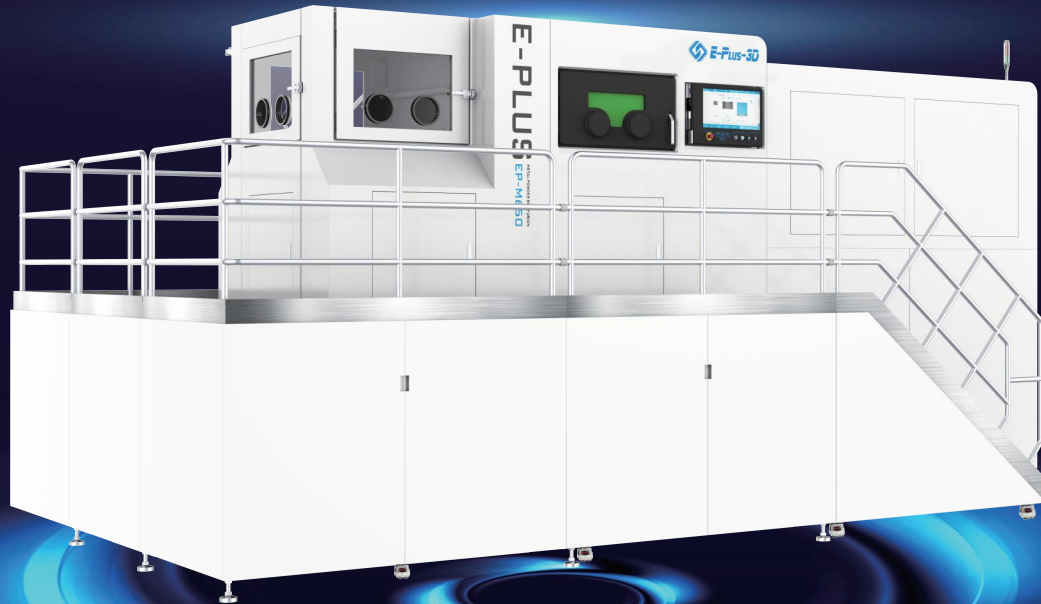


# EP-M650

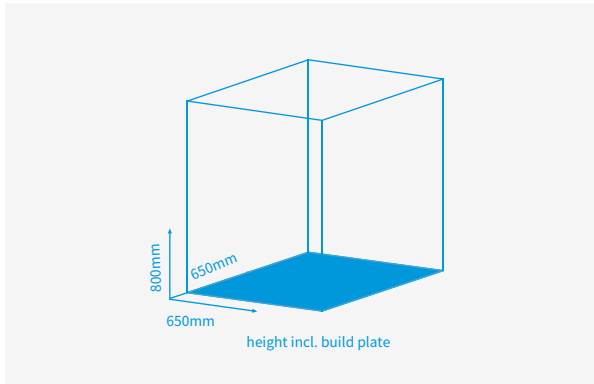
Eight Laser Large Size  
Metal Additive Manufacturing System



# EP-M650

Using MPBF™ (Metal Powder Bed Fusion) technology, EP-M650 is using a large building envelope and 4/6/8 laser systems to ensure a high efficiency production. The precise positioning and innovative area splicing control technology offers uniformity and stability throughout the whole printing phase.

The system can operate with various metal powders such as titanium, aluminum and nickel alloy, maraging steel, stainless steel, cobalt chrome and other materials. It is suitable for the direct manufacturing of large-size, high precision and high-performance parts in the aerospace, aviation and automotive industry, etc.



## ◀ STABLE QUALITY & GOOD CONSISTENCY

- Excellent high beam quality ( $M^2 \leq 1.1$ ).
- Accuracy deviation of lap area less than  $\pm 0.1$  mm.
- High parts accuracy in the overlap area of 0.1 mm.
- Optimized design of gas flow ensures the effective removal of dust and splatter.
- The strict calibration ensures the consistency between parts and batches.

## ◀ HIGH EFFICIENCY & PRODUCTIVITY

- Printing of mass-individualized parts in the 340 Liter build chamber.
- Four lasers are printing simultaneously with speed up to  $320 \text{ cm}^3/\text{h}$ , which increased efficiency of 3.5 times.
- Printing large layer thicknesses of more than 60  $\mu\text{m}$  possible.



## » HUMANIZED DESIGN & HIGH AUTOMATION

- User-friendly interface with fully automatic one click printing function.
- The build job information is displayed in real time with traceable printing parameters report.
- The one-piece take out function ensures a high automation.



## « REAL TIME MONITORING & HIGH SECURITY

- Safety design, prevent mis-operation, electric shock, fire, waste and pollution.
- Outstanding overall sealing performance, use and recovery of powder in a closed state.
- Environment and gas source state real-time monitoring, safe and reliable.

## » PERFECT AFTER-SALE SERVICE

- We support our customers with technical consulting services, including data evaluation, application development.
- Assisting our customers in new material parameter development, existing parameter packages are provided free of charge.
- Free equipment installation and maintenance during warranty period, full set of technical training is provided.



Safe Design



Electricity-proof



Misoperating



Fire-proof



Anti-pollution



Environment  
Real Time  
Monitoring



Gas Real Time  
Monitoring



Waste  
Prevention

# EP-M650

## PARAMETER

Machine Model	EP-M650
Build Volume (X x Y x Z) (height incl. build plate)	650 x 650 x 800 mm (25.59 x 25.59 x 31.49 in)
Optical System	Fiber Laser 4 / 6 / 8 x 500 W (700 W and 1000 W are optional)
Spot Size	70 - 120 $\mu$ m
Max Scan Speed	8 m/s
Layer Thickness	20 - 120 $\mu$ m
Theoretical Printspeed	Up to 320 cm <sup>3</sup> /h
Material	Titanium Alloy, Aluminum Alloy, Nickel Alloy, Maraging Steel, Stainless Steel, Cobalt Chrome, Copper Alloy, etc.
Substrate Heating	Substrate Heating Temperature 200 °C
Power Supply	380 V, 50 / 60 Hz, 18 ~ 23 kW
Gas Supply	Ar / N <sub>2</sub>
Oxygen Content	≤100 ppm
Dimension (W x D x H)	6800 x 3945 x 3785 mm
Weight	15000 kg
Software	EPControl, EP Hatch
Input Data Format	STL or other Convertible File

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