

NINGBO XINRUI LASER

EQUIPMENT

Fiber laser welding machine

Automatic Laser Welding Machine

Laser Marking Machine, Laser Engraving Machine

UV laser marking machine

PRODUCT
CATALOGUE 2018

高 / 端 / 激 / 光 / 设 / 备 / 专 / 业 / 制 / 造 / 商

匠心製造
睿智創新

欣睿精神 SPIRIT

待客如友 快乐服务 言行必果 敢于承担 创新务实 精益求精
Entertain guests, friends, happy services, words and deeds,
fruit and innovation.

欣睿使命 MISSION

为全球客户提供更稳定、更环保、更合理的激光应用解决方案
To provide more stable, more environmentally friendly and
reasonable laser application solutions for global customers.

欣睿策略 STRATEGY

研制最好产品、提供更好服务、创建优质品牌
Develop the best products, provide better services and
create high-quality brands.

欣睿愿景 VISION

向不可能挑战，成为行业先锋而非跟随着
It is impossible to challenge and become the pioneer of the
industry instead of following it.

欣睿核心价值观 CORE VALUES

共赢是我们生存和发展的基础
Win-win is the foundation of our survival and development

欣睿人才理念 TALENT IDEA

诚信为本 公私分明 选贤用能 公平竞争 共享成长
Honesty is the foundation of public and private choice, fair
play, sharing and growth.



公司概况

Company
Profile

宁波欣睿激光设备有限公司是国际知名激光设备制造商，集开发、生产、销售于一体的国家高新技术企业、宁波市软件高新技术企业，主要从事激光设备的研发、生产、营销和服务。十于载研发、生产激光工业设备的经验；凭借着雄厚的技术实力及完善的服务网络在工业和医疗领域为世界各地的客户提供一站式的激光设备、服务和客户化的解决方案，实现客户的潜在增长，持续为客户创造长期价值。

Ningbo Xinrui Laser Equipment Co.,Ltd. is an international renowned manufacturer of laser equipment which combines develop, production and sales and mainly engaged in the research, production, marketing and service of laser equipment. With rich production experience, strong technical force and perfect service network, we can provide one-stop laser equipment, service and solutions for customers in industrial and medical field, constantly create long-term value for customers.

产品 | Product

工业产品主要包括激光焊接机、光纤激光焊接机、光纤连续激光焊接机、半导体连续激光焊接机、机器人激光焊接配套设备、视觉自动激光焊接机、模具激光焊接机、自动激光焊接机、激光打标机、光纤激光打标机、紫外激光打标机、CO₂ 激光打标机、MOPA 激光打标机、FPC 激光切割机、光纤激光切割机、飞行激光标刻系统、皮秒加工系统几十余种工业激光设备并为客户提供各种规格的飞行激光应用的整套设备。产品性能卓越，操作维护简便，广泛应用于五金工具、汽摩配件、水暖、洁具器材、医疗器械、眼镜、皮革、通讯产品、电子元件、钟表配件、手机按键、电脑键盘、橡塑胶件、电池电芯、传感器、精密机械、首饰、有机玻璃、竹木器雕刻、礼品、食品包装、烟草包装等行业的产品标记、雕刻。

Industrial products include Optical fiber laser welding machine, welding machine, continuous fiber laser welding machines, Semiconductor continuous laser welding machine, laser welding equipment, robot vision automatic laser welding machine, laser welding machine, mold automatic laser welding machine, laser marking machine, laser marking machine, UV laser marking machine, CO₂ laser marking machine, MOPA laser marking machine, FPC laser cutting machine, laser cutting machine, laser marking system, picosecond flight processing system of dozens of kinds of industrial laser equipment and provide customers with a variety of flight laser application equipment. at the same time, we can offer various flight laser equipment with different specifications. Product have good performance, easy operation and maintenance, which are widely used in hardware tools, auto parts, plumbing, sanitary equipment, medical devices, eyeglasses, leather, communication products, electronic components, watch accessories, mobile phone keypad, computer keyboard, rubber and plastic parts, battery, sensors, precision machinery, jewelry, glass, wood carving device, gifts, food packaging and tobacco packaging industry.

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标准型激光打标



移动激光打标



旋转激光打标



手持式激光打标

特点 / Feature

- 激光通过光纤传输在光纤波导里受激振荡加大、损耗小、稳定性好;
Laser through optical fiber transmission in optical fiber waveguide stimulated oscillation increase, loss of small, good stability;
- 完美的软硬件配合与超高速的进口振镜, 有效提高产能, 打标速度可达 10000mm/s;
The software and hardware perfect cooperation and ultra high speed import galvanometer, effectively improve the production capacity, marking speed of up to 10000mm/s;
- 整机体积更小巧, 可做手持式和配置飞行在线打标;
The volume can be more compact, hand-held and configuration of flight line marking;
- 全风冷光纤激光器使用寿命长、10 万小时无耗材、低维护与运行成本低。
Full air cooling fiber laser with long service life, 10 thousand hours without supplies, low maintenance and operation cost.



在线激光打标



模具激光打标



封闭式激光打标



首饰激光打标



流水线激光打标

■ 技术参数 / Technical parameter

设备型号 Model	XR-FLM10	XR-FLM20	XR-FLM30	XR-FLM50	XR-FLM100
最大激光功率 Max. laser power	10W	20W	30W	50W	100W
激光波长 Laser wavelength	1064nm				
调 Q 频率 Frequency	20KHz—100KHz				
雕刻范围 Engraving range	100X100mm 标配 (50mm×50mm -300mm×300mm)				
光束质 M ² Laser beam quality	<2		<3		<4
雕刻线速 Line speed	≤ 10000mm/s				
最小线宽 Minimum line width	<0.012mm		<0.015mm		< 0.018mm
雕刻深度 Marking depth	<0.2mm	<0.4mm	<0.6 mm	<1.0mm	< 1.6mm
重复精度 Repeating precision	±0.002mm				
整机功率 Power consumption	400W	500W	700W	1000W	1800W
电力需求 Power supply	AC220V/50Hz/5A				
冷却系统 Cooling system	风冷 (Air cooling)				



便携式激光打标



振动盘激光打标



双头激光打标

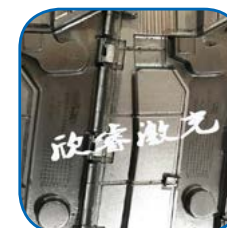
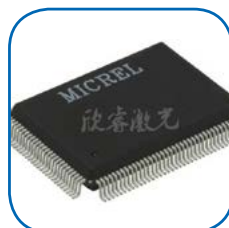
多工位激光打标



► 适用材料 / Application

应用于对深度、光滑度、精细度要求较高的领域,如钟表、模具行业、键盘、集成电路(IC)、汽车、高档按键等。

It is widely used in fields that have high requirement on depth, smoothness and fine, such as clock and watch, mould, bitmap marker, etc.



