

Bambu Lab A1 mini Technical Specification

Body

Build Volume:	180*180*180 mm ³
Chassis:	Steel + Extruded Aluminum

ToolHead

Hot End:	All-Metal
Extruder Gears:	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

Heatbed

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

Speed

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

Cooling

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

Supported Filament

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

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

Physical Dimensions

Dimensions:	347*315*365 mm ³
Net Weight :	5.5 kg

Electrical Requirements

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

Electronics

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

Slicer:	Bambu Studio Support 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:	IEEE 802.11 b/g/n