



ADD: HUST Industry District East Lake Hi-tech Development Zone, Wuhan, Hubei, P.R. China PC: 430223

TEL: 0086 27 87180225 After-sales service: 0086 27 87180263 EMAIL: info@hglaser.com WEB: en.hglaser.com











HGLASER Laser Marking Machine's Obvious Advantages

H5 Program Helps You Easily Get Profit (H: High)

Market rapidly changed, Crisis struck, serious competition in Internet+ Eras.When you confused about how to achieve transformation and upgrading of enterprises; When you are trying to rouse yourself but lack the strength to break through the bottleneck of marketing; When you are still disappointed for the quality of the product of market chaos; When you are still worried about the after sale service......Please try to find us—HGlaser.





En.hglaser.com



```
High Quality

High Precision

High Efficiency

High Cost-efficient

High Profit
```

For Higher Glory In Manufacture

HGLaser is a high-tech enterprise, the main business in the field of industrial manufacturing and laser processing. Over the years we have been a leader and technology pioneer in industrial manufacturing and laser processing industry. Our products set the standard for the industry. The strict quality requirements and reliable customer service is our fundamental competitiveness.

Convincing Diversified Products

HGLaser's laser product line is very rich, covering laser welding brazing, cutting, drilling, surface peeling and marking in all areas. Variety specifications of laser marking machines are equipped with variety of different power levels and the laser source of all available wavelengths. Therefore, whatever your laser marking tasks can find the suitable laser marking machine.

01	7	Product Lines
02	1	Markets & Applitions
03	1	Fiber Marking Series
04	1	DPSS Marking Series
05	1	CO2 Marking Series
05	1	3D Marking Series
07	1	Solutions For Industry
08	1	Global Serives

HGLASER PRODUCT LINES

HGLASER PRODUCTS



Fiber Marking Series

HGLaser fiber laser marking machine has a general type, large marking area rotary double-station, portable and other serieseach series has a different power modelseach model can be equipped with safety shield, can also be customized dedicated models according to user's needs at the same time.

CO2 Marking Series

HGLaser launched the CO2 laser marking machine series, with its excellent quality, perfect marking effect and perfect service system to win the attention and trust of global users.



02

DPSS Marking Series

DPSS laser marking machine includes infrared, green and UV series, which is suitable for metal and various non-metallic materials marking, is the first choice for high quality laser precision micro-processing.





3D Marking Series

HGLaser launched the 3D laser marking machine, including fiber, UV and CO2 series, which is suitable for all kinds of metals and nonmetals laser marking on 3D surface, widel, used in mobile manufacture, cubic circuits, medical equipments, moulds 3C electronics, auto parts, electronic communication, etc.

M

HGLASER PRODUCTS

Laser marking is a marking method which using the high-energy density of the laser proceeds local illumination on the work piece, resulting in the surface material evaporation or chemical reaction of color variations, therefor leaving a permanent marking, with high precision marking, fast speed and clear marking characteristics etc. HGLaser has infrared, green, ultraviolet, CO2 laser light source can handle different materials and processing requirements.

1. Stainless Steel Aluminum Cast Iron Marking





























2. Auto, Mobile Phone Components Marking





HGLASER Fiber Marking Series HGLASER DPSS Marking Series

3. 3C Parts Marking









Charger panel laser marking

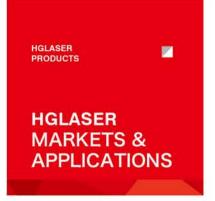


Sony parts marking



Laptop keyboard laser marking





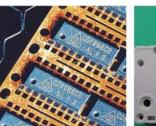


F 500 4

10. Electronic Components Marking

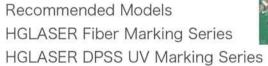












11. Personal Care Products **Tobacco Marking**



Recommended Models HGLASER Co2 Marking Series **HGLASER Fiber Marking Series**













12. Special Material Marking

















Aviation gold plating pieces







Crystal



Special-shaped card

Wafer



Ceramics

HGLASER CO2 Marking Series HGLASER DPSS Marking Series

HGLASER

PRODUCT ADVANTAGE

Laser marking is one of the most popular laser processing technologies. Laser marking is local irradiation in substances with high energy laser beam to make it evaporate rapidly and color change by physical or chemical reaction. These markers are permanent and hard to remove. Perfect marking effect, High marking speed and marking more clearly.



