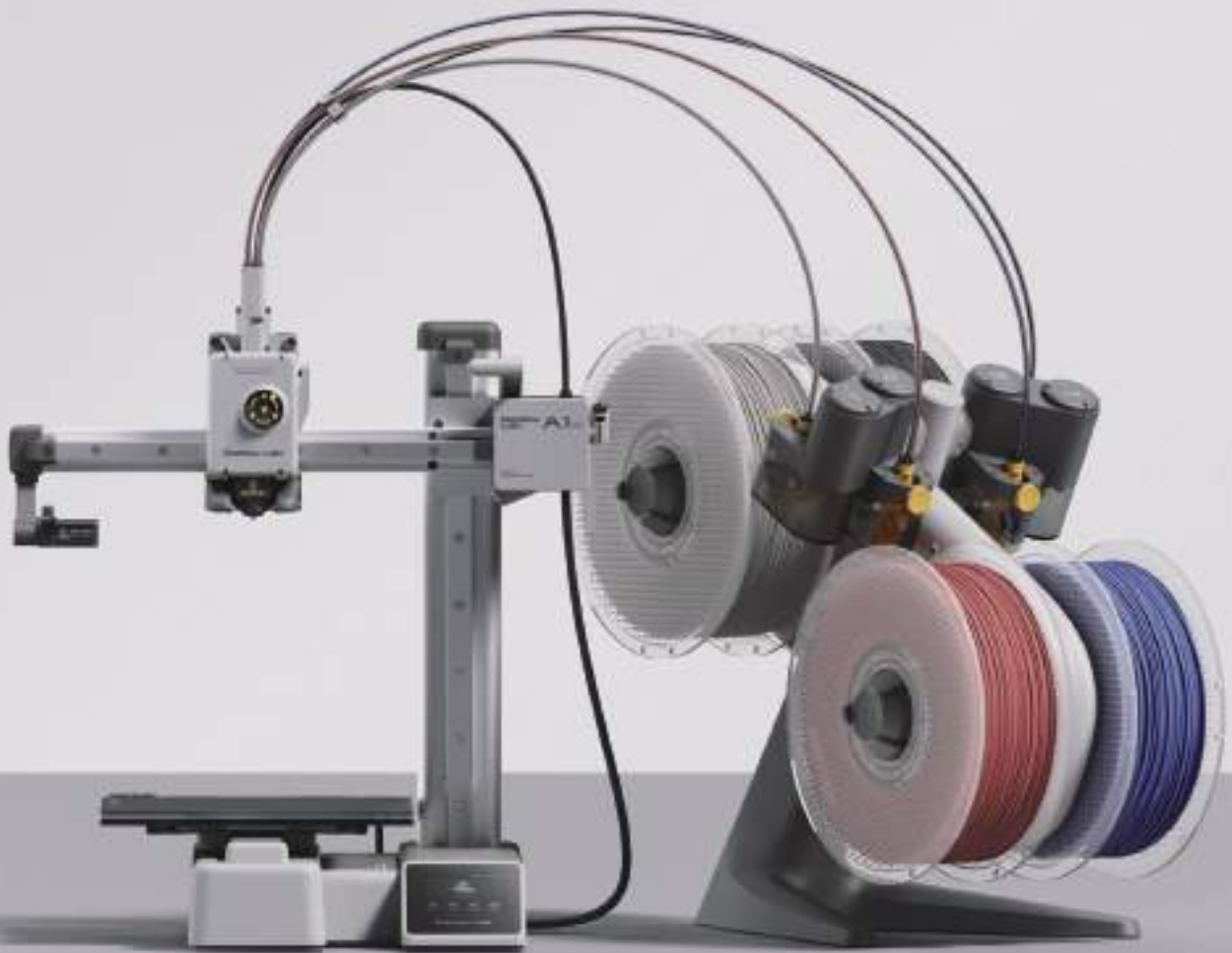


# Bambu Lab A1 mini

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 mini 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

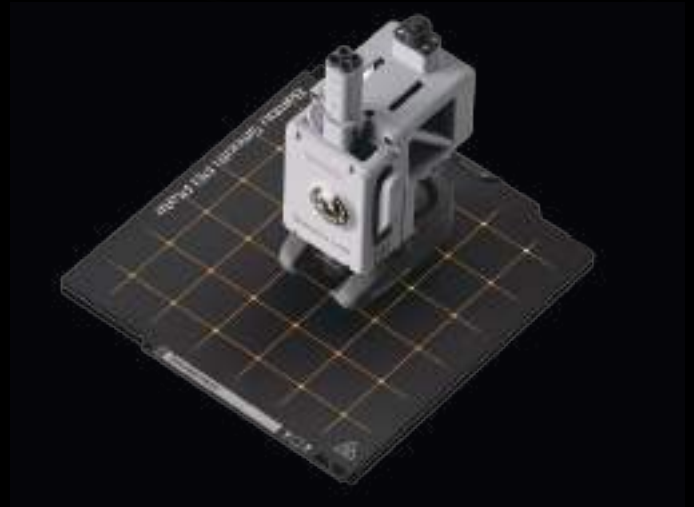
## Easy to Use Multi-color Printing

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 mini 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

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Build Volume: 180\*180\*180 mm<sup>3</sup>  
Chassis: Steel + Extruded Aluminum

## Speed

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Max Speed of Toolhead: 500 mm/s  
Max Acceleration of Toolhead: 10 m/s<sup>2</sup>  
Max Hot End Flow: 28 mm<sup>3</sup>/s @ABS (Model: 150\*150 mm single wall;  
Material: Bambu ABS; Temperature: 280 °C)

## Physical Dimensions

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Dimensions: 347\*315\*365 mm<sup>3</sup>  
Net Weight: 5.5kg

## Heatbed

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Compatible Build Plate: Bambu Textured PEI Plate  
Bambu Smooth PEI Plate  
Max Build Plate Temperature: 80°C

## Cooling

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

## ToolHead

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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

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Input Voltage: 100-240 VAC, 50/60 Hz  
Max Power: 150W

## Sensors

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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

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

## Electronics

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Display: 2.4 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

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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

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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