

Maxphotonics Co.,Ltd.

Q-Switch Pulsed Fiber Laser Series
MOPA Pulsed Fiber Laser Series
Single Module CW Fiber Laser Series
Multi Module CW Fiber Laser Series
QCW Fiber Laser Series
Diode Laser Series

Maxphotonics Fiber Laser

The logo for Maxphotonics, featuring the word "MAX" in a bold, sans-serif font. The letters "M" and "A" are blue, while the letter "X" is red. The background of the entire page is a blue-tinted photograph of two scientists in white lab coats and masks working in a laboratory, with one scientist using a microscope and the other handling a small electronic component.



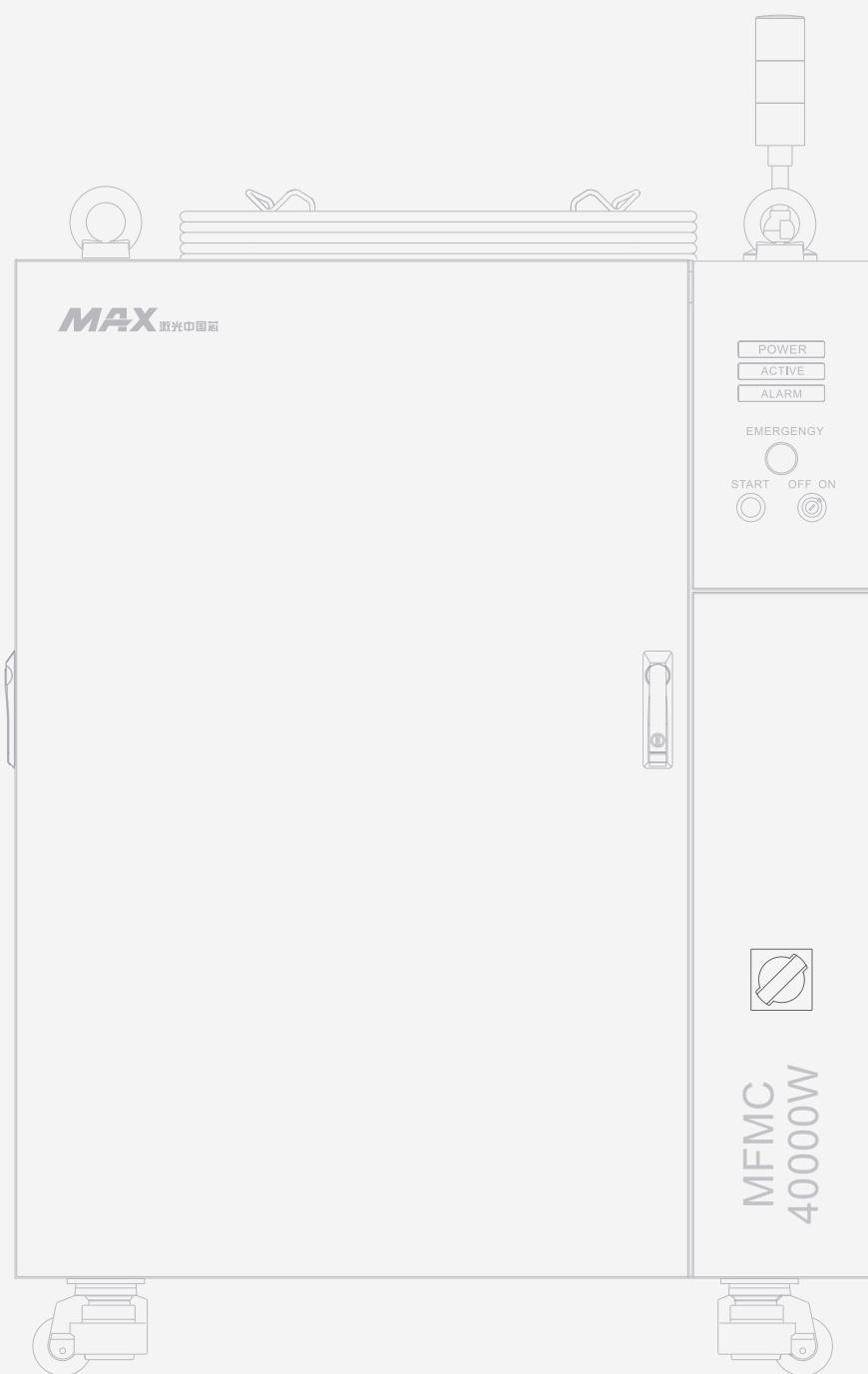
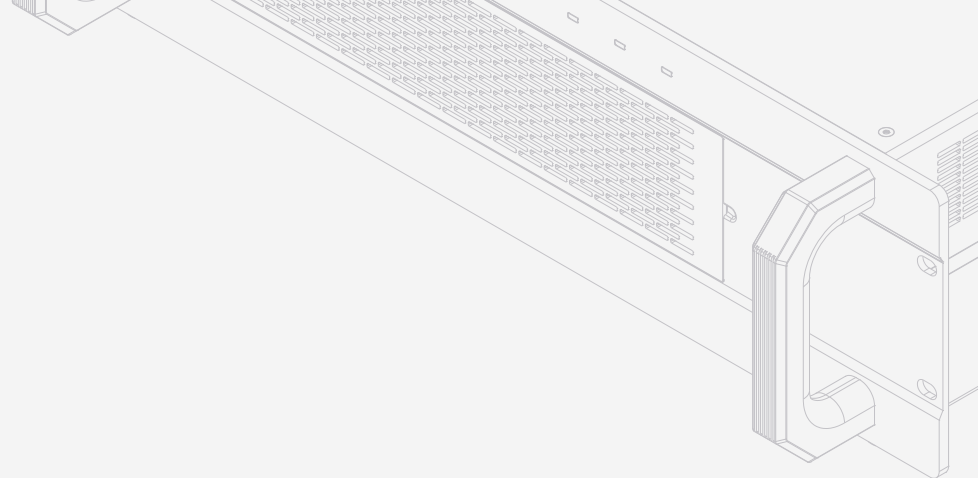
MAXPHOTONICS, INGENIOUS QUALITY

- 17 years R&D and manufacturing experience in fiber laser and optical components
- A national high-tech enterprise for mass production of fiber lasers
- Realized core technologies localization of fiber laser and optical components





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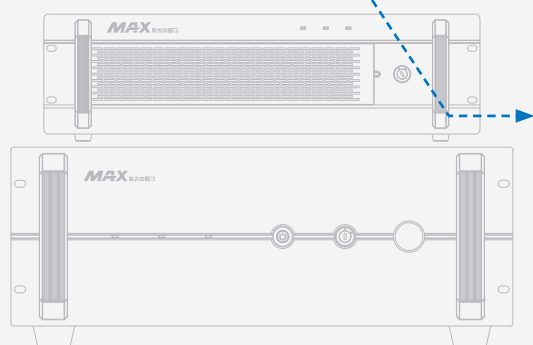
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2004 ▶

- Maxphotonics was founded. Offered customized optical components and products for research institutes.



2005 ▶

- Offered fiber amplifier and low-power laser for universities and research institutes.
- Developed broad band ASE light.

