

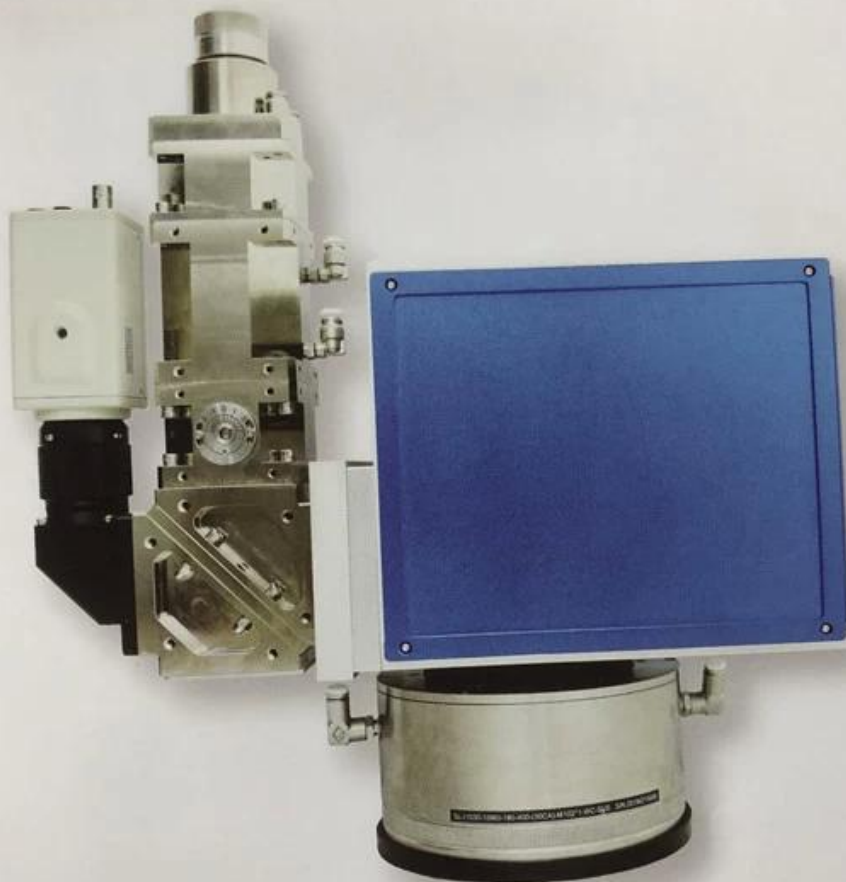
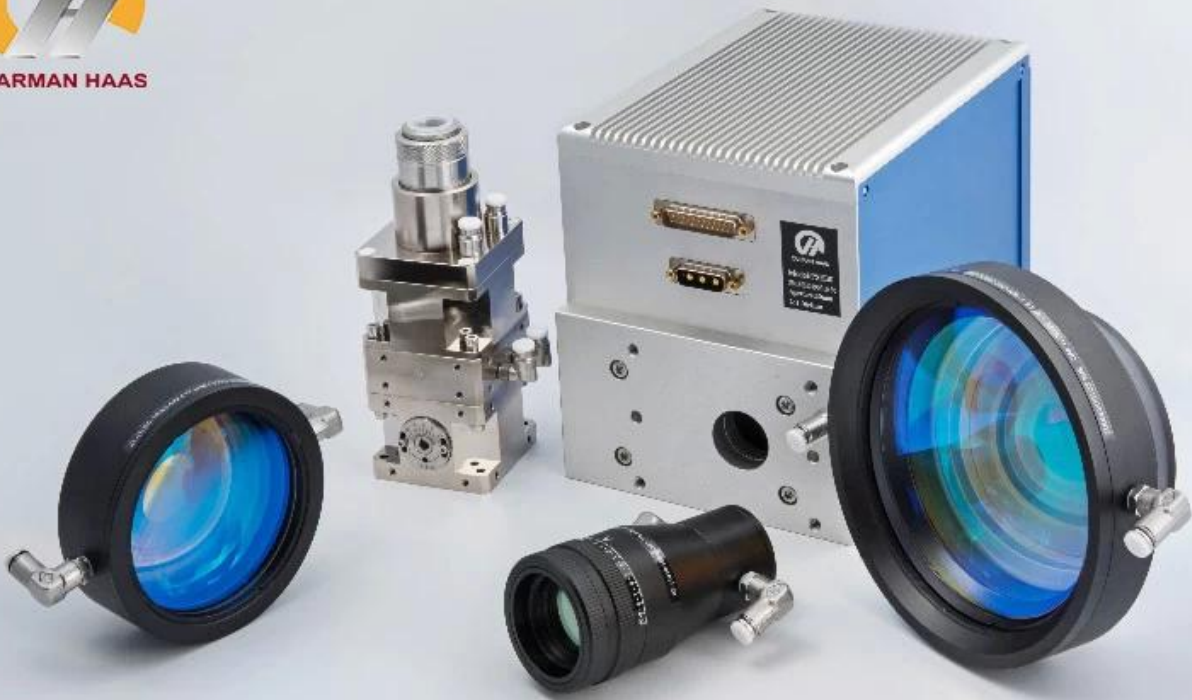


