

Stone series

*Automotive, consumer electronics,
and more*





UV-clean patented technology



Protection grade IP65



Service life 20,000⁺h



Adaptable



Power stability



**Reliable performance
and repair <3%**



Stone series mini UV lasers



3-8W
The laser power

7x24h
Meet 7*24 hours of work

20000⁺h
The service life

Introduction

All-in-one compact laser source with superior beam quality $M^2 < 1.3$, capable of processing more than 90% of industrial materials with excellent accuracy. The pulse width is narrower, only $\sim 13\text{ns}@30\text{kHz}$. Smaller size and easier to integrate. Its high stability can meet 7*24 hrs continuous working, with no worry of power attenuation.

Features

- The laser power 3-8W;
- Narrower pulse width of only $\sim 13\text{ns}@30\text{kHz}$;
- Solve power attenuation and meet 7*24 hours of work;
- The service life exceeds 20,000 hours, maintenance-free, no need for regular commissioning;
- 3 layers of protection, protection grade IP65, more suitable for harsh working environment.

Application

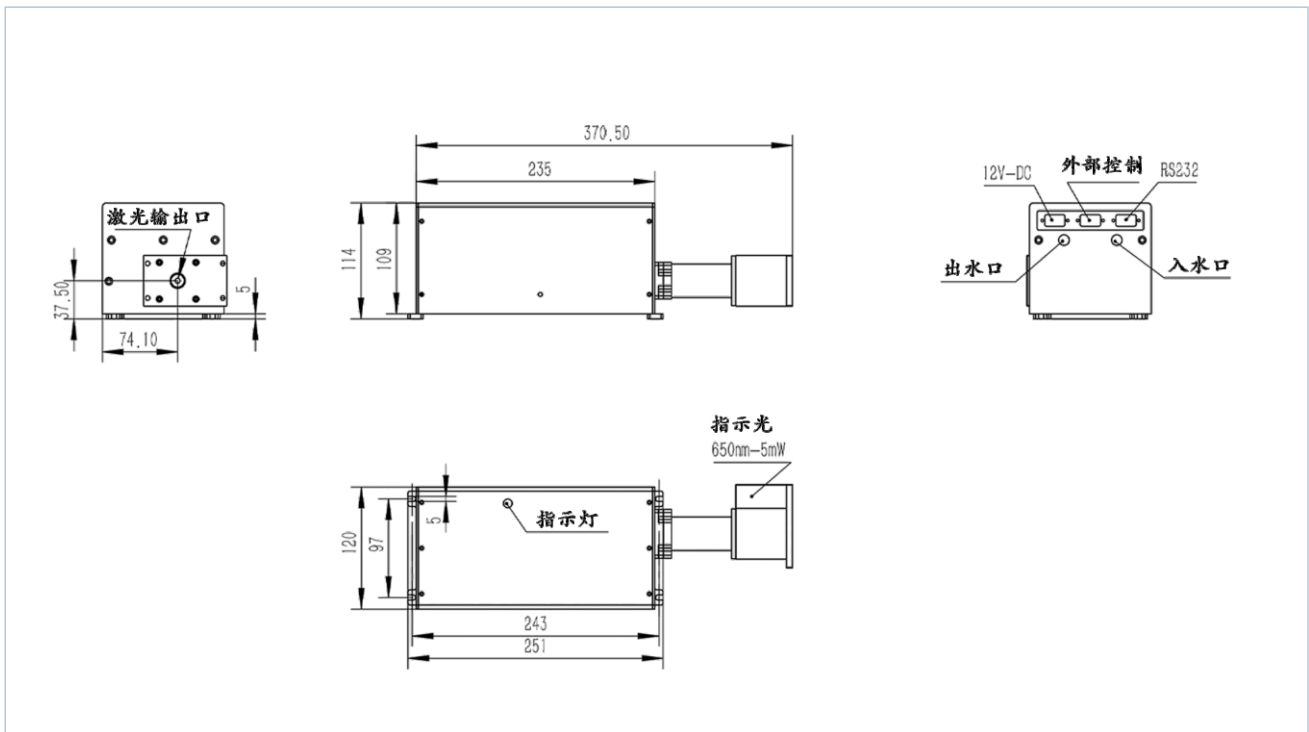
- Material marking - Plastic, glass, metal molds, wood, packaging bags, jade, etc.
- Crystal internal engraving
- 3D printing
- Film cutting



产品参数

型号	MMEPU-355-3-M	MMEPU-355-5-M	MMEPU-355-8-M
激光参数			
波长 (nm)	355nm±1nm		
平均功率(W)	>3W@30kHz	>5W@30kHz	>8W@40kHz
单脉冲能量(uJ)	~100uJ@30kHz	~160uJ@30kHz	~200uJ@40kHz
脉冲宽度 (ns)	~13ns@30kHz		
重复频率	20-500kHz		
脉冲稳定性	<3% rms		
长期稳定性	<±3%		
光束参数			
偏振比	水平偏振:>100:1		
光束直径	~0.8mm(出光孔)/~5mm(6倍扩束)		
光束圆度	>90%		
光束质量	TEM ₀₀ , M ² <1.3		
电源参数			
预热时间	冷启动时<15分钟		
供电要求	DC12V,350W		
环境温度	10-35°C, 湿度<80%		
存储温度	-10-40°C, 湿度<90%		
物理参数			
冷却方式	水冷		
工作水温	25°C		

尺寸参考



Stone series air-cooled UV lasers



3-8W

The laser power

7x24h

Meet 7*24 hours of work

20000⁺h

The service life

Introduction

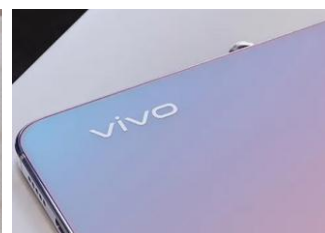
It perfectly inherits the excellent performance of Maiman's water-cooled UV lasers. The cooling method air-cooled does not require any chiller. Meantime it's more suitable for complex and harsh working condition.

Features

- The laser power 3-8W;
- Solve power attenuation and meet 7*24 hours of work;
- The service life exceeds 20,000 hours, maintenance-free, no need for regular commissioning;
- All-in-one machine, directly installed with galvanometer, compatible with the rack of fiber laser marking machine;
- 3 layers of protection, protection grade IP65, more suitable for harsh working environment.