■ 技术参数 / Technical parameter

设备型号 Model	XR-FLP20-M1	XR-FLP20-M6	XR-FLP30-M6
最大激光功率 Max. laser power	20W	20W	30W
激光波长 Laser wavelength	1064nm		
最大脉冲能量 Full Power Repetition Rate Range	0.4mJ	0.45mJ	0.9mJ
雕刻范围 Engraving range	100X100mm 标配 (50mm×50mm -300mm×300mm)		
频率可调范围 Pulse Duration	1 ~ 1000Khz		
脉冲宽度 Average Power Stability	2 ~ 200ns		
光束直径 Output Power Tuning Range	7mm		
输出稳定度 Cooling Method	<5%		
电力需求 Power supply	AC220V/50Hz/5A		
冷却系统 Cooling system	风冷 Air cooling		

特点 / Feature

- 2 ~ 200ns 脉冲宽度可调，材料应用范围广泛
2ns ~ 200ns ultrawide adjustable pulse width, wide application range of material
- 脉冲重复频率从 1kHz ~ 1000khz，塑料和其他敏感材料的性能
Pulse repetition rate from 1kHz~1000kHz, better performance on plastics and other sensitive material
- 短脉冲持续时间可以快速的黑色标记在氧化铝
Shorter pulse duration enables quick black marking on alumina
- 光束质量好、不变形、油漆剥落的薄板，大面积的标记
Excellent beam quality, no deformation or paint peeling on thin plate, large area marking



紫外激光打标系列 UV laser marker series

05 宁波欣睿激光设备有限公司
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■ 技术参数 / Technical parameter

设备型号 Model	XR-UV3	XR-UV5	XR-UV7	XR-UV10
最大激光功率 Max. laser power	3W	5W	7W	10W
激光波长 Laser wavelength	355nm			
调 Q 频率 Frequency	0-90KHz			
雕刻范围 Engraving range	100X100mm 标配 (50mm×50mm -180mm×180mm 可选)			
光束质 M ² Laser beam quality	1.1M ²		1.3M ²	
雕刻线速 Engraving Line speed	≤ 7000mm/s			
最小线宽 Minimum line width	<0.01mm		<0.015mm	
重复精度 Repeating precision	±0.001mm			
电力需求 Power supply	AC220V/50Hz/10A			
冷却系统 Cooling system	水冷 (water cooling)			
整机功率 Power consumption	1.2KW		1.5KW	

特点 / Feature

- 紫外激光器属于冷光源，热影响区小，卓越的光束质量创造出超高精度打标效果。
UV lasers are cold light source, a small heat-affected zone, excellent beam quality to create ultra-fine marking effect.
- 采用进口扫描振镜，标记速度快，同时适合微切割和钻孔。
Imported scanning, marking fast, while suitable for micro cutting and drilling
- 激光器 2 万小时免维护、无耗材、使用成本低廉，省电节能。
lasers 20,000 hours maintenance free, no supplies, low cost, energy saving
- 超高的峰值功率和极少热效应特点，非常适合氧化铝、氧化锆陶瓷钻孔切割
high peak power and high thermal effect and few characteristics suited alumina, zirconia ceramic cutting drilling
- 一体模块化设计，方便维修，体积小。
one of the modular design, easy maintenance, compact





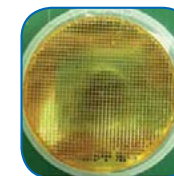
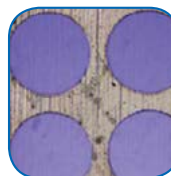
特点 /Feature

此款机型采用了三阶腔内倍频 (THG) 技术同红外激光比较, 355nm 紫外光聚焦光斑极小, 能在很大程度上降低材料的机械变形切加工热影响区微乎其微, 因而主要用于超精细打标、雕刻、特别适合于食品、医药包装材料打标、打微孔、玻璃材料的高速划分及对硅片晶圆进行复杂的圆形切割等应用领域。

This model uses third-order cavity frequency (THG) technology compared with the infrared laser, 355nm UV focused spot is extremely small, can greatly reduce the mechanical deformation of the material, the heat-affected zone is very small, so it is mainly used Yu Chao's fine marking, engraving, especially suitable for food, pharmaceutical packaging materials marking, micro-holes, high-speed glass material division and complex circular cutting of silicon wafers and other applications.

■ 技术参数 /Technicalparameter

设备型号 Model	XR-UV3	XR-UV5	XR-UV7	XR-UV10
最大激光功率 Max. laser power	3W	5W	7W	10W
激光波长 Laser wavelength	355nm			
调 Q 频率 Frequency	0-90KHz			
加工工位 Processing station	4 工位 /8 工位 (选配 Optional)			
光束质 M ² Laser beam quality	1.1M ²		1.3M ²	
雕刻线速 Engraving Line speed	≤ 10000mm/s			
最小线宽 Minimum line width	<0.01mm		<0.015mm	
重复精度 Repeating precision	±0.001mm			
电力需求 Power supply	AC220V/50Hz/10A			
冷却系统 Cooling system	水冷 (water cooling)			
整机功率 Power consumption	1.5KW		1.8KW	



CO2 激光打标机 CO2 laser marker

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■ 技术参数 /Technicalparameter

设备型号 Model	XR-CLM10	XR-CLM30	XR-CLM60
最大激光功率 Max. laser power	10W	30W	60W
激光波长 Laser wavelength	10.64um		
光束质量 Laser beam quality	M2<10	M2<10	M2<10
雕刻范围 Engraving range	70X70mm (110mm×110mm -200mm×200mm)		
雕刻线速 Engraving Line speed	≤ 7000mm/s		
最小线宽 Minimum line width	<0. 1mm	<0. 15mm	<0. 20mm
雕刻深度 Marking depth	< 1.5mm	< 3.0mm	< 5.0mm
重复精度 Repeating precision	±0.002mm		
电力需求 Power supply	AC220V/50Hz/12A		
冷却系统 Cooling system	风冷 Air cooling		
整机功率 Power consumption	500W	700W	1000W