CARMAN HAAS



激光焊接光学元器件

Optics and optical system for fiber laser welding



□□□□□ □□□□□:

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
Over 8hours Long-Term Offset Drift (After 15min warm-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) □□ □□ □□□□□□ □□□□□ □□ □□□ ([Galvo □□□ □□□□□□□□□□□□□□ □□□](#))
- (2) □□-□□□□ □□□□□□□□ □□ □□□ □□ = 163 □□□□□ □□□□□ □□□□□ □□□□□ □□□□ □□ □□□ □□□□ □□□
- (3) □□□□-□□□□□□□□ □□□□□□□□ 1 □□□□ □□□□□ □□ □□□□

□□□□□□□□ □□□□ (□□□□□)

PSH20 Scan Head

Focus on high end industrial laser applications

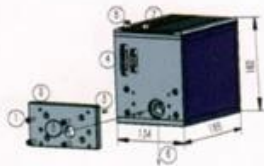


Mechanical Drawings



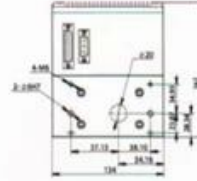
PSH20 scan head

- 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

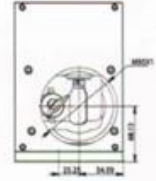


PSH20-H scan head

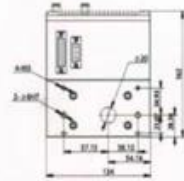
- Legend:**
1. Mounting screw holes (M5×12)
 2. Installation flange
 3. Dowel pin-hole (φ4×2)
 4. Electrical connector
 5. Beam in hole
 6. Beam out hole
 7. Cooling water in
 8. Cooling water out



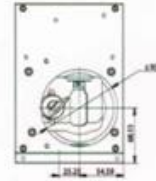
Beam In & Mounting Bracket



Beam Exit Side



Beam In & Mounting Bracket



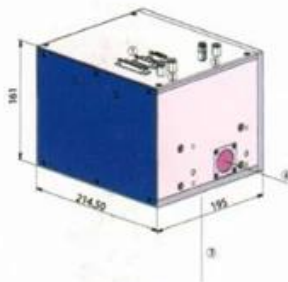
Beam Exit Side

PSH30 Scan Head

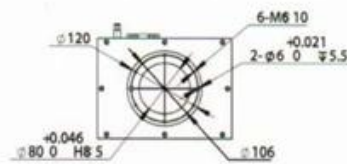
Focus on high end industrial laser applications