Application

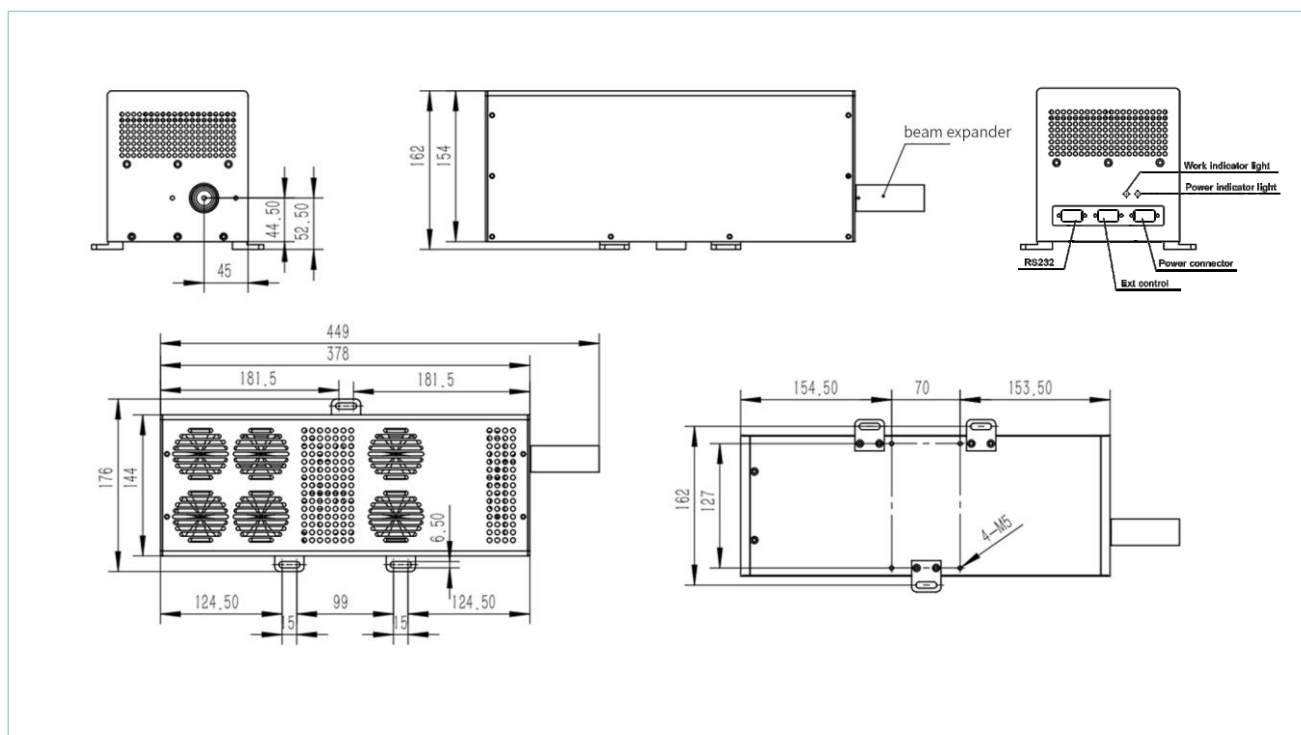
- Material marking - Plastic, glass, metal molds, wood, packaging bags, jade, etc.
- Crystal internal engraving
- 3D printing
- Film cutting



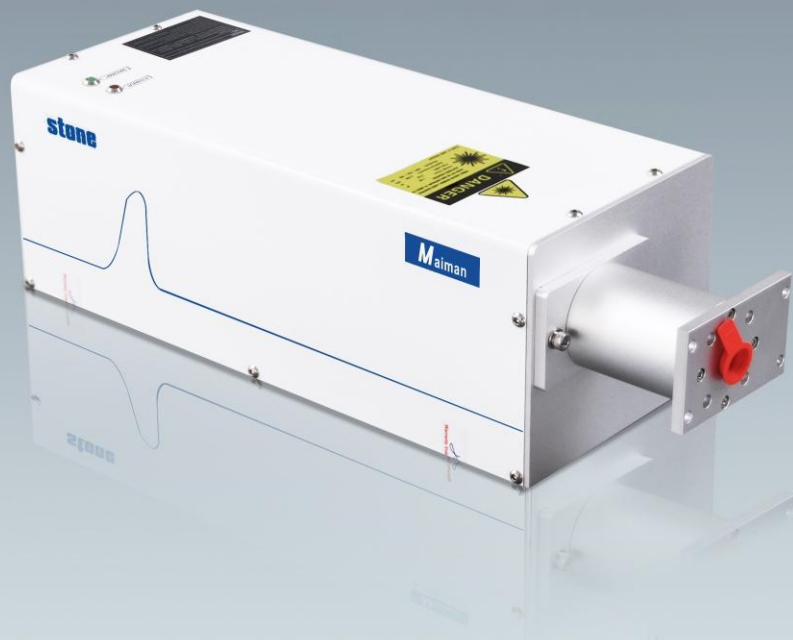
Specifications

Model No. -Stone Series	MMEPU-AC-355-3	MMEPU-AC-355-5	MMEPU-AC-355-8
Model No.-Stone Plus Series	MMEPU-AC-355Plus-3	MMEPU-AC-355Plus-5	MMEPU-AC-355Plus-8
Optical Characteristics			
Wavelength (nm)	355nm±1nm		
Average Power (W)	>3W@30kHz	>5W@30kHz	>8W@40kHz
Single Pulse Energy (uJ)	~100uJ@30kHz	~160uJ@30kHz	~200uJ@40kHz
Pulse Width (ns)	~15ns@30kHz		~15ns@40kHz
Repetition Rate	20-500kHz		40-500kHz
Pulse Stability	<3% rms		
Long Term Stability	<±3%		
Beam Characteristics			
Polarization Ratio	Horizontal;>100:1		
Beam Diameter	~0.8mm(at exit)/~5mm(6X beam expander)		
Beam Circularity	>90%		
Spatial Mode	TEM ₀₀ , M ² <1.3		
Operating Specifications			
Warm-up Time	<15 minutes from cold start		
Electrical Requirement	DC12V,350W		
Ambient Temperature	10-35°C, RH<80%		
Storage Conditions	-10-40°C, RH<90%		
Physical Characteristics			
Cooling System	Air-cooled		