特点 /Feature

- 高精度，高速度，可控雕刻深度。
High marker precision, high speed, controllable carving depth.
- 激光功率大，雕刻和切割非金属材料。
Big laser power, suitable carving and cutting nonmetal products.
- 无耗材，成本低，只要 20000 到 30000 小时的使用寿命。
No consumables, low cost, as long as 20,000 to 30,000 hours service life.
- 清除标记，雕刻和切割效率高，环保，节能。
Clear mark, high carving and cutting efficiency, environmental friendly, and energy saving.



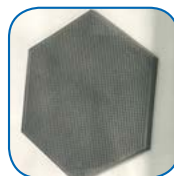


特点 / Feature

- 具备三维曲面立体打标功能, 保证在 0-60mm 高度范围内聚焦光斑精细, 打标效果一致;
Three dimensional surface marking function, Ensure that the focus is fine in the 0-60mm height range, Consistent marking effect;
- 大幅面打标功能, 最大打标幅面达到 400-400mm, 突破传统的光纤打标机打标幅面限制;
Large format marking function, The maximum marking area reached 400-400mm, Break through the traditional optical fiber marking machine marking size limit;
- 采用先进的数字式三轴动态聚焦技术, 打标速度快, 变焦控制实时性高, 聚焦光斑均匀
Advanced digital three axis dynamic focusing technology, Marking speed, Zoom control real time high, Uniform focal spot;
- 采用模块式设计理念, 可兼容国内以及国际上主流的光纤激光器, 产品适应性强;
Modular design concept, Compatible with domestic and international mainstream fiber laser, Strong product adaptability;
- 采用大理石工作平台, 具备良好的高震性以及抗应力性, 平面度好, 稳定性高;
Marble working platform, Good high shock and stress resistance, Good flatness, High stability;
- 软件功能强大, 可导入主流三维设计输出的图形, 并能进行简单的三维图形编辑, 具备二维图形转三维功能, 操作简单方便。
Powerful software, Graphics can be imported into the mainstream three-dimensional design output, And can be a simple three-dimensional graphics editor, With two-dimensional graphics to three-dimensional function, Simple and convenient operation.

技术参数 / Technical parameter

设备型号 Model	XR-FD20	XR-FD30	XR-FD50	XR-FD100
激光功率 laser power	20W	30W	50W	100W
电源需求 Power demand	AC220V±10%, 50Hz			
加工幅面 Processing format	110mm*110mm/175mm*175mm/300mm*300mm			
打标速度 Marking speed	0-7000mm/s			
整机功率 Power	500W	700W	1000W	1800W
支持图形格式 Graphic format support	BMP、GIF、JPEG、PLT、DXF、AI 等			
工作环境 work environment	温度: 10-30°C, 湿度: 5-85%, 无凝水, 无灰尘或灰尘较少 Temperature: 10-30, Humidity: 5-85% Non condensing water, No dust or dust			
打标方式 Marking method	XYZ 三轴动态聚焦 XYZ three axis dynamic focusing			
冷却方式 Cooling mode	风冷 Air cooling			
操作系统 operating system	WinXP/Win7/ 全 3D 视图操作 WinXP/Win7/ all 3D view operation			



模具激光焊接系列 Mould laser welding series

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小型模具焊接



中小型模具焊接



大型模具焊接



特大型模具焊接

特点 / Feature

- 采用英国进口陶瓷聚光腔体，耐腐蚀、耐高温、寿命 (8-10) 年，氙灯寿命 800 万次以上。
Imported ceramic condenser chamber, corrosion resistance, high temperature resistance, life expectancy (8-10), xenon lamp life 8 million times.
- 采用世界上最先进的自动遮光系统，消除了在工作时光对眼睛的刺激。
The use of the world's most advanced automatic shading system, eliminating the work time on the eye of the stimulus
- 激光头可旋转 360 度，光路部份可转动 360 度，上下电动升降前后推动适合大、中、小型模具的修补。
The laser head can rotate 360 degrees, and the light path part can rotate 360 degrees, and the upper and lower electric lifting drive is suitable for the repair of large, middle and small mold.
- 参数调节采用智能化遥控器控制，操作简单、快捷。
Parameter adjustment using intelligent remote control, easy to operate, fast

技术参数 / Technical parameter

设备型号 Model	XR-MW200	XR-MW300	XR-MW400	XR-MW500
最大激光功率 Max. laser output power	200W	300W	400W	500W
激光波长 Laser wavelength	1064nm			
最大单脉冲能量 Max. Pulse power	70J	80J	90J	100J
焊接频率 Welding frequency	≤ 100KHz			
脉冲宽度 Pulse width	≤ 20ms			
光斑直径 Spot diameter	0.1-3.0mm			
焊接深度 Welding depth	0.1-2.0mm	0.1-2.5mm	0.1-3.0mm	0.1-4.0mm
整机耗电功率 Power consumption	6KW	10KW	12KW	12KW
电力需求 Power supply	AC220V/50Hz	AC380V /50Hz	AC380V /50Hz 3P+PE	
焊丝直径 welding wire diameter	0.1mm ~ 0.8mm			
冷却系统 Cooling system	水冷 water cooling			



■ 技术参数 /Technicalparameter

设备型号 Model	XR-FM200	XR-FM300	XR-FM400	XR-FM500	XR-FM600
最大激光功率 Max. laser output power	200W	300W	400W	500W	600W
激光波长 Laser wavelength	1064nm				
最大单脉冲能量 Max. Pulse power	70J	80J	90J	100J	100J
焊接频率 Welding frequency	≤ 100KHz				
脉冲宽度 Pulse width	≤ 20ms				
光斑直径 Spot diameter	0.1-3.0mm				
焊接深度 Welding depth	0.1-2.0mm	0.1-3.0mm		0.1-4.0mm	
整机耗电功率 Power consumption	6KW	10KW	12KW	15KW	18KW
电力需求 Power supply	AC220V/50Hz	AC380V /50Hz 3P+PE			
冷却系统 Cooling system	水冷 water cooling				