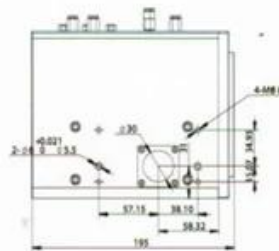
Mechanical Drawings



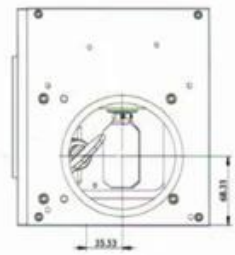
PSH30/PSH30-H scan head



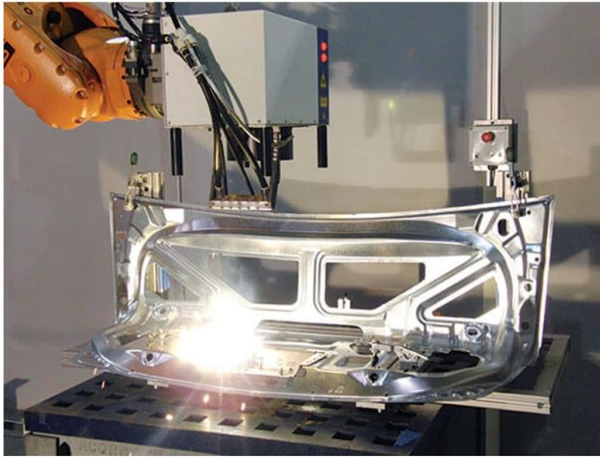
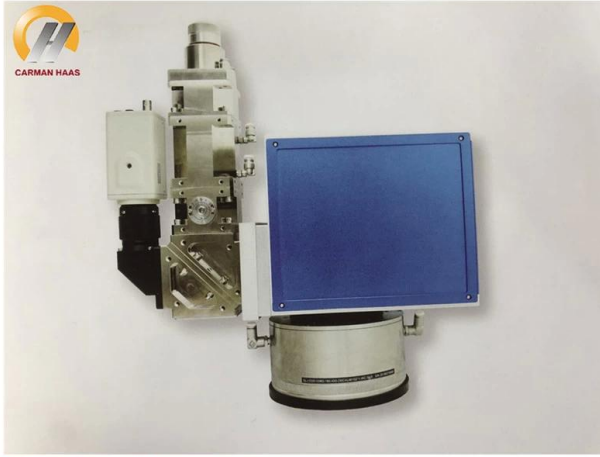
Installation flange