Dimensional Drawings



Stone series water-cooled UV lasers



3-15W

The laser power

7x24h

Meet 7*24 hours of work

20000⁺h

The service life

Introduction

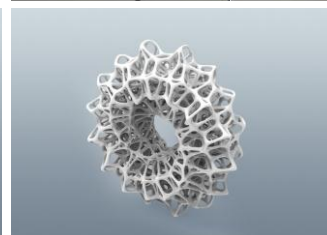
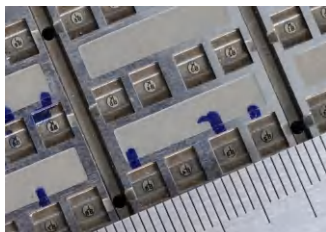
All-in-one compact laser source with superior beam quality $M^2 < 1.3$, it's capable to process more than 90% of industrial materials with excellent accuracy. Its high stability can meet 7*24 hrs continuous working, no worry of power attenuation.

Features

- The laser power 3-15W;
- Solve power attenuation and meet 7*24 hours of work;
- The service life exceeds 20,000 hours, maintenance-free, no need for regular commissioning;
- All-in-one machine, directly installed with galvanometer, compatible with the rack of fiber laser marking machine;
- 3 layers of protection, protection grade IP65, more suitable for harsh working environment.

Application

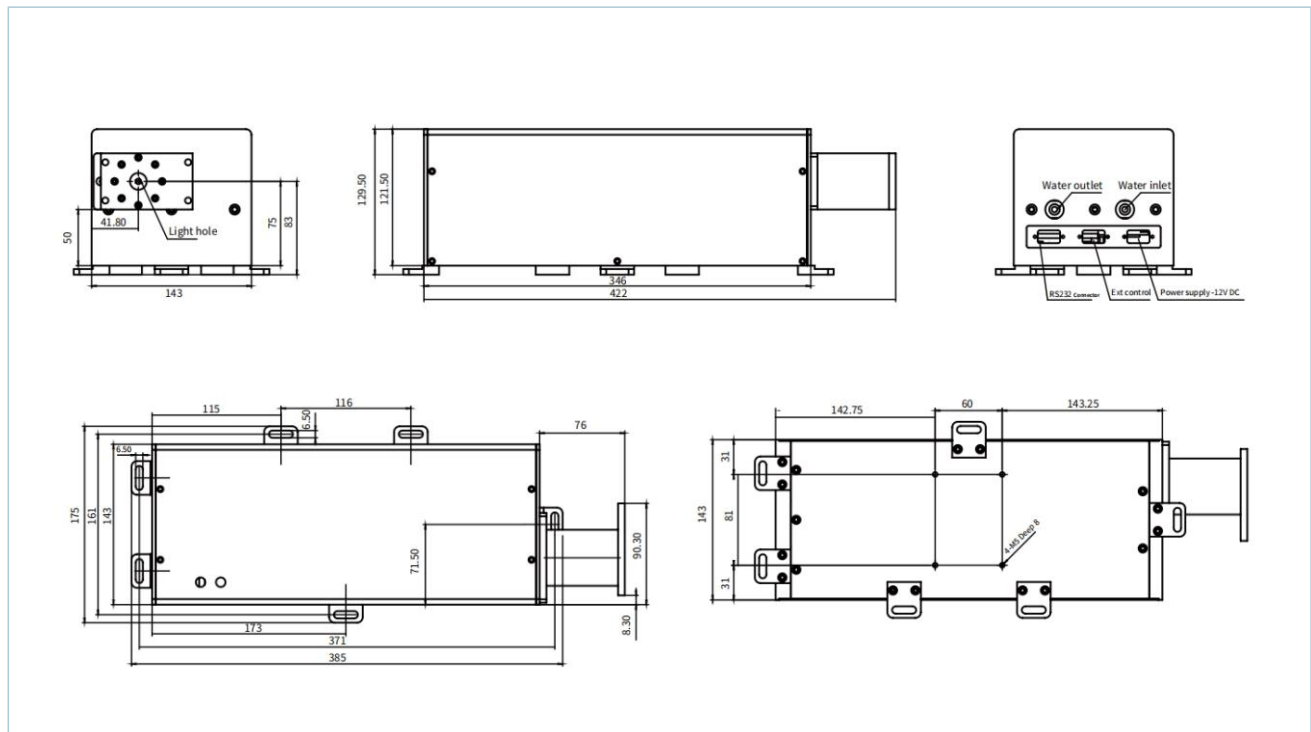
- Material marking - Plastic, glass, metal molds, wood, packaging bags, jade, etc.
- Crystal internal engraving
- 3D printing
- Film cutting



