

# FS1521M

32 Robust Fiber Lasers | Next Generation Metal Platform  
with Extra-large Build Volume

▶ Limited Availability



## EXTRA-LARGE BUILD VOLUME

The FS1521M series boasts a standard build volume of  $\Phi 1530\text{mm}$  platform and 850mm Z-height. It is equipped standard with 16 x 500W or 32 x 500W fiber lasers boosting productivity for volume fabrication. The FS1521M-U is also offered with an extended Z-height of 1650mm enabling huge potential in oil & gas as well as aerospace applications.

## CIRCULAR OR SQUARE BUILD CARTRIDGES

The FS1521M series offer circular and square build cartridge configurations to meet a broad range of application needs. The FS1521M-U square cartridge features a significant build volume of 3,862 Liters – one of the largest in the metal laser powder bed fusion market.

## REDUCED COST FOR VOLUME PRODUCTION

The advanced multi-laser scanning strategies offers optional modes towards efficiency, quality, and balanced performance for different manufacturing needs. FS1521M series offer maximized printing speed for large-format parts, or reduced manufacturing cost for volume series production.

## STREAMLINED POWDER HANDLING

The contact-less, closed-loop powder handling system includes powder supply, recycling and sieving, which is conducted under a fully inert gas protected system for operational safety. Thanks to the modular and redundant powder container design, the FS1521M offers continuous feeding and collection of overflow powder for an easy, streamlined powder management process.

# FARSOON FS1521M

TECHNICAL DATA	FS1521M	FS1521M-U
External Dimensions (L×W×H)	12900×6490×5360mm	13300×6510×6910mm (16 Lasers) 13800×6510×6910mm (32 Lasers)
Build Cylinder Size <sup>1</sup> (L×W×H) (Height incl. build plate)	Circular: Φ1530×850mm Square: 1530×1530×850mm	Circular: Φ1530×1650mm Square: 1530×1530×1650mm
Effective Build Size <sup>2</sup> (L×W×H) (Height incl. build plate)	Circular: Φ1510×850mm Square: 1510×1510×850mm	Circular: Φ1510×1650mm Square: 1510×1510×1650mm
Net Weight	Approx. 61000 KG	Approx. 65000 KG
Layer Thickness	0.02~0.1 mm	
Scanning Speed	Max. 10 m/s	
Laser Type	Fiber Laser, 16×500W	Fiber Laser, 16×500W or 32×500W
Scanner	F theta lenses	
Inert Gas Protection	Argon/Nitrogen	
Average Inert Gas Consumption in Process	35 - 40 L / min	
Operating System	64 bit Windows 10	
Comprehensive Software	BuildStar, MakeStar®	
Key Software Features	Open machine key parameters, real-time build parameter modification, three-dimensional visualization, diagnostic function, support-add function	
Data File Format	STL	
Power Supply	EUR/China: 400V±10%, 3~/N/PE, 50Hz, 100A/120A/160A US: transformer sold with machine	
Operating Ambient Temperature	22-28°C	
Materials <sup>3</sup>	TA15, GH4099, Ti6Al4V*, IN718*, more materials to come	

- 1 Smaller cylinder options available.  
2 The functional build volume depends on the parts/materials.  
3 The materials marked with \* are in the build process development.

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### TOROIDAL PANEL MOUNT FOR SOLAR PANEL ARRAY

PART SIZE: Φ1458 × 52 MM  
SYSTEM: FS1521M-16 (16 × 500W)  
MATERIAL: TA15  
PRINT TIME: 120 HOURS  
LAYER THICKNESS: 0.04 MM

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