特点 /Feature

- 10 个方向灵活调整焊接角度位置，适合各种模具的补焊。
The 10 direction flexible adjustment of welding position, welding is suitable for all kinds of mould.
- 针对大型模具，可以不用工作台，直接在地面上或叉车上进行模具焊接。
For large mold, can not work, mold welding directly on the ground or forklift.
- 配合大功率分体冷水机和大功率激光腔，长时间，大功率焊接时，稳定性更好。
With high power split chiller and high power laser cavity, long time, large power welding, better stability.
- 工作台底座电动升降，工作台移动使用精密滚珠丝杆及高精度直性导轨轻便灵活，定位精准。
workbench base electric lift, work station for mobile use precision ball screw rod and high precision collimation guideway is light and flexible, precise positioning.
- 激光头可前后滑动，手动升降，激光头可便捷旋转 360 度，方便补焊任何侧面。
The laser head can slide, manual lifting, convenient laser head can be rotated 360 degrees, convenient welding and any side.



YAG 激光焊接系列 YAG laser welding series

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宁波欣睿激光设备有限公司
Ningbo Xinrui Laser Equipment Co., Ltd.
E-mail: sale@tirilaser.com www.tairuilaser.com



特点 / Feature

- 采用英国知名厂家的陶瓷激光腔体，保证了设备的高可靠和高性能。
The ceramic laser cavity, which is well known in the UK, ensures the high reliability and high performance of the equipment.
- 不需要填补焊料，焊接速度快，焊点可靠，工件变形小，成型美观中。
Do not need to fill the solder, welding speed is high, the solder joint is reliable, the work piece deformation is small, the shape is beautiful.
- 单脉冲能量高，光电转换效率高，易于焊接金，银，铂金等贵金属中。
The high pulse energy, high photoelectric conversion efficiency, easy welding of gold, silver, platinum and other precious metals.
- 高质量的激光晶体以及完美的光学设计，保证了完美的激光光束质量，聚焦性能好，热效应低，不烫手。
Laser crystal of high quality and perfect optical design, to ensure the perfect laser beam quality and focusing performance is good, the thermal effect of low, not hot.

■ 技术参数 / Technical parameter

设备型号 Model	XR-W150	XR-W200
最大激光功率 Max. laser output power	150W	200W
激光波长 Laser wavelength	1064nm	
单脉冲最大激光能量 Single pulse Max. power	80J	100J
脉冲频率 Pulse frequency	≤ 50KHz	
脉冲宽度 Pulse width	0.1-20ms	
光斑直径 Spot diameter	0.1-3.0mm	
激光焊接深度 Laser welding depth	0.1-2.0mm	
整机耗电功率 Power consumption	5KW	7KW
电力需求 Power supply	AC220V/50HZ/25A	
冷却系统 Cooling system	水冷 water cooling	





两轴脉冲激光焊接机



三轴脉冲激光焊接机



光路运动激光焊接



四轴脉冲激光焊接机



非标定制脉冲式激光焊接机（根据客户不同产品需求定制）



根据客户需求，可提供完美的在线解决方案
According to customer needs, can provide the perfect online solution



特点 / Feature

- 采用立柱型机座结构，稳定可靠，减少环境影响；
Using column-type base structure, stable and reliable, reducing environmental impact
- 激光焦点与工作面之间预留可调节高度，便于安装工装夹具和安放被加工零件；
Reserve can be adjusted between laser focus and work surface height, easy to install fixtures and placement are machined parts
- 智能化保护装置，当激光水冷系统失效时，设备自动切断电源以保护激光器
Intelligent protection device, when the laser cooling system failure, the device automatically cut off the power to protect the laser
- 设备可靠性强，可 24 小时连续稳定加工，满足工业大批量生产加工的需求
High equipment reliability, 24 hours continuous and stable processing, to meet the needs of industrial mass production processing
- 专机定制能力强，可按客户需求打造专属机型
Plane customization ability, according to customer demand to create exclusive models

YAG 激光焊接系列 YAG laser welding series

13 宁波欣睿激光设备有限公司
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■ 技术参数 / Technical parameter

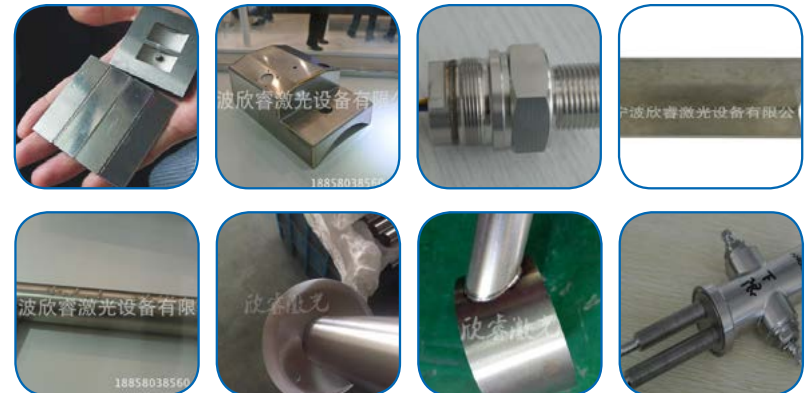
设备型号 Model	XR-AW200	XR-AW300	XR-AW400	XR-AW500	XR-AW600
最大激光功率 Max. laser output power	200W	300W	400W	500W	600W
激光波长 Laser wavelength	1064nm				
激光工作性质 Laser working medium	ND:YAG				
脉冲频率 Pulse frequency	≤ 100KHz				
脉冲宽度 Pulse width	≤ 20ms				
瞄准定位方式 Positioning	显微镜、CCD、红光 (选配) Red light or CCD				
工作台行程 Worktable moving range	200x200mm 至 1200x1200mm(可选) 200×200mm to 1200×1200mm(optional)				
整机耗电功率 Power consumption	8KW	10KW	12KW	15KW	18KW
电力需求 Power supply	AC220V±10%/50Hz	三相 AC380V /50Hz		三相 AC380V /50Hz	
冷却系统 Cooling system	水冷 water cooling				

适用材料：汽车零部件的焊接（液压挺杆、汽油滤清器、汽车尾气传感器、电磁阀、启动电机定子的焊接）

Widely used in aviation, machinery, electronics, communication, energy, chemical, automobile manufacture,

行业应用：广泛应用于航空、机械、电子、通讯、动力、化工、汽车制造等行业 锂离子电池密封焊接（手机电池、动力电池）冶金行业（硅钢板的焊接）应用军工行业传感器、发动机叶片焊接 电子元器件的精密点焊及密封焊接（继电器）电器行业（硅钢片的焊接、空调电机转子、漏电保护器）

welder of automobile parts, hydraulic lever, gasoline filter, automobile tail gas sensor, solenoid valve and start motor stator, and seal welder lithium battery.