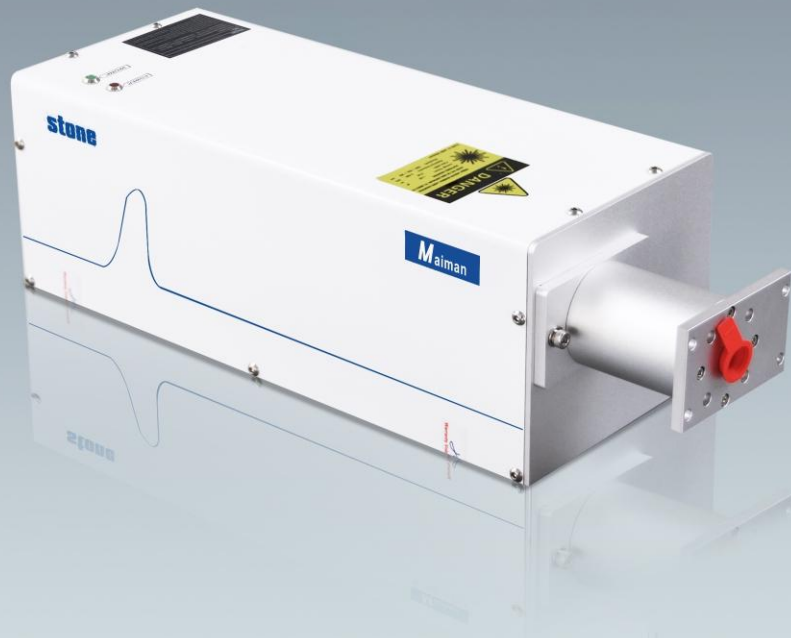
Specifications

Model No. -Stone Series	MMEPU-355-3	MMEPU-355-5	MMEPU-355-8	MMEPU-355-10	MMEPU-355-12	MMEPU-355-15
Model No.-Stone Plus Series	MMEPU-355Plus-3	MMEPU-355Plus-5	MMEPU-355Plus-8	MMEPU-355Plus-10	MMEPU-355Plus-12	MMEPU-355Plus-15
Optical Characteristics						
Wavelength (nm)	355nm±1nm					
Average Power (W)	>3W@30kHz	>5W@30kHz	>8W@40kHz	>10W@40kHz	>12W@40kHz	>15W@40kHz
Single Pulse Energy (uJ)	~100uJ@30kHz	~160uJ@30kHz	~200uJ@40kHz	~250uJ@40kHz	~300uJ@40kHz	~375uJ@40kHz
Pulse Width (ns)	~15ns@30kHz		~15ns@40kHz			
Repetition Rate	20-500kHz		40-500kHz			
Pulse Stability	<3% rms					
Long Term Stability	<±3%					
Beam Characteristics						
Polarization Ratio	Horizontal;>100:1					
Beam Diameter	~0.8mm(at exit)/~5mm(6X beam expander)					
Beam Circularity	>90%					
Spatial Mode	TEM ₀₀ , M ² <1.3					
Operating Specifications						
Warm-up Time	<15 minutes from cold start					
Electrical Requirement	DC12V,350W			DC15V,350W		DC18V,350W
Ambient Temperature	10-35°C, RH<80%					
Storage Conditions	-10-40°C, RH<90%					
Physical Characteristics						
Cooling System	Water-Cooled					
Water Temperature (laser inlet)	25°C					

Dimensional Drawings



Stone series glass marking UV laser



10W

The laser power

7x24h

Meet 7*24 hours of work

20000⁺h

The service life

Introduction

Specially designed for glass marking, it can meet the processing requirements of various glass materials. It has excellent beam quality $M^2 < 1.3$, 30% higher peak power, 30% higher processing time, and a more delicate processing effect than ordinary 10W.

Features

- The laser power 10W;
- Solve power attenuation and meet 7*24 hours of work;
- The service life exceeds 20,000 hours, maintenance-free, no need for regular commissioning;
- All-in-one machine, directly installed with galvanometer, compatible with the rack of fiber laser marking machine;
- 3 layers of protection, protection grade IP65, more suitable for harsh working environment.

Application

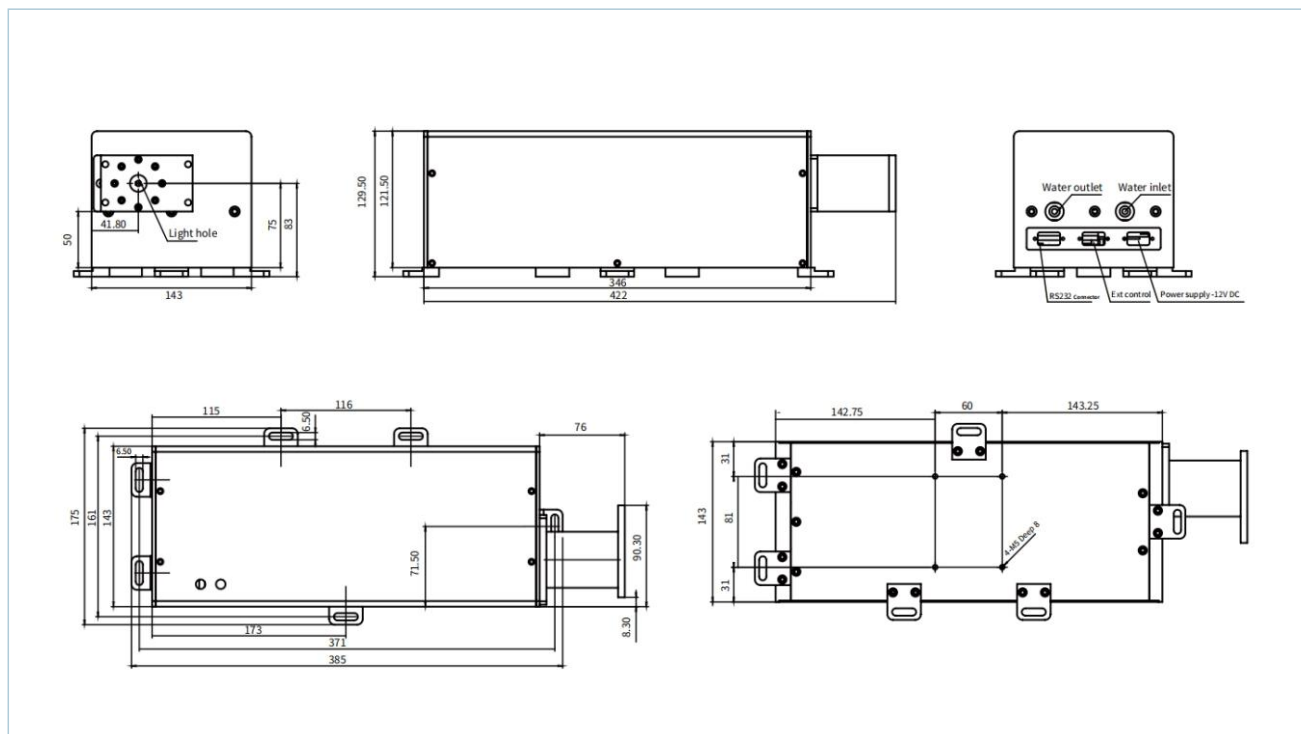
- Glass marking - Quartz, high borosilicate, K9, etc.