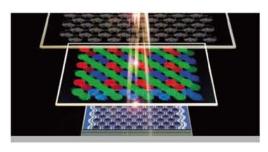
1.Perfect marking effect

Can mark various fine effects which are the users' requirement in an extremely tiny surface, has been known as "the king of marking" by client



2.Rich laser automation unit technology

Optional visual recognition, measurement technology, motion modules, fixture and other rich automation unit technology and modules





3.High marking speed, high efficiency

In the same time, the processing capacity significantly increased, Speed up the pay back on user investment





4.Overall structure integration

Compact, small footprint, easy to transport





All models of the series:

LSFD series



Equipment model	LSF20D	LSF30D	LSF50D	LSF100D
Nominal average output power	20W	30W	50W	100W
Laser Wavelength		100	64nm	
Pulse repetition frequency	30~60 kHz	30~60 kHz	50~100 kHz	20~100 kHz
Average power stability		<39	%rms	
Marking range (Optional)	F160/110×110 ((Standard), F100/70	×70, F210/145×14	5, F254/175×175
Minimum mark line width	0.06mm (Depends on the material)			
Minimum character height	0.2mm			
Scan speed	F=160mm, 7000mm/s			
Cooling method	Air cooling			
System power supply	1KW/AC220V/50	OHz		
Total Weight	≈145kg (Net weight), 190kg(With packaging)			
Operating environment requirements	0~40°C, 30%≤RH≤85%			
Complete sets of equipment dimensions	820mm×640mm×1500mm (Length × Width × Height)			

LSF series



Equipment model	LSF20	LSF30	LSF50	LSF100
Nominal average output power	20W	30W	50W	100W
Laser Wavelength		106	4nm	
Pulse repetition frequency	20~200 kHz	30~200 kHz	50~200 kHz	50~200 kHz
Average power stability		< 39	%rms	
Marking range (Optional)	F160/110×110 (Standard), F100/70×70, F210/145×145, F254/175×175			
Minimum mark line width	0.06mm (Depends on the material)			
Minimum character height	0.2mm			
Scan speed	< 24urad (F=160.4.3um)			
Cooling method	Air cooling			
System power supply	1KW/AC220V/50	Hz		
Total Weight	≈145kg (Net weight), 190kg(With packaging)			
Operating environment requirements	0~40°C, 30%≤RH≤85%			
Complete sets of equipment dimensions	820mm×640mm×1500mm (Length × Width × Height)			





> Desktop Fiber Laser Marking Machine LSF - M



Equipment model	LSF - M			
Laser wavelength (nm)	1064nm			
Laser brand		Raycus		
Output power (W)	20	30	50	
Galvo head marking speed	≤7000m/s			
Marking area	110mm×110mm (70mm×70mm , 145mm	110mm×110mm (70mm×70mm , 145mm×145mm , 175mm×175mm, Optional)		
Pulse repetition frequency	30~60kHz			
Marking standard line height	0.06mm(Depends on the material)			
Minimum character height	0.2mm			
Marking software	Customized by HGLASER, can be directly imported .ai, .plt, .dxf etc			
Communication interface	USB, RS232			
Power supply	AV220V/50HZ, Voltage fluctuation range $\pm 5\%$, if out of the range, voltage stabilizer would be needed			
Machine power consumption	0.6KW			
Net weight	65KG			

> Portable Fiber Laser Marking Machine LSF - H



Equipment model	LSF - H		
Laser wavelength (nm)		1064nm	
Laser brand		Raycus	
Output power (W)	20	30	50
Galvo head marking speed	≤7000m/s		
Marking area	110mm×110mm (70mm×70mm , 145mm	×145mm 、175mm×175	mm, Optional)
Pulse repetition frequency	30~60kHz		
Marking standard line height	0.06mm(Depends on the m	aterial)	
Minimum character height	0.2mm		
Marking software	Customized by HGLASER,	can be directly imported .a	i, .plt, .dxf etc
Communication interface	USB, R\$232		
Power supply	AV220V/50HZ, Voltage flu voltage stabilizer would be		ut of the range,
Machine power consumption	0.6KW		
Net weight	≈45KG		

