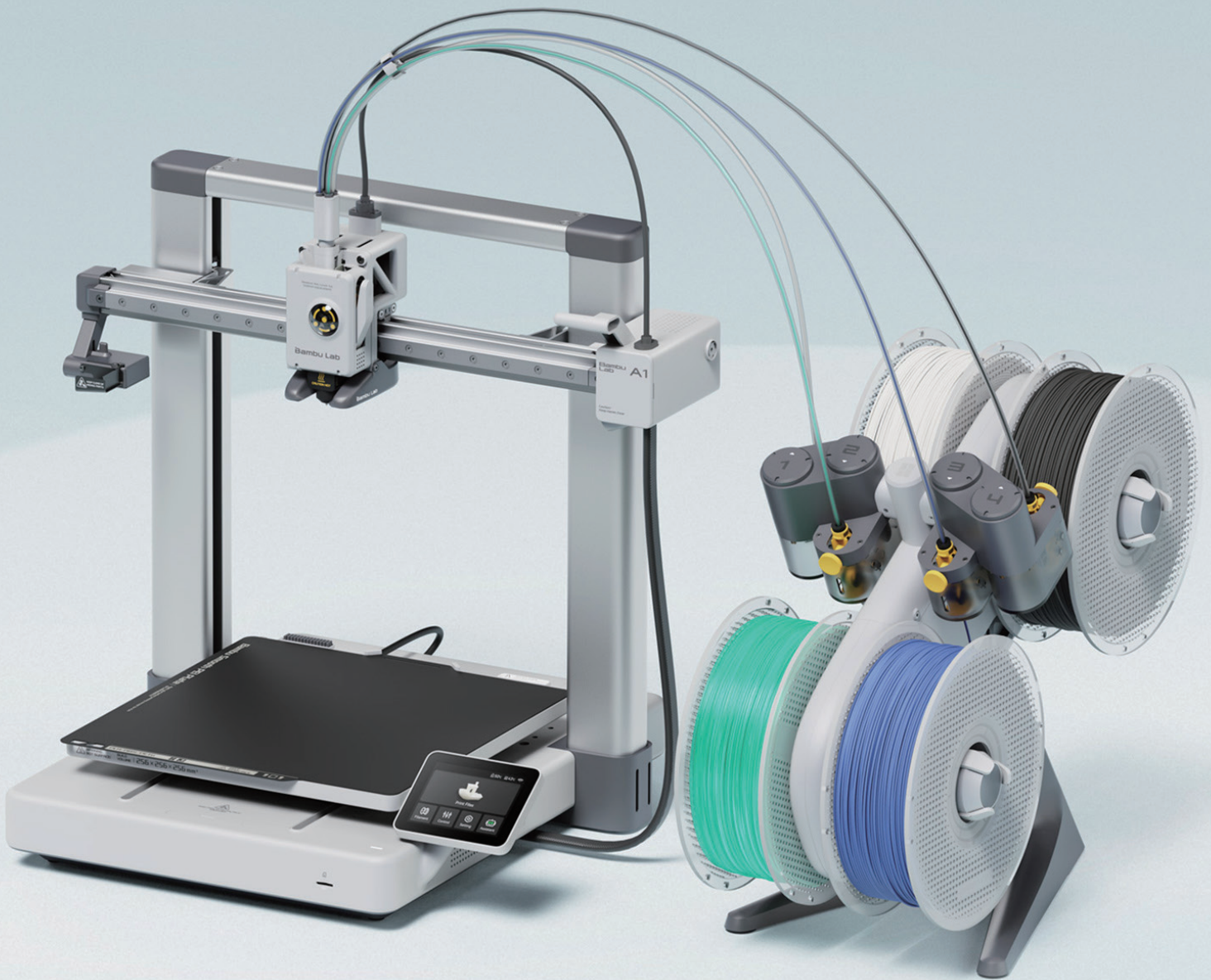


Bambu Lab A1

A Colorful Gateway to 3D Printing



The Innovations

Full Auto Flow Calibration & Active Flow Rate Compensation

The eddy current sensor in the toolhead monitors nozzle pressure to automatically calculate the flow calibration parameter. The Active Flow Rate Compensation algorithm can then utilize this updated parameter to accurately compensate the flow, ensuring smooth extrusion at every corner.

Comprehensive Filament Monitoring

Fully loaded with filament tangle and runout sensors, a nozzle pressure sensor, and two filament odometers, A1 can combine the information from all these sensors to monitor filament tangle, filament runout, and air printing problems.



Active Motor Noise Canceling

Silent mode and Active Motor Noise Canceling can quiet the printer down to under 48dB. Take a nap while the printer works hard.



Plug-N-Play

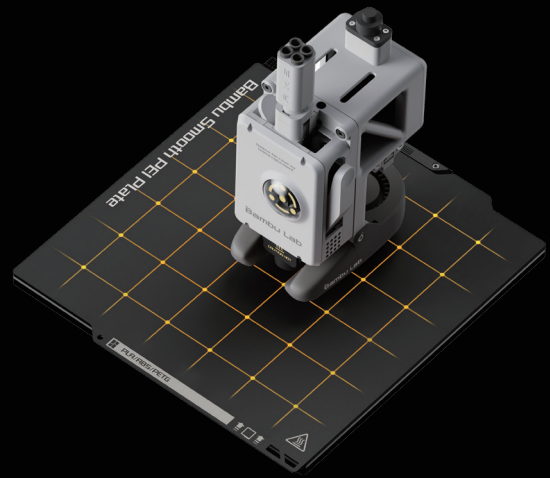
Easy to Use Multi-color Printing

The all-new AMS lite is simple and reliable, offering the most intuitive multi-color printing experience to users of all kinds.



