

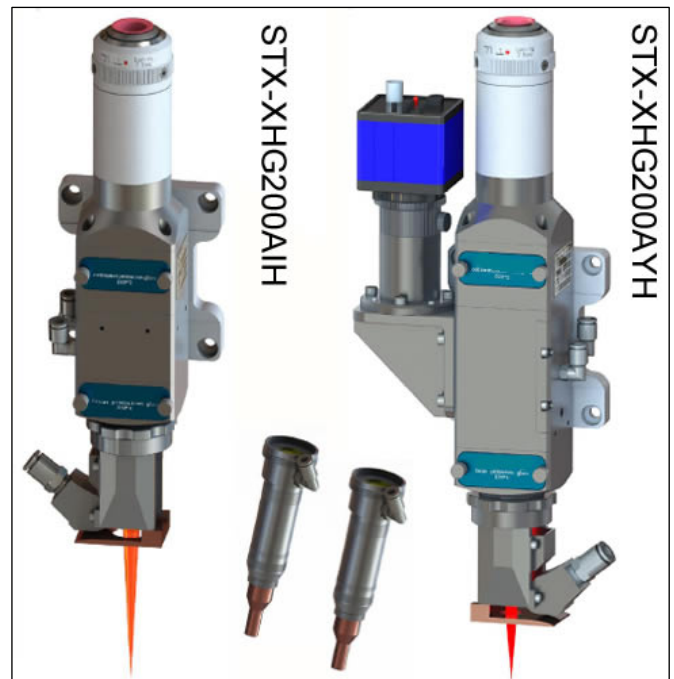
STX Series Laser Welding Heads

1. Fiber Laser Welding Head, Type I, STX-XHG200AIH

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D30F80/F100
- Focusing: D30F120/F150/F200/F250/F300
- Clear aperture: D26mm
- Collimated glass: D28X2mm
- Focus protection glass: D30X4mm
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 1.33kg

2. Fiber Laser Welding Head, Y Type, STX-XHG200AYH

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D30F80/F100
- Focusing: D30F120/F150/F200/F250/F300
- Clear aperture: D26mm
- Collimated protection glass: D28X2mm
- Focus protection glass: D30X4mm
- Charge Coupled Device (CCD): 700TVL
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 2.25kg

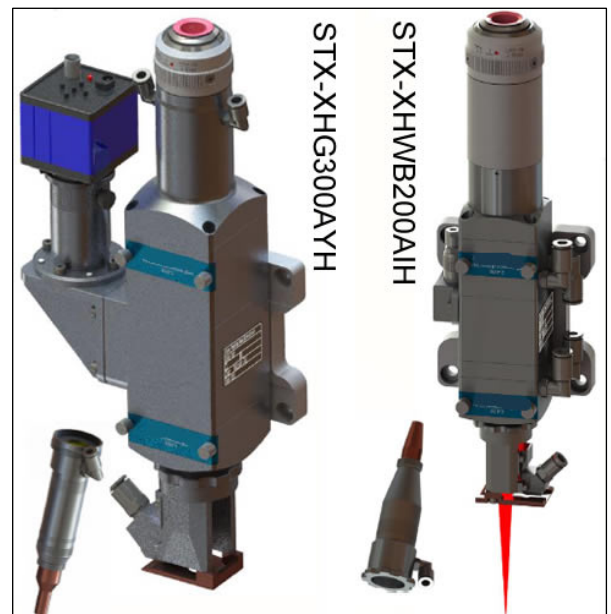


3. Fiber Laser Welding Head, Type Y, STX-XHG300AYH

- Max. laser power: 3000W (higher power on request)
- Fiber interface: QBH
- Collimation: D28F80(2A)
- Focusing: D30F120/F150/F200/F250/F300
- Clear aperture: D26mm
- Collimated protection glass: D28X2mm
- Focus protection glass: D30X4mm
- Charge Coupled Device (CCD): 700TVL
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 2.8kg

4. Fiber Winging Welding Head, Type I, STX-XHWB200AIH

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F70/F100
- Focusing: D20F120/F150/F200/F250/F300
- Clear aperture: D14mm
- Collimated protection glass: D20X2mm
- Focus protection glass: D20X2mm
- Max motor speed: 1.5W r/min
- Spot diameter: 1-3mm (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 1.4kg

