

## Product Description

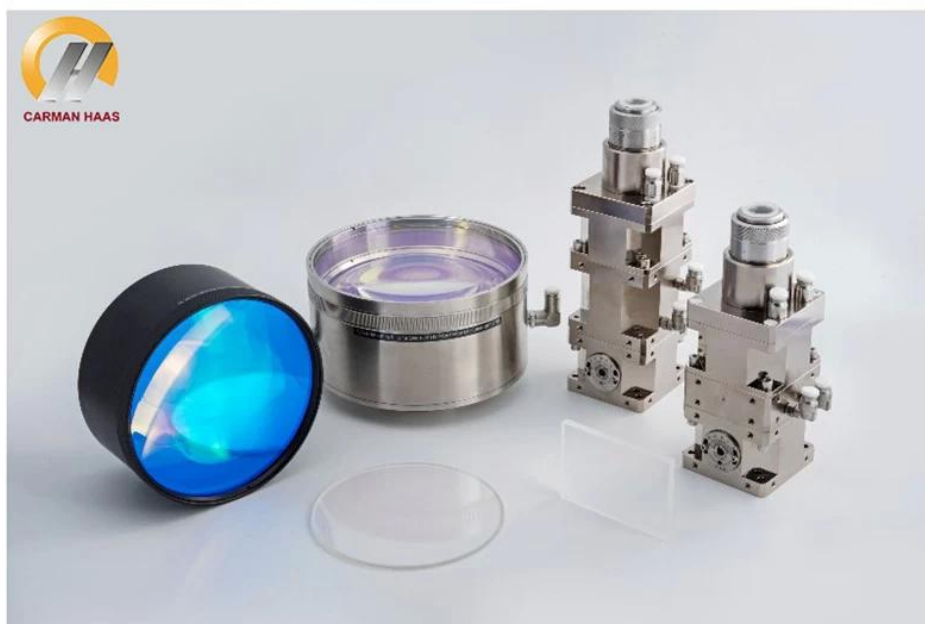
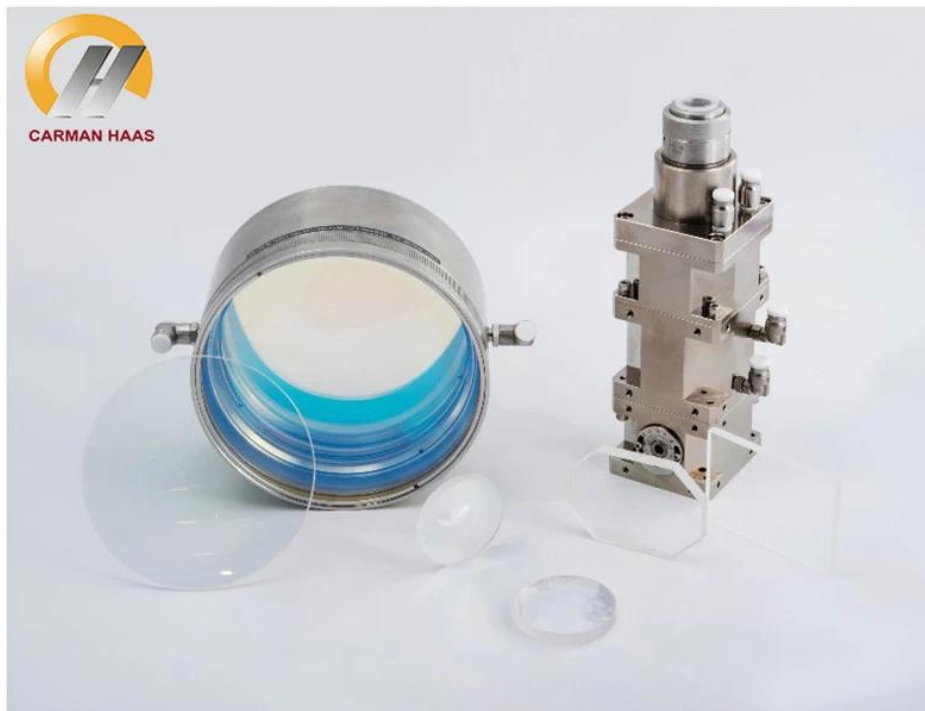
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Carmanhaas offer professional laser optical system with galvo scan laser processing. The entire system is a separate functional module that enables plug-and-play functionality. Processing by galvanometer scanning, mainly include: QBH collimation module / beam expander, galvanometer system, F-theta scan lens, in which QBH collimation module / beam expander realizes shaping of light source (diverging parallel or small spot becomes large spot), the galvanometer system realizes beam. ([QBH Optical Modul Supplier China](#))