> Suitcase Fiber Laser Marking Machin LSF - B



Equipment model	LSF - B			
Laser wavelength (nm)	1064nm			
Laser brand		Raycus		
Output power (W)	20	30	50	
Galvo head marking speed	≤7000m/s			
Marking area	110mm×110mm (70mm×70mm, 145	5mm×145mm 、175mm×175	imm, Optional)	
Pulse repetition frequency	30 ~60kHz			
Marking standard line height	0.06mm(Depends on the material)			
Minimum character height	0.2mm			
Marking software	Customized by HGLASER, can be directly imported .ai, .plt, .dxf etc			
Communication interface	USB, R\$232			
Power supply	AV220V/50HZ, Voltage fluctuation range $\pm 5\%, \ \ \text{if out of the range,} \\ \ \ \text{voltage stabilizer would be needed}$			
Machine power consumption	0.6KW			
Net weight	75KG			

> Full protection fiber laser marking machine



Equipment model	LSF - H			
Laser wavelength (nm)		1064nm		
Laser brand		Raycus		
Output power (W)	20	30	50	
Galvo head marking speed	≤7000m/s			
Marking area	110mm×110mm (70mm×70mm , 145mm×145mm , 175mm×175mm, Optional)			
Pulse repetition frequency	30 ~60kHz			
Marking standard ine height	0.06mm(Depends on the material)			
Minimum character neight	0.2mm			
Marking software	Customized by HGLASER, can be directly imported .ai, .plt, .dxf etc			
Communication nterface	USB, R\$232			
Power supply	AV220V/50HZ, Voltage fluctuation range $\pm 5\%,$ if out of the range, voltage stabilizer would be needed			
Machine power consumption	1KW			
Net weight	85KG			



HGLASER FIBER MARKING SERIES

Equipment model Nominal average outputpower

Laser Wavelength

Pulse repetition frequency

Marking range (Optional)

Minimum mark line width

Minimum character height

System power supply

Operating environment requirements

Complete sets of equipment dimensions

Scan speed Cooling method

Total Weight

Average power stability

20W

1064nm

20~80kHz

<3%rms

0.2mm

Air cooling

HGLASER

PARAMETER

HG-V20

> HG-V series



>	LSFN series



LSF20N
L31 2014
20W
1064nm
1.6~1000kHz
<3%rms
F160/110×110(Standard), F100/70×70, F210/145×145, F254/175×175
0.06mm (Depends on the material)
0.2mm
F=160mm, 7000mm/s
Air cooling
1KW/AC220V/50Hz
≈180kg (Net weight), 220kg(With packaging)

820mm×640mm×1450mm (Length × Width × Height)

F160/110×110 (Standard), F100/70×70, F210/145×145, F254/175×175

≈145kg(Net weight), 190kg(With packaging)

0.06mm(Depends on the material)

F=160mm, 7000mm/s

1KW/AC220V/50Hz

0 ~ 40 °C, 30%≤RH≤85%

LSFH series



Equipment model	LSF20H
Nominal average outputpower	20W
aser Wavelength	1064nm
ulse repetition equency	50~1000 kHz
verage power stability	<3%rms
arking range Optional)	F160/110×110 (Standard), F100/70×70, F210/145×145, F254/175×175
inimum mark line dth	0.06mm(Depends on the material)
inimum character	0.2mm
can speed	F=160mm, 7000mm/s
ooling method	Air cooling
stem power supply	1KW/AC220V/50Hz
otal Weight	≈180kg (Net weight), 220kg(With packaging)
perating environment quirements	0 ~ 40 °C, 30%≤RH≤85%
omplete sets of quipment dimensions	820mm×560(780)mm×1495mm (Length × Width × Height)

> LSF Flexible car label marking machine series



Equipment model	LSF20LI
Nominal average outputpower	20W
Laser Wavelength	1064nm
Pulse repetition frequency	1.6~1000kHz
Average power stability	<3%rms
Marking range (Optional)	F254/175×175(Standard)
Minimum mark line width	0.06mm(Depends on the material)
Minimum character height	0.2mm
Scan speed	≤7000mm/s
Cooling method	Air cooling
System power supply	2 KW/AC220V/50Hz
Total Weight	≈480kg
Operating environment requirements	10 ~ 35 °C, humidity≤90%
Complete sets of equipment dimensions	1100mm×800mm×1670mm (Length × Width × Height)



HGLASER DPSS MARKING SERIES

HGLASER PRODUCTS



1. Have independent intellectual property rights and patentedtechnology

1

Stable equipment performance, high reliability, to satisfy the requirement of continuous 24 hours of full load operation, suitable for large quantities needs of factory processing



3.Long service life, easy maintenance

The average working life is 20 times as longer as that of the traditional machine, greatly reducing the equipment maintenance amount