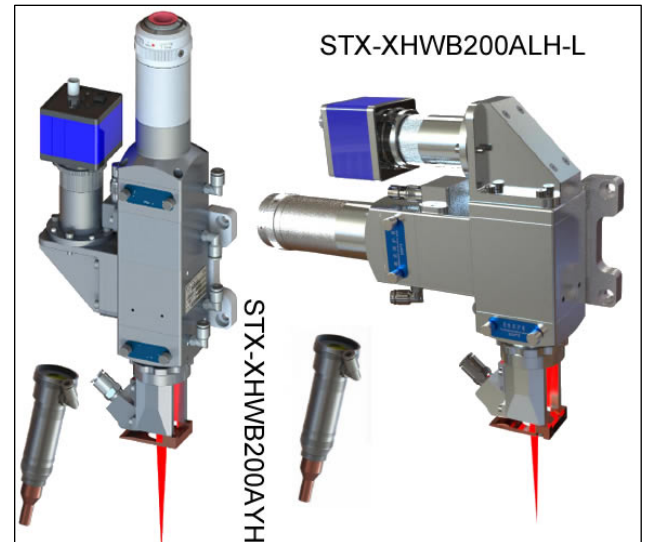


5. Fiber Winging Welding Head, Type Y, STX-XHWB200AYH

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F70/F100
- Focusing: D20F150/F200/F250/F300
- Clear aperture: D16mm
- Collimated protection glass: D20X3mm
- Focus protection glass: D20X3mm
- Charge Coupled Device (CCD): 700TVL
- Max motor speed: 1.5W r/min
- Spot diameter: 1-3mm (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 2.73kg

6. Fiber Winging Welding Head, Type Left F, STX-XHWB200ALH-L

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F100
- Focusing: D20F150/F200/F250/F300
- Clear aperture: D16mm
- Collimated protection glass: D20X3mm
- Focus protection glass: D20X3mm
- Charge Coupled Device (CCD): 700TVL
- Max motor speed: 1.5W r/min
- Spot diameter: 1-3mm (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 3.2kg

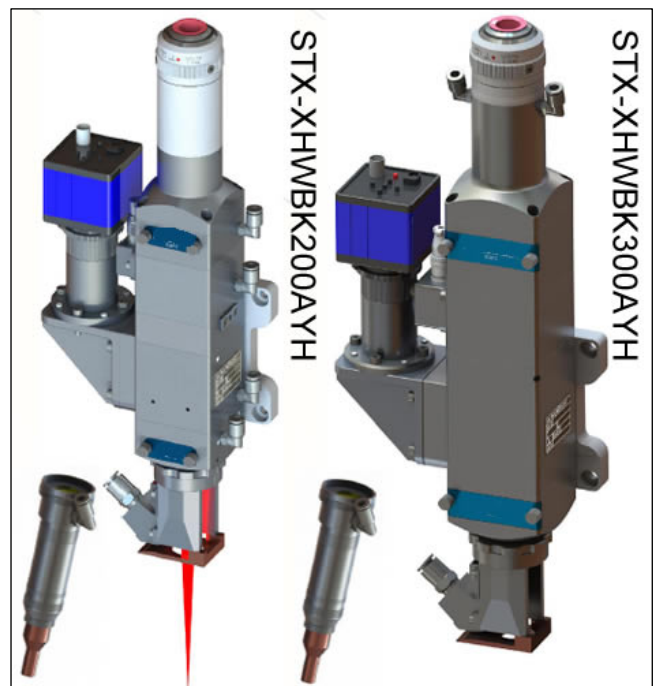


7. Fiber Welding Head with Changeable Beam Diameter, Type Y, STX-XHWBK200AYH

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F70/F100
- Focusing: D20F150/F200/F250/F300
- Clear aperture: D16mm
- Collimated protection glass: D20X3mm
- Focus protection glass: D20X3mm
- Charge Coupled Device (CCD): 700TVL
- Max motor speed: 1.5W r/min
- Adjustable spot size: 0-4mm (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 2.89kg

