

Product Information

Product Description:

[Galvo scan head welding supplier china](#), Carmanhaas high power welding module including QBH Module, scan head and F-theta Scan lenses. We are focus on high end industrial laser application. Our standard model is PSH14, PSH20 and PSH30.

PSH14-H high power version- for laser power ranging from 200W to 1KW(CW); fully sealed scan head with water cooling; suitable for high laser power, dusted, or environmentally challenging occasions, e.g. additive manufacturing(3D printing), precise welding, etc.

PSH20-H high power version- for laser power ranging from 300W to 3KW(CW); fully sealed scan head with water cooling; suitable for high laser power, dusted, or environmentally challenging occasions, e.g. additive manufacturing(3D printing), precise welding, etc.

PSH30-H high power version- for laser power ranging from 2KW to 6KW(CW); fully sealed scan head with water cooling; suitable for super high laser power, extremely low drift occasions. E.g. laser welding.

TYPICAL APPLICATIONS:

Welding battery cell covers is a typical application for the High Power welding module, as is welding cell contact surfaces made of aluminum or copper plates in order to electrically connect the individual cells to a battery block. The module is also a perfect solution for welding steel plates using the “remote welding” method, mounted on axis gantries or robot arms. In addition to the deflection unit with 30 mm aperture, deflection units with 20 mm aperture are available for plastics welding.

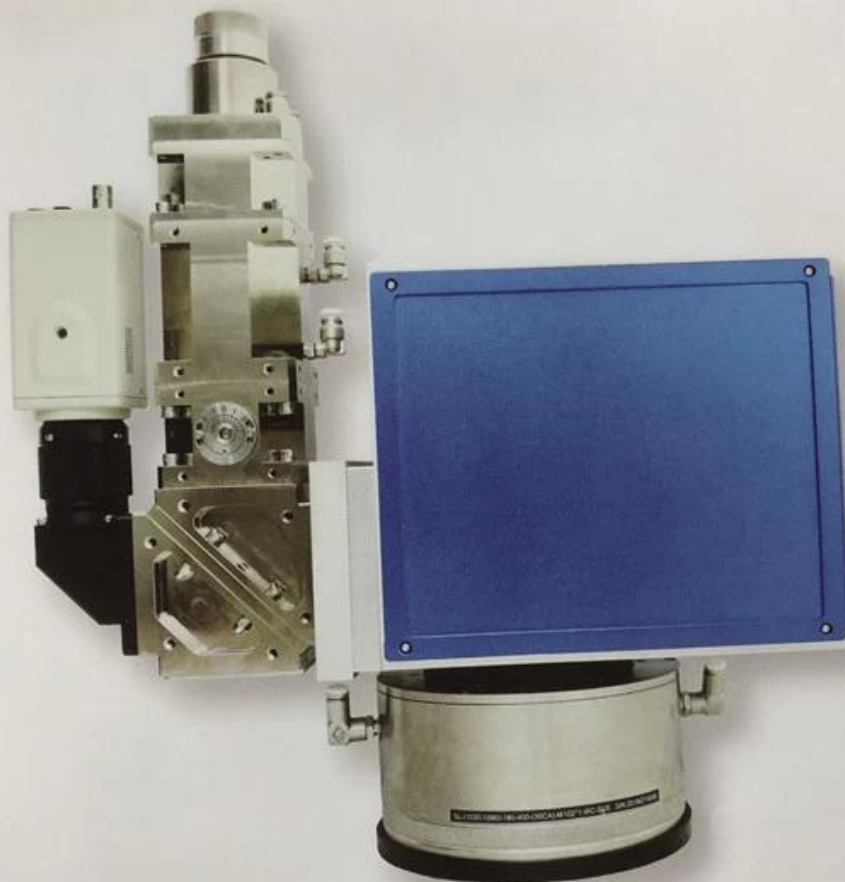
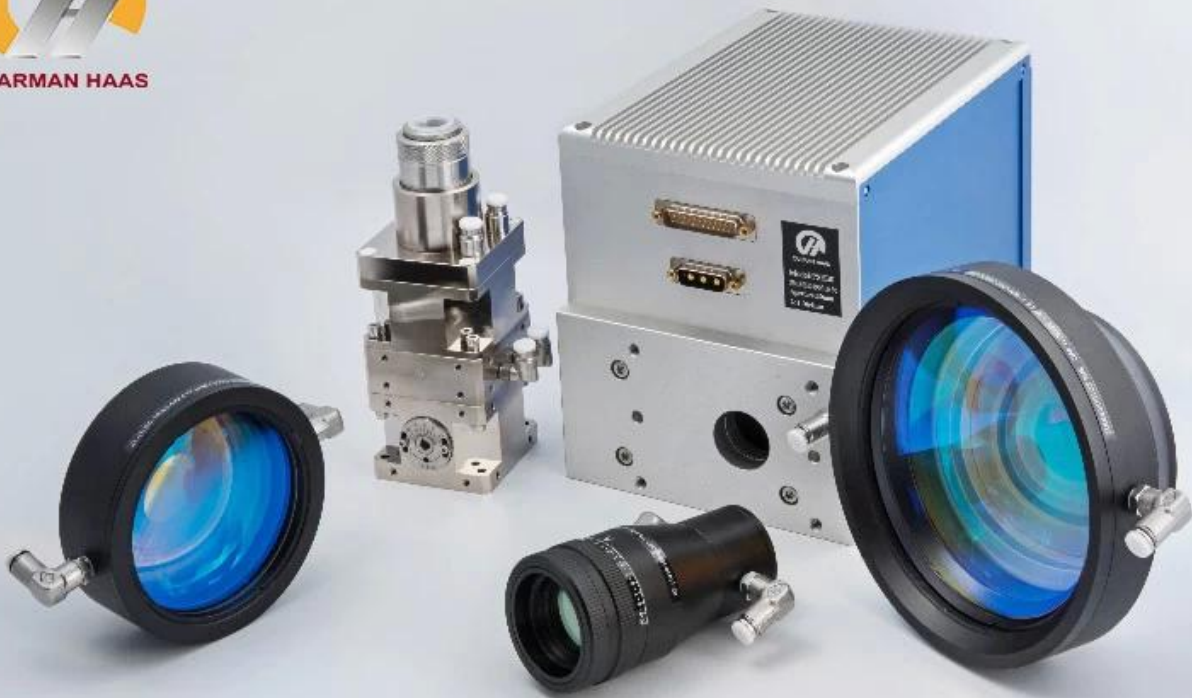
Key Advantages:

- 1.Extremely low temperature drift ($\leq 3\text{urad}/^{\circ}\text{C}$); Over 8 hours Long-Term Offset Drift $\leq 30\text{ urad}$
- 2.Extremely high resolution and repeatability; resolution $\leq 1\text{ urad}$; repeatability $\leq 2\text{ urad}$
- 3.Extremely high speed:
PSH14-H: 15m/s
PSH20-H: 12m/s
PSH30-H: 9m/s



激光焊接光学元器件

Optics and optical system for fiber laser welding



Technical Parameters:

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 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

Note:

- (1)All angles are in mechanical degrees. ([Galvo head laser welding manufacturer china](#))
- (2)With F-Theta objective f=163mm. Speed value varies correspondingly with different focal lengths.
- (3)Single-stroke font with 1mm height.

Mechanical Dimensions(mm)□

PSH20 Scan Head

Focus on high end industrial laser applications

Mechanical Drawings



PSH20 scan head

Legend:

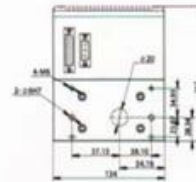
1. Mounting screw holes (M5×12)
2. Installation flange
3. Dowel pin-hole ($\phi 4 \times 2$)
4. Electrical connector
5. Beam in hole
6. Beam out hole



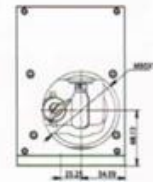
PSH20-H scan head

Legend:

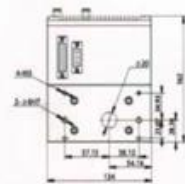
1. Mounting screw holes (M5×12)
2. Installation flange
3. Dowel pin-hole ($\phi 4 \times 2$)
4. Electrical connector
5. Beam in hole
6. Beam out hole
7. Cooling water in
8. Cooling water out