### **Carmanhaas [Fiber Laser Galvo Mirrors Manufacturer](#) Advantage:**

- (1)Material is Fused silica;
- (2)High damage threshold coating (damage threshold: 40 J/cm<sup>2</sup>, 10 ns);  
Coating absorption <20 ppm. Ensure that the scan lens can be saturated at 8KW;
- (3)Optimized index design, collimation system wavefront <  $\lambda/10$ , ensuring diffraction limit;
- (4)Optimized for heat dissipation and cooling structure, ensuring no water cooling below 1KW, temperature <50°C when using 6KW;
- (5)With a non-thermal design, the focus drift is <0.5mm at 80 °C;
- (6)Complete range of specifications, customers can be customized.





## Technical Parameters:

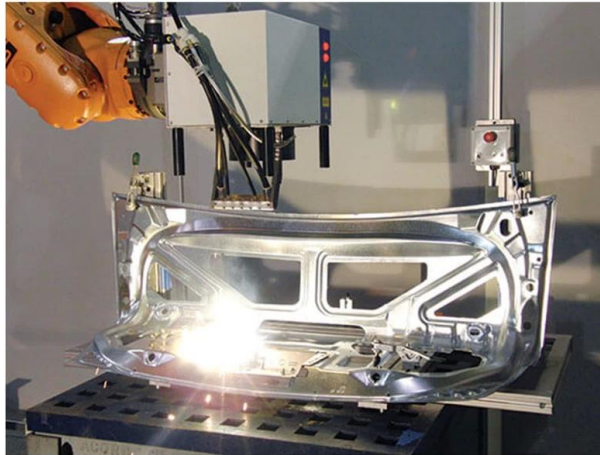
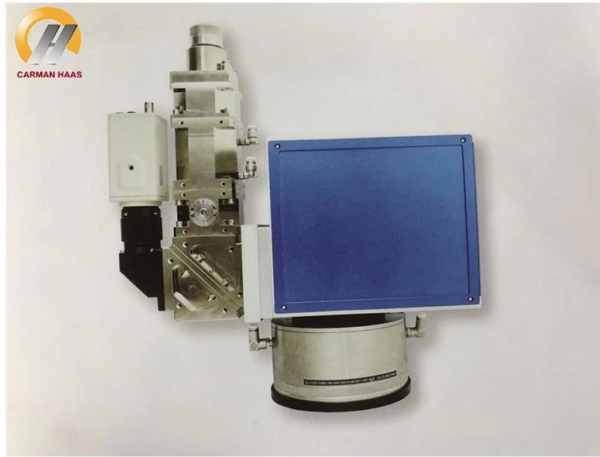
### 1030-1090nm F-Theta Lenses

Part Description	Focal Length (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance(mm)	Mounting Thread
SL-1064-100-170-(14CA)	170	100x100	14	215	M79x1/M102x1
SL-(1030-1090)-150-210-(15CA)	210	150x150	15	269	M79x1/M102x1
SL-(1030-1090)-175-254-(15CA)	254	175x175	15	317	M79x1/M102x1
SL-(1030-1090)-90-175-(20CA)	175	90x90	20	233	M85x1
SL-(1030-1090)-160-260-(20CA)	260	160x160	20	333	M85x1
SL-(1030-1090)-100-254-(30CA)-M102*1-WC	254	100x100	30	333	M102x1/M85x1
SL-(1030-1090)-180-348-(30CA)-M102*1-WC	348	180x180	30	438	M102x1
SL-(1030-1090)-180-400-(30CA)-M102*1-WC	400	180x180	30	501	M102x1
SL-(1030-1090)-250-500-(30CA)-M112*1-WC	500	250x250	30	607	M112x1/M100x1