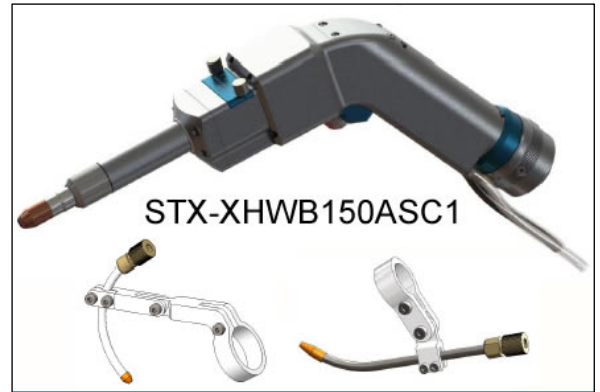
8. Fiber Welding Head with Changeable Beam Diameter, Type Y, STX-XHWBK300AYH

- Max. laser power: 3000W (higher power on request)
- Fiber interface: QBH
- Collimation: D30F100
- Focusing: D30F150/F200/F250/F300
- Clear aperture: D26mm
- Collimated protection glass: D22*2mm
- Focus protection glass: D30*4mm
- Charge Coupled Device (CCD): 700TVL
- Max motor speed: 2W r/min
- Adjustable spot size: 0-4mm (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 2.83kg



9. Handheld Winging Welding Head, STX-XHWB150ASC1

- Max. laser power: 1500W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F70
- Focusing: D20F150/F200/F250
- Clear aperture: D14mm
- Focus protection glass: D20X3mm
- Max motor speed: 1.5W r/min
- Spot diameter: 1-3mm (other diameter on request)
- Assist gas pressure: 10, 15, 20par
- Weight: 0.9kg



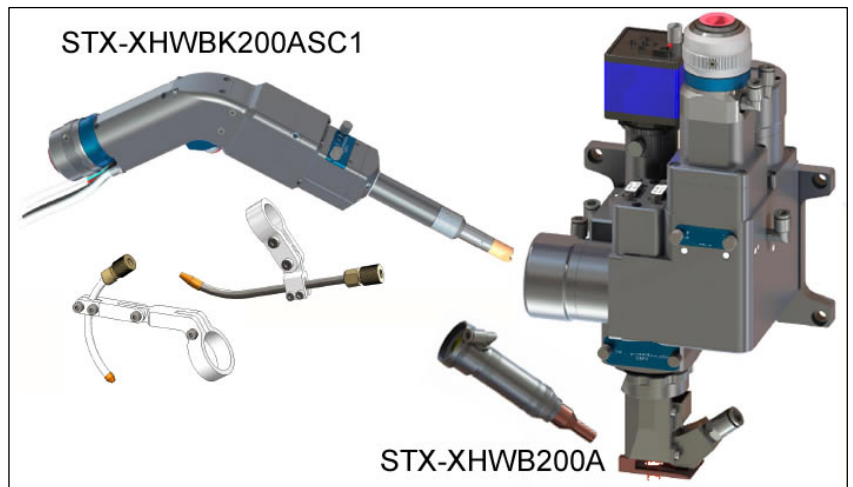
10. Handheld Winging Welding Head, STX-XHWB200ASC1

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F100
- Focusing: D20F150/F200/F250
- Clear aperture: D16mm
- Focus protection glass: D20X3mm
- Max motor speed: 1.5W r/min
- Spot diameter: 1-3mm (other diameter on request)
- Assist gas pressure: 10, 15, 20par
- Weight: 0.89kg



11. Handheld Welding Head with Changeable Beam Diameter, STX-XHWBK200ASC1

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F100
- Focusing: D20F150/F200/F250
- Clear aperture: D16mm
- Focus protection glass: D20X3mm
- Max motor speed: 1.5W r/min
- Adjustable spot size: 0-4mm (other diameter on request)
- Assist gas pressure: 10, 15, 20par
- Weight: 1kg



