

## Magforms SLA 3D Printer Technical Specifications



### PRINTER PROPERTIES

	Helios-P 450	Helios-P 600	Helios-P 800
3D Printer	Helios-P 450	Helios-P 600	Helios-P 800
3D Printer Size Crated (WxDxH)	1600 × 1600 × 2050 mm 63 × 63 × 80.7 in	1800 × 1700 × 2200 mm 70.9 × 66.9 × 86.6 in	
3D Printer Size Uncrated (WxDxH)	Without monitor and LED light: 1380 × 1440 × 1800 mm 54.3 × 56.7 × 70.9 in With monitor and LED light: 2050 × 1560 × 2120 mm 80.7 × 61.4 × 83.5 in	Without monitor and LED light: 1490 × 1580 × 1970 mm 58.7 × 62.2 × 77.6 in With monitor and LED light: 2160 × 1690 × 2300 mm 85.0 × 66.5 × 90.6 in	Without monitor and LED light: 1760 × 1730 × 2100 mm 65.7 × 68.1 × 82.7 in With monitor and LED light: 2400 × 1800 × 2420 mm 94.5 × 68.1 × 95.3 in
3D Printer Weight Crated	~1300 kg 2866 lbs	~1550 kg 3417 lbs	
3D Printer Weight Uncrated	1167 kg 2573 lbs	1428 kg 3148 lbs	1700 kg 3748 lbs
Electrical Requirements	220-240 VAC 50/60 Hz Single Phase 2.5 kW	220-240 VAC 50/60 Hz Single Phase 2.5 kW	220-240 VAC 50/60 Hz Single Phase 2.5 kW
Operating Temperature Range	22-26 °C 71.6-78.8 °F	22-26 °C 71.6-78.8 °F	22-26 °C 71.6-78.8 °F
Humidity Range	35-45 %RH Non-condensing	35-45 %RH Non-condensing	35-45 %RH Non-condensing
Laser	Solid-state frequency tripled Nd:YVO4	Solid-state frequency tripled Nd:YVO4	Solid-state frequency tripled Nd:YVO4
Recoater Rim	Marble	Marble	Marble
Accessories	UPS Drain Device Post Curing Apparatus	UPS Drain Device PCA600 Post Curing Apparatus	UPS Drain Device PCA800 Post Curing Apparatus

## PRINTING SPECIFICATIONS

### 3D Printer

#### Max Build Volume (xyz)

##### Full

##### Custom

#### Resin Vat Capacity

#### Accuracy

#### Slicing Thickness

#### Intelligent Scanning Strategy

##### XY Resolution

##### Fine Feature/Outer Surface Scanning

##### Larger Feature/Internal Surface Scanning

### Helios-P 450

Flexible build volume options with customized resin vat.

450 × 450 × 400 mm  
17.7 × 17.7 × 15.75 in  
175 L  
46.2 U.S. gal

The height of the resin vat is customized (less than full height).

~206 kg  
454 lbs

L ≤ 100 mm: ± 0.1 mm  
L ≤ 3.94 in: ± 0.004 in  
L > 100 mm: ± 0.1% × L  
L > 3.94 in: ± 0.1% × L  
\*Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.

0.05-0.15 mm  
0.002-0.006 in

Viable Laser Beam

0.025 mm  
0.001 in  
\*XY resolution describes image grayscale adjust.

0.15-0.2 mm  
0.006-0.008 in

0.5-0.6 mm  
0.020-0.024 in

### Helios-P 600

Flexible build volume options with customized resin vat.

600 × 600 × 500 mm  
23.6 × 23.6 × 19.7 in  
297 L  
78.5 U.S. gal

The height of the resin vat is customized (less than full height).

~350 kg  
772 lbs

L ≤ 100 mm: ± 0.1 mm  
L ≤ 3.94 in: ± 0.004 in  
L > 100 mm: ± 0.1% × L  
L > 3.94 in: ± 0.1% × L  
\*Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.

0.05-0.15 mm  
0.002-0.006 in

Viable Laser Beam

0.025 mm  
0.001 in  
\*XY resolution describes image grayscale adjust.

0.15-0.2 mm  
0.006-0.008 in

0.5-0.6 mm  
0.020-0.024 in

### Helios-P 800

Flexible build volume options with customized resin vat.

800 × 800 × 550 mm  
31.5 × 31.5 × 21.7 in  
510 L  
136 U.S. gal

The height of the resin vat is customized (less than full height).

~610 kg  
1345 lbs

L ≤ 100 mm: ± 0.15 mm  
L ≤ 3.94 in: ± 0.006 in  
L > 100 mm: ± 0.15% × L  
L > 3.94 in: ± 0.15% × L  
\*Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.

0.05-0.15 mm  
0.002-0.006 in

Viable Laser Beam

0.025 mm  
0.001 in  
\*XY resolution describes image grayscale adjust.

0.15-0.2 mm  
0.006-0.008 in

0.5-0.6 mm  
0.020-0.024 in

## MATERIALS

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Build Materials

Please refer to the TDS and MSDS for more information for the printing material.

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Material Packaging

10 kg per barrel

10 kg per barrel

10 kg per barrel

## SOFTWARE AND NETWORK

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3D Printer Software

Magforms iBuild 2.0

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Magforms iBuild 2.0

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Magforms iBuild 2.0

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Printer Operating System

Windows® 10

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Windows® 10

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Windows® 10

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Input Data File Formats Supported

SLC,CLI

SLC,CLI

SLC,CLI