FLIGHT® 252PSERIES

Powerful & Flexible Platform for Material Development and High Temperature Applications

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FIBER LIGHT INNOVATION

Equipped with an all-new fiber laser in place of a standard CO₂ laser, Flight® or Fiber Light® Technology is capable of delivering a smaller laser spot size with greatly increased power, as well as a more homogenous energy distribution to the powder bed. Farsoon's 252P series is to latest to implement the Flight® system to achieve full sintering of powder in a significant shorter amount of time, and with improved feature detail compared to other standard plastic laser sintering technologies. Due to the more robust and stable nature of a fiber laser system, Flight® Technology also provides improved laser longevity which is key when considering ROI for manufacturing applications.

HIGH TEMPERATURE CAPABILITY

The Flight[®] 252P series offers two configurations capable of achieving processing chamber temperatures from up to 220°C (HT) to 280°C (ST). Enhanced thermal controls, temperature shielded components, and enhanced parameters offer customers the ability to process high performance polymer materials.

POWERFUL PLATFORM FOR MATERIAL DEVELOPMENT

Application of Flight® Technology on Farsoon's high-temperature 252P series results in a powerful, yet versatile plastic AM solution. The compact size of 252P series is well suited for the research environment as well as small scale production. With increased energy absorption characteristics of Fiber laser, paired with truly open parameters, Flight® 252P series is capable of accessing a much wider range of process-able materials and operational flexibility as compared to standard laser sintering systems, which allows for increased freedom for future AM material and application development.



FARSOON FLIGHT® 252P SERIES

TECHNICAL DATA	FLIGHT® ST252P	FLIGHT® HT252P
External Dimensions (L×W×H)	1735×1225×1975 mm (68.3×48.2×77.8 in)	1735×1205×1975 mm (68.3×47.4×77.8 in)
$\textbf{Build Cylinder Size}^{1}(\textbf{L}\textbf{x}\textbf{W}\textbf{x}\textbf{H})$	$250 \times 250 \times 320 \text{ mm} (9.8 \times 9.8 \times 12.6 \text{ in})$	
Net Weight	Approx. 1700 kg (3747.9 lb)	
Laser Type	Fiber laser, 1×300W	
Scanner	High-precision three-axis galvo system	
Layer Thickness	0.06~0.3mm (0.0024-0.0118 in)	
Scanning Speed	Max. 20 m/s (65.6 ft/s)	
Max. Chamber Temperature	280°C (536°F)	220°C (428°F)
Thermal Field Control	Eight-zone heater & Intelligent temperature control systems	
Temperature Regulation	Continuous real-time build surface temperature monitoring & optimization	
Operating System	64 bit Windows 10	
Comprehensive Software	BuildStar, MakeStar®	
Data File Format	STL	
Key Software Features	Open machine key parameters, real-time build parameter modification, three-dimensional visualization, diagnostic functions	
Power Supply	EUR/China: 400V±10%, 3~/N/PE, 50/60Hz, 32A US: transformer sold with machine	
Operating Ambient Temperature	22-28°C (71.6-82.4°F)	
Materials	FS4200PA-F, FS3300PA-F, FS3201PA-F, FS3401GB-F, FS6140GF-F, WANFAB-PU95AB, Ultrasint® TPU 88A black, LUVOSINT® TPU X92A-1064 WT, more materials to come	

¹ The functional build volume depends on the parts/materials.

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PART: ELECTRONIC FRAME SYSTEM: FLIGHT® HT252P MATERIAL: FS3300PA-F



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