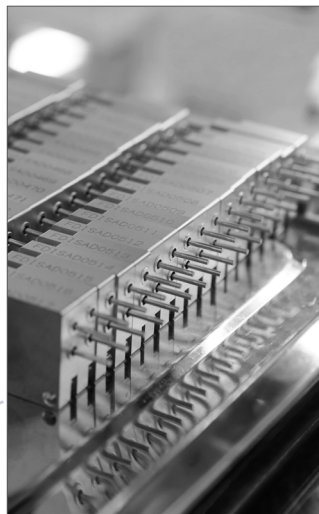
2008 ▶

- Developed 10W and 20W pulsed fiber laser, 1.5μm pulse fiber laser.
- Developed the single frequency pulsed/continuous dual output laser system.



2007 ▶

- Developed the 2W erbium-doped fiber amplifier in China.



2013 ▶

- 500W Fiber laser released.
- Sales volume reached 0.11 billion RMB.
- Maxphotonics won the 2nd place in National Innovation & Venture Competition.

2010 ▶

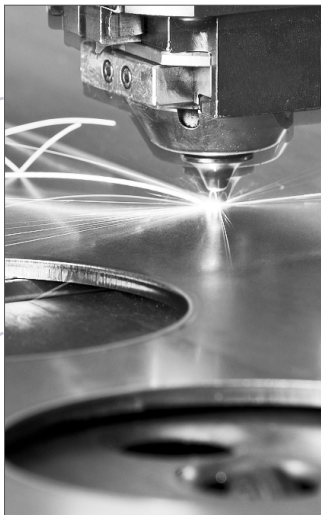
- Realized the industrialization of fiber laser and optical components..

2011 ▶

- Developed the Q-switch pulsed fiber laser.

2014 ▶

- 800W Fiber laser released.
- Sales volume reached 0.34 billion RMB.



2016 ▶

- Smart laser released.
- Be honored with "Intellectual property leading company of Bao'an Shenzhen 2015" and "Guangdong Patent Gold Awards"
- Academician and expert work station of Maphotonics was found.



2017 ▶

- 10000W Ultra-high power CW fiber laser released.
- New generation 20W Q-switch released.
- High performance MOPA HM6 released.

2018 ▶

- 12000W, 15000W Ultra-high power multi module & 2000W, 3000W single module CW fiber laser released.
- Honored "2018 China Laser Industry Influence Enterprise Award", "the Best Laser Technology Innovation Award" of OFweek, and "the 2018 Ringier Technology Innovation Award", etc.



2019 ▶

- 25000W, 35000W Ultra-high power multi module & 4000W, 5000W single module CW fiber laser released.
- It has won "the China Industrial Laser Innovation Contribution Award" and "the 2019 Ringier Technology Innovation Award" and has been listed as one of "the 2019 Top 100 Science and Technology Innovation Enterprises".



2020 ▶

- High-power multi-mode 40000W, high-power single module 6000W launched.
- Won the Red Light Award "Fiber Laser Innovation Contribution Award", 2020 Laser Industry "Ringier Technology Innovation Award", Veken Cup 2020 Laser Industry Fiber Laser Technology Innovation Award, Baoan District Innovation Benchmarking Enterprise Award.

Maxphotonics was founded in 2004, we have more than 17 years of R&D experience in optical components and fiber lasers.

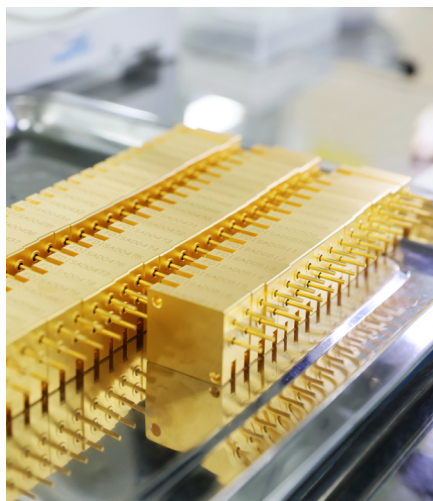
Maxphotonics is among the first few fiber laser manufacturers in China, also the first batch of national hightech enterprises that have independent intellectual property rights and vertical integration in core technologies of fiber lasers and optical components. Maxphotonics has developed into an internationally renowned laser manufacturer that integrates R&D, production, and sales of fiber lasers and optical components.

Maxphotonics Shenzhen headquarters has 30,000m² modern industrial park and 9,000m² class 1,000 cleanroom. The total number of employees is more than 1600. A strong core R&D team is composed of several PostDoc, Ph.D., and a group of highlevel R&D personnel in the laser industry.

We also have Suzhou and Anshan industrial park and oversea support centers.

Maxphotonics is committed to provide high performance, high quality, and costeffective fiber laser and component integration solutions and a comprehensive service system in the global laser market.





Mass Production of Core Component

1

Maxphotonics has the self-production capability of core optical components such as pump source, pump combiner, power combiner, fiber grating, laser output head, isolator, mode stripper, acousto-optic modulator, mode matching device, etc. Maxphotonics is one of the few Chinese laser manufacturers mastering core high-power component technology.

At present, Maxphotonics has obvious advantages in the industrialization of chip technology such as fully automatic chip packaging technology and automatic placement technology. It has achieved a single pump 300W high-brightness output and successfully developed 10,000-watt level power combiner and 10,000-watt level QBH output head.



Continuous Breakthroughs in high power fiber laser

2

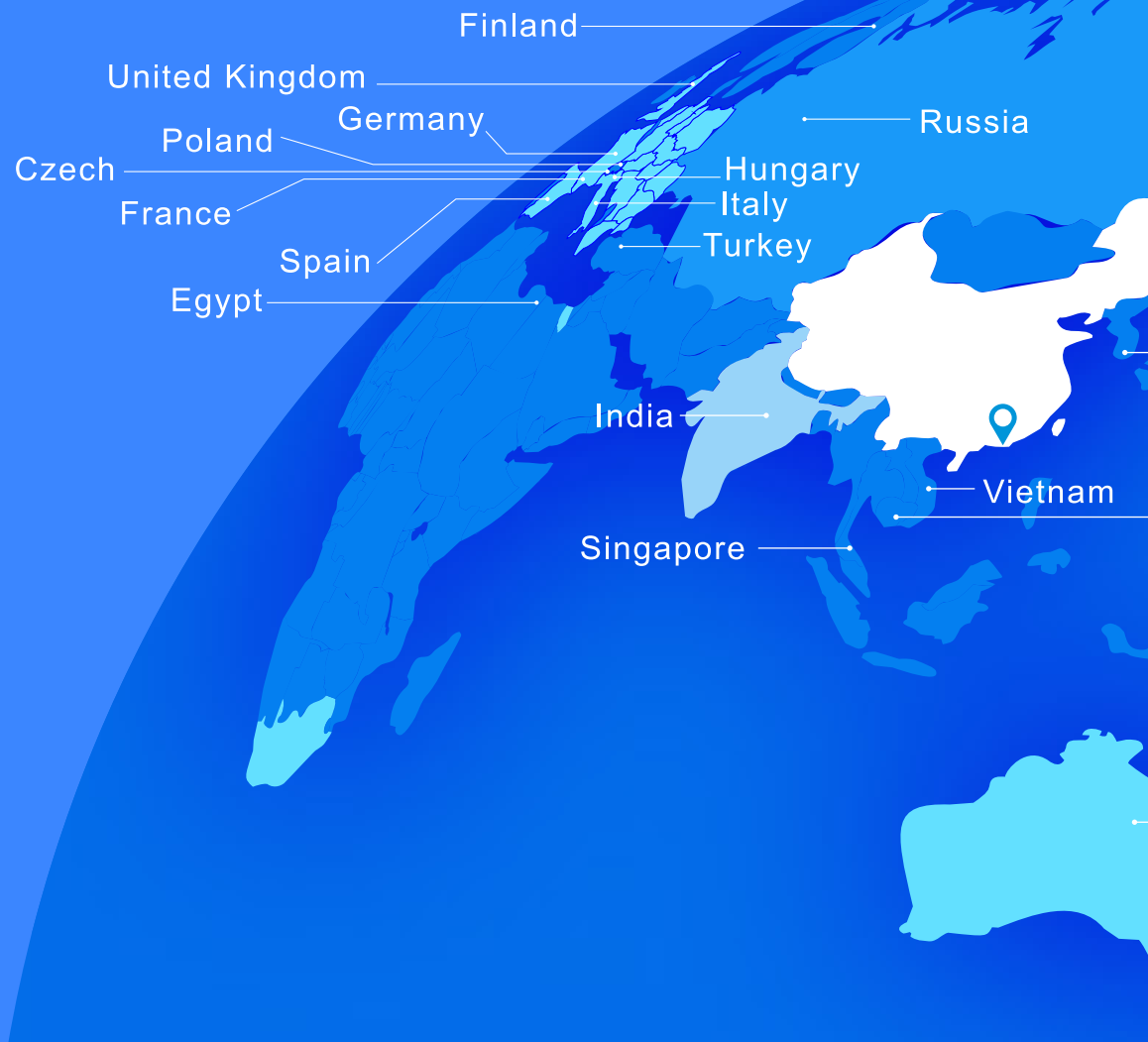
Based on high power single module and 10,000-watt level laser beam combining technology, the power of 10,000-watt level laser has continued to increase. At present, ultra high power CW fiber lasers such as 10000W, 12000W, 15000W, 25000W, 35000W, and 40000W have been launched, a complete matrix system of low, medium, and high power products with multiple types has been formed.



