



**SHINING 3D®**

FOR MORE SHINING IDEAS

# EP-A350/450/650 3D PRINTER STEREO LITHOGRAPHY





## FEATURES

### Stable & Reliable

- Dense high precision marble moving substrate
- Self-developed software, support continuous upgrade
- Automatic detection & calibration by functional module ensure working stability
- Optimized structure, less maintenance

### High Efficiency

- Patented **VarioBeam** technology
- High-speed scan
- Brand-new software brings one-click print and outstanding performance

### High Accuracy

- Self-developed 3D optical high-precision calibration technology
- Avoiding the influence of human factors

### User-friendly & Intelligent

- Provide different processing parameter package
- Broad application flexibility
- Remote control available

## New Software



EP-Resin, machine controlling software

## RECOMMENDED MATERIALS

### Somos® GP Plus 14122

White opaque material, similar as ABS and PBT, an ideal choice for automobile, aerospace and consumption products, also can be used in biomedicine, dental and skin applications.

### Somos® WaterShed XC 11122

Transparent material without color, similar as ABS and PBT, with exceptional clarity and high water-resistance, an ideal choice for automobile, medical and consumption products, including lens, packing, fluid flow analysis, concept models, etc.

### Somos® PerFORM

White material, with high heat tolerance, outstanding detail resolution and stiffness, ideal material for a variety of applications including tooling, wind tunnel testing, high temperature testing, electrical casings and automotive housings.

### SH8900

White material, with good surface effect and ductility, an ideal choice for hand models, functional parts, models, etc.

### Open Platform

Compatible with standard 355 nm photosensitive resin.

# TECHNICAL SPECIFICATIONS

## EP-A350/EP-A450/EP-A650

Model	EP-A350	EP-A450	EP-A650
Build Volume	350 x 350 x 300 mm	450 x 450 x 350 mm	650 x 600 x 400 mm
Layer Thickness	0.05 mm~0.25 mm to choose		
Spot Size	0.08 mm~0.2 mm (standard)		0.08 mm~0.8 mm (optional <b>Variobeam</b> )
Build Accuracy*	±0.08 mm (L<100 mm); ±0.08%×L (L≥100 mm)		±0.1 mm (L<100 mm); ±0.1%×L (L≥100 mm)
Laser	Diode-pumped solid-state laser Nd:YVO4 wavelength:355 nm		
Typical Scanning Speed	6 m/s~10 m/s		
Dimension	1100*950*1640 mm	1350*1200 *2050 mm	1500 *1300*2200 mm
Net Weight	440 kg	900 kg	1050 kg
Resin	70 kg	120 kg	250 kg
Power Supply	200-240 VAC, 50/60 Hz, single phase		
Software	EP-Resin		
Input Data	*.stl/* .slc/* .cli/* .epi		
Working Platform	Marble platform (A0 level)		
Optical Scanning System	High-speed scanning galvanometer		
Operating Environment	Temperature 20-26 °C ; relative humidity <40% (non-condensing)		

\*Notice: SHINING 3D reserves the right to explain any alteration of the specifications and pictures.



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# **EP-A800**

## **LARGE SIZE PARTS & MASS PRODUCTION SOLUTION RESIN 3D PRINTER**



# EP-A800

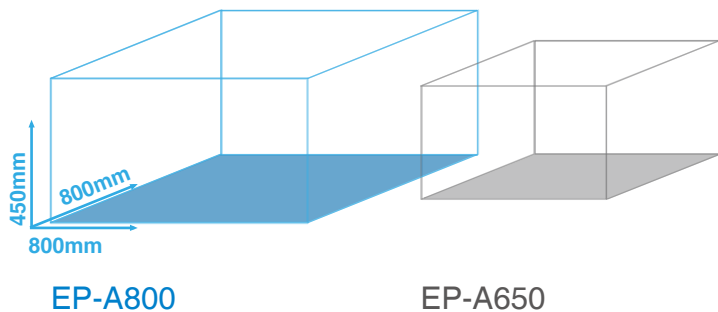
Based on years experience of 3d digital technology, laser scanning strategy optimization technology and the successful experience of EP-A650, EP-A450, EP-A350 resin 3d printers, SHINING 3D launched the new large-size resin 3d printer EP-A800. The newly developed 3d printer is of high efficiency, high precision, large size and free maintenance, especially suits for producing prototypes, rapid molds, precision casting prototypes, sole molds and dental orthodontic models.

