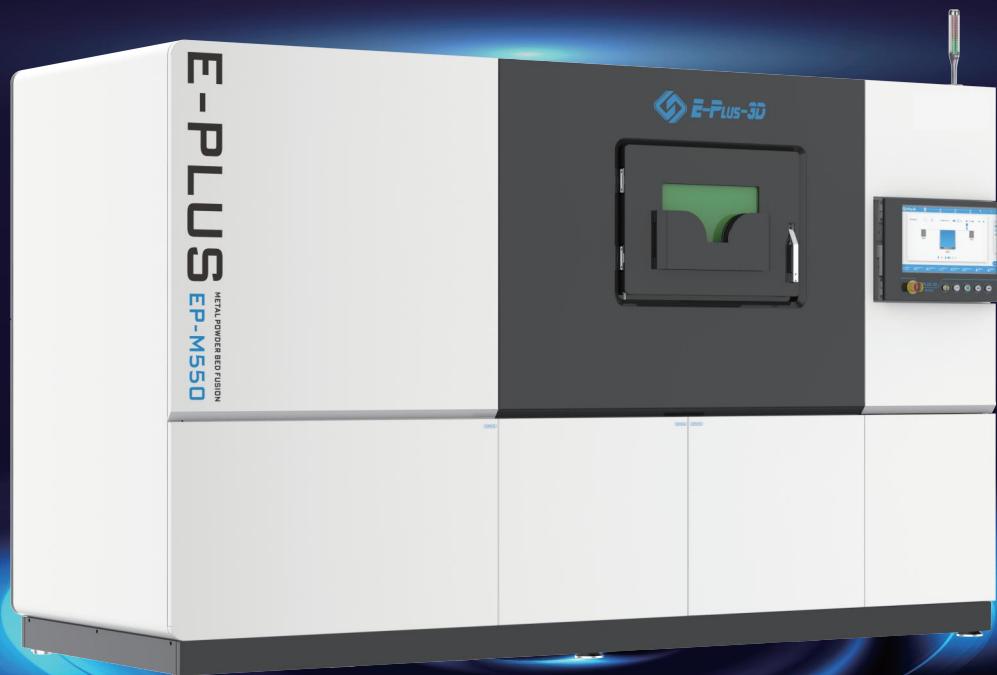




# EP-M550

Big Output, Small Footprint  
Metal Additive Manufacturing System

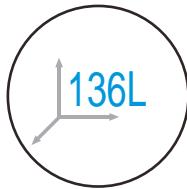


# EP-M550

---

EP-M550 adopts Metal Powder Bed Fusion (MPBF) technology, featuring a forming chamber that reaches up to 550 x 550 x 450 mm. It is a multi-laser system designed to ensure high efficiency production.

Compatible with titanium alloy, aluminum alloy, nickel alloy, maraging steel, stainless steel and cobalt chrome, etc, EP-M550 is an ideal choice for direct manufacturing of large-size high-precision and high-performance parts in the tooling, automotive, aerospace industry and other relevant industries.



## « HIGH EFFICIENCY & PRODUCTIVITY

- Build volume (X x Y x Z): 550 x 550 x 450 mm (height incl. build plate), build chamber volume >136 L.
- The printer is capable of printing at speeds of up to 280 cm<sup>3</sup>/h, with multi-laser simultaneously engaged in the printing process.
- Bi-directional powder recoating method leads to reduced recoating time.



## « STABLE QUALITY & GOOD CONSISTENCY

- Overlapping deviation  $\pm 0.1$  mm.
- Printed parts' density > 99.9%, deviation in parts' mechanical properties <5%.
- The optimized gas flow design ensures efficient removal of smoke and splashes as well as achievement of uniform and consistent full size printing.



#### « REAL TIME MONITORING & HIGH SECURITY

- Safety design, prevent mis-operation, electric shock, re, waste and pollution.
- Real time monitoring of the working environment and air source status ensures safety and reliability.
- The equipment has passed the EU CE certification and FDA laser safety certification, with high safety.



#### « HUMANIZED DESIGN & HIGH AUTOMATION

- The one-piece take out function ensures a high automation.
- The build job information is displayed in real time with traceable printing parameters report.
- Process software supports SLC and CLI formats, enabling real-time modification of printing parameters during the printing process.



# EP-M550

## PARAMETER

Machine Model	EP-M550
Build Volume (X x Y x Z) <sup>height incl. build plate)</sup>	550 x 550 x 450 mm ( 21.6 x 21.6 x 17.7 in)
Optical System	Fiber Laser 4 / 6 / 8 x 500 W (700 W and 1000 W are optional)
Spot Size	70 - 120 μm
Max Scan Speed	8 m/s
Layer Thickness	20 - 120 μm
Theoretical Printspeed	Up to 280 cm <sup>3</sup> /h
Material	Titanium Alloy, Aluminum Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, Copper Alloy, etc.
Power Supply	380 V, 50 / 60 Hz, 18 ~ 40 kW
Gas Supply	Ar / N <sub>2</sub>
Oxygen Content	100 ppm
Dimension (W x D x H)	4000 x 1950 x 2840 mm
Weight	7000 kg
Software	EPCControl, EPHatch
Input Data Format	STL or other Convertible File

Notice: Eplus3D reserves the right to explain any alteration of the specifications and pictures.