

3D Model

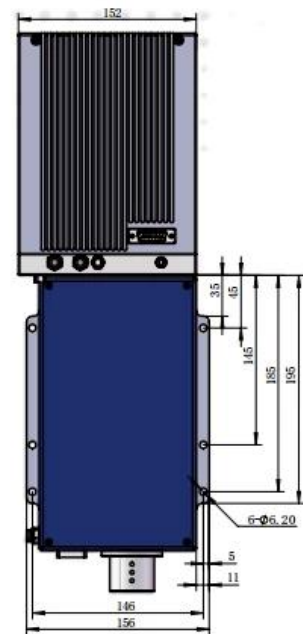
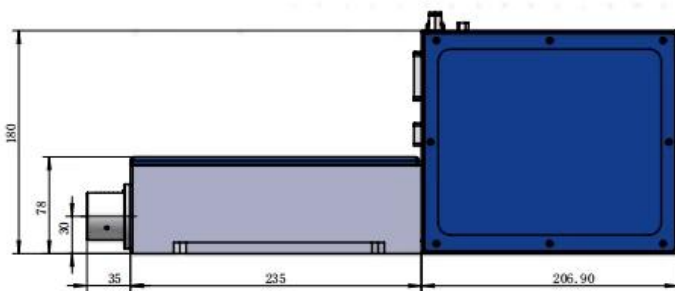
SLS 3D printing technology is a type of additive manufacturing that uses a laser to sinter powdered material, such as plastic or metal, layer by layer. This process allows for the creation of complex, custom parts that are often difficult to produce using traditional manufacturing methods. SLS is particularly well-suited for producing functional prototypes and end-use parts for a wide range of industries, including aerospace, automotive, and medical. The process involves a laser beam that selectively fuses the powder particles, creating a solid structure. The unfused powder is then removed, and the process is repeated to build up the part. SLS offers high precision, excellent mechanical properties, and the ability to produce parts with internal features and complex geometries. Additionally, SLS is a powder-based process, which means there is no need for support structures, reducing material waste and post-processing requirements. The use of CO₂ laser in SLS provides high power density, enabling the sintering of a wide range of materials. The resulting parts are typically smooth and have a high surface finish. SLS is a versatile and powerful manufacturing technology that offers many advantages over traditional methods. It is a key technology in the field of additive manufacturing, enabling the production of high-quality, custom parts with complex geometries and excellent mechanical properties. The use of SLS in manufacturing is growing rapidly, driven by the need for faster, more efficient production of custom parts. SLS is a key technology in the field of additive manufacturing, enabling the production of high-quality, custom parts with complex geometries and excellent mechanical properties. The use of SLS in manufacturing is growing rapidly, driven by the need for faster, more efficient production of custom parts.

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Mechanical Drawings

(Dimensions in mm)



3D Model

This document provides a detailed 3D model of the machine, showing its overall dimensions and key features. The model is designed to be used for manufacturing and assembly purposes. The dimensions are provided in millimeters (mm). The machine is a compact, blue industrial unit with a front panel featuring X, Z, and Y axis labels. The mechanical drawings provide a detailed view of the machine's structure, showing the top, side, and front views. The dimensions are as follows: Side view: 180 (height), 78 (width of top section), 30 (width of bottom section), 35 (width of base), 235 (width of main body), and 206.90 (width of front panel). Front view: 152 (width of top section), 3.5 (height of top section), 15 (height of top section), 115 (height of main body), 185 (height of main body), 195 (height of main body), 6-Φ6.20 (hole pattern), 6 (width of bottom section), 11 (width of bottom section), 145 (width of main body), and 156 (width of main body). The machine is designed for precision and reliability, ensuring consistent performance in industrial applications. The 3D model and mechanical drawings are essential tools for understanding the machine's design and for ensuring accurate manufacturing and assembly. The use of 3D modeling and mechanical drawings allows for a more comprehensive understanding of the machine's structure and dimensions, facilitating the production of high-quality, custom parts. The 3D model and mechanical drawings are essential tools for understanding the machine's design and for ensuring accurate manufacturing and assembly. The use of 3D modeling and mechanical drawings allows for a more comprehensive understanding of the machine's structure and dimensions, facilitating the production of high-quality, custom parts.

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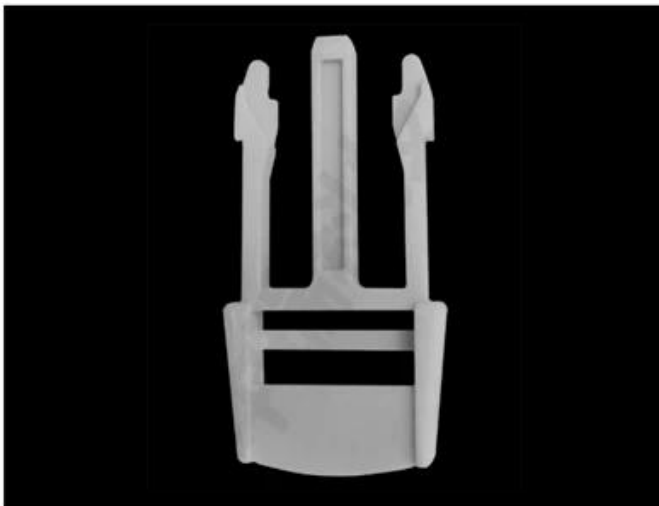
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110.	3.	AR / AR@10.6um.
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GF100 (Glass Fiber Composite Nylon Powder)



PHYSICAL CHARACTERISTICS	Apparent density: $\geq 0.66 \text{ g/cm}^3$
THERMAL PROPERTY	Melting Point: 183°C ($10^\circ\text{C}/\text{min}$) HDT: 89°C @ 1.8MPa / 163°C @ 0.45MPa
MOLDING PERFORMANCE	Density: 1.24 g/cm^3 Tensile Modulus: 3498 MPa Tensile Strength: 43 MPa Elongation at break: 5% Un-notched Impact Strength: 19.26 KJ/m^2 Notched Impact Strength: 4.11 KJ/m^2 Bending Modulus: 2413 MPa Bending Strength: 67 MPa

MF100 (Mineral Fiber Composite Nylon Powder)



PHYSICAL CHARACTERISTICS	Apparent density: $\geq 0.53 \text{ g/cm}^3$
THERMAL PROPERTY	Melting Point: 180°C ($10^\circ\text{C}/\text{min}$) HDT: 125°C @ 1.8MPa / 170°C @ 0.45MPa
MOLDING PERFORMANCE	Density: 1.18 g/cm^3 Tensile Modulus: 6128 MPa Tensile Strength: 50 MPa Elongation at break: 4.6% Un-notched Impact Strength: 20.75 KJ/m^2 Notched Impact Strength: 5.58 KJ/m^2 Bending Modulus: 4630 MPa Bending Strength: 74 MPa

ZRTPU (Thermoplastic Polyurethanes Powder)



PHYSICAL CHARACTERISTICS	Grain Size: $60\mu\text{m}$ Shape: Spherical Apparent density: 0.47 g/cm^3
THERMAL PROPERTY	Melting Point: 165°C HDT Heat deflection temperature: -25°C
MOLDING PERFORMANCE	Density: 1.15 g/cm^3 Tensile Modulus: 61 MPa Tensile Strength: 21 MPa Elongation at break: 310% Tear strength: 101 N/mm Bending Modulus: 74 MPa Bending Strength: 3.3 MPa







重要仪器,
非专业人士勿动。

OptiCentric 300

TRIOPTICS





PerkinElmer Lambda 950---Testing Transmission and Reflectivity



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C E R T I F I C A T E

ATTESTATION CERTIFICATE OF MACHINERY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully. 2006/42/EC Machinery Directive and 2014/35/EU Low Voltage Directive have been taken as references for these processes

Company Name : **Camnan HAAS Laser Technology (Suzhou) Co., Ltd.**

Company Address : No 155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu , P.R.China

Related Directives and Annex : **Low Voltage Directive 2014/35/EU
Machinery Directive 2006/42/EC**

Related Standards : **EN ISO 12100:2010; EN 60204-1:2006+A1:2009+AC:2010**

Product Name : **Laser Marking Machine**

Report No and Date : SD-90049717:09.08.2018

Product Brand/Model/Type : LMCH-3W,LMCH-5W,LMCH-10W,LMCH-15W,LMCH-20W,LMCH-25W,
LMCH-30W,LMCH-50W,LMCH-60W,LMCH-70W,LMCH-100W,
LMCH-120W,LMCH-150W,LMCH-200W,LMCH-300W,LMCH-500W

Certificate Number : **M.2018.201.N6073**

Initial Assessment Date : 10.08.2018

Registration Date : 13.08.2018

Reissue Date/No :

Expiry Date : **12.08.2023**

Signature
UDEM International Certification
Auditing Training Centre Industry
and Trade Inc. Co.



The validity of the certificate can be checked through www.udem.com.tr. The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s)
Address: Mulkikent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TÜRKİYE
Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 70
E-mail: info@udemtd.com.tr www.udem.com.tr



Certificate of Approval

Certificate No.: 10119Q12565ROM

Awarded to

**Carman Haas Laser Technology(SuZhou)
Co., Ltd.**

Organization Code Certificate No. / Unified Social Credit Code:91320594M1MF4EP56
Add.:No.155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu Province, P.R. China. 215000

Beijing ZhongLian TianRun Certification Center (ZLTR) certify that the
Quality Management System of the above organization has been assessed and found to be
in accordance with the requirements of the standard:
GB/T19001-2016 / ISO9001:2015

SCOPE OF CERTIFICATION/REGISTRATION

The Research and Development and Production of Optics Lenses (Except the limits of national laws and regulations.)

This certificate is made valid when used with certification scopes and the requirements of applicable laws and regulations. These requirements include, but are not limited to, administrative permits, scopes of qualifications, and CCC requirements.

Subject to operation conditions in requirements conformity with Quality Management System,

This Certificate is valid for a period of three years only,
Date from: Mar 13th,2019 To: Mar 12th,2022

The effectiveness of this Certificate shall be Validated by periodic surveillance audit
of ZLTR for maintenance.

Information of this certificate can be found on the official website of Beijing Zhonglian Tianrun
Certification center (<http://www.zltr.com.cn>)



Beijing Zhongliantianrun Certification Center

Room2603, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100102

Information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China (<http://www.cnca.gov.cn>)

ISO 9001

ISO 9001



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- .ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් පිටුපසින් ප්‍රශ්න 02 ක් (2 කොටසක)
- .ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් (3 කොටසක)
- ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් (4 කොටසක).

ප්‍රශ්න 04 ක් සඳහා:

- (1) ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් dhl, ups, tnt, ems, ets
- (2) ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් CNF, CIF

ප්‍රශ්න 04 ක්

Q1. ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A1: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්.

Q2.How ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A2: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්.

Q3.How ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A3: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්.

Q4.How ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A4: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්.

Q5.May ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A5: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් !

q6.can ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A6: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්.

Q7.How ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් OEM, ODM

A7: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් OEM / ODM ORDers.

q8. ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක්

A8: ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් සඳහා පිටුපසින් ප්‍රශ්න 02 ක් T / T