

# Bambu Lab X1-Carbon

## Technical Specifications

Technology		X1-Carbon
		Fused Deposition Modeling
Body	Build Volume(W×D×H)	256 x 256 x 256 mm <sup>3</sup>
	Chassis	Steel
	Shell	Aluminum & Glass
Tool Head	Hot End	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
	Hot bed	Build Plate
Build Plate Surface (Included)		Bambu Cool Plate, Bambu Engineering Plate
Build Plate Surface (Optional)		Bambu High Temperature Plate
Max Build Plate Temperature		110°C @220 V, 120°C @110 V
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 x 150 mm single wall; Material: Bambu ABS; Temperature: 280°C)
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
Supported Filament	PLA, PETG, TPU, ABS, ASA, PET	Yes
	PA, PC	Ideal
	Carbon/Glass Fiber Reinforced Polymer	Ideal
Sensors	Bambu Micro Lidar	Yes
	Chamber Monitoring Camera	1920 x 1080 Included
	Door Sensor	Yes
	Filament Run Out Sensor	Yes
	Filament Odometry	Optional with AMS
	Power Loss Recover	Yes
Physical Dimensions	Dimensions	389 x 389 x 457 mm <sup>3</sup>
	Net Weight	14.13 kg
Electrical Requirements	Voltage	100-240 VAC, 50-60 Hz
	Max Power	1000 W @220 V, 350 W @110 V
Electronics	Display	5-inch 1280 x 720 Touch Screen
	Connectivity	Wi-Fi, Bambu-Bus
	Storage	4 GB 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
Software	Slicer	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