手持式激光焊接



L 型单工位焊接



单工位焊接



二轴激光焊接



双工位激光焊接



三轴激光焊接



多工位激光焊接



精密激光焊接

特点 /Feature

- 通过实时能量闭环反馈功能可获得稳定理想的波形，确保路焊接的稳定性；

The stable and ideal waveform can be obtained by the real time energy feedback function, ensure the stability of road welding;

- 可快速切换焊接条件，实现高速高品质焊接； Fast switching condition, high speed and high quality welding;

The use of high speed can achieve a certain region of the welding seam and the galvanometer combination;

- 激光输出支持时间分光、能量分光、瞬时分光，最多 4 路分光； Laser output support time、Energy splitting、Instantaneous splitting、Up to 4 points of light；

- 具有能量缓升缓降功能，在缝焊时保证开始与结束的重叠部分整齐美观；

With energy slow up slow down function , in the seam ensure overlapping part of the beginning and end of the neat appearance ;

- 通过内置的能量监测仪可以监测激光能量与平均输出功率的异常。

The laser energy and the average output power can be monitored by the built-in energy monitor.

光纤传导激光焊接系列 Optical fiber conducting laser welding series

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振镜激光焊接



龙门式激光焊接



视觉定位激光焊接



机器人激光焊接

■ 技术参数 / Technical parameter

设备型号 Model	XR-FW50	XR-FW150	XR-FW300	XR-FW500	XR-FW600
最大激光功率 Max. laser output power	50W	150W	300W	500W	600W
激光波长 Laser wavelength	1064nm				
单脉冲最大激光能量 Single pulse Max. power	50J	65	75	100J	100J
脉冲宽度 Pulse width	0.5ms-15ms				
脉冲频率 Pulse frequency	1-100HZ				
光纤输出数量 Fiber output quantity	最多 4 路 Up to four routes				
反馈类型 Feedback type	能量反馈 Current minus feedback				
分光方式 Share way	能量分光 / 时间分光 / 瞬时分光 Energy share/time share/instant share				
整机耗电功率 Power consumption	4KW	6KW	12KW	15KW	16KW
电力需求 Power supply	单相； 220V/50HZ single phase	三相；380V/50HZ			
冷却系统 Cooling system	水冷（内置水冷可选） water cooling（internal water/ air optional）				
光纤型号 Fiber mode	三菱 SI/GI 光纤 Mitsubishi SI/GI fiber				



光纤连续激光焊接机 Fiber continuous laser welding machine

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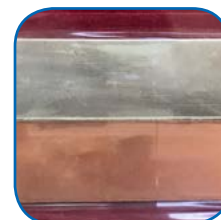
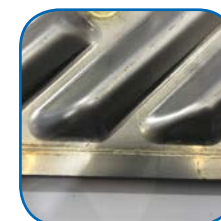
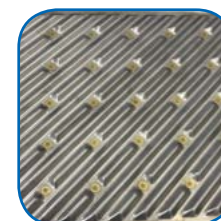
■ 技术参数 /Technicalparameter



设备型号 Model	XR-FCW 250	XR-FCW 500	XR-FCW 700	XR-FCW 1000	XR-FCW 1500	XR-FCW 2000	XR-FCW 3000	XR-FCW 4000	XR-FCW 6000
最大激光功率 Max. laser output power	250W	500W	750W	1000W	1500W	2200W	3300W	4000W	6000W
工作模式 working mode	连续出光 Continuous light								
激光波长 Laser wavelength	1070nm±5nm				1080±5nm				
焊接深度 Welding depth	< 3mm				< 5mm				
输出功率稳定度 standard output laser power	±2%								
电力需求 Power supply	单相 AC220V±10%			AC380V±10%/3P+N+PE					
冷却系统 Cooling system	风冷或水冷 Air cooling or water cooling			水冷 water cooling					

特点 /Feature

- 电光转换效率高达 25%- 30%；极其出色的脉冲功率、能量稳定性；
The electro-optical conversion efficiency of up to 25%--30%; pulse energy stability.
- 寿命长，精度高，泵浦源使用寿命 >10 万小时；
High precision, long service life, the service life of pump source >10 million hours;
- 速度更快，效果更完美；光束质量最优化于应用；
Faster, more perfect beam quality optimization in application;
- 紧凑型结构设计；体积小，重量轻，免维护；
Compact structure design; small volume, light weight, maintenance free.
- 低成本紧凑解决方案，以半导体光纤作激光发生介质，无需激光发生气体，绿色环保。
Low cost and compact solution to the optical fiber as the laser medium, without the need for laser gas, green environmental protection;

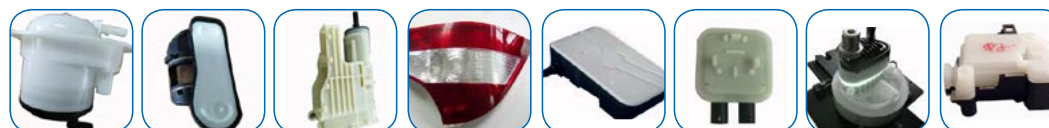


■ 技术参数 / Technical parameter

设备型号 Model	XR-CFP80	XR-CFP100
连续输出功率 Output power	80W	100W
激光波长 Laser wavelength	915±10nm	
指示激光参数 Pilot laser parameter	650±10nm , > 10mW	
脉冲宽度 Pulse width	可调 Adjustable	
光纤芯径 Fiber core	105um	200um
光纤输出数量 Fiber output quantity	单支 Single	
电力需求 Power supply	AC220V/50Hz	
耗电功率 Power consumption	260W	500W
工作温度 Operating temperature	0°C ~ 40°C	
冷却方式 Cooling	风冷 Air cooling	
定位方式 Targeting	红光 Red light	
控制方式 Control method	触摸屏控制 / 外部控制 Touch panel/External Control	

特点 / Feature

- 升温速度快，热影响区小，适用于塑料件及无铅加工制成。
The heating speed is fast and the heat affected zone is small. It is suitable for plastic parts and lead-free processing.
- 模块清晰分明，性能稳定，故障率极低，且维护简单；
The module is clear and distinct, the performance is stable, the failure rate is extremely low, and the maintenance is simple;
- 无接触性焊接，焊接产生应力小，变形小，焊接美观，无污染，高效节能；
Non-contact welding, welding produces small stress, small deformation, beautiful welding, no pollution, high efficiency and energy saving;
- 采用风冷式散热。环保且维护简单，提高了设备稳定性和出光质量；
Air-cooled heat dissipation. Environmental protection and simple maintenance, improve equipment stability and light quality;
- 系统操作简单可靠，采用 LCD 显示做人机界面，操作直观简洁；
System operation is simple and reliable, using LCD display as human-machine interface, intuitive and simple operation;



半导体连续激光焊接系列 Semiconductor continuous laser welding series



特点 / Feature

- 平底光斑，光斑大，能量均匀分布；
Flat spot, large spot, uniform distribution of energy;
- 高效率设计，输出功率高，光束质量好，减少电力消耗，降低使用成本，延长使用寿命；
High efficiency design, high output power, good beam quality, reduced power consumption, reduced use cost, and extended service life;
- 可以通过同时 2 路光学系统（分时系统），提高生产效率（选配）；
It can improve the production efficiency (optional) by using two optical systems (time-sharing systems) at the same time;
- 通过触摸屏可自由进行操作（无需 PC 即可实时监控设备的设定和运行状态）；
Operate freely through the touch screen (no need for a PC to monitor the settings and operating status of the device in real time);
- 高效的能量转换率、极高的功率密度、高功率输出以及值得信赖的稳定性；
Efficient energy conversion rate, high power density, high power output, and trustworthy stability
- 设备体积小，结构紧凑、模块化；
The equipment is compact, compact and modular;

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■ 技术参数 / Technical parameter

设备型号 Model	XR-CMW1000	XR-CMW1500	XR-CMW2000	XR-CMW3000	XR-CMW4000
最大激光功率 Max. laser output power	1000W	1500W	2000W	3000W	4000W
激光工作介质 Laser working medium	半导体				
激光波长 Laser wavelength	915nm				
工作模式 working mode	连续 / 调制 CW/Modulate				
整机功率 Power consumption	5KW	7KW	10KW	15KW	20KW
瞄准定位 Aiming positioning	红光指示				
电源输入 Power input	AC220V±10% 50/60Hz	AC380V±10% 50/60Hz			
冷却方式 Cooling mode	水冷 water cooling				
光纤直径 Fiber diameter	300um	600um	600um	600um	800um
光纤长度 Fiber length	10m		20m		
功率稳定性 Power stability	< ±1%		< ±3%		
工作环境温度 Working environment temperatur	20-30℃				
工作环境湿度 Working environment temperature	30%-75%				





特点 / Feature

- 极其出色的脉冲功率 / 能量稳定性
Extremely pulse power and energy stability
- 灯泵激光器替换，内置脉冲发生器；
Replace lamp-pumped lasers, built-in pulse generator
- 电光转换效率高于 30%；
Lector-optical conversion efficiency higher than 30%
- 光束质量最优化于应用；
Beam quality optimized for applications
- 脉冲和连续两种工作模式；
Pulsed and continuous two modes
- 低成本解决方案，同时兼具高峰值功率；
Low-cost solution while both peak power

技术参数 / Technical parameter

设备型号 Model	XR-QCW150	XR-QCW300	XR-QCW450	XR-QCW600
最大平均功率 (脉冲模式) Max. average power (pulse mode)	150W	300W	450W	600W
最大平均功率 (连续模式) Max. average power (continuous mode)	250W	300W	450W	600W
最大脉冲能量 Max. pulse energy	15J	30J	45J	60J
最大峰值功率 Max. peak power	1500W	3000W	4500W	6000W
冷却系统 Cooling system	风冷 Air cooling			
激光波长 Laser wavelength	1070nm			
脉冲宽度 Pulse width	0.2-50ms			
工作模式 working mode	脉冲 / 连续 pulse/continuous			
电力需求 Power supply	220V±10%, 50HZ			





特点 /Feature

- 德国进口高精度电控比例阀，精确控制切割辅助气体的气压，以达到最佳的切割效果。
Germany imported high-precision electronic proportional valve, Accurate control of the pressure of cutting auxiliary gas, In order to achieve the best cutting effect.
- 实用新型专利一体式设计，可分别搭载不同的类型或厂家的激光光源，结构紧凑可靠、安全、实用、合理。
Integrated design of utility model patent, Can be equipped with different types or manufacturers of laser light source, The structure is compact, reliable, safe, practical and reasonable.
- 采用光学大理石平台，防震动框架设计，适合高速运动，稳定性高。
Optical marble platform, Anti vibration frame design, Suitable for high speed movement, High stability.
- 多功能集成控制、自主研发专利软件，加工过程软件自动控制，软件界面实时反馈，显示各功能和各部位加工状态；
Multifunctional integrated control, Independent research and development of proprietary software, Automatic control of machining process, Software interface real time feedback, Display the processing status of each function and parts;
- 激光切割头非接触式加工方式，不划伤产品工件，无机械应力变形，切缝最窄，热影响区最小，工件不变形，切割面光滑无毛刺。
Non-contact processing method of laser cutting head, Do not scratch the workpiece, No mechanical stress deformation, Narrow slit, Minimum heat affected zone, Workpiece deformation, Cutting surface smooth without burr.
- 加工最方便，可以加工任意设计图形，也可切割管材。
The most convenient processing, Can process any design graphics, Cutting pipe.
- 可以对钢板，不锈钢板，铝合金板，铜板等任何硬度的材料进行切割。
Can plate, Stainless steel plate, Aluminum alloy plate, Copper and other materials of any hardness cutting.

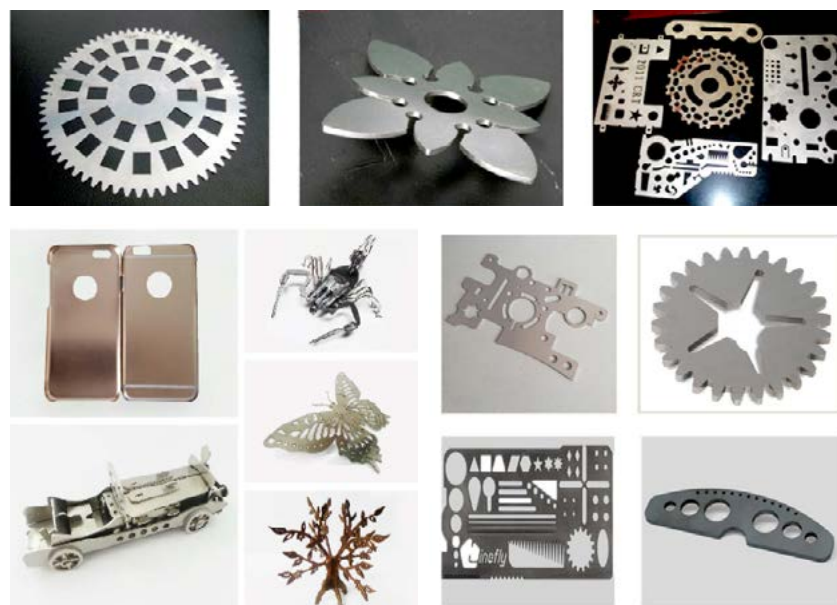
■ 技术参数 /Technicalparameter

设备型号 Model	XR-FSW500	XR-FSW750	XR-FSW1000
激光功率 laser power	500W	750W	1000W
激光波长 Laser wavelength	1070nm		
加工幅面 Processing format	500*500mm	1300*900	1500*1000
X 轴行程 X axis travel	520mm	1320mm	1520mm
Y 轴行程 Travel Y-axis	520mm	920mm	1020mm
Z 轴行程 Z axis travel	60mm		
X/Y 轴定位精度 X/Y axis positioning accuracy	±0.03mm/s		
X/Y 轴重复定位精度 X/Y axis repeat positioning accuracy	±0.02mm/s		
切割速度及厚度 Cutting speed and thickness	视具体材质而定 Depending on the specific materia		
整机重量 Weight	800KG	1200KG	1800KG
整机功率 Power	< 3.5KW	< 4.5KW	< 5.5KW
用电需求 Electricity demand	380V/50Hz/60Hz/60A		

适用材料 /Application

适用于各种金属薄片切割和打孔等多种激光加工，如五金、消费类电子元器件、眼镜行业，广告行业，电器柜行业，汽车零件，厨具，电路板，五金各类仪表、钣金加工业等切割；多种金属材料的精密切割和打孔等行业。

Suitable for all kinds of laser cutting of metal sheet cutting and punching,Such hardware、Consumer electronic components、Glasses industry,Advertising industry,Electrical cabinet industry , Auto parts , Kitchenware , Circuit board,Various types of hardware instruments、Sheet metal cutting ; A variety of metal materials, such as precision cutting and drilling industry.



光纤金属激光切割机 Fiber laser cutting machine



特点 / Feature

- 高性能，进口原厂封装光纤激光器，性能稳定，使用寿命可达 10 万多小时。
The imported fiber laser, high performance, stability, life more than 100 thousand hours
- 高速度，高效率，切割薄板每分钟速度可达数十米。
The high cutting speed and cutting efficiency, plate speed can reach up to 10 meters.
- 激光器免维护。
Laser - free maintenance;
- 切割边缘质量好，变形小，外观平整，美观。
The small deformation of the edge or surface - smooth;
- 采用进口导向传动机构和伺服电机，切割精度高。
The imported servo motor and drive system to ensure accurate cutting;
- 可随意设计各种图形或文字即时切割，操作简单、灵活、方便。
Can freely design a variety of graphics or text immediately cut, the operation is simple, flexible and convenient

适用材料 / Application

- 适用于快速切割金属板或管，主要用于切割不锈钢、碳钢、锰钢、镀锌板、铝合金板、稀有金属。
Applicable to fast cutting on plate or tube in metal, mainly for cutting on SS, carbon steel, Manganese steel, galvanized plate, alloy plate, rare metal.
- 广泛应用于厨房电气、钣金机箱机框、机框设备、电器设备、灯饰五金、广告标牌、汽车配件、展示器材、各种金属制品、钣金切割加工等行业；
Widely used in kitchen appliance, electric control box, high-resolute device, mechanical equipment, electrical equipment, lighting, posters, auto parts, display equipment, hardware and metal processing.

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■ 技术参数 / Technical parameter

设备型号 Model	XR-FLC3015	XR-FLC4020	XR-FLC6020
加工幅面 Processing range	3000*1500	4000*2000	6000*2000
行程 stroke	3025*1525*100	4030*2020*120	6030*2020*120
X/Y 轴定位精度 X/Y axis location accuracy	±0.03mm		
X/Y 重复定位精度 X/Y axis repeat location accuracy	±0.02mm		
最大定位速度 Max. location speed	169m/min		
最大加速度 Max. acceleration	1G		
激光功率 Laser power	500W	1000W	
切割厚度 Cutting thickness	≤ 6mm	≤ 12mm	
瞄准定位 Positioning	红光 red light		
整机耗电功率 Power consumption	≤ 8kw	≤ 20kw	
电力需求 Power supply	380V / 50Hz		





特点 /Feature

- 核心部件采用进口全球领导品牌 Spectra-Physics 紫外激光器。

Core parts adopt imported global leadership brand Spectra - uv laser Physics.

- 高精度 CCD 自动定位，多标靶任意设定。

High precision CCD automatic positioning, target set arbitrary.

- 采用大理石底座，高精进口直线电机两轴运动平台，精度高，速度快，平台真空吸附方便快捷。

USES the marble pedestal, two high precision imported linear motor axis motion platform, high precision, fast speed, convenient platform for vacuum adsorption.