R&D and Technological Accumulation

3

With 17 years of experience in R&D and production of fiber lasers and optical components, Maxphotonics has 267 patents at home and abroad, and 23 computer software copyrights. The results of independent research and development are increasing year by year. Maxphotonics is one of the initial high-tech enterprise in China which localized the vertical integration of fiber laser and core optical device.



PRODUCTS SELL WELL IN MORE THAN 50 COUNTRIES AND REGIONS GLOBALLY

ABOVE 5000 ENTERPRISES WITNESS

2021





Domestic Sales Network

Xinjiang, Gansu, Qinghai, Tibet, Inner Mongolia, Ningxia, Sichuan, Yunnan, Shanxi, Shanxi, Jilin, Heilongjiang, Chongqing, Guizhou, Guangxi, Hunan, Hubei, Henan, Hebei, Beijing, Tianjin, Shandong, Liaoning, Jiangsu, Shanghai, Anhui, Zhejiang, Jiangxi, Fujian, Guangdong, Hong Kong, Taiwan, Macau, Hainan...

Overseas Sales Network

More than 50 countries and regions including Germany, Russia, Britain, France, Germany, Italy, Spain, India, Indonesia, Singapore, Turkey, United States, Brazil, Mexico, Japan, South Korea, Thailand, and Vietnam...

Service Commitment

1. 7*24 hour
2. Response time < 6 hours
3. Site visit within 24 hours for available area

* International warranty ONLY valid if products are purchased directly from Maxphotonics or authorized local distributors/agents.



PRODUCT FAMILY

12000 W

20000 W



Complete Category

Independent research and develop the production of pulsed fiber laser, continuous fiber laser, QCW fiber laser, Diode fiber laser, scientific research fiber laser, laser solution six series of products.

Multi-power Optional

Covers tens of watts, hundreds of watts, kilowatts to megawatts, also can meet the performance requirements of fiber lasers in different industry fields and different application scenarios.

Customization

We can provide pertinence and flexibleness multi-application and diversified laser solutions for scientific research fields such as sheet metal processing, engineering machinery, robots, automobile ships, home appliance manufacturing and other industrial fields.

ULTRA HIGH POWER SERIES

High Beam Quality

High Efficiency

High Reliability

Maintenance Free

40000 W

30000 W

15000 W



MFP 20W~70W Q-Switch Pulsed Fiber Laser

Product Feature

1-Excellent Single Pulse Energy

Higher single pulse energy makes our laser applicable to more types of materials and applications.

2-New Compact and Rugged Design

>40% reduction in volume

Higher flexibility when integrated into system.

3-Wide Application Even with Highly Reflective Material

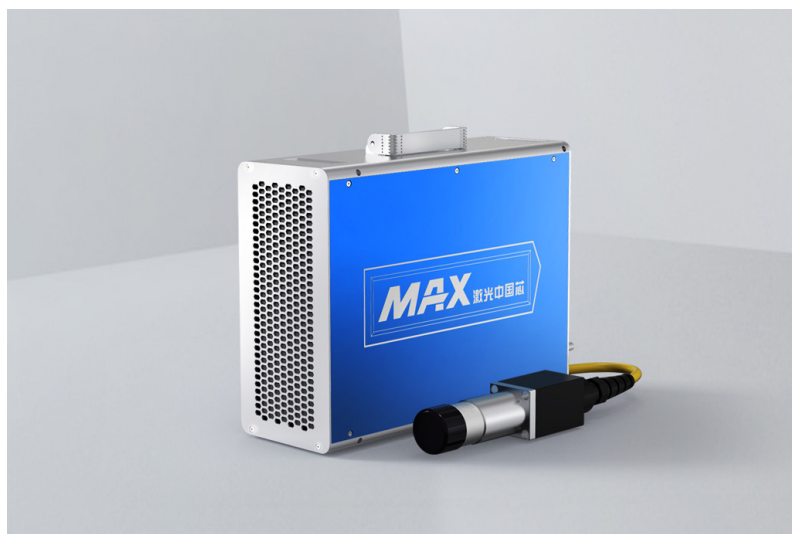
High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

4-High Level Vertical Integration

All key components are designed and produced in house .

Strict quality control, high consistency and reliability.



Models	MFP-20W	MFP-20H	MFP-30X	MFP-30W	MFP-30H	MFP-50X	MFP-50W	MFP-50H	MFP-70W
OPTICAL SPECIFICATIONS									
Nominal Power	20W	20W	30W	30W	30W	50W	50W	50W	70W
Mode of Operation	Pulsed								
Polarization	Random								
Power Tunability	10 to 100%								
Wavelength	1064 ± 5 nm								
Power Stability	≤ 3 %								
Laser Beam Quality M ²	≤ 1.5		≤ 1.6						
Pulse Energy	0.67mJ		0.75mJ	1mJ	1.2mJ	1mJ	1mJ	1.5mJ	1.5mJ
Pulse Duration	90~110ns								100~140 ns
Repetition Rate	30~60 KHz	20~80 KHz	30~60KHz		20~80 KHz	50~170KHz			
FIBER DELIVERY SYSTEM									
Length	1.9~3m standard, other lengths optional								3m standard, other lengths optional
Beam Diameter	6~8mm								
Beam Ellipticity	90%								
ELECTRICAL RATINGS									
Supply Voltage	24 VDC								
OTHER SPECIFICATIONS									
Operating Temperature	+10 to +42°C								
Storage Temperature	-10 to +60°C								
Humidity	10 to 95%								
Cooling Method	Air Cooling								
Dimension	345×266.2×120 mm								
Weight	6 kg	10 kg							

Application



High speed chip marking



Precision jewelry marking



Gift marking



Phone case marking

MFP 20X

Q-Switch Pulsed Fiber Laser

Product Feature

1-Excellent Single Pulse Energy

Higher single pulse energy makes our laser applicable to more types of materials and applications.