Specifications

Model No.	MMEPU-355-10-ZRS2
Optical Characteristics	
Wavelength (nm)	355nm ± 1nm
Average Power (W)	>10W@40kHz
Single Pulse Energy (uJ)	~250uJ@40kHz
Pulse Width (ns)	~10ns@40kHz
Repetition Rate	40-500kHz
Pulse Stability	<3% rms
Long Term Stability	<±3%
Beam Characteristics	
Polarization Ratio	Horizontal; >100:1
Beam Diameter	~0.8mm(at exit)/~5mm(6X beam expander)
Beam Circularity	>90%
Spatial Mode	TEM ₀₀ , M ² <1.3
Operating Specifications	
Warm-up Time	<15 minutes from cold start
Electrical Requirement	DC15V, 350W
Ambient Temperature	10-35°C, RH<80%
Storage Conditions	-10-40°C, RH<90%
Physical Characteristics	
Cooling System	Water-Cooled
Water Temperature (laser inlet)	25°C

Dimensional Drawings



Stone series active Q-switched IR lasers



12-30W

The laser power

IP65

Protection grade

20000⁺h

The service life

Introduction

Newly upgraded all-in-one structure, water-cooled, with higher beam quality, power stability and pulse stability, easier to integrate, easy to deal with the marking of transparent products and the etching of ITO films.

Features

- The laser power 12-30W;
- Water cooling, 3-layer protective shell, protection grade IP65, suitable for harsh working environment;
- Pulse width, power and frequency are all adjustable to meet different process requirements;
- All-in-one structure, easier to integrate and smaller in size;
- Ultra-high stability to meet 7*24 hours of work, with a service life exceeds 20,000 hours.

Application

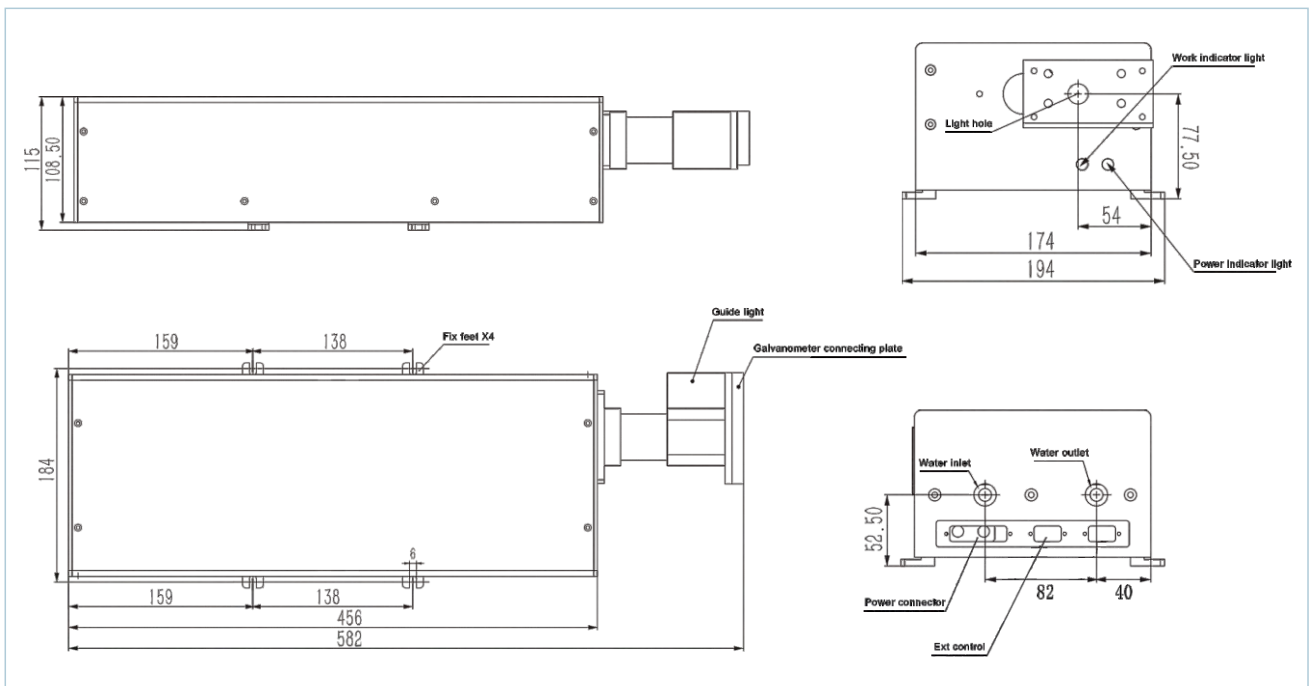
- Transparent key & button paint stripping
- ITO film etching



Specifications

Model No.	MMEPA-1064-12	MMEPA-1064-15	MMEPA-1064-20	MMEPA-1064-25	MMEPA-1064-30
Optical Characteristics					
Wavelength (nm)	1064nm				
Average Power (W)	>12W@CW	>15W@CW	>20W@CW	>25W@CW	>30W@CW
Single Pulse Energy (uJ)	~270uJ@40kHz	~330uJ@40kHz	~450uJ@40kHz	~550uJ@40kHz	~600uJ@50kHz
Pulse Width (ns)	~16ns@40kHz				15~16ns@50kHz
Repetition Rate	20-500kHz				
Pulse Stability	<3% rms				
Long Term Stability	<±3%				
Beam Characteristics					
Polarization Ratio	Horizontal;>100:1				
Beam Diameter	6mm(Built in beam expander)				
Beam Circularity	>90%				
Spatial Mode	TEM ₀₀ , M ² <1.3				
Operating Specifications					
Warm-up Time	<15 minutes from cold start				
Electrical Requirement	DC12V, 350W				DC15V, 350W
Ambient Temperature	10-35°C, RH<80%				
Storage Conditions	-10-40°C, RH<90%				
Physical Characteristics					
Cooling System	Water-Cooled				
Water Temperature (laser inlet)	25°C				

