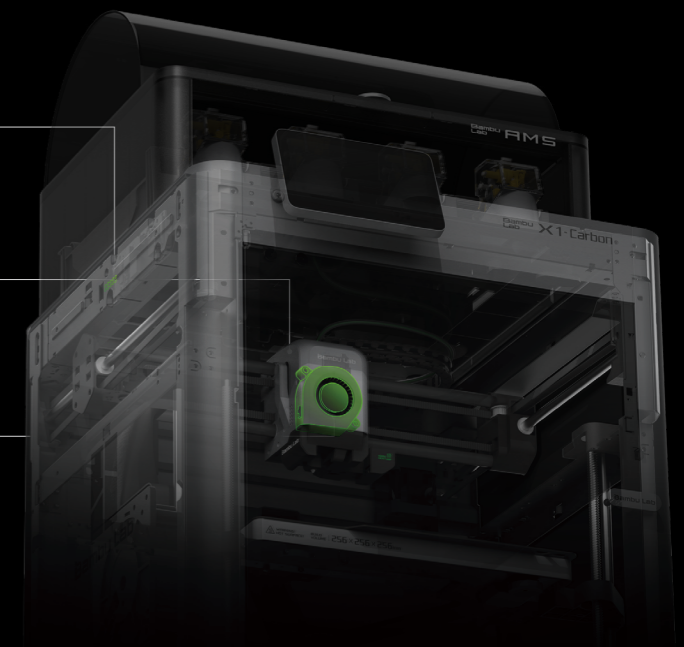
The X1's Chamber Temperature Sensors automatically adjust the speed of chamber fan to cool the chamber down to the right temperature.

### Filament Sensor

Filament run out sensor helps make sure you never run out of filament in the middle of a long print job.

### Closed Loop Fan

The fan system of the X1 is equipped with speed feedback sensors, allowing the control system to monitor and control each fan in real-time. This enables the system to accurately adjust the speed of each fan according to the current printing conditions, ensuring print quality while reducing operational noise.





**Technology Education Concepts**  
**www.TECedu.com | 800-338-2238**  
**info@TECedu.com**



## Body

Build Volume (WxDxH): 256 × 256 × 256 mm<sup>3</sup>

Chassis: Steel

Shell: Aluminum & Glass

## Speed

Max Speed of Tool Head: 500 mm/s

Max Acceleration of Tool Head: 20 m/s<sup>2</sup>

Max Hot End Flow: 32 mm<sup>3</sup>/s @ABS (Model: 150\*150mm single wall; Material: Bambu ABS; Temperature: 280°C)

## Hot bed

Compatible build Plate:

- Bambu Cool Plate
- Bambu High Temperature Plate
- Bambu Textured PEI Plate
- Bambu Smooth PEI Plate
- Bambu Engineering Plate (The other side of Cool/High Temperature Plate)

Max Build Plate Temperature: 110°C@220V, 120°C@110V

## 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

## Tool Head

Hotend: 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

## Electrical Requirements

Voltage: 100-240 VAC, 50/60 Hz

Max Power: 1000W@220V, 350W@110V

## Sensors

Chamber Monitoring Camera: 1920 × 1080 Included

Filament Run Out Sensor: Yes

Filament Odometry: Optional with AMS

Power Loss Recover: Yes

## Supported Filament

PLA, PETG, TPU, ABS, ASA, PVA, PET: Yes

PA, PC: Ideal

Carbon / Glass Fiber Reinforced Polymer: Ideal

## Electronics

Display: 5-inch 1280 × 720 Touch Screen

Connectivity: Wi-Fi, Bambu-Bus

Storage: 4GB 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

## Physical Dimensions

Dimensions: 389 × 389 × 457 mm<sup>3</sup>

Net Weight: 14.13kg

## Software

Slicer: Bambu Studio, 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

\*To heat the heatbed to 120°C, the power supply must be 110V; with a 220V supply, the maximum temperature is 110°C.