2-New Compact and Rugged Design

>40% reduction in volume

Higher flexibility when integrated into system.

3-Wide Application Even with Highly Reflective Material

High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

4-High Level Vertical Integration

All key components are designed and produced in house .

Strict quality control, high consistency and reliability.



Model	MFP-20X
OPTICAL SPECIFICATIONS	
Nominal Power	18~19W
Mode of Operation	Pulsed
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1064 ± 5 nm
Power Stability	≤ 5 %
Laser Beam Quality M ²	1.1~1.6
Pulse Energy	0.67 mJ
Pulse Duration	90~110 ns
Repetition Rate	27~60 kHz
FIBER DELIVERY SYSTEM	
Length	1.9~3m standard, other lengths optional
Beam Diameter	6~8mm
Beam Ellipticity	90%
ELECTRICAL RATINGS	
Supply Voltage	24 VDC
OTHER SPECIFICATIONS	
Operating Temperature	+10 to +40°C
Storage Temperature	-10 to +60°C
Humidity	10 to 95%
Cooling Method	Air Cooling
Dimension	244×200×73 mm
Weight	6 kg

Application



Adapter marking



Metal water pipe marking



Accessories marking



Cable marking

MFP 100W~200W Q-Switch Pulsed Fiber Laser

Product Feature

1-Excellent Single Pulse Energy

Higher single pulse energy makes our laser applicable to more types of materials and applications.

2-New Compact and Rugged Design

>40% reduction in volume

Higher flexibility when integrated into system.

3-Wide Application Even with Highly Reflective Material

High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

4-High Level Vertical Integration

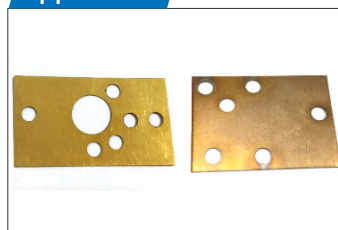
All key components are designed and produced in house .

Strict quality control, high consistency and reliability.



Models	MFP-100W	MFP-200W
OPTICAL SPECIFICATIONS		
Nominal Power	100W	200W
Mode of Operation	Pulsed	
Polarization	Random	
Power Tunability	5 to 100%	
Wavelength	1064 ± 5 nm	
Power Stability	≤ 5 %	
Laser Beam Quality M ²	≤ 1.6	≤ 1.8
Pulse Energy	1.5~7 mJ	
Pulse Duration	150~190 ns	180~220 ns
Repetition Rate	20~200 kHz	30~200 kHz
Full Power Repetition Rate	65~200 kHz	135~200 kHz
FIBER DELIVERY SYSTEM		
Length	5m standard, other lengths optional	
Beam Diameter	6~8 mm	
Beam Ellipticity	90%	
ELECTRICAL RATINGS		
Supply Voltage	220 VAC Single-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +35°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 95%	
Cooling Method	Air Cooling	
Dimension	540.4×482.6×131.3 mm	
Weight	21 kg	

Application



Brass cutting



Brass engraving



Carbon steel derusting



Inductive coil paint removing

MFPT 20W~70W MOPA Pulsed Fiber Laser

Product Feature

1-New Generation Optical Path Design

New core technology of fiber gain control.

2-High Output Power

Greatly improved single pulse energy.

3-Compact and Rugged Design

Maintenance free Operation.

4-Wide Application Even with Highly Reflective Material

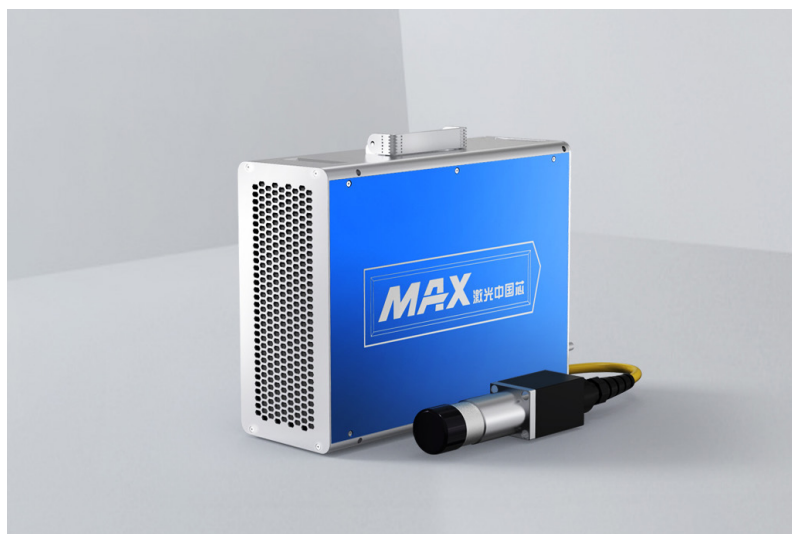
High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

5-High Level Vertical Integration

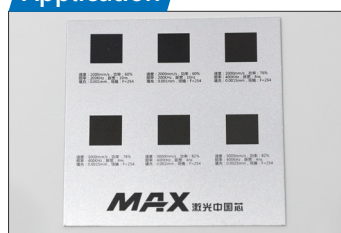
All key components are designed and produced in house.

Strict quality control, high consistency and reliability.

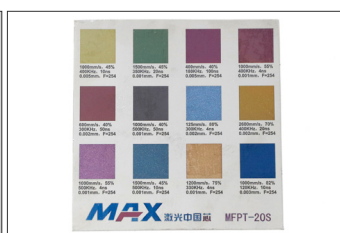


Models	MFPT-20M	MFPT-30M	MFPT-50M	MFPT-70M
OPTICAL SPECIFICATIONS				
Nominal Power	≥ 20	≥ 30	≥ 50	≥ 70
Mode of Operation	Pulsed			
Polarization	Random			
Power Tunability	10 to 100%			
Wavelength	1064 nm			
Power Stability	≤ 5 %			
Laser Beam Quality	≤ 1.3	≤ 1.3	≤ 1.4	≤ 1.5
Pulse Energy	0.7 mJ	1 mJ		
Pulse Duration	2~350 ns		2~500 ns	
Repetition Rate	1~4000 kHz			
FIBER DELIVERY SYSTEM				
Length	3m standard, other lengths optional			
Beam Diameter	6~8mm			
ELECTRICAL RATINGS				
Supply Voltage	24 VDC			
OTHER SPECIFICATIONS				
Operating Temperature	0 to +40℃			
Storage Temperature	-10 to +60℃			
Humidity	10 to 95%			
Cooling Method	Air Cooling			
Dimension	355×266×120 mm			
Weight	6 kg	8 kg	11 kg	

Application



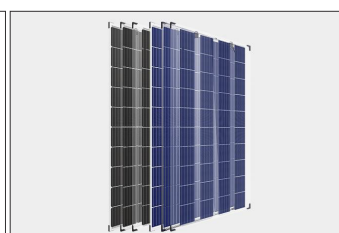
Anodised aluminium dark marking



Stainless steel color marking



Adapter marking



Solar wafer scribing

MFPT 100M~300M MOPA Pulsed Fiber Laser

Product Feature

1-New Generation Optical Path Design

New core technology of fiber gain control.

2-High Output Power

Greatly improved single pulse energy.

3-Compact and Rugged Design

Maintenance free Operation.