Dimensional Drawings



Stone series high power green lasers



10-20W

The laser power

IP65

Protection grade

20000⁺h

The service life

Introduction

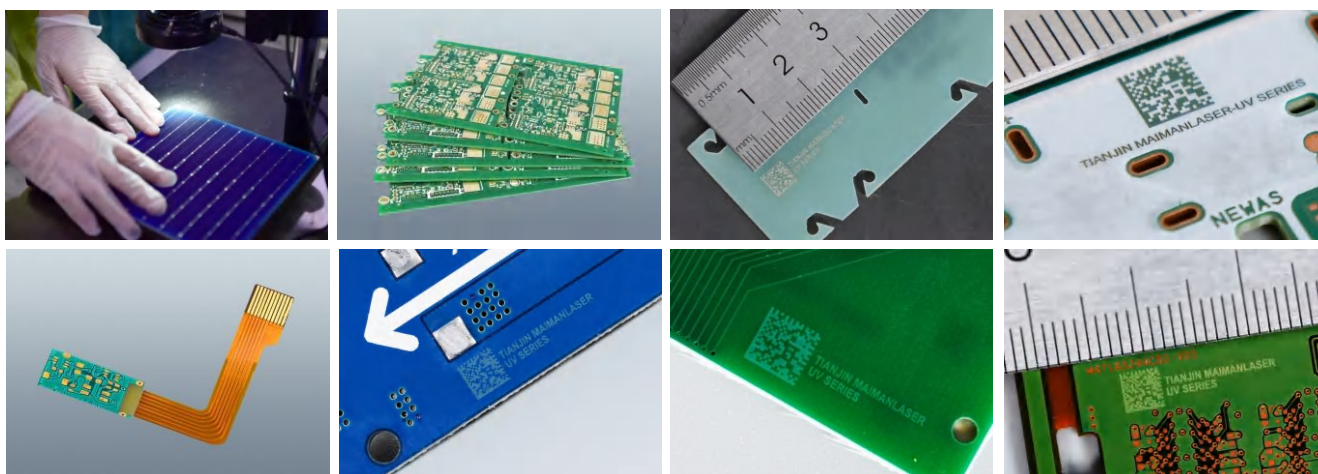
Superior beam quality and high laser power, capable of PCB&FPC cutting and marking easily, with more stable performance.

Features

- The laser power 10-20W;
- Higher power stability to ensure the consistency of long-term processing;
- Superior beam quality, capable to provide a smaller focusing spot and higher processing efficiency;
- Water-cooled, 3-layer protective shell, protection grade IP65, suitable for harsh working environment;
- All-in-one structure, no need for regular commissioning, maintenance-free and easier to integrate;
- Ultra-high stability to meet 7*24 hours of work, the service life exceeds 20,000 hours.

Application

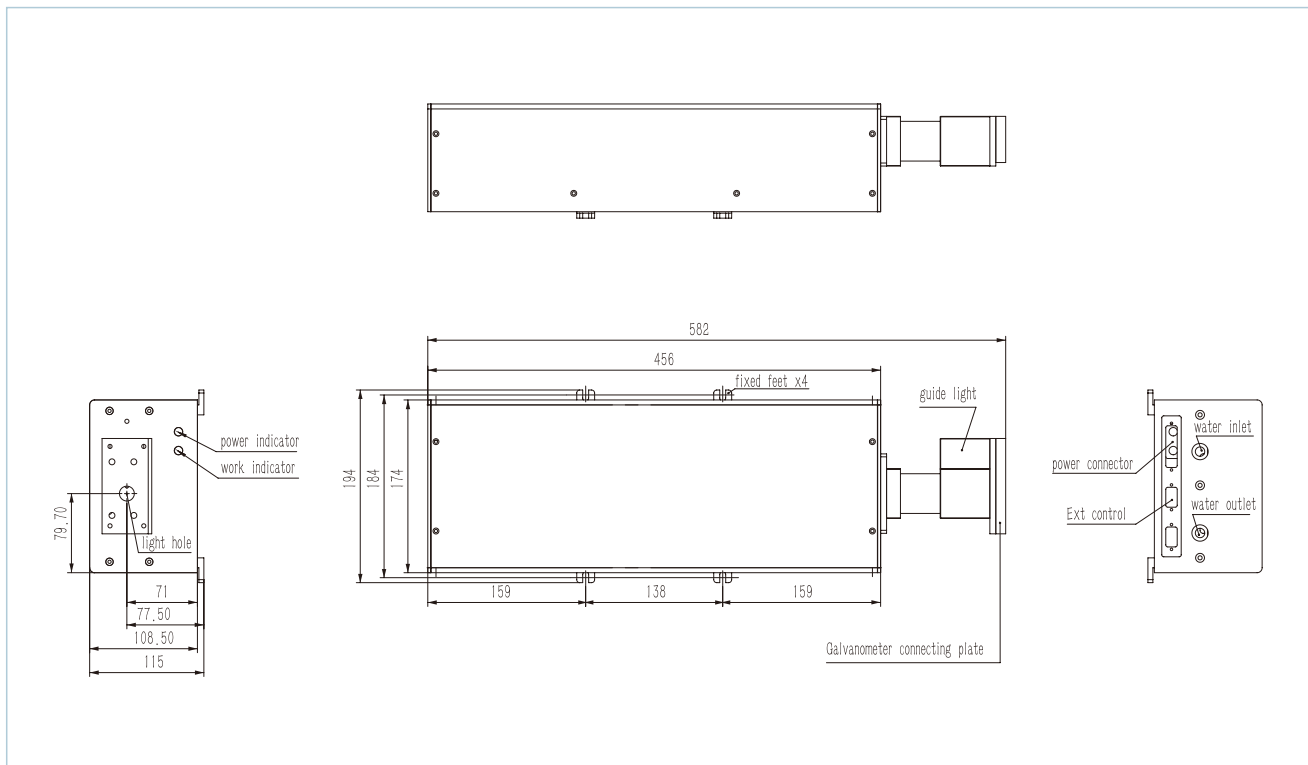
- Solar cell scribing
- Precision cutting
- PCB & FPC marking