2.Fine marking, good light mode

Exquisite marking lines, favorable rate of customer is reaching 100%



4.Low using cost

High electro-optical conversion efficiency, reducing the 75% energy consumption which compared with the traditional YAG marking machine



All models of the series:

> LSG Green laser series



Equipment model	LSG10EA	LSG20EA	LSG40EA	
Nominal average output power	20W	30W	50W	
Laser Wavelength		532nm		
Pulse repetition frequency		20~200kHz		
Average power stability		<3%rms		
Marking range (Optional)	F160/110×110(Standard), F100/60×60, F254/165×165			
Minimum mark line width	0.03mm(Depends on the material)			
Minimum character height	0.06mm			
Scan speed	F=160mm, 7000mm/s			
Cooling method	Water cooling			
System power supply	1.5KW/AC220V/50Hz	1.5KW/AC220V/50Hz		
Total Weight	≈255Kg			
Operating environment requirements	10 ~ 35 °C, humidity≤90%			
Complete sets of equipment dimensions	1212mm×640mm×1715mm (Length × Width × Height)			







HGLASER DPSS MARKING SERIES

HGLASER

PRODUCT PARAMETER

LSUE UV series



Equipment model	LSU3EA	LSU5EA	
Nominal average output power	3W	5W	
Laser Wavelength	355	5nm	
Pulse repetition frequency	20~200kHz		
Average power stability	<3%	rms	
Marking range (Optional)	F170/105×105 (Standard), F120/14	0×140, F255/170×170	
Minimum mark line width	0.01mm(Depends on the material)		
Minimum character height	0.03mm		
Repeat positioning accuracy	<24 μrad(F170, 4.1 μm)		
Long time drift	<0.6 mrad, Constant ambient temperature +15 °C~+35 °C, 8 hours of continuous work)		
Scan speed	F=170mm, 7000mm/s		
Cooling method	Water cooling		
System power supply	1.5KW/AC220V/50Hz		
Total Weight	≈255Kg		
Operating environment requirements	10 ~ 35 °C, humidity≤90%		
Complete sets of equipment dimensions	1052mm×640mm×1715mm (Length × Width × Height)		

> LSUE UV series



quipment model	LSU5EA	LSU12EA	
lominal average utput power	5W	12W	
aser Wavelength	355	ōnm	
Pulse repetition requency	20~200kHz 1~200kHz		
Average power stability	<3%i	rms	
Marking range Optional)	F170/105×105(Standard), F210/140	0×140, F255/170×170	
Minimum mark ine width	0.01mm(Depends on the material)		
Minimum character neight	0.03mm		
Repeat positioning	<24 μrad(F170, 4.1 μm)		
ong time drift	<0.6 mrad, Constant ambient temperature +15 °C~+35 °C, 8 hours of continuous work)		
Scan speed	F=170mm, 7000mm/s		
Cooling method	Water cooling		
System power supply	1.5KW/AC220V/50Hz		
otal Weight	≈350Kg		
perating environment equirements	10 ~ 35 °C, humidity ≤ 90%		
Complete sets of equipment dimensions	1240mm×700mm×1700mm (Length × Width × Height)		

LSUD UV double station



Equipment model	LSU3D	LSU5D	
Nominal average output power	3W	5W	
Laser Wavelength	358	5nm	
Pulse repetition frequency	20-20	00kHz	
Average power stability	<3%	rms	
Marking range (Optional)	F170/105×105(Standard), F120/140×140, F255/170×170		
Minimum mark line width	0.01mm(Depends on the material)		
Minimum character height	0.03mm		
Scan speed	F=170mm, 7000mm/s		
Cooling method	Water cooling		
System power supply	1.5KW/AC220V/50Hz		
Total Weight	≈400Kg		
Operating environment requirements	10 ~ 35 °C, humidity≤90%		
Complete sets of equipment dimensions	1550mm×900mm×1825mm (Length × Width × Height)		







ADVANTAGE

1.Exquisite marking lines

Using imported metal sealed RF excitation CO2 laser, stable and reliable performance, high repeatability accuracy and positioning accuracy, favorable rate of customer is reaching 100%





2.Long service life

Many manufacturers used CO2 laser which service life is only 5000 hours, and HGLaser used laser which service life up to 40,000 hours or more, 24 hours full load operation, can well meet the requirements of mass production and processing of enterprise





3.Environmentally friendly

Does not produce any harmful chemical substances to the environment and the human body, which is an environmentally friendly marking method





