

Bambu Lab A1

Technical Specification

Body

| | |
|---------------|-----------------------------|
| Build Volume: | 256*256*256 mm ³ |
| Chassis: | Steel + Extruded Aluminum |

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 |

Heatbed

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|-----------------------------|---------------------------------------------------------------------------------------------------------------------|
| Compatible Build Plate: | Bambu Textured PEI Plate Bambu Smooth PEI Plate Bambu High Temperature Plate (Smooth PEI) Bambu Cool Plate |
| Max Build Plate Temperature | 100 |

Speed

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|-------------------------------|---------------------------------------------------------------------------------------------------------|
| Max Speed of Toolhead: | 500 mm/s |
| Max Acceleration of Toolhead: | 10000mm/s ² |
| Max Hot End Flow: | 28 mm ³ /s @ABS (Model: 150*150 mm single wall; Material: Bambu ABS; Temperature: 280 °C) |

Cooling

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

Supported Filament

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

Sensors

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|--------------------------|--------------------------------------------------|
| Monitoring Camera: | Low Rate Camera (up to1080P) Timelapse Supported |
| Filament Run Out Sensor: | Yes |
| Filament Odometry: | Yes |
| Power Loss Recover: | Yes |
| Filament Tangle Sensor: | Yes |

Physical Dimensions

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|--------------|----------------------------|
| Dimensions: | 385*410*430mm ³ |
| Net Weight : | 8.3 kg |

Electrical Parameters

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

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

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|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |