Bambu Lab H2S - Technical Specifications

Printing Technology

Fused Deposition Modeling

Body

Build Volume (W*D*H)	340*320*340 mm³
Chassis	Aluminum, Steel, Plastic and Glass
Laser Safety Windows	Equipped on Laser Edition, normal H2S can upgrade through Laser Upgrade Kit
Air Assist Pump	Equipped on Laser Edition, normal H2S can upgrade through Laser Upgrade Kit

Physical Dimensions

Physical Dimensions	492*514*626 mm³
Net Weight	H2S: 30 kg H2S Laser Edition: 30.5 kg

Toolhead

Hotend	All Metal
Extruder Gear	Hardened Steel
Nozzle	Hardened Steel
Max Nozzle Temperature	350 °C
Included Nozzle Diameter	0.4 mm

Extruder Motor	Bambu Lab High-precision Permanent Magnet Synchronous Motor

Heatbed

Supported Build Plate Type	Textured PEI plate, Smooth PEI Plate
Max Heatbed Temperature	120 °C

Speed

Max Speed of Toolhead	1000 mm/s
Max Acceleration of Toolhead	20,000 mm/s^2
Max Flow for Hotend (Standard Flow Hotend)	40 mm^3/s (Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 °C printing temperature)
Max Flow for Hotend (Optional High Flow Hotend)	65 mm^3/s (Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 °C printing temperature)

Chamber Temperature Control

Active Chamber Heating	Supported
Max Temperature	65 °C

Air Purification

Pre-filter Grade	G3
HEPA Filter Grade	H12
Activated Carbon Filter Type	Granulated Coconut Shell
VOC Filtration	Superior

Part Cooling Fan	Closed Loop Control
Cooling Fan for Hotend	Closed Loop Control
Main Control Board Fan	Closed Loop Control
Chamber Exhaust Fan	Closed Loop Control
Chamber Heat Circulation Fan	Closed Loop Control
Auxiliary Part Cooling Fan	Closed Loop Control

Filament Supported

PLA, PETG, TPU, PVA, BVOH, ABS, ASA, PC, PA, PET, PPS;
Carbon/Glass Fiber Reinforced PLA, PETG, PA, PET, PC, ABS, ASA, PPA, PPS

Sensor

Live View Camera	Built-in; 1920*1080
Toolhead Camera	Built-in; 1600*1200
BirdsEye Camera	Built-in; 3264*2448 (Equipped with Laser Edition)
Door Sensor	Supported
Filament Run Out Sensor	Supported
Filament Tangle Sensor	Supported
Filament Odometry	Supported with AMS
Power Loss Recovery	Supported

Electrical Requirements

Voltage	100–120 VAC / 200–240 VAC, 50/60 Hz
Max Power[1]	2050 W@220 V / 1170 W@110 V

Working Temperature

Touchscreen	5-inch 720*1280 Touchscreen
Storage	Built-in 8 GB EMMC and USB Port
Control Interface	Touchscreen, mobile App, PC App
Neural Processing Unit	2 TOPS

Software

Slicer	Bambu Studio Supports third-party slicers which export standard G-code, such as Super Slicer, PrusaSlicer and Cura, but certain advanced features may not be supported.
Supported Operating System	MacOS, Windows, Linux

Wi-Fi

Operating Frequency	2412-2472 MHz (CE/FCC), 2400-2483.5 MHz (SRRC) 5150-5850 MHz
Wi-Fi Transmitter Power (EIRP)	2.4 GHz: ‹23 dBm (FCC); ‹20 dBm (CE/SRRC/MIC) 5 GHz Band1/2: ‹23 dBm (FCC/CE/SRRC/MIC) 5 GHz Band3: ‹30 dBm (CE); ‹24 dBm (FCC) 5 GHz Band4: ‹23 dBm (FCC/SRRC); ‹14 dBm (CE)
Wi-Fi Protocol	IEEE 802.11 a/b/g/n

10W Laser Module

Laser Type	Semiconductor Laser
Laser Wavelength	Engraving Laser: 455 nm ± 5 nm Blue Light Height Measuring Laser: 850 nm ± 5 nm Infrared Light

Max Engraving Speed	400 mm/s
Max Cutting Thickness	5 mm (Basswood Plywood)
Laser Safety Class for Laser Module	Class 4
Overall Laser Safety Class[2]	Class 1
Engraving Area	H2D: 310 * 270 mm² H2S: 310 * 260 mm²
XY Positioning Method	Visual Positioning
XY Positioning Accuracy	< 0.3 mm
Z Height Measuring Method	Micro Lidar
Z Height Measuring Accuracy	± 0.1 mm
Flame Detection	Supported
Temperature Detection	Supported
Door Sensor	Supported
Laser Module Installation Detection	Supported
Safety Key	Included
Air Pump	Built-in; 30 kPa, 30 L/min
Ventilation Pipe Adapter Outer Diameter	100 mm
Supported Material Type	Wood, rubber, metal sheet, leather, dark acrylic, stone, and more

Cutting Module

Cutting Area	H2D： 300*285 mm² H2S： 297.5*300 mm²
Drawing Area	300*255 mm²
Supported Pen Diameter	10.5 mm–12.5 mm
Cutting Mat Type	LightGrip and StrongGrip Cutting Mats
Blade Type	45°*0.35 mm
Blade Pressure Range	50 gf–600 gf
Max Cutting Thickness	0.5 mm
Blade and Pen Recognition	Supported

[1] To ensure the heatbed quickly reaches the needed temperature, the printer will maintain maximum power for about 3 minutes.

[2] When the printer's protection is complete and properly working, the printer and laser module work as a class 1 laser product.