4.Simple operation

Powerful dedicated marking software, friendly man-machine dialogue interface, generally skillful workers can quickly independent operation





All models of the series:

> LSC10/30/55 CO, Laser marking machine



Equipment model	LSC10	LSC30	LSC60	
Nominal average output power	10W	30W	60W	
Laser Wavelength	CO2 /10.6 µm	CO2/10.6µm	CO2 /10.6 µm	
oulse repetition requency	≤20kHz	0~25kHz	0~25kHz	
Average power stability		±5%		
Marking range (Optional)	F150/107×107(Standard), F200/140×140, F250/175×175			
Minimum mark ine width	0.1mm(Depends on the material)			
Minimum character neight	0.4mm			
Scan speed	F=150mm, 7000mm/s	F=150mm, 7000mm/s		
Cooling method	Air cooling			
System power supply	1.5KW/AC220V/50Hz			
Total Weight	≈170Kg			
Operating environment requirements		Synrad 10W CO2 laser: 15 ~ 40 °C; Coherent 30W CO2 laser: 5 ~ 40 °Chumidity≤90%		
Complete sets of equipment dimensions	640mm×930mm×1435mm (Length × Width × Height)			

> LSC100/150 CO, marking machine



Equipment model	LSC100 LSC150				
Nominal average output power	100W	150W			
Laser Wavelength	CO2 /10.2~10.7 µm	CO2 /10.2~10.8µm			
Pulse repetition frequency	0~100kHz	0~100kHz			
Average power stability	±10%	≤±7%			
Marking range (Optional)	F150/107×107(Standard), F100/70×70), F200/140×140, F250/175×175			
Minimum mark line width	0.1mm(Depends on the material)				
Minimum character height	0.4mm				
Repeat positioning accuracy	<24µrad(F150, 3.7µm)				
Long time drift	< 0.6 mrad, Constant ambient temperature +15 °C-+35 °C, 8 hours of continuous work				
Scan speed	F=150mm, 7000mm/s				
Cooling method	Water cooling				
System power supply	4.5KW/AC220V/50Hz				
Total Weight	≈350Kg				
Operating environment requirements	5 ~ 40 °C, humidity≤90%				
Complete sets of equipment dimensions	Control cabinet, laser profile frame, the working table was presented distributed arrangement (Length × Width × Height)				





1、First Class 3D Marking Technology

The laser marking can be achieved more accurately on the surface of workpiece, and there is no defocus in processing. Even complex surface can be handled freely. 3D dynamic laser marking process are controlled by self developed hardware and software, and a special three dimensional galvanometer is configured to control the laser beam mark on any 3D surface perfectly.



3、Leading 3D Graphics Processing Technology

The operation interface is friendly and suitable for various formats such as DXF, PLT, CNC, STEP, IGES and so on.







2、High Precision 3D Positioning Technology

High speed focusing and scanning system, laser beam base mode, short pulse, high peak power, high repetition rate, bring the perfect marking result for custom-





4. Great Performance

High photoelectric conversion, long service life, simple maintenance, fast marking speed and high efficiency, independent light source, guaranteed performance and service, flexible extensible configuration, optional automatic lifting, automatic focusing and rotation functions.





All models of the series:

> Fiber 3D Laser Marking Machine

No.	LSF20DS, LSF30DS, LSF50DS, LSF100DS	Remarks
Laser	20W, 30W, 50W, 100W	Raycus/IPG Laser Source
Scanner	3D Scanner	Fine, accurate, fast and stable performance with range
		400×400mm, 600×600mm, 800×800mm
IPC	HGLaser	High stability of continuous work, and strong
		anti-interference ability, smoothly software editing and running.
Control Card	HGLaser	Stable performance.
Marking Software	HGLaser	Software is easy to operate and edit,
		also compatible with other software formats.
Lifting Mechanism	Strike 540mm	Stable and reliable performance by four guide rod lifting mechanism
Cabinet	Standard small cabinet, chiller size	High strength cabinet and load capacity, internal device with good
	1240mmX800mmX1850mm	grounding, and strong anti-interference ability.
Protecting Cover	HGLaser	For laser protection use.
Chiller	HGLaser	Air cooling.
Power Supply	1KW/AC220V/50Hz	







