

## Product Information

### Product Description:

[CO2 F Theta lens factory china](#) Carmanhaas Laser marking system can be applied to the marking of all non-transparent materials. General optical system: Expanding the beam through the beam expander to improve the divergence angle, after the beam combines the indicator light into the galvanometer system for beam deflection and scanning, finally, the workpiece is scanned and focused by the F-THETA scan lens.

Laser marking optical components mainly include beam expander and F-THETA scan lenses. The role of the beam expander is to enlarge the beam diameter and reduce the beam divergence angle. F-Theta scan lenses achieve uniform focusing of the laser beam.



## CO2 focus lens:

- Dia Tol:  $+0/-0.13\text{mm}$
- Thk Tol:  $\pm 0.25\text{mm}$
- FI Tol:  $< \pm 2\%$
- ETV:  $< 3 \text{ arc min}$
- CA:  $> 90\%$
- Surface Figure: L/20 @10.6um
- AR:  $R < 0.25\% \text{ @10.6um}$

### Detail Image



## Related Optics:



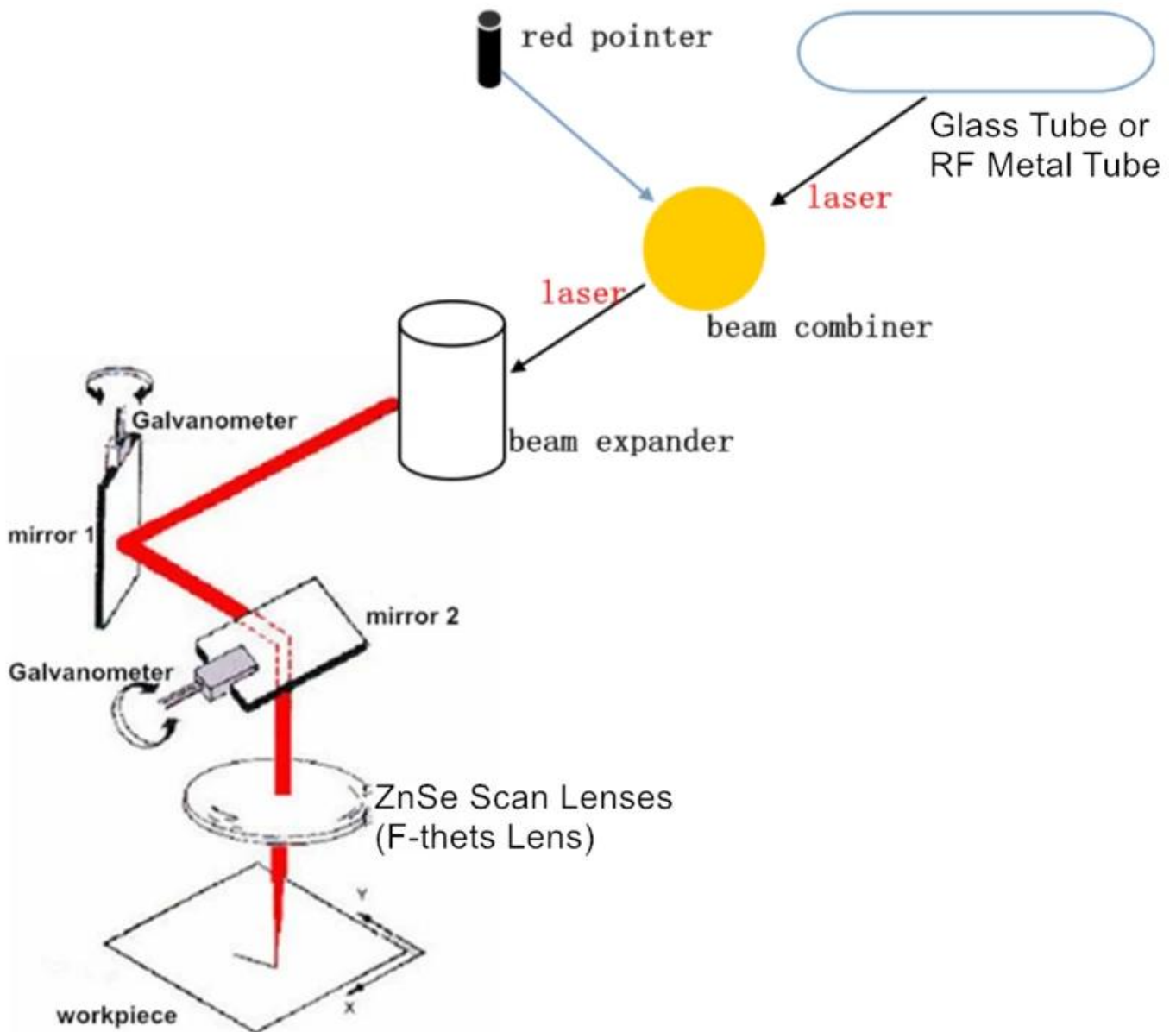
## Technical Parameters:

### CO2 F-Theta Scan Lenses(10.6um)

Part Description	FL (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance (mm)	Mounting Thread
SL-10.6-50-75	75	50x50	14	57.5	M85x1
SL-10.6-70-100	100	70x70	14	85.7	M85x1
SL-10.6-90-125	125	90x90	14	111.9	M85x1
SL-10.6-110-150	150	110x110	14	135.9	M85x1
SL-10.6-140-230	230	140x140	14	227	M85x1
SL-10.6-175-250	250	175x175	14	232	M85x1
SL-10.6-210-300	300	210x210	14	288	M85x1
SL-10.6-250-360	360	250x250	14	352.9	M85x1
SL-10.6-300-430	430	300x300	14	414.7	M85x1
SL-10.6-400-541	541	400x400	14/20	536.5	M85x1
SL-10.6-500-650	650	500x500	14/20	635.6	M85x1
SL-10.6-600-800	800	600x600	14/20	765.2	M85x1

### CO2 F-Theta Scan Lenses(9.2-9.7um)

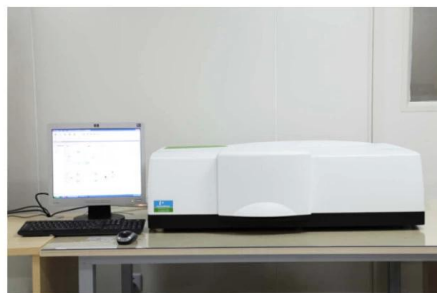
Part Description	FL (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance (mm)	Mounting Thread
SL-10.6-110-150	150	110x110	14	135.9	M85x1
SL-10.6-140-230	230	140x140	14	227	M85x1



## Factory



**TRIOPTICS OptiSpheric 2000 AF**  
---Testing EFL、R、Centering Error、Wedge Angle、BFL、MTF



**PerkinElmer Lambda 950**---Testing Transmission and Reflectivity



**Carmanhaas Coating Machine**



## Certificate&Exhibition



## Packing List

## Lens Cleaning

### 1. For light pollution (dust, fiber particles) were flexible cleaning.

Using a blowing balloon, Blow off scattered contaminants on the surface of the optical element.



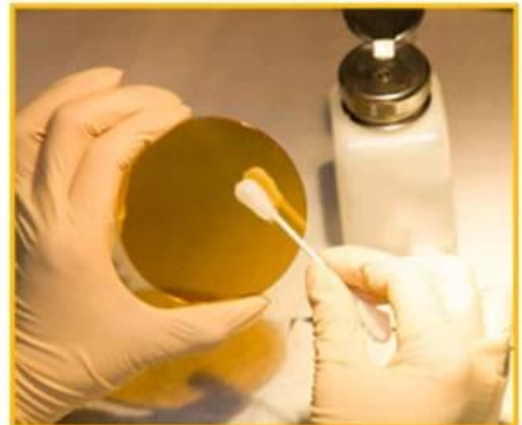
### 2. For light pollution (stains, fingerprints) were flexible cleaning.

Propanol, acetone glue with a cotton swab or alcohol to gently wipe the surface.



### 3. For moderately polluted (saliva, oil) in moderate-intensity cleaning.

Infiltrating distilled white vinegar with a cotton swab, wipe the surface a little pressure.



## Packaging 3







**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 etc

(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

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.

