




XH-M160G


More Than Just Copper


Compact High-performance Precision Printing Solution

Features

- ✦

Outstanding Printing Performance in Pure Copper and Copper Alloys
Green Laser Enables the Additive Manufacturing of Highly Reflective Materials, Allowing for More Effective and Efficient Printing. It Delivers a High Absorption Rate, and Generates Less Spatter During Printing. Finer Details Can be Achieved Due to the Small Spot Size of Green Laser. The Performance of the Printed Copper and Its Alloy Parts are Enhanced.
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Electrical Conductivity $\approx 101\% \text{IACS}^{(1)}$
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Thermal Conductivity $\approx 390 \text{W}/(\text{m}\cdot\text{K})^{(1)}$
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Density $\geq 99.8\%^{(1)}$
- ✦

Precision Printing, Accurate Control of Details
Featuring a 15μm Minimum Beam Diameter, M160G Delivers Exceptional Resolution for Micron-level Precision and a Minimum Wall Thickness of 0.05mm.
- ✦

High Power & Stability for Continuous Operation
Equipped With 500W / 700W High-power Green Fiber Lasers, Enabling long Time High-load Printing and Ensuring a Stable and Eeliable Process.
- ✦

Broad Material Compatibility, Expanded Applications
Support a Range of Materials, Including Pure Copper, Copper Alloys, Titanium Alloys, Stainless Steel, Pure Tungsten, Tungsten Alloys, Aluminum Alloys. Widely Used in Aerospace, Electronics, Automotive, Precision Manufacturing, and Other Fields.

Note: (1) Pure Copper Heat Treated. The Test Parameter can Vary According to Factors Like Printing Parameter, Material Used.

M160G is a Compact Industrial Metal Laser Printing System for Precision Manufacturing. Compatible With Pure Copper, Copper Alloys,Titanium Alloys,Stainless steel,Pure Tungsten,Tungsten Alloys,Aluminum Alloys,it Offers High Performance in a 160*160*200mm Footprint.

Equipped With ADDIREEN's Self-developed 532nm Continuous Single-mode Green Fiber Laser (500W/700W), M160G Enhances Absorption in Highly Reflective and Refractory Metals. Overcoming Infrared Laser Challenges in Such Materials.

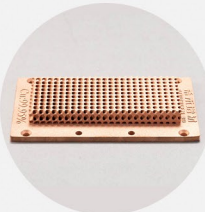
With a Minimum Beam Diameter of 15μm, It Enables Ultra-fine Wall Thickness and Micron-level Precision. Built for Efficiency and Stability, M160G Operates Reliably Under High-load Industrial Conditions, Meeting the Rigorous Demands of High-end Manufacturing.

Machine Specifications

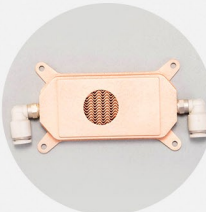
Model	XH-M160G
Build Volume ⁽¹⁾	160*160*200mm
Laser Source	Continuous Single-mode Green Fiber Laser, Wavelength 532nm, Optional With 500W, 700W
Focus Diameter	15-40μm
Focusing System	F-theta Lens Focusing
Scanning Speed	8m/s
Printing Speed	10-30cm³/h
Layer Thickness	20-120μm
Machine Dimensions	1280*1200*2000mm
Weight	Approx. 1.2T
Materials	Pure Copper, Copper Alloys, Titanium Alloys, Stainless Steel, Pure Tungsten, Tungsten Alloys, Aluminum Alloys and Other Highly Reflective Metals, Refractory Metals, Composite Materials (Cu-based Diamond Composite, Cu-based Graphene), Other Common Metal Materials.

Note : (1)Height of Build Plate is Not Included.

Applications



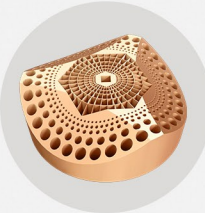
IGBT
Material: Pure Copper



Cold Plate
Material: Pure Copper



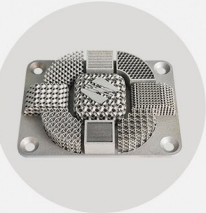
Fin Structure Display
Material: Pure Copper
Fin thickness: 0.5mm



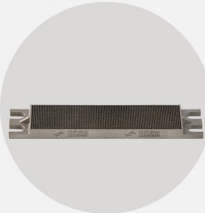
Structure Display
Material: Pure Copper
Wall Thickness: 0.1mm



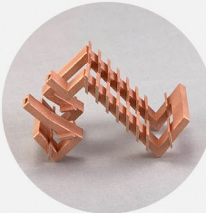
Grid Structure
Material: Stainless Steel
Wall Thickness: 0.06 mm



Lattice Structure
Material: Titanium Alloy
Wall Thickness: 0.06 mm



Tungsten Anti-scatter Grids
Material: Pure Tungsten
Wall Thickness: 0.05mm



High Frequency Induction Heating Coil
Material: Pure Copper