4-Wide Application Even with Highly Reflective Material

High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MFPT-100M	MFPT-120M	MFPT-150M	MFPT-200M	MFPT-250M	MFPT-300M
OPTICAL SPECIFICATIONS						
Nominal Power	≥ 100W	≥ 120W	≥ 150W	≥ 200W	≥ 250W	≥ 300W
Mode of Operation	Pulsed					
Polarization	Random					
Power Tunability	10 to 100%					
Wavelength	1064 nm					
Power Stability	≤ 5 %					
Laser Beam Quality	≤ 1.6, Typ.~1.3					
Pulse Energy	1.7 mJ					
Pulse Duration	10~500 ns					
Repetition Rate	1~4000 kHz					
FIBER DELIVERY SYSTEM						
Length	5m standard, other lengths optional					
Beam Diameter	6~8mm					
ELECTRICAL RATINGS						
Supply Voltage	220 VAC Single-phase					
OTHER SPECIFICATIONS						
Operating Temperature	0 to +40°C					
Storage Temperature	-10 to +60°C					
Humidity	10 to 95%					
Cooling Method	Air Cooling					
Dimension	422×440.4×131.3 mm					
Weight	25 kg					

Application



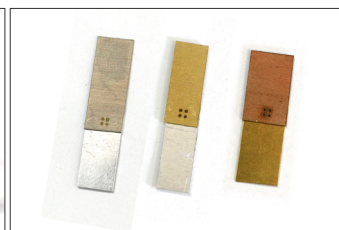
Battery pole ear welding



Shrapnel welding



Carbon steel derusting



Sheet metal welding

MFPT 500W~1000W MOPA Pulsed Fiber Laser

Product Feature

1-New Generation Optical Path Design

New core technology of fiber gain control.

2-High Output Power

Maximum nominal output power up to **1000W**.

Greatly improved single pulse energy.

3-Compact and Rugged Design

Maintenance free Operation.

4-Wide Application Even with Highly Reflective Material

High performance isolator effectively reduces reflection damage to the laser source.

Smoothly marking on aluminum, copper and brass etc.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Model	MFPT-500W	MFPT-1000W
OPTICAL SPECIFICATIONS		
Nominal Power	500W	≥ 1000
Mode of Operation	Pulsed	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	1064 nm	
Power Stability	≤ 5 %	
Laser Beam Quality, BPP	≥ 7.7 mm x mrad	
Pulse Energy	≥ 30 mJ	
Pulse Duration	200~500 ns	
Repetition Rate	1~400 kHz	
FIBER DELIVERY SYSTEM		
Interface	QBH	
Length	15m standard, other lengths optional	
ELECTRICAL RATINGS		
Supply Voltage	220 VAC	380 VAC
Nominal Power	2500W	5000W
OTHER SPECIFICATIONS		
Operating Temperature	0 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 95%	
Cooling Method	Air Cooling	
Dimension	682.6×1000×202.8 mm	
Weight	70 kg	

Application



Water pipe joint decontamination



Aluminum alloy oxide layer cleaning



Casting surface cleaning



Carbon steel derusting

MFSC 300W

Single Module CW Fiber Laser(3D Printing)

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Model	MFSC-300W
OPTICAL SPECIFICATIONS	
Nominal Power	300W
Mode of Operation	CW/Modulated
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1080 ± 10 nm
Power Stability	± 1 %
Laser Beam Quality M ²	1.1 to 1.2
Modulation Frequency	20~50kHz
Preview Red Light Power	150μW
FIBER DELIVERY SYSTEM	
Interface	QCS/QBH(LOC)
Length	2m standard, other lengths optional
Diameter	20(25/30/50) μm
Bending Radius	200 mm
ELECTRICAL RATINGS	
Supply Voltage	220VAC (-15% to +10%) Single-phase
OTHER SPECIFICATIONS	
Operating Temperature	0 to +35°C
Storage Temperature	-10 to +60°C
Humidity	10 to 90%
Cooling Method	Air Cooling
Dimension	482×610.4×139.3 mm
Weight	26 kg

Application



Copper sheet cutting



Metal 3D printing



Metal 3D printing



Metal 3D printing hollow ornament

MFSC 500W

Single Module CW Fiber Laser

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

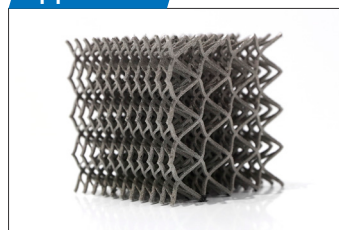
All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MFSC-500W
OPTICAL SPECIFICATIONS	
Nominal Power	500W
Mode of Operation	CW/Modulated
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1080 ± 10 nm
Power Stability	± 1 %
Laser Beam Quality M ²	1.3(20u QBH) 1.8(50u QBH)
Modulation Frequency	≤ 20kHz
Preview Red Light Power	150 μW
FIBER DELIVERY SYSTEM	
Interface	QBH
Length	10m standard, other lengths optional
Diameter	50(14/20/25/30/100) μm
Bending Radius	200 mm
ELECTRICAL RATINGS	
Supply Voltage	220VAC (-15% to +10%) Single-phase
OTHER SPECIFICATIONS	
Operating Temperature	+10 to +40°C
Storage Temperature	-10 to +60°C
Humidity	10 to 85%
Cooling Method	Water Cooling
Cooling Medium	Distilled water/ Glycol Antifreeze
Dimension	725.9×482.6×154.7 mm
Weight	35(±2) kg

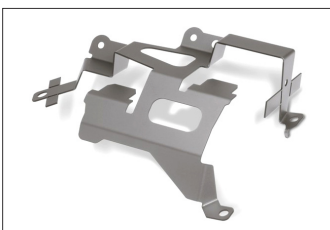
Application



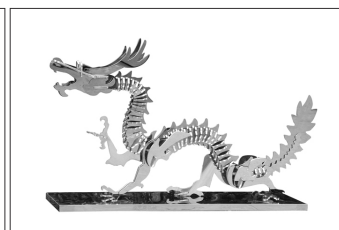
Metal 3D printing



1mm aluminum plate cutting



Stainless steel welding



Cutting craft

MFSC 1000W~1500W Single Module CW Fiber Laser

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MFSC-1000W	MFSC-1500W
OPTICAL SPECIFICATIONS		
Nominal Power	1000W	1500W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	1080 ± 10 nm	
Power Stability	± 1 %	
Laser Beam Quality, BPP	1~1.5 mm x mrad (50μm QBH)	
Modulation Frequency	≤ 20kHz	
Preview Red Light Power	150 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH(LOC)	
Length	10m standard, other lengths optional	15m standard, other lengths optional
Diameter	50 μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	220VAC (-15% to +10%) Single-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 85%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	482.6x700x172 mm	
Weight	53(±3)kg	57(±3) kg