### QBH Collimation Module

Part Description	Focal Length (mm)	Clear Aperture (mm)	Max NA	Coating
CL2-(900-1100)-30-F60-QBH-A-WC	60	28	0.22	AR/AR@1030-1090nm
CL2-(900-1100)-30-F100-QBH-A-WC	100	28	0.13	AR/AR@1030-1090nm
CL2-(900-1100)-30-F125-QBH-A-WC	125	28	0.10	AR/AR@1030-1090nm
CL2-(900-1100)-38-F100-QBH-A-WC	100	34	0.16	AR/AR@1030-1090nm
CL2-(900-1100)-38-F125-QBH-A-WC	125	34	0.13	AR/AR@1030-1090nm
CL2-(900-1100)-38-F135-QBH-A-WC	135	34	0.12	AR/AR@1030-1090nm
CL2-(900-1100)-38-F150-QBH-A-WC	150	34	0.11	AR/AR@1030-1090nm
CL2-(900-1100)-38-F200-QBH-A-WC	200	34	0.08	AR/AR@1030-1090nm

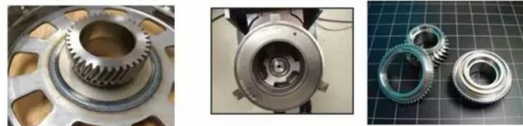




# 白车身 **Body-in-White**



Sun gear, Ring gear      Viscous damper      Synchronization ring



Differential gear      Planetary carrier      Flywheel



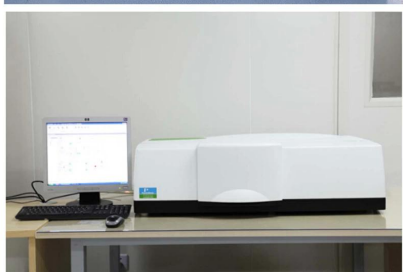
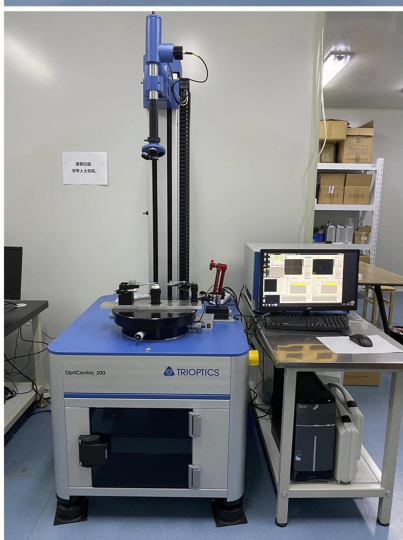
Recliner      Backrest      Seat Frame



Seat Track Assembly

# Factory

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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**

The validity of the certificate can be checked through [www.udem.com.tr](http://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 10 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: Muratkerem Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TÜRKİYE

Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 76

E-mail: [info@udemtd.com.tr](mailto:info@udemtd.com.tr) [www.udemtd.com.tr](http://www.udemtd.com.tr)

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



## Certificate of Approval

Certificate No.: 10119Q12565R0M

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 ZhongLianTianRun 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**

Room2003, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100022

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



## Packing List

### Packaging & Shipping





**Return Policy:**

Should returns be required:

Step 1) Contact us with this website email.

Step 2) Provide as much detail as possible about the problem you are having.

Step 3) Authorization to return the item will be issued.

Step 4) Return the item for the agreed replacement or refund.

### **Logistics:**

(1)For Laser Optics order delivery,can be optional with DHL,UPS,FedEx,TNT,EMS,ets

(2)For Laser machine order delivery,can be optional with terms of EXWork FOB,CNF,CIF By Air or by Sea based on the buyer's forwarders or ours.

## **FAQ**

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### **Q1.Are you a manufacturer?**

A1: Yes, we are professional and experienced manufacturer with our own molds and production lines.

### **Q2.How about quality of products?**

A2: Our technicians and QC teams test the products one by one using aging line, professional devices and instruments to ensure the quality for all products.

### **Q3.How about price?**

A3: We are a manufacturer and always offer our customers the most competitive prices.

### **Q4.How to place an order?**

A4: Contact with online service, or sent email to us directly, we will reply to you with product price, specifications, packing etc. soon. Thank you.

### **Q5.May I send material to test marking performance?**

A5: Yes! You are welcome to send material to test our superior quality and service.

### **Q6.Can I visit your factory?**

A6: Yes, welcome to visit our factory at your convenient time.

### **Q7.How can I make OEM or ODM orders?**

A7: We have different print processing for different OEM/ODM orders. Please contact us with online service or send email to us directly.

### **Q8. How should I pay for my orders?**

A8: You can pay by T/T would be available for qualified bank and MOQ required for each order.