## Large Size, High efficiency, Great productivity

- Compared with EP-A650, the build volume is increased by 85% to 800mm\*800mm\*450mm.
- Based on the dynamic optimization of printing path algorithm and the patented VarioBeam technology, the printing efficiency is doubled.
- With dual-laser, the printing speed is 30%~45% faster.

## Patented Technology, Stable and Reliable, High Precision

- Patented VarioBeam Technology, which has a high positioning accuracy, ensures processing efficiency and surface quality as well.
- Liquid-level Control Technology, the adjustment accuracy is within  $\pm 0.01\text{mm}$
- Automatic detection during printing, dynamic fine adjustment.
- The design of machine hardware framework is optimized and more stable.
- 00-level marble platform to improve the motion accuracy and long-term stability.

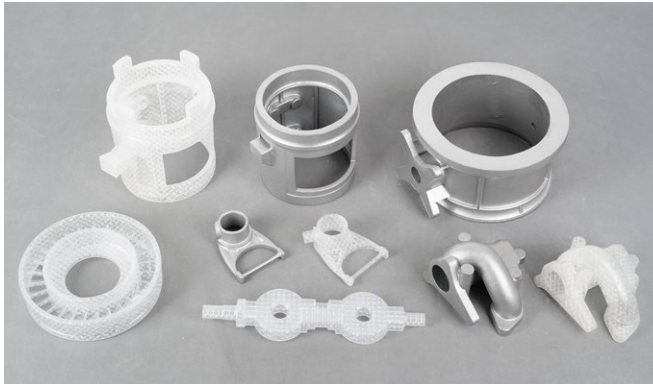


### User-friendly Software, Easy to operate

- Optimized software automatically identifies the model features and surface quality.
- The process parameters can be dynamically specified for a better printing.
- One-click to calibrate the Laser Power. The power will be detected and adjusted automatically before printing
- Simple software, One-click to print. The printing parameters is clearly displayed in real time.

### Variety materials open system and meet diversified application requirements

- Offering material, related applications technology support for prototype part shell, structure testing, jigs and fixtures, investment casting, prototype rollover, medical models and guidance boards
- Offering variety material's printing parameter packages and opening common parameter adjustment for users' fine tune.
- Open material selection, compatible with main 355 nm photosensitive resin in market



· Quick casting moulds



· Transparent resin parts



· Dentistry



Size: 720mm(L) 720mm(W) 430mm(H)

· Large size part

# TECHNICAL SPECIFICATIONS

## EP-A800

Build Volume (X*Y*Z)	800mm*800mm*450mm (The height can be customized up to 550mm)
Build Accuracy*	±0.15mm (L<100mm); ±0.15%×L (L ≥ 100mm) *
Layer Thickness	0.05mm~0.25mm
Scan speed	Typical speed: 6 – 12m/s
Max. weight of one-time produced part	120Kg
Laser	DPSSL (Diode-pumped solid-state laser), 3W
Optical scanning system	Galvanometer Scanners system
Optical focusing system	F-theta lens
Spot size	Invariant spot: 0.08-0.2mm Variant spot: 0.08~0.8mm (VarioBeam Module required)
Motion platform	Marble platform (00 level)
Control software	Self-developed software EPRResin
Data format	*.stl /*.slc/* .cli/* .epi
Equipment IPC	I3, 2.1GHz Frequency, 4GB Memory; Windows® 7 or Windows® 10
Dimensions (L*W*H)	Without package: 1650mm*1500mm*2250mm With package: 1850mm*1700mm*2500mm
Machine Weight	1500KG (without resin)
Power Supply	200-240VAC,50/60Hz, single phase
Operating Temperature	20-26°C
Operating Humidity	Less than 40%
Installation ground	Solid, level, no vibration

\* Notice: The accuracy may vary according to factors such as the processing parameters, part geometry and dimension, the type of post-processing, environment and printing material.