HGLASER

PRODUCT PARAMETER

HGLASER

PRODUCT PARAMETER

> 3D UV Laser Marking Machine

Series

No.	LSU3DS, LSU5DS	Remarks
Laser	20W、30W、50W、100W	UV integrated laser source
Scanner	3D Scanner	Fine, accurate, fast and stable performance with range
		100×100mm, 200×200mm, 300×300mm, 400×400mm
IPC	HGLaser	High stability of continuous work, and strong anti-interference ability
		smoothly software editing and running.
Control Card	HGLaser	Stable performance.
Marking Software	HGLaser	Software is easy to operate and edit,
		also compatible with other software formats.
Lifting Mechanism	Strike 540mm	Stable and reliable performance by
		double 170 profile lifting mechanism.
Cabinet	Standard small cabinet, chiller size	High strength cabinet and load capacity, internal device with
	1240*700*1698mm	good grounding, and strong anti-interference ability.
Protecting Cover	HGLaser	For laser protection use.
Chiller	HGLaser	Integrated circulating water cooling.
Power Supply	1.5KW/AC220V/50Hz	

3D Marking



> LSC30DS Laser Marking Machine

No.	LSC10DS, LSC30DS, LSC100DS, LSC150DS	Remarks
Laser	10W, 30W, 100W, 150W	CO2 Laser Source
Scanner	3D Scanner	Fine, accurate, fast and stable performance with range
		400×400mm, 600×600mm, 800×800mm
IPC	HGLaser	High stability of continuous work, and strong anti-interference ability,
		smoothly software editing and running.
Control Card	HGLaser	Stable performance.
Marking Software	HGLaser	Software is easy to operate and edit,
		also compatible with other software formats.
Lifting Mechanism	Strike 285mm	Stable and reliable performance by double 170 profile
		lifting mechanism.
Cabinet	Standard cabinet size	High strength cabinet and load capacity, internal device
	1200*1100*1712mm	with good grounding, and strong anti-interference ability.
Protecting Cover	HGLaser	For laser protection use.
Chiller	HGLaser	Air cooling.
Power Supply	1.5KW/AC220V/50Hz (10W, 20W)	
	4.5KW/AC220V/50Hz (100W, 150W)	

















Continuously persist "Client as God and Market Orientation", HGLASER has established perfect market service system. More than 40% of employees are market sales and service staffs. We have set up more than 40 offices in domestic, distributed in major central cities, so as to implement "Closer to the user, extending the service". The nationwide sales network ensures timely and quick response to customers.



For more examples please see: http://en.hglaser.com/







Wuhan HGLaser Engineering Co.,Ltd

Address:Huagong Tech Building Science And Technology Region Of Hust, Donghu High-tech Zone, Wuhan, Hubei, Province, P.R China

Tel:+86 (0)27 87180263/0225 After-sales service:+86 (0)27 87180263
FAX: 027-87180210 Email:info@hglaser.com / farleyinfo@hglaser.com Web:en.hglaser.com SERICE CENTRE

 $Korea \ / \ Thail and \ / \ Malaysia \ / \ Mexico \ / \ USA \ / \ Argentina \ / \ Brazil \ / \ Iran \ / \ Russia \ / \ Taiwan \ / \ India \ / \ Indonesia \ / \ Poland \ / \ Vietnam$

If you want to know more details about us, welcome to visit our company in Wuhan! We will wholeheartedly to serve you with a company tour inspection of samples and machine, printing samples, processing researching and other services. \\

The contents of this book are published through the company's research and evaluation, the content is subject to change without notice.

High Efficiency and Precision **HGLASER** Inline Marking Application Solution



Diversified **Products**

FlyingU UV Laser Marking Series FlyingF Fiber Laser Marking Series FlyingC CO2 Laser Marking Series

Laser Wave Length: 355 nm UV Laser Source Limit Thermal Region Small Focusing Spot Size Especially for Special Material Marking | Marking Series

FlyingU **UV** Laser





FlyingF Fiber Laser Marking Series

Good Beam Mode Reliable and Stable System Laser Source Life Over 100,000 Hours Especially for Long-distance Transmission in Complex Production Line

Imported MRF CO2 Laser Source Good Beam Mode Maintenance-free and Installation-flexible Especially for Working in Various Conditions

FlyingC CO₂ Laser Marking Series





Laser Mark VS Ink Jet

There are two ways for anti-counterfeit, that is laser mark and jet ink Coding has been used in commodity business, food and pharmaceuticals industry.

Laser Marking VS Ink Jet

		Laser Marker	Ink Jet
	Anti-counterfeit	Character can be dot matrics or line Marking on product surface Non-removable and changeable	Removable and changeable
**	Working Condition	High efficiency Online Non-stop laser marking Working on static state and dynamic state	Only working on dynamic state
Performance	Flexibility	Marking serial number, lot number, bar code, QR code, logo, graphic	Marking bar code, lot number an simple graphic
	Reliability	24-hour continuous working Maintenance free and little environment affection	High failure rate Great environment affection
	Use	Windows and interface with high resolution	Low resolution
peration & Installation	Installation	Compact size and marking head can be installed on production line in various plant	Some machines should be connected with air compressor
(Initial Cost	High	Low
Cost	Operating Cost	Low	High
Data Processing		Strong ability of data transmission and processing	Limited ability of data transmission an processing
Environmental Protection and Safety		Environmental-friendly (GB7247-87; GB10320-88)	Environmental-pollution



Marking Series





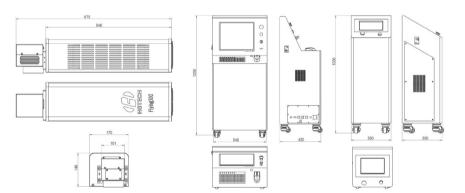
Details

- Professional industrial laser source to ensure high speed and consistency of marking
- 24-hour's stable working to meet the need of volume production
- Human conversation interface

Application

It's suitable for various non-metallic material and some metallic material, such as PVC, paper, rubber, wood, glass, ceramics, PET, plastic, HDPE, leather and etc. It's mostly applied for package box, package bag, thin film, food can, glass bottle, beverage bottle, HDPE bottle, tube, cable and electronic components.

Optical Cabinet Operating Cabinet



Technical Parameters

Model		FlyingC 30C / 55C / 70C / 100C				
	Focusing Lens	F=160	F=100 (可选)	F=210(可选)	F=254(可选)	
	Marking Area	110×110	69×69	145 × 145	175×175	
	Working Distance	152.7 ± 6mm	100.9 ± 4mm	204.3 ± 8mm	256 ± 10mm	
Marking Parameter	Marking Speed	400 cha/sec (350/500Optiona), Times New Roman, 2mm(Height)				
	Repositioning Resolution	<24 µrad (F160, 3.7 µm)				
	Min.Marking Character	0.4mm				
	Min.Line Width	0.1mm(Depending on Material)				
	Wavelength	CO2/10.6 µm,CO2/10.2µm,CO2/9.3µm				
Marking Laser	Output Power	10/30/55/70/100				
	Power Stability	±5%rms				
	Pulse Repetition Frequency		0 ≤ F ≤	≤ 25kHz		
Indicator Laser	Wavelength		Red Ligh	nt ,650nm		
	Output Power		<51	mW		
Others	Operating Environment		0-35℃, Hur	midity≤ 90%		
Outels	Cooling Method	Air Cooling				





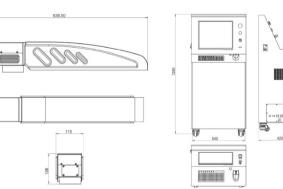
Details

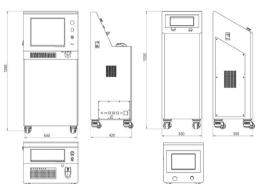
- ICompact size and easy-installed bracket to satisfy production line in complex working
- Professional industrial laser source to ensure high speed and consistency of marking 24-hour's stable working to meet the need of volume production
- High photoelectric conversion efficiency, consumable free and long life time Human conversation interface

Application-

It's suitable for various metallic material and some non-metallic material. It's applied for metallic material after surface processing, PVC, aluminum film, rubber, plastic and HDPE.

Operating Cabinet Optical Cabinet





Application

Model		FlyingF 10F / 20F / 30F / 50F					
	Focusing Lens	F=160	F=100 (Optional)	F=210 (Optional)	F=254 (Optional)		
	Marking Area	110×110	69×69	145 × 145	175×175		
	Working Distance	180 ± 3.6mm	107 ± 2mm	226 ± 4.5mm	278 ± 5.6mm		
Marking Parameter	Marking Speed	500 cha/sec	(400/640 Optional),7	Times New Roman, 1	mm(Height)		
	Repositioning Resolution		<2μ rad(F1	60,0.36μm)			
	Min.Marking Character		0.2mm				
Min.Line Width		60μm(Depending on Material)					
	Wavelength	Fiber / 1064nm					
Marking Laser	Output Power	10/20/30/50					
	Power Stability	<3%rms					
	Pulse Repetition Frequency	20KHz ≤ F ≤ 80kHz					
Indicator Laser	Wavelength	LD Red Light ,650nm					
	Output Power		<5r	mW			
Others	Operating Environment		0-35℃, Hur	midity≤ 90%			
Others	Cooling Method	Air Cooling					



