

# Laser Sintering Production System S600DL



## Introduction

S600DL is equipped with dual laser, dual digital dynamic focusing system, intelligent division of labor and collaborative scanning mode, not simply expand the building volume, but greatly improve the production efficiency at the same time, to ensure the quality of parts. The building size of the equipment reaches 600×600×800mm, which is the largest building volume equipment in the industry at present and suitable for large size parts.

## Applications



## SLS 3D Printer Specification

## S600DL

Build Chamber Size X × Y × Z (mm)	600 × 600 × 800
Effective Space Size X × Y × Z (mm)	590 × 590 × 790
Dimension of Main Machine W × D × H (m)	1.65 × 1.52 × 2.36
Dimension of Control Unit W × D × H (m)	0.60 × 1.06 × 1.92
Weight of Main Machine (kg)	1,750
CO <sub>2</sub> Laser Power (w)	140 x2 Double laser

Focusing	3-axis, dynamic focusing
Building Speed (mm/h)	10~25
Layer Thickness (mm)	<ul style="list-style-type: none"> <li>• 0.06 ~ 0.2 Adjustable.</li> <li>• Recommended Values 0.12</li> </ul>
Diameter of Laser Beam (mm)	0.42
Maximum Scanning Speed (mm/s)	25,000
Maximum Operating Temperature (°C)	230/160
Powder Pyrometer Long Term Stability (°C/Year)	0.1
Powder Feeding Type	<ul style="list-style-type: none"> <li>• Powder discharged upside,</li> <li>• Powder fed both sides</li> </ul>

Data Format	STL
OS	Windows 10.0
Data Processing Software	Voxeldance Additive - TPM3D Version
Options for Color of SLS Parts	White, black or other colors

Auto Lock for Platform	Yes
Lifting Trolley	Manual
Active Cooling	Yes
Thermal Management for Control Cabinet	Chiller
Powder Recoater	Smart dual blade
Electrical Protection	PL-e Dual-channel security control
Nitrogen generator	Integration
Power	380V, 3P/N/PE, 32A, 50/60Hz, Avg 4kW

## Part & Powder Processing Station (600ver)

TPM3D released an innovative clean production solution, the Part & Powder Processing Station (PPS), which provides a perfect solution to prevent powder leakage. The PPS solution not only keeps your work place from any dust pollution, but also helps save your production time and cost. Both automatic and manual operation modes are available on the PPS, which provides you with more flexibilities when using the TPM3D SLS AM system.

Size X × Y × Z (mm)	2700 × 1830 × 2300
Weight (Kg)	1,000
Powder Feeding Rate (Kg/h)	50
Maximum Power (Kw)	4
Intake Pressure (MPa)	≥0.5
Air Flow Requirement (L/min)	≥200
Dust Explosion-Proof Grade (GB3836 / GB12476)	Dust Explosion - Proof Zone 22
Working Noise (dB)	≤70
Power	380V, 3P/N/PE, 10A, 50/60Hz, Avg 2kW
Maximum Capacity	1 SLS System



www.tpm3d.com

© 2023 TPM3D®, All Rights Reserved.

The TPM3D digital printing is for the relevant information of this series of products only, which, at any time, might be updated without prior notice due to technological innovations, improvements of production processes, or any necessary corrections to the printing errors and the inaccurate information.

## TPM 3D Printing Technology CO.,LTD.

### Headquarters:

Rm.112,1/F, Bldg#6, 3000 Yixian Rd.,  
Baoshan District,Shanghai, China 200441

**North China:** Rm. 620, Bldg. A, Zhaolin Plaza,1  
9 Ronghua Rd., M., Beijing 10076

### East China:

Unit 308, 3/F, Bldg.# A-9, Big Data Industrial Park,  
Yannan Hi-Tech Zone, Yancheng,  
Jiangsu, China 224000

**South China:** 1F, No.36, Jiuzhouji Fuli Road,  
Xiaolan Town, Zhongshan City,  
Guangdong Province 528415