Beam In Side



Beam Exit Side



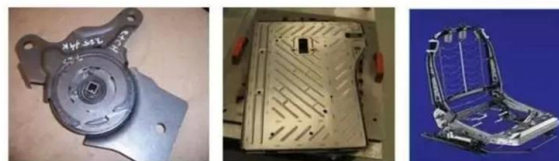
白车身 Body-in-White



Sun gear, Ring gear Viscous damper Synchronization ring



Differential gear Planetary carrier Flywheel



Recliner Backrest Seat Frame

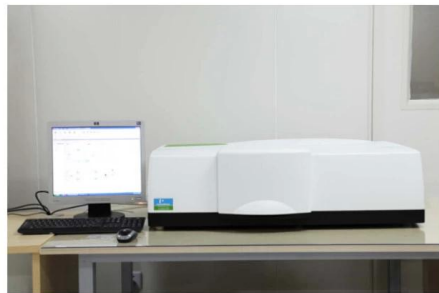


Seat Track Assembly

□□□□□□



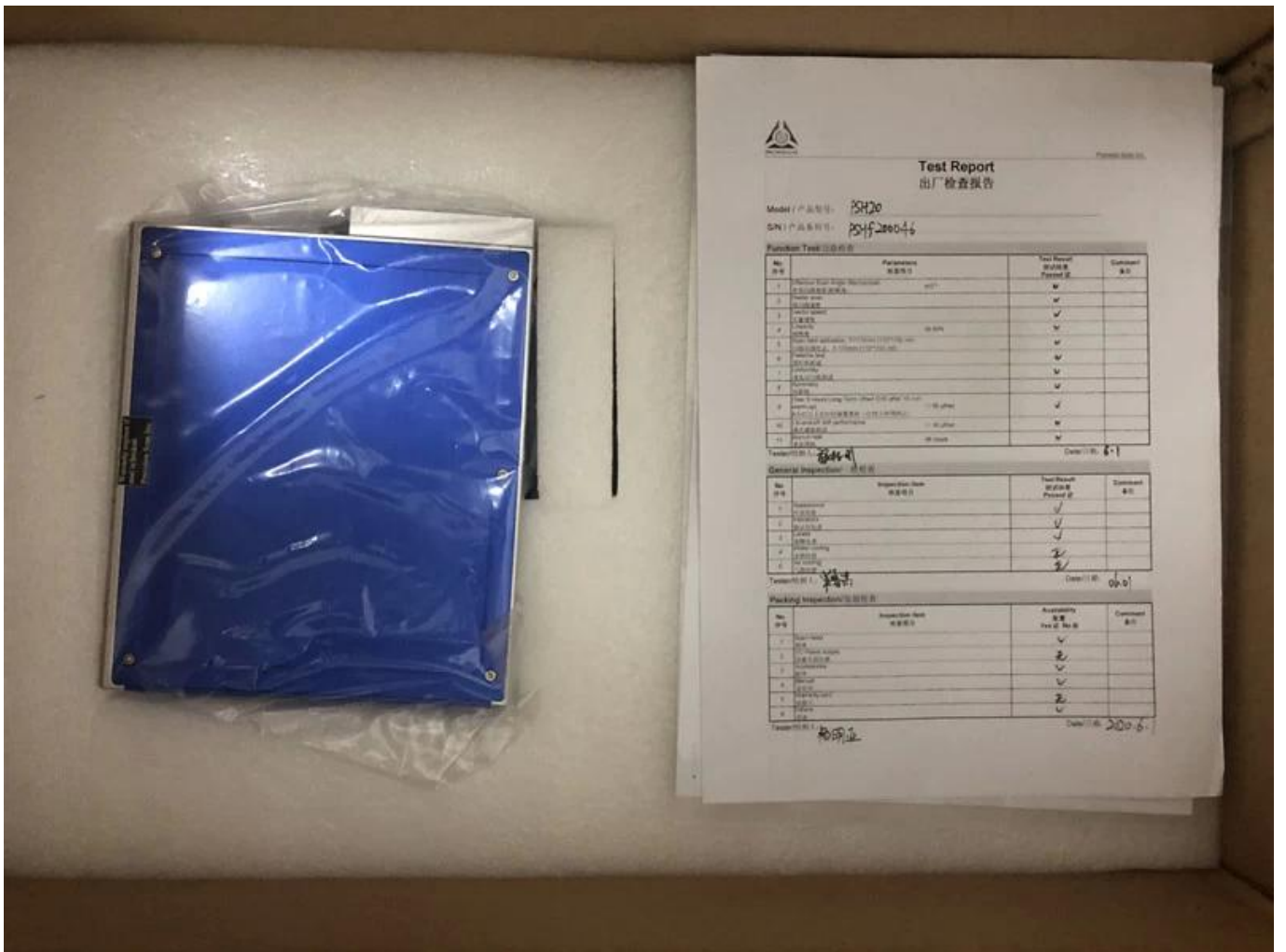
TRIOPTICS OptiSpheric 2000 AF
---Testing EFL, R, Centering Error, Wedge Angle, BFL, MTF



PerkinElmer Lambda 950---Testing Transmission and Reflectivity



Carmanhaas Coating Machine







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>



QUESTION: 1

- 1) The company's main product is...
- 2) The company's main market is...
- 3) The company's main competitor is...
- 4) The company's main strength is...

ANSWER:

- (1) The company's main product is... FedEx, etc
- (2) The company's main market is... CNF, etc

QUESTION: 2

Q1: What is the company's main product?

A1: The company's main product is...

QUESTION: 3

A2: The company's main market is...

QUESTION: 4

A3: The company's main competitor is...

QUESTION: 5

A4: The company's main strength is...

QUESTION: 6

A5: The company's main market is...

QUESTION: 7

A6: The company's main competitor is...

QUESTION: 8

A7: The company's main strength is...

QUESTION: 9