12. Fiber Dual-axis Swinging Welding Head, STX-XHWB200A

- Max. laser power: 2000W (higher power on request)
- Fiber interface: QBH
- Collimation: D20F100
- Focusing: D30F120/F150/F200/F250/F300
- Clear aperture: D16mm
- Collimated protection glass: D20X3mm
- Focus protection glass: D30X4mm
- Charge Coupled Device (CCD): 700TVL
- Max motor frequency: 300Hz
- Spot type: O, 8, ∞, —, | (1-5mm) (other diameter on request)
- Assist gas pressure: 10, 15, 20, 25par
- Weight: 3.65kg

STW Series Laser Welding Heads

1. Hand-held Laser Welding Heads STW-ND18

- This welding head could be widely used in complex and irregular welding process such as cabinets, kitchen, staircase, shelf, gridiron, stainless steel door and window guardrail, distribution box, stainless steel furniture and other industries. It is a perfect replacement of traditional argon arc welding in welding thin stainless steel plate, iron plate, aluminum plate and other metal materials.
- Smart internal design and interactive control system expand the tolerance range and welding width of the processing parts, and solve the disadvantage of minor laser welding spot, and provide better welding forming.
- Light shape, ergonomic design, advanced structure, and reliable performance ensure comfort grip and simple operation.
- Nice welding seam, fast welding speed, no consumables, no welding marks, no discoloration, no later polish.
- This head could be equipped with a variety of angular nozzles to meet the welding needs of different products.



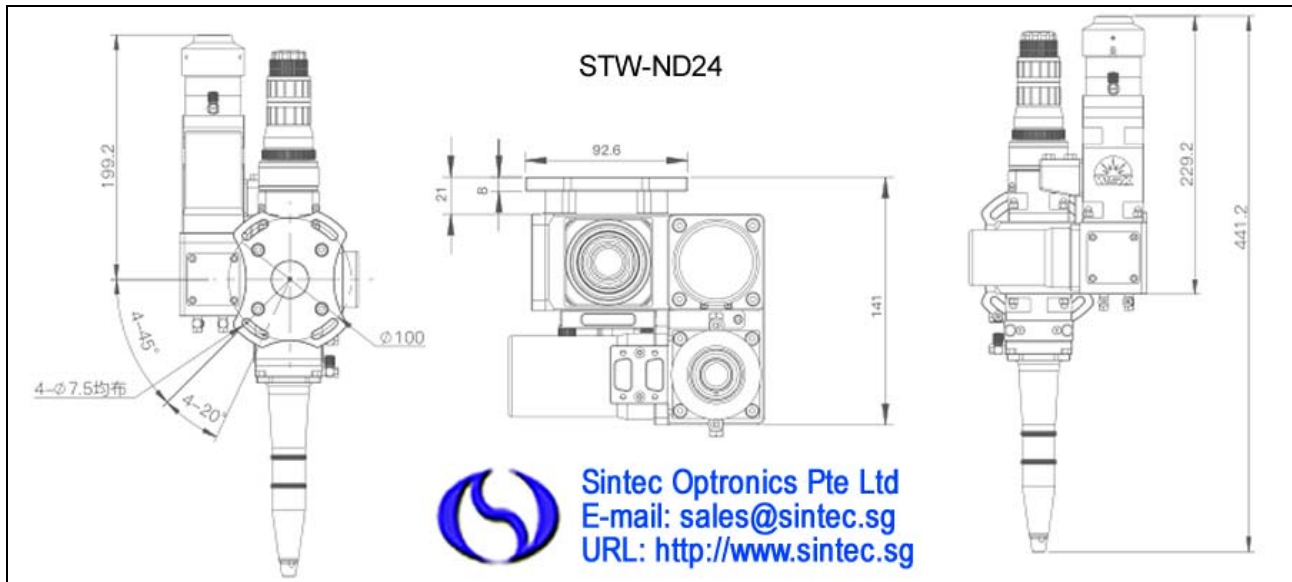
| | |
|----------------------|-----------|
| Model | STW-ND18 |
| Power range | 1500W |
| Adjustable width | 0-4mm |
| Fiber interface | QBH |
| Collimating lens | 50mm |
| Focal length of lens | 125/150mm |
| Weight | 1.36kg |

