

# Laser Sintering Production System S480



## Introduction >>

S480 has a large molding range and high scanning speed, is suitable for the manufacture of large quantities of plastic parts or small-volume parts in batch; when used in combination with S480, it has the manufacturing capability of small parts and large parts, and gives consideration to economical efficiency and extremely high capacity of parts production, which is the preferred equipment matching scheme for additive manufacturing service agencies.

## Applications >>



Medical Treatment



Aviation



Automobiles



Education



Household Appliances

## SLS 3D Printer Specification

### S480

Build Chamber Size X×Y×Z (mm)	480 × 480 × 600
Effective Space Size X×Y×Z (mm)	470 × 470 × 590
Dimension of Main Machine W×D×H (m)	1.60 × 1.48 × 2.09
Dimension of Control Unit W×D×H (m)	0.60 × 1.06 × 1.92
Weight of Main Machine (kg)	1,450
CO <sub>2</sub> Laser Power (w)	100

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)	0.31
Maximum Scanning Speed (mm/s)	21,000
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	Single blade
Electrical Protection	PL-e Dual-channel security control
Nitrogen generator	Integration
Power	380V, 3P/N/PE, 32A, 50/60Hz, Avg 3.5kW

## Part & Powder Processing Station (480ver)

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)	2285 × 1700 × 2070
Weight (Kg)	500
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 or 2 SLS Systems



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## 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