H2S & H2S Laser Edition Spec Sheet

Item		Specification
Printing Technology		Fused Deposition Modeling
Body	Build Volume (W*D*H)	340*320*340 mm³
	Chassis & Shell	Aluminum and Steel
	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	30 kg
Toolhead	Hotend	All Metal
	Extruder Gear	Hardened Steel
	Nozzle	Hardened Steel
	Max Nozzle Temperature	350 ℃
	Included Nozzle Diameter	0.4 mm
	Supported Nozzle Diameter	0.2 mm, 0.4 mm, 0.6 mm, 0.8 mm
	Filament Cutter	Built-in
	Filament Diameter	1.75 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 ℃
Speed	Max Speed of Toolhead	1000 mm/s
	Max Acceleration of Toolhead	20,000 mm/s²
	Max Flow for Hotend (Standard Flow Hotend)	40 mm³/s (Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 ℃ printing temperature)
	Max Flow for Hotend (Optional High Flow Hotend)	65 mm³/s (Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 ℃ printing temperature)
Chamber Temperature Control	Active Chamber Heating	Supported
	Max Temperature	65 ℃
Air Purification	Pre-filter Grade	G3
	HEPA Filter Grade	H12
	Activated Carbon Filter Type	Granulated Coconut Shell
	VOC Filtration	Superior
	Particulate Matter Filtration	Supported

Cooling	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		10 ℃-30 ℃
Electronics	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
Network Control	Ethernet	Not Available
	Wireless Network	Wi-Fi
	Network Kill Switch	Not Available
	Removable Network Module	Not Available
	802.1X Network Access Control	Not Available
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 Spec	Laser Type	Semiconductor Laser
	Laser Wavelength	Engraving Laser: 455 nm ± 5 nm Blue Light Height Measuring Laser: 850 nm ± 5 nm Infrared Light
	Laser Power	10 W ± 1 W
	Laser Spot Dimension	0.03 * 0.14 mm²
	Working Temperature	0 ℃–35 ℃
	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 Spec	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
	Cutting Mat Type Detection	Supported
	Supported Image Type	Bitmap and Vector Images
	Supported Material Type	Paper, PVC, vinyl, leather, and more

[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.