

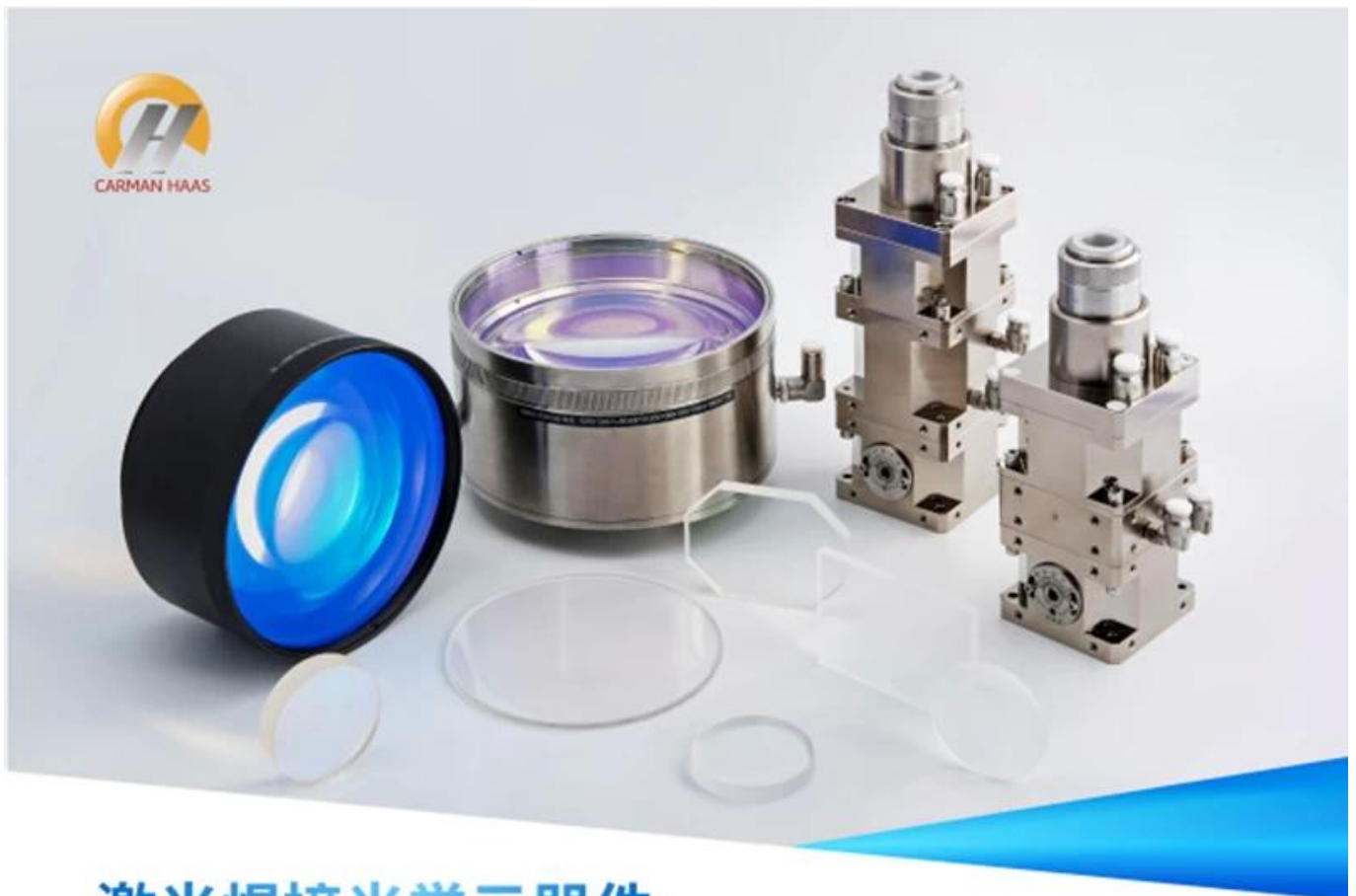
00 00 :

Carmanhaas ([Galvo 00-0000-00-00-00-00](#)) QBH 00, 00 00 0 F-Theta 00 0000 0000 0000 00 00. 0000 00 00 0000 0000 00 000000 0000 0 00 0. 0000 00 0000 PSH14, PSH20 0 PSH30000.

PSH14-H 0 00 00 - 200W00 1kw (CW)0000 0000 0000 00; 0000 00 0 00 0000 0 00; 00 0000 00, 0 00 00 0000 0000 0 00 000000. 0000 00 (3D 00), 0000 00 0

PSH20-H 0000 00 - 300W ~ 3kW (CW) 0000 0000 00; 0000 00 0 00 0000 0 00; 00 0000 00, 0 00 00 0000 00000 0000 00000. 0000 00 (3D 00), 0000 00 0

PSH30-H 0000 00 - 2KW00 6KW (CW) 0000 0000 0000 00; 0000 00 0 00 0000 0 00; 00 00 0000 00, 00 00 000000 0000 00 000000. 00 00, 0000 00.



激光焊接光学元器件

Optics and optical system for fiber laser welding

0000 00 0000 :

此系列之鏡頭係採用高品質之玻璃材料，經精密研磨及拋光而成。其外觀美觀大方，且具優良之透光性能。30mm 鏡頭之重量僅 20mm 鏡頭之重量之半。此系列之鏡頭係採用高品質之玻璃材料，經精密研磨及拋光而成。其外觀美觀大方，且具優良之透光性能。30mm 鏡頭之重量僅 20mm 鏡頭之重量之半。

鏡頭規格：

1. 外光軸角 (≤3urad / °C); 8 吋鏡頭之重量 ≤30 磅

2. 鏡頭之重量; 鏡頭 ≤ 1 URAD; 鏡頭 ≤ 2 Urad.

3. 外光軸角：

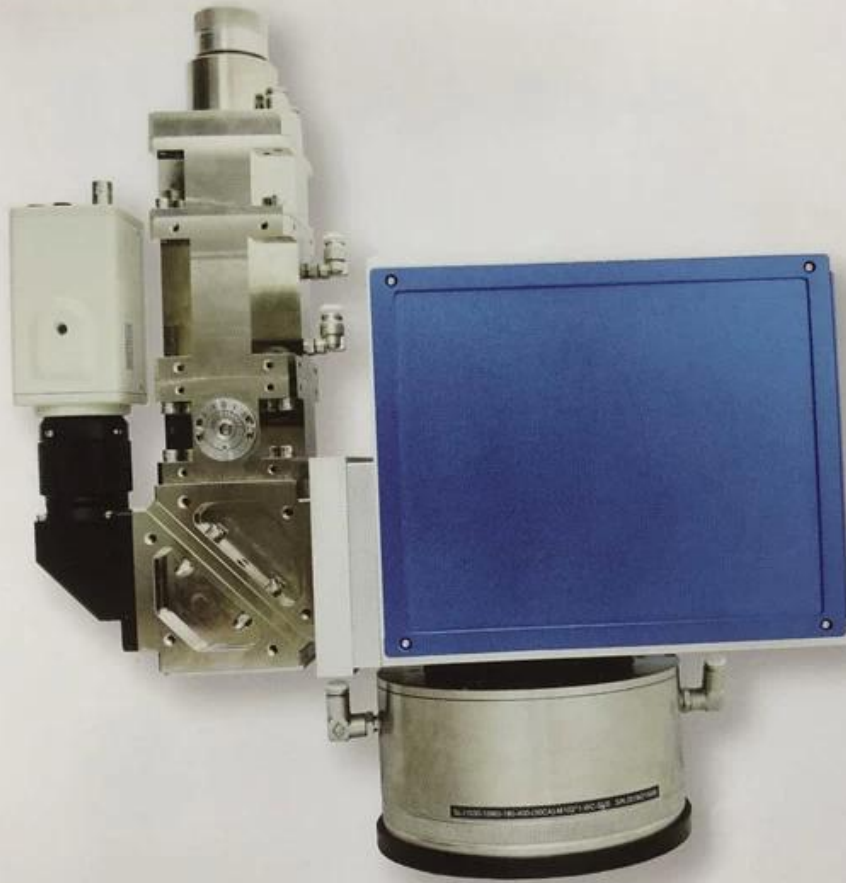
PSH14-H : 15m / S.

PSH20-H : 12M / S.

PSH30-H : 9M / S.

鏡頭規格請參閱 [CARMAN HAAS 鏡頭規格表](#) 之說明。





□□ □ □ □ :

Model	PSH14-H	PSH20-H	PSH30-H
Input laser power (MAX.)	CW: 1000W @ fiber laser Pulsed: 500W @ fiber laser	CW: 3000W @ fiber laser Pulsed: 1500W @ fiber laser	CW: 1000W @ fiber laser Pulsed: 150W @ fiber laser
Water cool/sealed scan head	yes	yes	yes
Aperture (mm)	14	20	30
Effective Scan Angle	±10°	±10°	±10°
Tracking Error	0.19 ms	0.28ms	0.45ms
Step Response Time(1% of full scale)	≤ 0.4 ms	≤ 0.6 ms	≤ 0.9 ms
Typical Speed			
Positioning / jump	< 15 m/s	< 12 m/s	< 9 m/s
Line scanning/raster scanning	< 10 m/s	< 7 m/s	< 4 m/s
Typical vector scanning	< 4 m/s	< 3 m/s	< 2 m/s
Good Writing quality	700 cps	450 cps	260 cps
High writing quality	550 cps	320 cps	180 cps
Precision			
Linearity	99.9%	99.9%	99.9%
Resolution	≤ 1 urad	≤ 1 urad	≤ 1 urad
Repeatability	≤ 2 urad	≤ 2 urad	≤ 2 urad
Temperature Drift			
Offset Drift	≤ 3 urad/°C	≤ 3 urad/°C	≤ 3 urad/°C
Qver 8hours Long-Term Offset Drift (After 15min warn-up)	≤ 30 urad	≤ 30 urad	≤ 30 urad
Operating Temperature Range	25°C±10°C	25°C±10°C	25°C±10°C
Signal Interface	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol
Input Power Requirement (DC)	±15V@ 4A Max RMS	±15V@ 4A Max RMS	±15V@ 4A Max RMS

□□:

(1) □□ □□ □□ □□ □□□□.

(2) f-theta objective f = 163mm. □□ □□ □□ □□ □□ □□ □□□□.

(3) 1mm □□ □□ □□□□ □□.

□□□ □□ (mm) :

PSH20 Scan Head

Focus on high end industrial laser applications



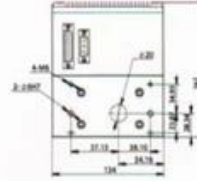
Mechanical Drawings



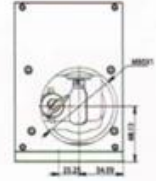
PSH20 scan head

Legend:

1. Mounting screw holes (M5×12)
2. Installation flange
3. Dowel pin-hole (φ4×2)
4. Electrical connector
5. Beam in hole
6. Beam out hole



Beam In & Mounting Bracket



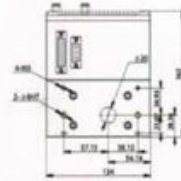
Beam Exit Side



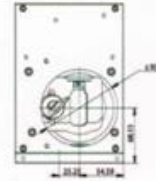
PSH20-H scan head

Legend:

1. Mounting screw holes (M5×12)
2. Installation flange
3. Dowel pin-hole (φ4×2)
4. Electrical connector
5. Beam in hole
6. Beam out hole
7. Cooling water in
8. Cooling water out



Beam In & Mounting Bracket



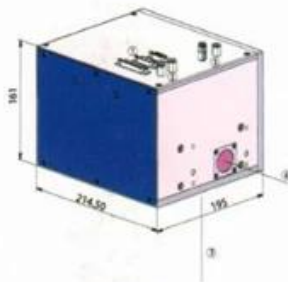
Beam Exit Side

PSH30 Scan Head

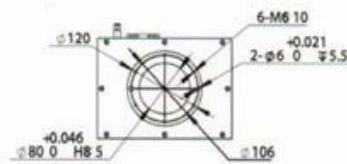
Focus on high end industrial laser applications



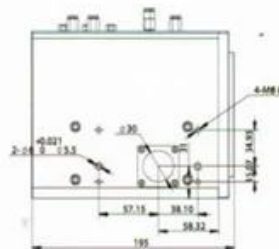
Mechanical Drawings



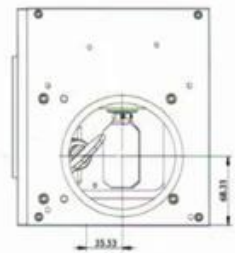
PSH30/PSH30-H scan head



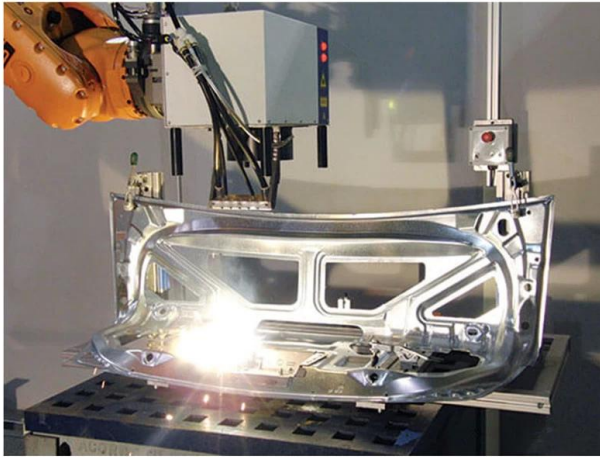
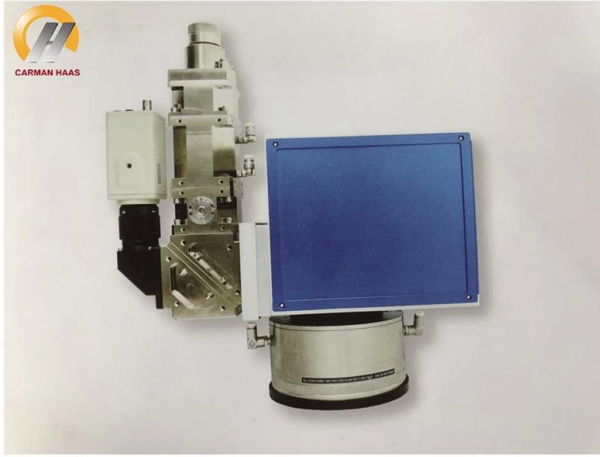
Installation flange



Beam In Side



Beam Exit Side



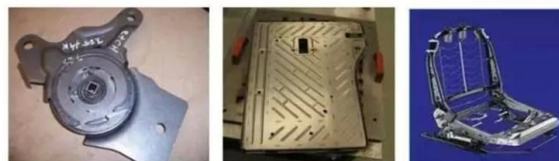
白车身 Body-in-White



Sun gear, Ring gear Viscous damper Synchronization ring



Differential gear Planetary carrier Flywheel



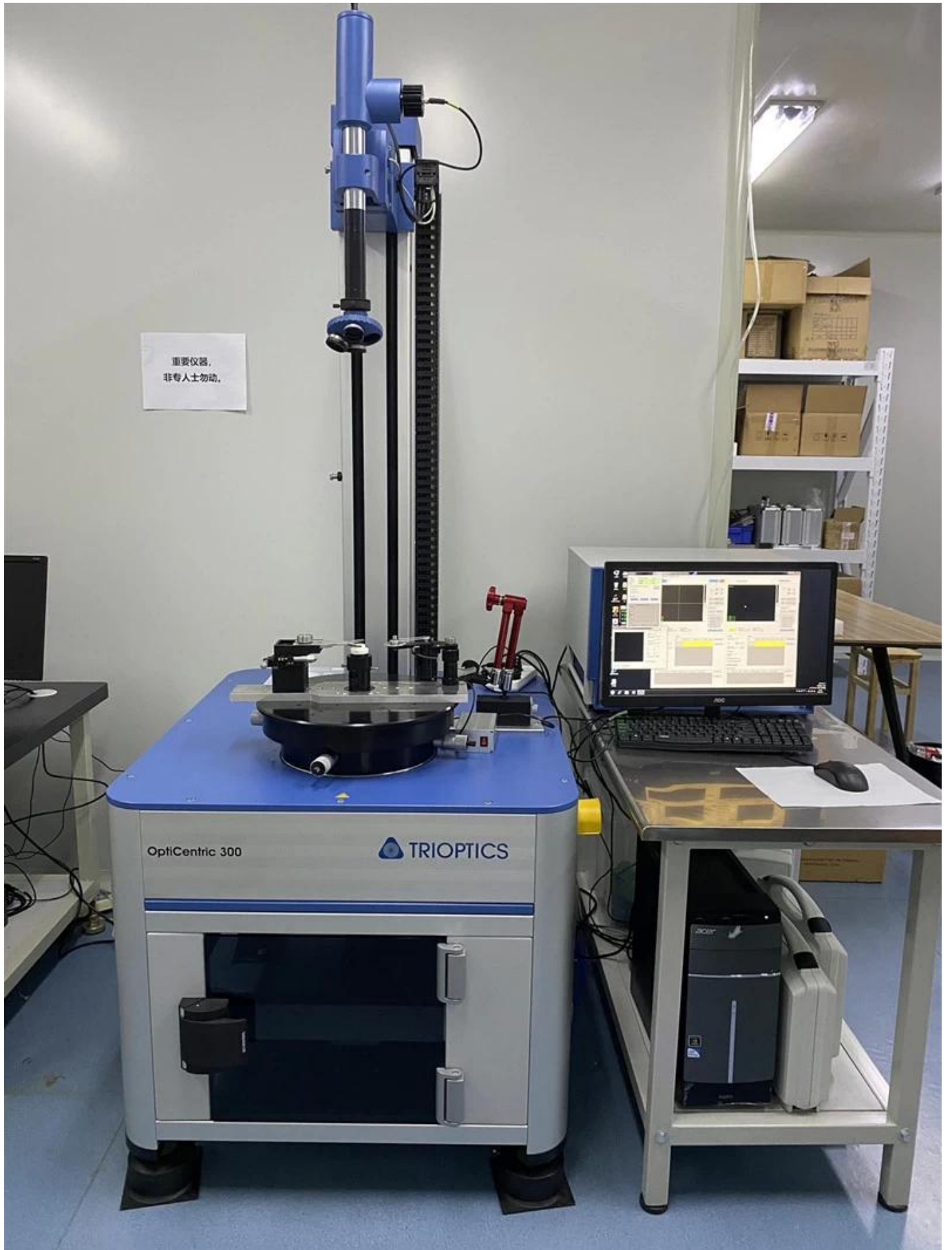
Recliner Backrest Seat Frame



Seat Track Assembly





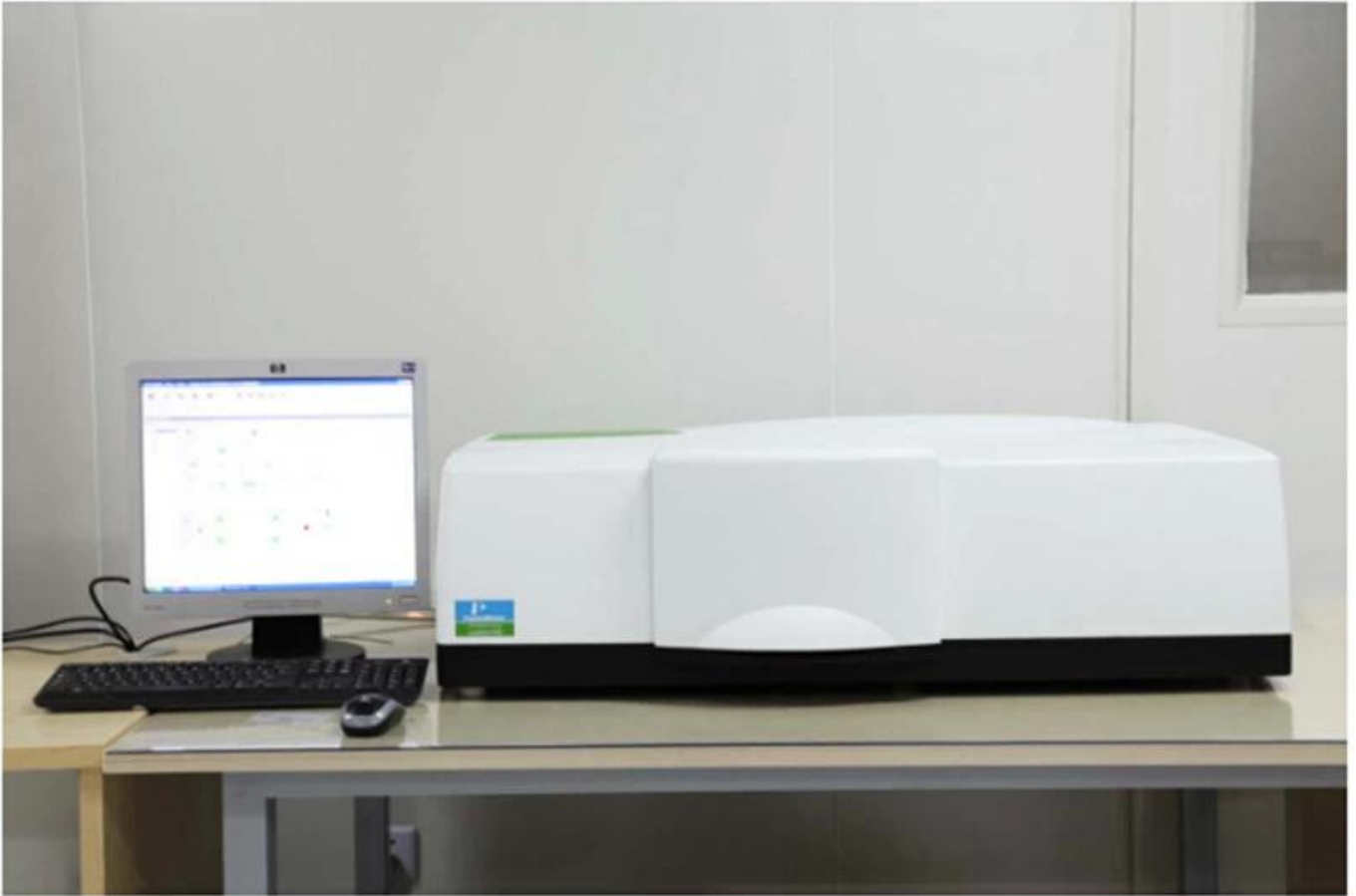


重要仪器,
非专业人士勿动。

OptiCentric 300

TRIOPTICS





PerkinElmer Lambda 950---Testing Transmission and Reflectivity





CERTIFICATE

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 : **Camman 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**

U. Saygılı
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 noticed 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:91320594MA1MF4EP56
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>)

ISO 9001

ISO 9001



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>)



Test Report
出厂检查报告

Model / 产品型号: **PSH20**
 S/N / 产品序列号: **PS1F200046**

Function Test / 功能测试

No. / 序号	Parameter / 参数名称	Test Result / 测试结果 Pass/Fail / 合格/不合格	Comment / 备注
1	Dimensional Accuracy	Pass	
2	Surface Finish	Pass	
3	Material	Pass	
4	Coating	Pass	
5	Strength	Pass	
6	Corrosion Resistance	Pass	
7	Temperature Stability	Pass	
8	Impact Resistance	Pass	
9	Welding Quality	Pass	
10	Final Inspection	Pass	

Tester: **张明** Date: **2020-6-1**

General Inspection / 外观检查

No. / 序号	Inspection Item / 检查项目	Test Result / 测试结果 Pass/Fail / 合格/不合格	Comment / 备注
1	Surface	Pass	
2	Edges	Pass	
3	Dimensions	Pass	
4	Material	Pass	
5	Coating	Pass	
6	Strength	Pass	
7	Corrosion Resistance	Pass	
8	Temperature Stability	Pass	
9	Impact Resistance	Pass	
10	Welding Quality	Pass	
11	Final Inspection	Pass	

Tester: **张明** Date: **2020-6-1**

Packing Inspection / 包装检查

No. / 序号	Inspection Item / 检查项目	Test Result / 测试结果 Pass/Fail / 合格/不合格	Comment / 备注
1	Quantity	Pass	
2	Labeling	Pass	
3	Packaging	Pass	
4	Storage	Pass	
5	Final Inspection	Pass	

Tester: **张明** Date: **2020-6-1**

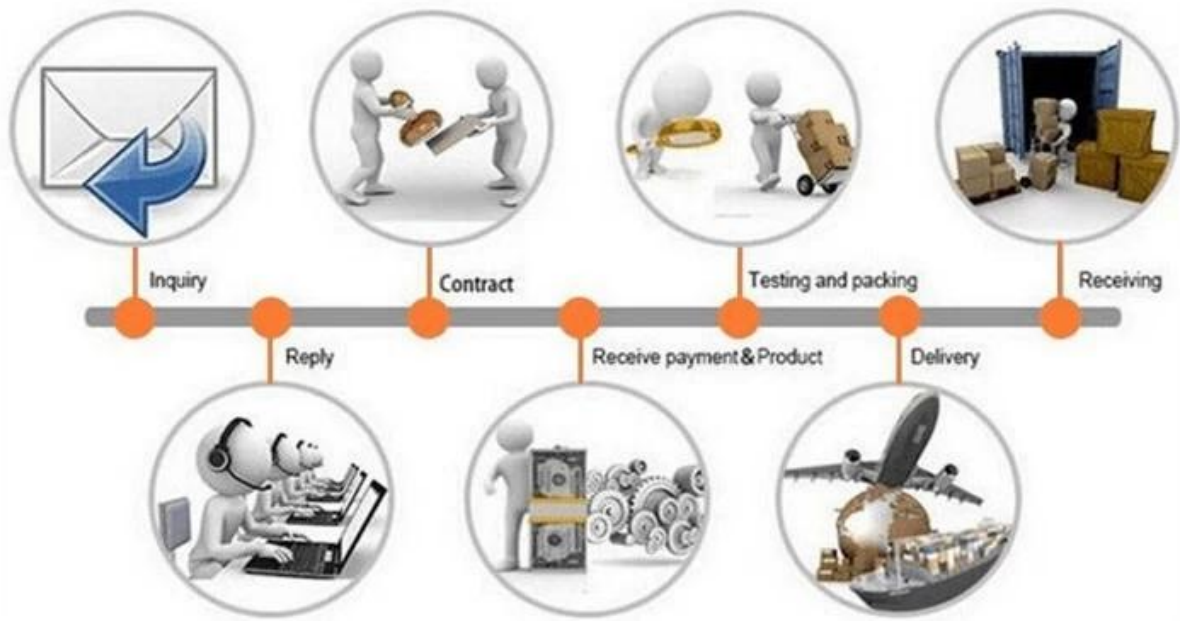




Model: PSH20
S/N: PSHf200046

Precision Scan Inc.