FlyingU UV Laser Marking Series





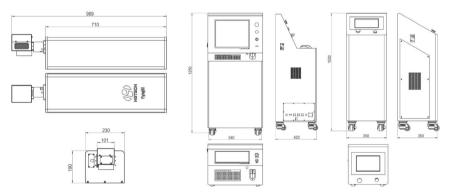
Details

- Compact size and easy-installed bracket to satisfy production line in complex working conditions
- Professional industrial laser source to ensure high speed and consistency of marking 24-hour's stable working to meet the need of volume production
- High photoelectric Conversion efficiency, consumable free and long life time
- Human conversation interface

Application -

It's widely applied for eletronic components, intergrated circuit, metallic tool, auto parts, plastic products

Optical Cabinet — Operating Cabinet



HUARAY

Application

Model	Flyir	Remarks			
Wavelength		355			
Marking Speed		≥ 7m/s			
Marking Area		110×110mm		45x145mm(Optional)	
Focal Length		180mm			
Character		Dot Matricx / Line			
Mode					
Online Marking Speed		Depend on Marking Content			
Material	La	bel/Paper/PET/HDPE/PE			
Working Temperature		5-35℃			
Working Humidity		Humidity≤ 95%			
Structural Material	Alun	ninium Alloy/Stainless Ste	eel		
Edit Mode					
Communication Interface	USB;RS23				
Power Supply					
Power Consumption	1500W	1600W	2000W		



FlyingU UV Laser Marking Series / After-sale Service 11/12



8h Feedback inline + 24h Solution Local Installation and Training Service

As the pioneer of Chinese laser industry, HGLASER has sold thousands of machines all around the world. HGLASER has overseas branches and offices in Australia, USA, India, Vietnam, Malaysia and Taiwan. With local installation and service members, HGLASER has always provided customer-oriented solutions.

LEAF



Typical Applications





Bottle Beverage

- 1) Production Date Marking
- 2) QR Code Marking
- 3) Traceability Code Marking



Canned Beverage

- 1) QR Code or Winning Number Marking InsidetheTab
- 2) QR Code Marking on Can Surface



information marking on corrugated box.



• FlyingC 30C Laser Marking Machine is applied for production date marking on bottle beverage made of PVC, PP, PE and PET material, is also best choice for traceability code and product



- FlyingF 20F Fiber Laser Marking Machine is applied for QR code or production date marking on aluminum can
- FlyingC 50C CO2 Laser Marking Machine is applied for QR code or production date marking on tin plate.



Dairy Package

- 1) Production Date Marking
- 2) QR Code Marking
- 3) Traceability Code Marking



Liquor Package

- 1) Production Date Marking
- 2) QR Code Marking
- 2) Traceability Code Marking







- FlyingU UV Laser Marking Machine is applied for production date or QR code marking on HDPE material.
- FlyingC CO2 Laser Marking Machine is applied for production date marking on TETRAPAK.







• FlyingC CO2 Laser Marking Series are applied for production date marking on glass and ceramics bottle ,and is also the best choice for traceability code and product information marking on corrugated box.































• FlyingU UV Series are applied for QR code and production date marking on PE or PET film.



















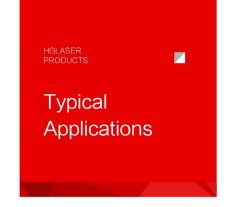
















- FlyingU UV Series are applied for production date marking on PE or ABS material
- * FlyingF Fiber Series are applied for QR code and production date marking on
- FlyingC CO2 Series are applied for QR code and production date marking on PE or HDPE material





Production Date and QR Code Marking









Production Date and QR Code Marking









Profile

Production Date and QR Code Marking





























Bottle Package

Production Date and QR Code Marking





































Qcts **Quality Control** Tracing system

QCTS-Quality Control Tracing System is a user-configurable, validated, off-theshelf tool, used to quickly identify issues that impact quality and cost, and to ensure that appropriate follow-up and actions are taken. It's widely used in consumer products manufacturers, such as liquor, food, beverage, tobacco, medicine, daily chemical, household appliances, clothing, mechanical manufacturing and etc.