Specifications

Model No.	MMEPG-532-10	MMEPG-532-15	MMEPG-532-20
Optical Characteristics			
Wavelength (nm)	532nm		
Average Power (W)	>10W@40kHz	>15W@40kHz	>20W@40kHz
Single Pulse Energy (uJ)	~250uJ@40kHz	~370uJ@40kHz	~500uJ@40kHz
Pulse Width (ns)	~15ns@40kHz		
Repetition Rate	20-500kHz		
Pulse Stability	<3% rms		
Long Term Stability	<±3%		
Beam Characteristics			
Polarization Ratio	Vertical;>100:1		
Beam Diameter	6mm(Built in beam expander)		
Beam Circularity	>90%		
Spatial Mode	TEM ₀₀ ,M ² <1.3		
Operating Specifications			
Warm-up Time	<15 minutes from cold start		
Electrical Requirement	DC12V, 350W		
Ambient Temperature	10-35°C, RH<80%		
Storage Conditions	-10-40°C, RH<90%		
Physical Characteristics			
Cooling System	Water-Cooled		
Water Temperature (laser inlet)	25°C		

Dimensional Drawings



Stone series fiber green laser



4-5W

The laser power

6-8ns

The pulse width maintains

20000⁺h

The service life

Introduction

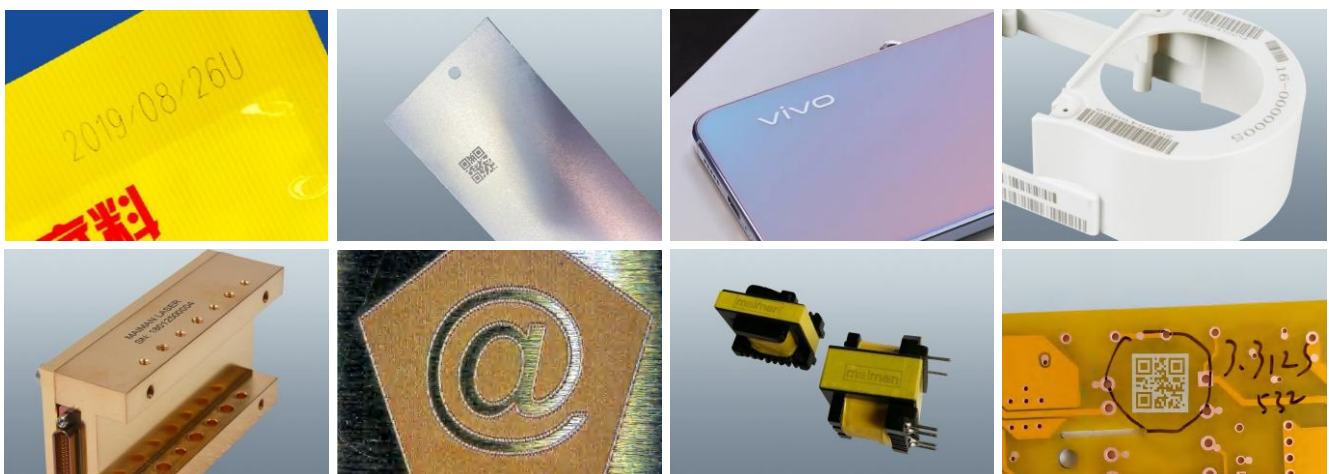
The repetition rate 20-30kHz, the pulse width maintains at 6-8ns, lower processing heat, higher peak power, better processing capacity.

Features

- The laser power 4-5W;
- Narrow pulse width, low thermal effect of processing, not easy to cause scorch on the plastic surface;
- High peak power, strong processing ability, capable of processing more materials;
- Air-cooled structure, compact laser head, compatible with the optical path of fiber laser;
- Service life exceeds 20000 hours.

Application

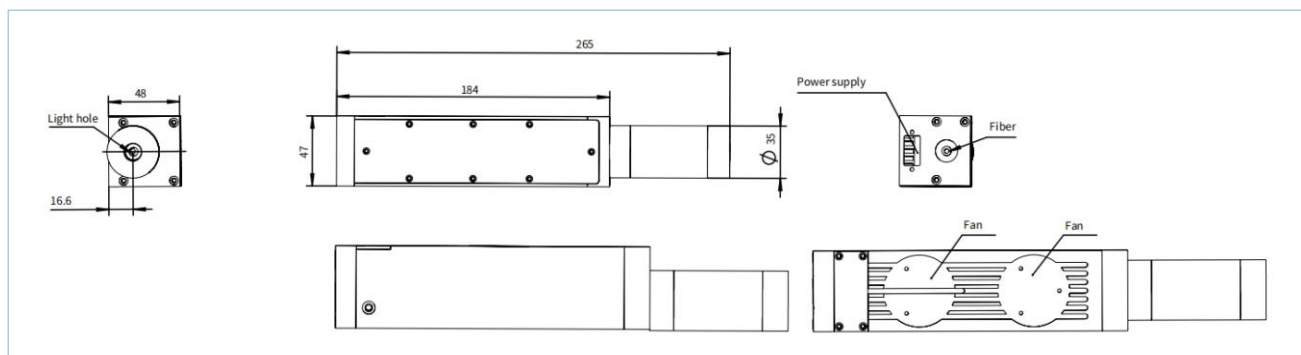
- Packaging films marking
- Gold-plated surface blackening treatment
- Metallic materials marking
- 3C product surface marking



