# FLIGHT® 252Pseries

FLIGHT 252P

### Powerful & Flexible Platform for Material Development and High Temperature Applications



#### FIBER LIGHT INNOVATION

Equipped with an all-new fiber laser in place of a standard CO<sub>2</sub> laser, Flight<sup>®</sup> or Fiber Light<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Technology also provides improved laser longevity which is key when considering ROI for manufacturing applications.

#### HIGH TEMPERATURE CAPABILITY

The Flight<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 <sup>®</sup> ST252P   | FLIGHT <sup>®</sup> 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)                                   |
| Build Cylinder Size <sup>1</sup> (L×W×H) | 250×250×320 mm (9.8×9.8×12.6 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                    |  | ouild parameter modification, three-dimensional<br>liagnostic functions |
| Power Supply                             | EUR/China: 400V $\pm$ 10%, 3 $\sim$ /N/PE, 50/60Hz, 32A US: transformer sold with machine  |   |
| Operating Ambient Temperature            | 22-28°C (71.6-82.4°F)  |   |
| Materials                                | FS3200PA-F, FS3201PA-F, FS3401GB-F, FS6140GF-F, WANFAB-PU95AB, Ultrasint® TPU 88A black<br>LUVOSINT® TPU X92A-1064 WT, Ultrasint® PA11 Black, more materials to come |   |

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PART: ELECTRONIC FRAME SYSTEM: FLIGHT® HT252P MATERIAL: FS3201PA-F



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