Application



Water pipe joint decontamination



3mm stainless steel cutting



Gas nozzle seal welding



6-12mm carbon steel cutting

MFSC 2000W~3000W Single Module CW Fiber Laser

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

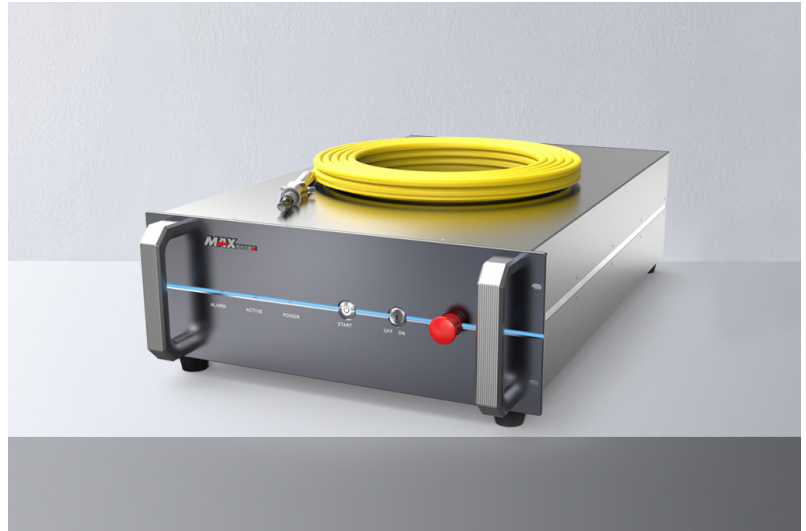
>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MFSC-2000W	MFSC-3000W
OPTICAL SPECIFICATIONS		
Nominal Power	2000W	3000W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100 %	
Wavelength	1080 ± 10 nm	
Power Stability	± 1 %	
Laser Beam Quality, BPP	1.1 to 1.5 mm x mrad(50um QBH)	
	2.8 to 3.6 mm x mrad(100um QBH)	
Modulation Frequency	≤ 5 kHz	
Preview Red Light Power	200 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH (LOC)	
Length	15 m standard, other lengths optional	20 m standard, other lengths optional
Diameter	50(100/200) μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	400VAC (-15% to +10%) 3-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40 °C	
Storage Temperature	-10 to +60 °C	
Humidity	10 to 85 %	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	482.6×950×193 mm	
Weight	72(±3) kg	80(±3) kg

Application



25mm carbon steel cutting



4-8mm stainless steel cutting



4-6mm brass cutting



2mm aluminum pipe welding

MFSC 3000W~4000W Single Module CW Fiber Laser

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MFSC-3000W	MFSC-4000W
OPTICAL SPECIFICATIONS		
Nominal Power	3000W	4000W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	1080 ± 10 nm	
Power Stability	±1 %	
Laser Beam Quality, BPP	1.1 to 1.5 mm x mrad (50μmQBH)	
	2.8 to 3.6 mm x mrad (100μmQBH)	
Modulation Frequency	≤ 5kHz	
Preview Red Light Power	200 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH(LOC)	
Length	20m standard, other lengths optional	
Diameter	50(100/200) μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	400VAC (-15% to +10%) 3-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 85%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	640×1173×1102 mm	
Weight	200(±20) kg	

Application



25mm carbon steel cutting



8-10mm brass cutting



8-12mm stainless steel cutting



2mm brass welding

MFSC 5000W~6000W Single Module CW Fiber Laser

Product Feature

1-Up to 6KW Output From CW Single Module Series

Better beam quality vs. multi module lasers.

Greatly improved efficiency.

2-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

3-Compact Design, Maintenance Free

Highly integrated system with modular design.

Easy maintenance significantly reduce TCO.

4-Smaller Size with Higher Stability

>60% reduction in volume.

Higher flexibility when integrated in to system.

5-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.

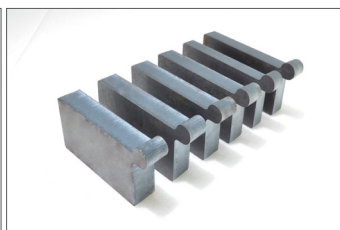


Models	MFSC-5000W	MFSC-6000W
OPTICAL SPECIFICATIONS		
Nominal Power	5000W	6000W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	1080 ± 10 nm	
Power Stability	± 1 %	
Laser Beam Quality, BPP	2.8 to 3.6 mm x mrad (100μm QBH)	
Modulation Frequency	≤ 5kHz	
Preview Red Light Power	200 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH(LOC)	
Length	20m standard, other lengths optional	
Diameter	100(150/200) μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	400VAC (-15% to +10%) 3-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 85%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	640×1173×1102 mm	
Weight	240(±20) kg	

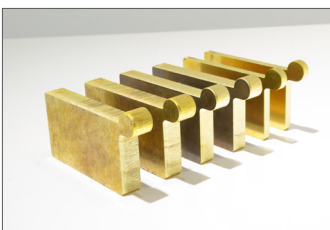
Application



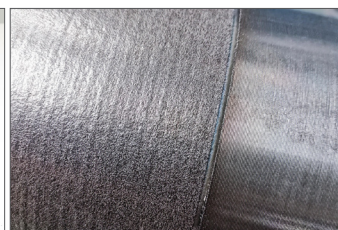
Battery electrode welding



14-25mm carbon steel cutting



8-14mm brass cutting



Laser cladding

MFMC 6000W~20000W Multi Module Fiber Laser

Product Feature

1-High Power with Great Beam Quality

High power density with flat-head distribution.

High wall-plug efficiency.

2-Even Energy Distribution

Less splash during cutting and welding.

3-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

4-Compact Design, Maintenance Free

Highly integrated system with modular design.

High stability and easy maintenance significantly reduce TCO.

5-Best Choice for Cutting and Welding

Widely used in hardware processing, automobile, shipping, construction machinery, medical industries and more.



Models	MFMC-6000W	MFMC-12000W	MFMC-15000W	MFMC-20000W
OPTICAL SPECIFICATIONS				
Nominal Power	6000W	12000W	15000W	20000W
Mode of Operation	CW/Modulated			
Polarization	Random			
Power Tunability	10 to 100%			
Wavelength	1080 ± 5 nm			
Power Stability	± 1 %			
Laser Beam Quality, BPP	3.5 to 4.5 mm x mrad (100μmQBH)			
	5 to 6.5 mm x mrad (150μmQBH)			
	6.5 to 9 mm x mrad (200μmQBH)			
Modulation Frequency	≤ 5kHz			
Preview Red Light Power	200 μW			
FIBER DELIVERY SYSTEM				
Interface	QBH	LOE		
Length	20m standard, other lengths optional			
Diameter	100/150/200 μm			
Bending Radius	200 mm			
ELECTRICAL RATINGS				
Supply Voltage	400 (-15% to +10%) VAC 3-phase			
OTHER SPECIFICATIONS				
Operating Temperature	+10 to +40°C			
Storage Temperature	-10 to +60°C			
Humidity	10 to 80%			
Cooling Method	Water Cooling			
Cooling Medium	Distilled water/ Glycol Antifreeze			
Dimension	1050×1385×1658 mm			
Weight	534(±4) kg	646(±5) kg	726(±5) kg	815(±5) kg

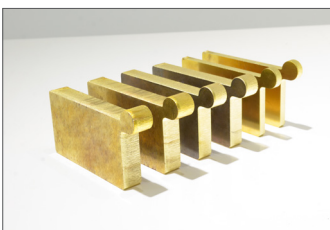
Application



Carbon steel cutting
(Bright surface)



Stainless steel cutting



Brass cutting



Carbon steel cutting

MFMC 20000W Multi Module Fiber Laser

Product Feature

1-High Power with Great Beam Quality

High power density with flat-head distribution.

High wall-plug efficiency.

2-Even Energy Distribution

Less splash during cutting and welding.

3-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

4-Compact Design, Maintenance Free

Highly integrated system with modular design.

High stability and easy maintenance significantly reduce TCO.

5-Best Choice for Cutting and Welding

Widely used in hardware processing, automobile, shipping, construction machinery, medical industries and more.