- 采用固定光路设计，稳定性高。

Adopt fixed optical path design, high stability.

- 进口紫外激光切割头，高效，品质，精度，可同时加工不同的厚度的 FPC 材料。

Import uv laser cutting head, efficiency, quality, accuracy, at the same time processing of different thickness of FPC materials.

- 欣睿专用开发切割软件，人性化操作界面，简单易学。

Xin Rui special cutting software development, humanized operation interface, easy to learn.

- 专用的环保集尘过滤系统。

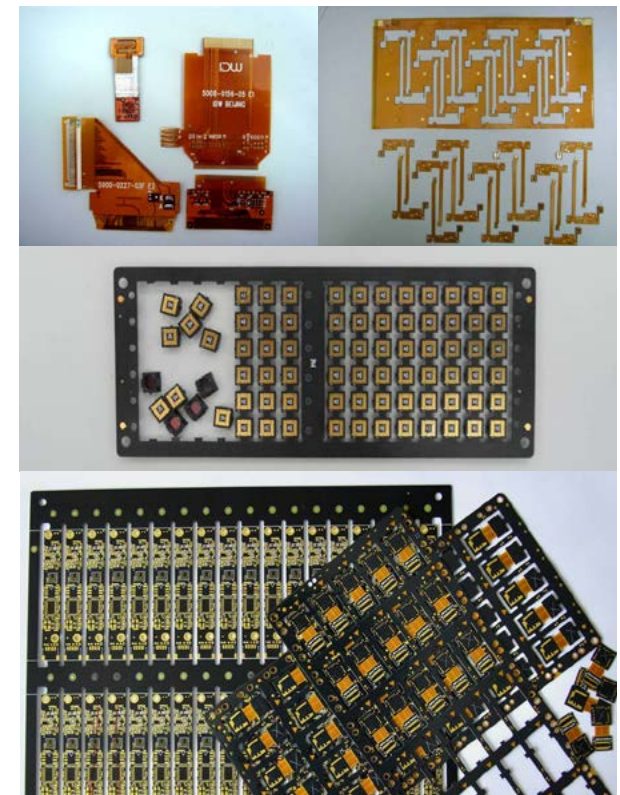
Special environmental protection dust filtering system.

■ 技术参数 / Technical parameter

设备型号 Model		XR-UC-3010	XR-UC-4012	XR-UC-5015
激光功率 laser power		10W	12W	15W
激光器光斑 Laser spot		20um	20um	20um
速度 speed	激光切割速度 (mm/s) Laser cutting speed (mm/s)	100-3500	100-3500	100-3500
	平台运动速度 (mm/s) Platform motion velocity (mm/s)	300	300	300
行程 Trip	X 轴 (mm) X axis (mm)	420	420	420
	Y 轴 (mm) Y axis (mm)	420	420	420
精度 Accuracy	XY 平台重复精度 (um) XY platform repeatability (UM)	≤ ±1	≤ ±1	≤ ±1
	XY 平台定位精度 (um) XY platform positioning accuracy (UM)	≤ ±3	≤ ±3	≤ ±3
	CCD 定位精度 (um) CCD positioning accuracy (UM)	≤ ±3	≤ ±3	≤ ±3
加工幅面 Processing format	可定制 Customizable	300*300mm	400*400mm	500*500mm
外形尺寸 Outline dimension	L*W*Hmm	900*1200*1700	1200*1400*1700	1450*1800*1600
机器重量 (Kg) Machine weight (Kg)		1800	1800	1800
使用环境 Use environment	供电需求 Power supply	220V/50Hz	220V/50Hz	220V/50Hz
	整机功率 Power	< 3KW	< 3KW	< 3KW
	相对湿度 relative humidity	45%-70%	45%-70%	45%-70%
	环境温度 ambient temperature	20° - 25°	20° - 25°	20° - 25°
	激光器冷却 Laser cooling	水冷 water-cooling		

适用材料 / Application

适用于指纹识别模组，指纹识别芯片，摄像头模组，FPC 挠性电路板，软硬结合板，多层板，PI、FR4、电磁膜、覆盖膜等辅助材料切割、钻孔、开窗、开盖等。
Suitable for fingerprint identification module, fingerprint identification chip, camera module, FPC flexible circuit board, soft board, laminated, PI, FR4, electromagnetic film, covering film auxiliary materials such as cutting, drilling, open the window, open, and so on.





氙灯
Xenon lamp



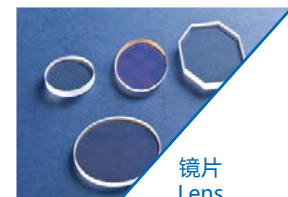
金腔
Gold cavity



陶瓷腔
Ceramic cavity



激光棒
Laser rod



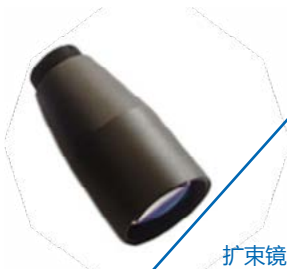
镜片
Lens



显微镜
Microscope



调光片
Dimmer



扩束镜
Beam expander



场镜
Field mirror



红光
Red light



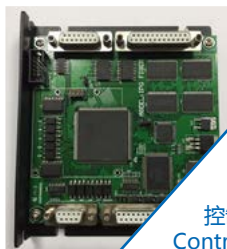
旋转
Rotate



平移台
Translation Stages



振镜
Vibrating mirror



控制卡
Control card



防护眼镜
Protective glasses



光纤线
Optical fiber line



CCD



● 服务客户

- 欣睿激光坚持 “客户至上” 和 “质量为先”
- 国内免费送货、安装、调试
- 提供免费的设备操作培训
- 一年免费质保维修
- 全国联保，终身提供维护服务
- 终身享有免费软件升级服务
- 响应 “3+2” 式服务（365天+24H）

● CUSTOMER SERVICE

- Xinrui Laser insists on "Customer First" and "Quality
- Domestic free shipping, installation, commissioning
- Provide free equipment operation training
- One year free warranty repair
- Quanguolianbao, providing maintenance services for life
- Lifelong free software upgrade service
- Response to "3+2" service (365 days + 24H)



高 / 端 / 激 / 光 / 设 / 备 / 专 / 业 / 制 / 造 / 商

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