D5-4 Red Manor International Bounded Innovation Park, No. 1 Baijialou,
Chaoyangbei Rd, Chaoyang District, 100024 Beijing, China
<https://www.precisionscan.ca>



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- 1 問) 〇 〇〇〇 〇〇〇〇 〇〇〇〇〇〇。
- 2 問) 〇〇〇 〇〇〇 〇〇 〇〇〇 〇 〇〇 〇〇 〇〇〇〇〇〇。
- 3 問) 〇〇〇 〇〇〇〇 〇〇 〇〇〇 〇〇〇〇〇。
- 4 問) 〇〇 〇 〇〇 〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇〇〇。

問 問:

- (1) 〇〇〇 〇〇 〇〇 〇〇〇 〇〇 DHL, UPS, FedEx, TNT, EMS, ETS 〇 〇〇〇 〇 〇〇〇〇。
- (2) 〇〇〇〇〇〇〇〇〇〇〇〇, 〇 〇 〇〇〇〇~〇〇〇〇〇 〇〇~〇 〇〇〇〇〇〇〇 〇〇FOB, CNF, CIF. 〇 〇〇〇〇〇〇〇~〇 〇〇〇〇〇〇〇〇 〇〇〇〇〇〇〇〇〇〇〇〇〇〇〇〇 〇。



Q1. 〇〇〇〇〇〇?

A1 : 〇, 〇〇〇 〇〇 〇〇〇 〇〇 〇 〇〇 〇〇〇 〇〇 〇〇〇〇〇 〇〇 〇 〇〇〇〇〇〇〇。

Q2. 〇〇〇 〇〇〇 〇〇〇〇?

A2 : 〇〇〇 〇〇〇〇 QC 〇〇 〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇 〇, 〇〇 〇〇 〇 〇〇〇 〇〇〇〇 〇〇〇 〇〇〇 〇〇〇〇〇。

Q3. 〇〇〇 〇〇〇〇〇?

A3 : 〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇〇 〇〇〇 〇〇〇〇〇。

Q4. 〇〇〇 〇〇〇 〇〇〇 〇〇〇〇?

A4 : 〇〇〇 〇〇〇〇〇 〇〇 〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇 〇〇 〇〇, 〇〇, 〇〇 〇〇 〇 〇〇 〇〇〇〇〇。 〇〇〇〇〇。

Q5. May MARKING 〇〇〇 〇〇〇〇〇 〇〇 〇〇〇 〇〇〇 〇?

A5 : 〇! 〇〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇 〇〇〇 〇〇 〇〇 〇 〇〇〇〇。

Q6. 〇〇〇 〇〇 〇 〇 〇〇〇?

A6 : 〇, 〇〇〇 〇〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇〇〇〇。

Q7. OEM 〇〇 ODM 〇〇〇 〇〇〇 〇 〇 〇〇〇?

A7 : 〇〇 OEM / ODM ORD 〇〇 〇〇 〇〇〇 〇〇ers. 〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇〇〇 〇〇 〇〇 〇〇〇〇〇。

Q8. 〇〇〇 〇〇〇 〇〇〇〇〇〇?

A8 : 〇 〇〇〇 〇〇〇 〇〇〇 〇〇 〇〇 〇 MOQ 〇〇〇 〇〇〇 T / T 〇〇 〇 〇 〇〇〇〇。