Models	MFMC-20000W
OPTICAL SPECIFICATIONS	
Nominal Power	20000W
Mode of Operation	CW/Modulated
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1080 ± 5 nm
Laser Beam Quality, BPP	5 to 6.5 mm x mrad (150μmQBH) 8 to 10 mm x mrad (200μmQBH)
Modulation Frequency	≤ 5kHz
Preview Red Light Power	200 μW
FIBER DELIVERY SYSTEM	
Interface	LOE(Q+)
Length	20m standard, other lengths optional
Diameter	150/200 μm
Bending Radius	200 mm
ELECTRICAL RATINGS	
Supply Voltage	400VAC (-15% to +10%) 3-phase
OTHER SPECIFICATIONS	
Operating Temperature	+10 to +40°C
Storage Temperature	-10 to +60°C
Humidity	10 to 80%
Cooling Method	Water Cooling
Cooling Medium	Distilled water/ Glycol Antifreeze
Dimension	1050×1460×1640 mm
Weight	978(±4)kg

Application



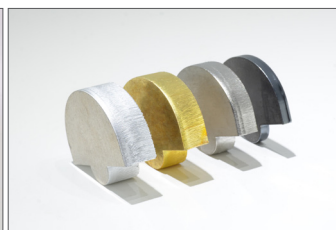
Carbon steel cutting
(Bright surface)



Carbon steel cutting



130mm stainless steel cutting



Metal cutting

MFMC 30000W~40000W Multi Module Fiber Laser

Product Feature

1-High Power with Great Beam Quality

High power density with flat-head distribution.

High wall-plug efficiency.

2-Even Energy Distribution

Less splash during cutting and welding.

3-Excellent Material Processing Performance

High speed in thin sheet cutting.

Strong capability in thick material processing.

4-Compact Design, Maintenance Free

Highly integrated system with modular design.

High stability and easy maintenance significantly reduce TCO.

5-Best Choice for Cutting and Welding

Widely used in hardware processing, automobile, shipping, construction machinery, medical industries and more.

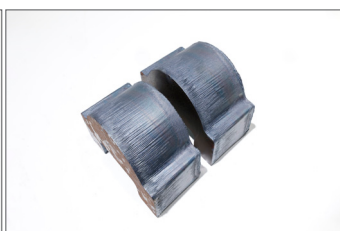


Models	MFMC-30000W	MFMC-40000W
OPTICAL SPECIFICATIONS		
Nominal Power	30000W	40000W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	1080 ± 5 nm	
Laser Beam Quality, BPP	5 to 6.5 mm x mrad (150μmQBH)	
	8 to 10 mm x mrad (200μmQBH)	
Modulation Frequency	≤ 5kHz	
Preview Red Light Power	200 μW	
FIBER DELIVERY SYSTEM		
Interface	LOE	
Length	20m standard, other lengths optional	
Diameter	150/200 μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	400VAC (-15% to +10%) 3-phase	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 80%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	1050×1909×1658 mm	
Weight	1140(±10) kg	1265(±10) kg

Application



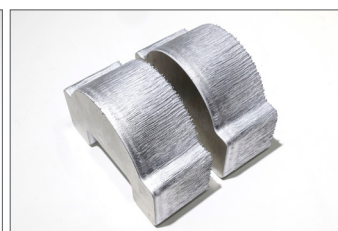
Aluminum cutting



Carbon steel cutting



Metal cutting



Aluminum cutting

MFSQ 150/1500W QCW Fiber Laser

Product Feature

1-All-fiber Structure

Compact and rugged design for long time operation.

2-Adjustable Pulse Width Waveform

The output waveform can be customized according to different welding or cutting applications.

3-Compact Design, Maintenance Free

Plug and play, higher flexibility when integrated into system.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Model	MFSQ-150/1500W
OPTICAL SPECIFICATIONS	
CW Mode Max Power	250W
Pulsed Mode Max Power	1500W
Mode of Operation	CW/Modulated
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1080 ± 10 nm
Power Stability	2%
Laser Beam Quality M ²	1.3(20um)
Pulse Energy	15 J
Pulse Duration	0.05~50 ms
Repetition Rate	1~5000 Hz
Preview Red Light Power	100 μW
FIBER DELIVERY SYSTEM	
Interface	QBH (LOC)
Length	10 m standard, other lengths optional
Diameter	20/50 μm
Bending Radius	200 mm
ELECTRICAL RATINGS	
Supply Voltage	220VAC
Rated Power	3 KW
OTHER SPECIFICATIONS	
Operating Temperature	+10 to +40°C
Storage Temperature	-10 to +60°C
Humidity	10 to 85%
Cooling Method	Air Cooling
Dimension	510.5x448x131.5 mm
Weight	34 kg

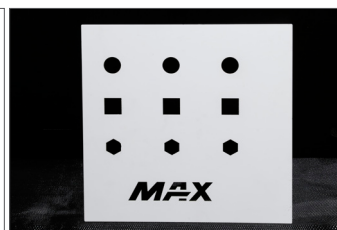
Application



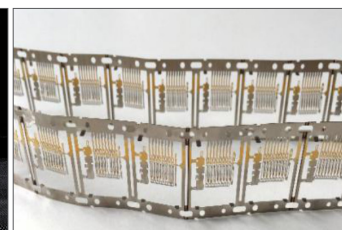
Shrapnel welding



Power battery welding



Ceramic cutting



Precision welding

MFSQ 1000/2500W QCW Fiber Laser

Product Feature

1-All-fiber Structure

Compact and rugged design for long time operation.

2-Adjustable Pulse Width Waveform

The output waveform can be customized according to different welding or cutting applications.

3-Compact Design, Maintenance Free

Plug and play, higher flexibility when integrated into system.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.

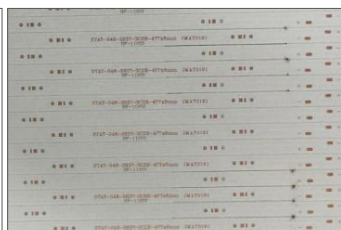


Model	MFSQ-1000/2500W
OPTICAL SPECIFICATIONS	
CW Mode Max Power	1000W
Pulsed Mode Max Power	2500W
Mode of Operation	CW/Modulated
Polarization	Random
Power Tunability	10 to 100%
Wavelength	1080 ± 10 nm
Power Stability	3%
Laser Beam Quality BPP	1.1~1.5 (50μm)
Pulse Energy	25 J
Pulse Duration	0.03~50 ms
Repetition Rate	1~5000 Hz
Preview Red Light Power	100 μW
FIBER DELIVERY SYSTEM	
Interface	QBH (LOC)
Length	15 m standard, other lengths optional
Diameter	20/30/50 μm
Bending Radius	200 mm
ELECTRICAL RATINGS	
Supply Voltage	220VAC
Rated Power	7 KW
OTHER SPECIFICATIONS	
Operating Temperature	+10 to +40°C
Storage Temperature	-10 to +60°C
Humidity	10 to 85%
Cooling Method	Water Cooling
Dimension	950×482.6×193.2 mm
Weight	68 kg

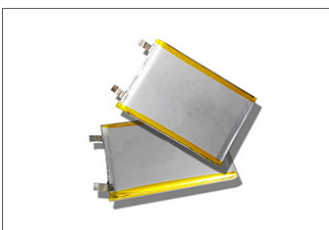
Application



Battery pole ear welding



Aluminum substrate plate



Battery case welding



Battery electrode welding

MD

1000W/1500WSingle Wavelength Direct
Diode Laser Series**Product Feature****1-High Utilization**

Short wavelength, high laser absorption rate of metal.

2-Excellent Electro-optical Conversion Efficiency

Energy saving and environmental protection, the EOCE of the whole machine reaches more than **45%**.