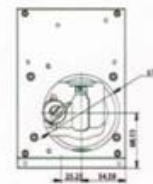
Beam In & Mounting Bracket



Beam Exit Side



Beam In & Mounting Bracket

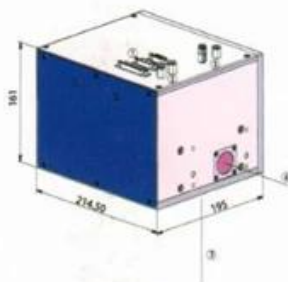


Beam Exit Side

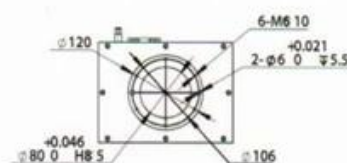
PSH30 Scan Head

Focus on high end industrial laser applications

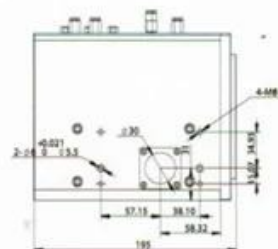
Mechanical Drawings



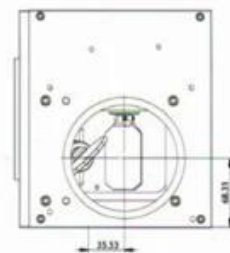
PSH30/PSH30-H scan head



Installation flange

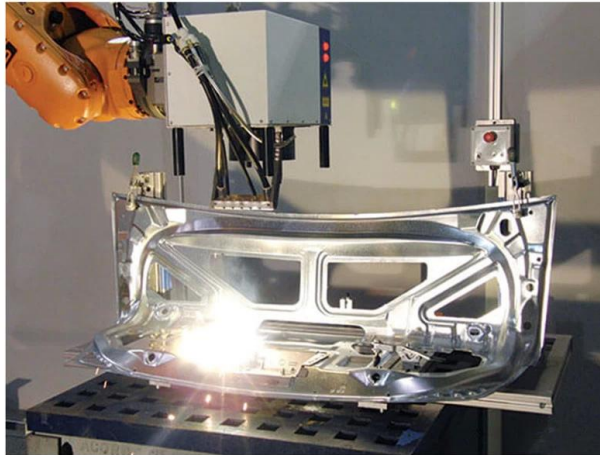
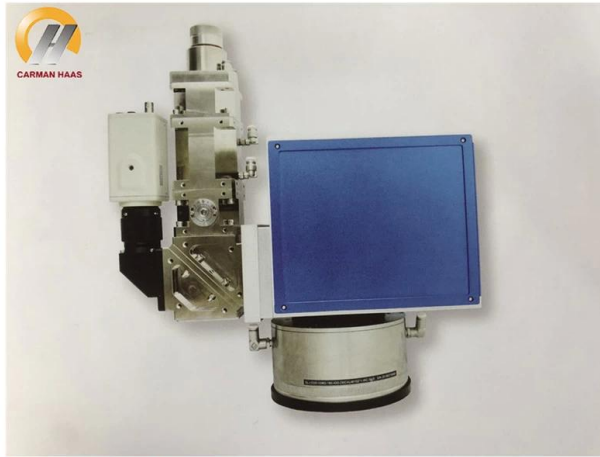


Beam In Side



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

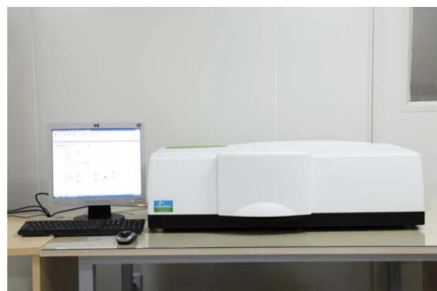


Seat Track Assembly

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



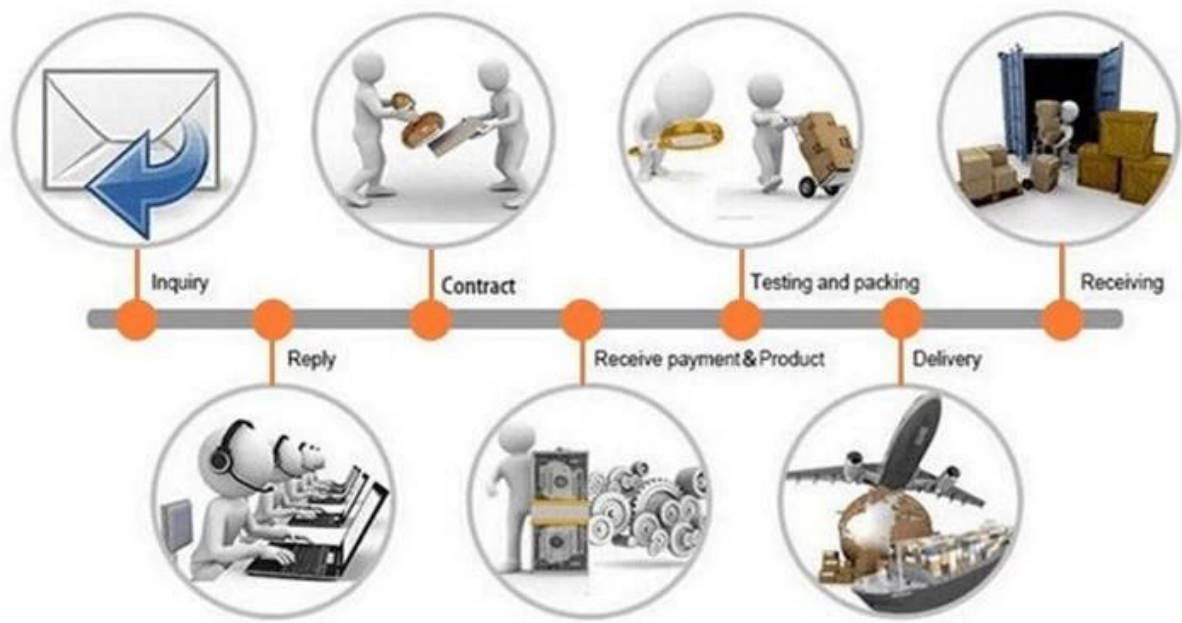




Model: PSH20
S/N: PSHf200046

Precision Scan Inc.

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



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

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.