2. Wobble Welding Head STW-ND80/ND60/ND24/ND15

- This composite fiber welding laser head is cost-effective, having a strong advantage in welding highly reflective materials and high power welding.
- It adopts the motor to drive the X, Y-axis galvanometer lens with a variety of wobbling modes. It allows the work piece with irregular welds, and the larger clearance. Processing parameters can significantly improve the welding performance.
- Fully sealed internal structure protects optical parts from pollution by dust.
- Air curtain parts prevent welding slag from entering head inside.
- Easy to change/replace protective windows via drawer structure.
- Fit for QBH connector



| Model | STW-ND80 | STW-ND60 | STW-ND24 | STW-ND15 |
|-----------------------------|-----------|-----------|-------------|----------|
| Max gas pressure | 25bar | | | |
| Horizontal adjustment range | ±1.5mm | | | |
| Vertical adjustment range | ±10mm | | | |
| Clear aperture | | 48mm | 27mm | 26mm |
| Effective aperture | 32mm | 50mm | 27mm | 27mm |
| Collimating focal length | 100mm | 100/150mm | 100mm | 75/100mm |
| Focusing focal length | 100/190mm | 300mm | 200mm | 300mm |
| Max. applicable power | 6kW | 6kW | 6kW | 1.5kW |
| Dimension (mm) | | | 441x141x120 | |
| Weight | 7.3kg | 6.5kg | 3.8kg | 3.3kg |



3. Galvanometer Welding Heads STW-Nd65/Nd31

- This fiber laser welding head has a strong advantage in welding speed and high accuracy with high efficiency in multipoint welding.
- It adopts the motors to drive the X, Y-axis galvanometer lens, F-theta lens to focus with a variety of wobbling modes, all of which can significantly improve the welding performance.
- Fully sealed internal structure protects optical parts from pollution by dust.
- Air curtain parts prevent welding slag from entering head inside.
- Fit for QBH connectors



| Model | STW-ND65 | STW-ND31 |
|--------------------------|-----------|-----------|
| Max. applicable power | 6kW | 4kW |
| Scanning area | 334x334mm | 210x210mm |
| Collimating focal length | 100mm | 100mm |
| Focusing focal length | 600mm | 250/400mm |
| Weight | 13.5kg | 7.5kg |

4. Cladding Heads STW-ND66/ND45

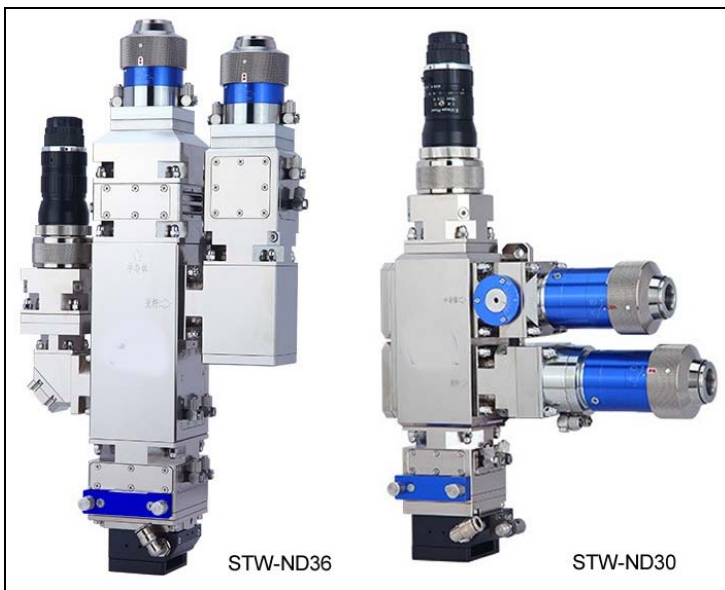
- Three-way powder feeding and one-way gas feeding design.
- Adjusting reasonable air pressure to feed the powder.
- Full-sealed internal structure protects optical part from pollution by dust.
- Cooling parts ensure lens at a reasonable temperature.
- Well matched various diode sources.



| | | |
|--------------------------|-----------|-----------|
| Model | STW-ND66 | STW-ND45 |
| Max. applicable power | 6kW | 4kW |
| Clear aperture | 50mm | 46mm |
| Effective aperture | 48mm | 46mm |
| Collimating focal length | 100/150mm | 100mm |
| Focusing focal length | 250/300mm | 250/300mm |
| Weight | 6.6kg | 5.5kg |