3-High Power Density with Flat-top Distribution

Laser spot energy evenly distributed, improve processing effect.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MD-1000W	MD-1500W
OPTICAL SPECIFICATIONS		
Nominal Power	1000W	1500W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	920 ± 10 nm	
Power Stability	± 1 %	
Laser Beam Quality, BPP	25~28 mm*mrad	30~33 mm*mrad
Modulation Frequency	≤ 20 KHz	
Preview Red Light Power	150 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH (LOC)	
Length	15m standard, other lengths optional	
Diameter	300 μm	400 μm
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	220 VAC	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 80%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	800×482.6×192 mm	
Weight	50(±3) kg	

Application

Stainless steel pipe welding



Seal Welding



Kettle base welding



Gas nozzle seal welding

MD 2000W/3000W

Single Wavelength Direct Diode Laser Series

Product Feature

1-High Utilization

Short wavelength, high laser absorption rate of metal.

2-Excellent Electro-optical Conversion Efficiency

Energy saving and environmental protection, the EOCE of the whole machine reaches more than **45%**.

3-High Power Density with Flat-top Distribution

Laser spot energy evenly distributed, improve processing effect.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.



Models	MD-2000W	MD-3000W
OPTICAL SPECIFICATIONS		
Nominal Power	2000W	3000W
Mode of Operation	CW/Modulated	
Polarization	Random	
Power Tunability	10 to 100%	
Wavelength	920 ± 10 nm	
Power Stability	± 1 %	
Laser Beam Quality, BPP	40~45 mm*mrad	
Modulation Frequency	≤ 20 KHz	
Preview Red Light Power	150 μW	
FIBER DELIVERY SYSTEM		
Interface	QBH (LOC)	
Length	15m standard, other lengths optional	
Diameter	600 μm	
Bending Radius	200 mm	
ELECTRICAL RATINGS		
Supply Voltage	220 VAC	
OTHER SPECIFICATIONS		
Operating Temperature	+10 to +40°C	
Storage Temperature	-10 to +60°C	
Humidity	10 to 80%	
Cooling Method	Water Cooling	
Cooling Medium	Distilled water/ Glycol Antifreeze	
Dimension	950×482.6×193.2 mm	
Weight	68(±3) kg	

Application



Stainless steel pipe welding



Seal Welding



Kettle base welding



Gas nozzle seal welding

MD 1000W~2500W

Dual Wavelength Direct Diode Laser Series

Product Feature

1-High Utilization

Short wavelength, high laser absorption rate of metal.

2-Excellent Electro-optical Conversion Efficiency

Energy saving and environmental protection, the EOCE of the whole machine reaches more than **45%**.

3-High Power Density with Flat-top Distribution

Laser spot energy evenly distributed, improve processing effect.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.

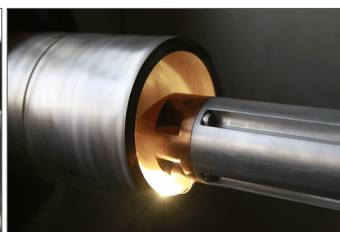


Models	MD-1000W	MD-1500W	MD-2000W	MD-2500W
OPTICAL SPECIFICATIONS				
Nominal Power	1000W	1500W	2000W	2500W
Mode of Operation	CW/Modulated			
Polarization	Random			
Power Tunability	10 to 100%			
Wavelength	920 nm (910~930) 975 nm (965~985)			
Power Stability	±1 %			
Laser Beam Quality, BPP	20~22 mm*mrad	25~28 mm*mrad	30~33 mm*mrad	
Modulation Frequency	≤ 20 KHz			
Preview red light power	150 μW			
FIBER DELIVERY SYSTEM				
Interface	QBH			
Length	15m standard, other lengths optional			
Diameter	200 μm	300 μm	400 μm	
Bending Radius	200 mm			
ELECTRICAL RATINGS				
Supply Voltage	380 VAC			
OTHER SPECIFICATIONS				
Operating Temperature	+10 to +40°C			
Storage Temperature	-10 to +60°C			
Humidity	10 to 85%			
Cooling Method	Water Cooling			
Cooling Medium	Distilled water/ Glycol Antifreeze			
Dimension	800×482.6×192 mm			
Weight	58(±3) kg		68±3	

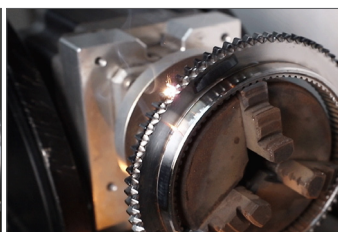
Application



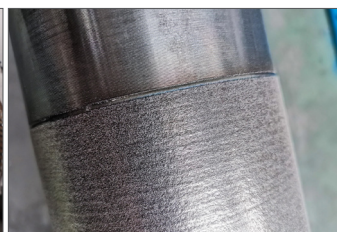
Laser brazing



Inner hole cladding



Laser hardening



Laser cladding

MD 3000W~5000W Dual Wavelength Direct Diode Laser Series

Product Feature

1-High Utilization

Short wavelength, high laser absorption rate of metal.

2-Excellent Electro-optical Conversion Efficiency

Energy saving and environmental protection, the EOCE of the whole machine reaches more than **45%**.

3-High Power Density with Flat-top Distribution

Laser spot energy evenly distributed, improve processing effect.

4-High Level Vertical Integration

All key components are designed and produced in house.

Strict quality control, high consistency and reliability.

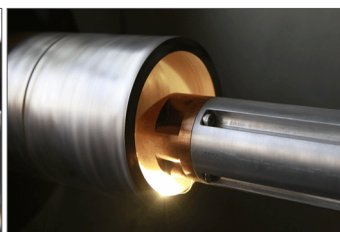


Models	MD-3000W	MD-4000W	MD-5000W
OPTICAL SPECIFICATIONS			
Nominal Power	3000W	4000W	5000W
Mode of Operation	CW/Modulated		
Polarization	Random		
Power Tunability	10 to 100%		
Wavelength	920 nm (910~930) 975 nm (965~985)		
Power Stability	±1 %		
Laser Beam Quality, BPP	40~45 mm*mrad		
Modulation Frequency	≤ 20 KHz		
Preview red light power	150 μW		
FIBER DELIVERY SYSTEM			
Interface	QBH		
Length	15m standard, other lengths optional		
Diameter	600 μm		
Bending Radius	200 mm		
ELECTRICAL RATINGS			
Supply Voltage	380 VAC		
OTHER SPECIFICATIONS			
Operating Temperature	+10 to +40°C		
Storage Temperature	-10 to +60°C		
Humidity	10 to 85%		
Cooling Method	Water Cooling		
Cooling Medium	Distilled water/ Glycol Antifreeze		
Dimension	950×482.6×172 mm		
Weight	78(±3) kg		

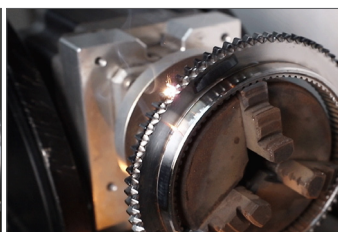
Application



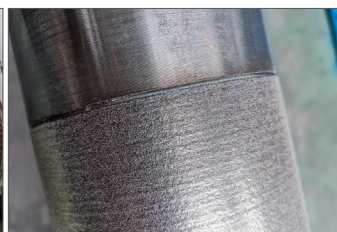
Laser brazing



Inner hole cladding



Laser hardening



Laser cladding



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