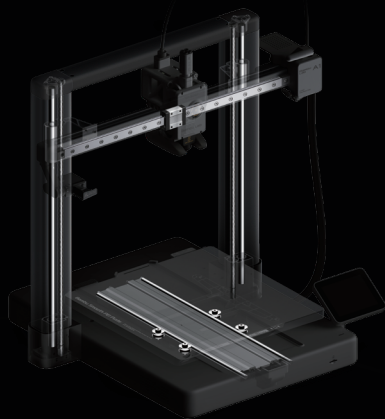
Full-auto Calibration

A1 handles various calibrations all by itself. It meticulously calibrates the Z-offset, bed-level, vibration resonance and nozzle pressure for EVERY print job, automatically.



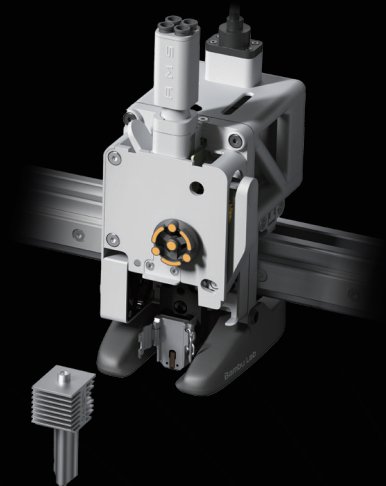
High-speed Precision

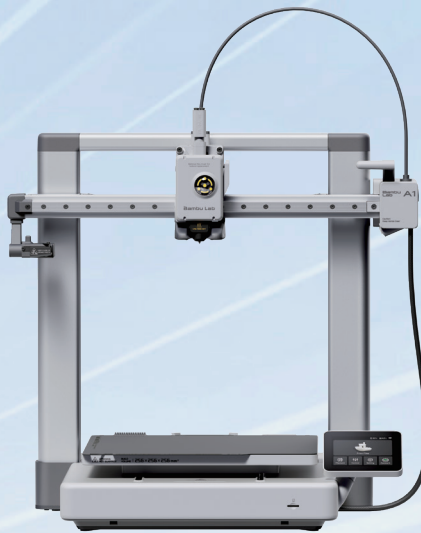
Full-metal Rails, Rigid frame, nozzle pressure sensor, accelerometers, powerful MCU, and above all, an advanced motion control system that utilizes these features to bring you ultra-fine print quality under high print speed.



Quick Swap Nozzle

All-new quick swap hotend design, the hotend pops in and out with just 1 clip. No tool needed.





Body

Build Volume: 256 x 256 x 256 mm³
Chassis: Steel + Extruded Aluminum

Speed

Max Speed of Toolhead: 500 mm/s
Max Acceleration of Toolhead: 10000 mm/s²
Max Hot End Flow: 28 mm³/s @ABS (Model: 150*150 mm single wall;
Material: Bambu ABS; Temperature: 280 °C)

Physical Dimensions

Dimensions: 385 x 410 x 430 mm³
Net Weight: 8.3 kg

Heatbed

Compatible Build Plate: Bambu Textured PEI Plate
Bambu Smooth PEI Plate
Bambu Cool Plate
Max Build Plate Temperature: 100°C

Cooling

Part Cooling Fan: Closed Loop Control
Hot End Fan: Closed Loop Control

ToolHead

Hot End: All-Metal
Extruder Gears: Hardened Steel
Nozzle: Stainless 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

Input Voltage: 100–240 VAC, 50/60 Hz
Max Power: 1300W@220V, 350W@110V

Sensors

Monitoring Camera: Low Rate Camera (up to 1080P) Timelapse Supported
Filament Run Out Sensor: Yes
Filament Odometry: Yes
Power Loss Recover: Yes
Filament Tangle Sensor: Yes

Supported Filament

PLA, PETG, TPU, PVA: Ideal
ABS, ASA, PC, PA, PET, Carbon/Glass Fiber Reinforced Polymer:
Not Recommended

Electronics

Display: 3.5 inches 320*240 IPS Touch Screen
Connectivity: Wi-Fi, Bambu-Bus
Storage: Micro SD Card
Control Interface: Touch Screen, APP, PC Application
Motion Controller: Dual-Core Cortex M4

Software

Slicer: Bambu Studio supports third-party slicers which export standard Gcode such as SuperSlicer, PrusaSlicer and Cura, but certain advanced features may not be supported.

Slicer Supported OS: MacOS, Windows

Wi-Fi

Frequency Range: 2412 MHz – 2472 MHz(CE)
2412 MHz – 2462 MHz(FCC)
2400 MHz – 2483.5 MHz(SRRC)

Transmitter Power (EIRP): ≤ 21.5 dBm(FCC)
≤ 20 dBm(CE/SRRC)

Protocol: IEEE802.11 b/g/n