5. Hybrid Multi-wavelength Welding Heads STW-ND36/ND30

- Fiber and diode are well matched
- A strong advantage in welding back reflection materials such as copper and aluminum.
- Reducing welding spattering of different welding materials.
- Enhancing welding speed, finish and quality.
- Widely used in power battery and thin sheet metal welding, such as safety valves, battery poles, battery seals, etc.



| | | |
|---------------------------|-------------|------------|
| Model | STW-ND36 | STW-ND30 |
| Max. applicable power | 4kW | 2kW |
| Effective aperture | 48mm | 36mm |
| Collimating focal length | F100*F100mm | F75*F100mm |
| Focusing focal length | 200/250mm | 200/250mm |
| Vertical adjustment range | ±4mm | ±4mm |
| Weight | 5.5kg | 3.2kg |

6. High Power Welding Head STW-ND/61/ND40/ND26

- Cost-effective and strong advantage in welding plates.
- Outstanding welding performance with good cooling and optical design.
- High dustproof from fully sealed internal structure, guaranteeing protective window's lifespan.
- CCD module could be equipped with camera and display to achieve welding seam tracking.
- Well matched various laser source.




| | | | |
|--------------------------|-----------|-----------|----------|
| Model | STW-ND61 | STW-ND40 | STW-ND26 |
| Max. applicable power | 6kW | 4kW | 2kW |
| Clear aperture | 48mm | 48mm | 27mm |
| Effective aperture | 48mm | 48mm | 48mm |
| Collimating focal length | 150mm | 100/150mm | 110mm |
| Focusing focal length | 200/250mm | 150mm | 200mm |
| Weight | 4.6kg | 4.2kg | 4.2kg |

STOS Series Fiber Laser Welding Head

STOS-LW405A/B

- Drawer installation method.
- Water cooling module.
- Anti-splash gas curtain.
- External red light focusing module.
- CCD and display module.

| | | |
|---------------------------|---------------------|---|
| interface type | QBH\QCS |  |
| Laser incident mode | 90° | |
| laser power | < 2000W | |
| Focal length | 150mm, 180mm, 250mm | |
| Collimating Focal length | 80mm~150mm | |
| Collimating control range | ±5mm | |
| protective gas | paraxial / coaxial | |
| weight | 3.5KG | |


STOS-LW404A/B

- Drawer installation method.
- Water cooling module.
- Anti-splash gas curtain.
- External red light focusing module.
- CCD and display module

| | | |
|---------------------------|---------------------|--|
| interface type | QBH |  |
| Laser incident angle | 90° | |
| laser power | < 2000W | |
| Focal length | 150mm, 180mm, 250mm | |
| Collimating Focal length | 80mm~150mm | |
| Collimating control range | ±5mm | |
| Gas protection | paraxial / coaxial | |
| weight | 3.5KG | |


STOS-LW403A/B

- Various Collimating, focus configuration specifications.
- Drawer installation method.
- Water cooling module.
- Anti-splash gas curtain.
- External red light focusing module.
- CCD and display module.

| | | |
|---------------------------|---------------------|--|
| interface type | QBH /QCH |  |
| Laser incident way | coaxial | |
| laser power | < 2000W | |
| Focal length | 150mm, 180mm, 250mm | |
| Collimating Focal length | 80mm~150mm | |
| Collimating control range | ±5mm | |
| Gas protection | paraxial / coaxial | |
| weight | 3.5KG | |

STOS-LW407A

- Custom weld pool width.
- Reducing weld width requirements.
- Various Collimating, focus configuration specifications.
- Drawer installation method.
- Water cooling module.
- Anti-splash gas curtain.
- External red light focusing module.
- CCD and display module.

| | | |
|---------------------------|--|--|
| Laser incident mode | common axis |  |
| laser power | < 3000W | |
| Collimating Focal length | 80mm~150mm | |
| Collimating control range | ±5mm | |
| scanning scope | less than or equal to $\Phi 20\text{mm}$ | |
| Track frequency | 130Hz | |