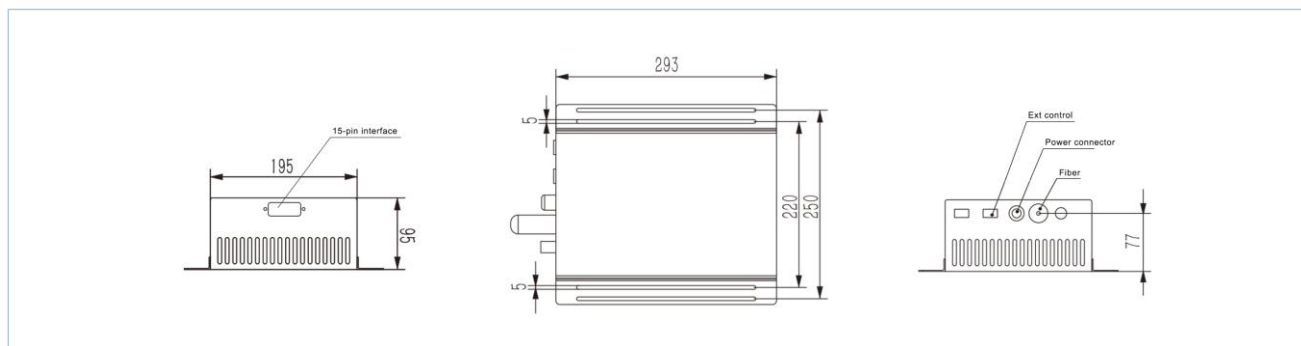
Specifications

Model No.	MMEPGF-532-5L
Optical Characteristics	
Wavelength (nm)	532nm ± 1nm
Average Power (W)	5 ± 0.5W @ 20kHz
Single Pulse Energy (uJ)	200-250uJ @ 20kHz
Pulse Width (ns)	~7ns @ 20kHz
Repetition Rate	Uncontrollable, range 20-30kHz
Pulse Stability	<3% rms
Long Term Stability	<±3%
Beam Characteristics	
Polarization Ratio	Linear; >100:1
Beam Diameter	6mm
Beam Circularity	>90%
Spatial Mode	TEM ₀₀ , M ² < 1.3
Operating Specifications	
Warm-up Time	<15 minutes from cold start
Electrical Requirement	DC12V, >200W
Ambient Temperature	10-35°C, RH < 80%
Storage Conditions	-10-40°C, RH < 90%
Physical Characteristics	
Cooling System	Air-Cooled

Dimensional Drawings



Driver



Stone series cold light IR lasers



5-10W

The laser power

>30kW

The peak power

20000⁺h

The service life

Introduction

The frequency 20-30kHz, the pulse width maintains at 6-8ns, lower processing heat and higher peak power can achieve alumina black marking easily, with stronger processing capacity.

Features

- The laser power 5-10W;
- The pulse width 6-8ns, the processing heat is only 1/10 that of fiber laser, which will not cause plastic scorch;
- The peak power > 30kW, which is 10 times that of fiber laser, the processing capacity is stronger;
- Anti-reflection function, easy to deal with high reflective materials such as gold, silver and copper;
- Ultra-high stability, with service life exceeds 20,000 hours.

Application

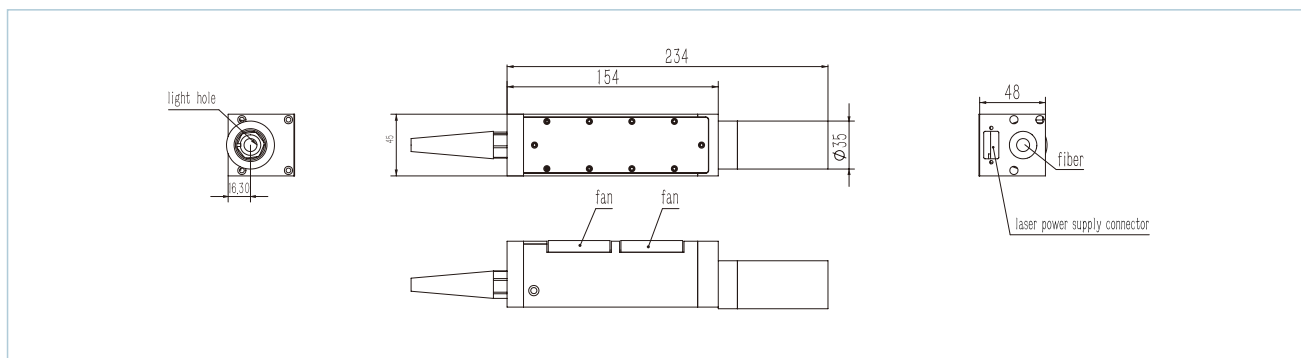
- Material marking - Auto parts, high reflective materials, plastic shell, etc.



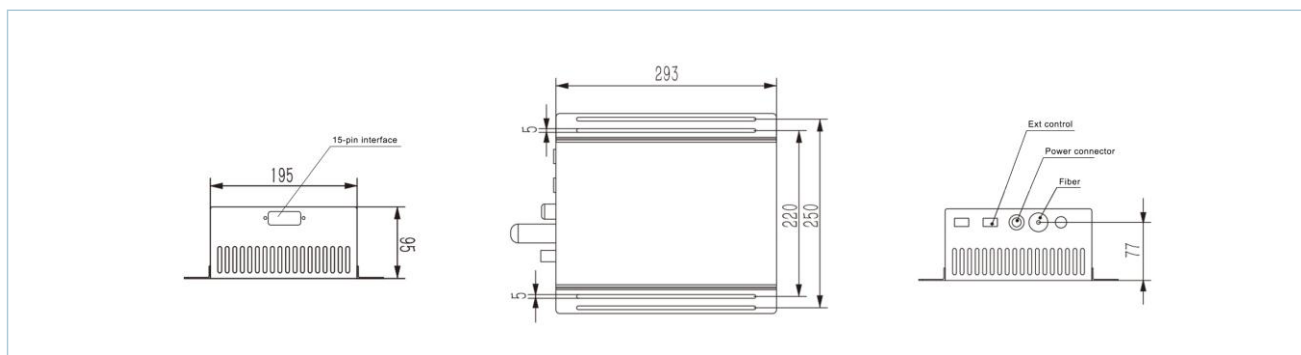
Specifications

Model No.	MMEPF-1064-5	MMEPF-1064-8L	MMEPF-1064-8	MMEPF-1064-10
Optical Characteristics				
Wavelength (nm)	1064nm±1nm			
Average Power (W)	>5W@20kHz	>8±1W@20kHz	>8W@20kHz	>10W@20kHz
Single Pulse Energy (uJ)	~150uJ@20kHz	~400uJ@20kHz	~400uJ@20kHz	~500uJ@20kHz
Pulse Width (ns)	~7ns@20kHz			
Repetition Rate	Uncontrollable, range 20-30kHz			
Pulse Stability	<3% rms			
Long Term Stability	<±3%			
Beam Characteristics				
Polarization Ratio	Random polarization			
Beam Diameter	7mm			
Beam Circularity	>90%			
Spatial Mode	TEM ₀₀ , M ² <1.5			
Operating Specifications				
Warm-up Time	<15 minutes from cold start			
Electrical Requirement	DC12V, >200W			
Ambient Temperature	10-35°C, RH<80%			
Storage Conditions	-10-40°C, RH<90%			
Physical Characteristics				
Cooling System	Air-Cooled			

Dimensional Drawings



Driver



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Website



View catalog



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