

股票代码：688025

固体激光器

DPSS Laser

深圳市杰普特光电股份有限公司

SHENZHEN JPT OPTO-ELECTRONICS CO., LTD.



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深圳市杰普特光电股份有限公司
SHENZHEN JPT OPTO-ELECTRONICS CO., LTD.

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公司简介 COMPANY PROFILE

深圳市杰普特光电股份有限公司(股票代码：688025)成立于2006年，是一家集研发、生产和销售激光器、激光/光学智能装备和光纤器件于一体的国家级高新技术企业。经过多年发展，公司搭建了国际化的研发、营销平台，产品和服务覆盖全球。公司以激光核心技术为基础，打造激光与光学、测试与测量、运动控制与自动化、机器视觉等技术平台，持续为客户创造价值。

杰普特坚持走自主知识产权的道路，已申请600余件专利及软件著作权，其中发明专利200余项。公司拥有一支由多位海外留学归国博士及国内知名大学博士、硕士为核心组成的优秀的顾问、管理、研发及销售团队，公司拥有博士30余人，硕士80余人，并且拥有先进的生产设备、配套齐全的研发测试设备。

作为中国首家商用脉宽可调高功率光纤激光器生产制造商，公司坚持“激光+”的定位，深耕核心激光技术，聚焦激光核心模块，围绕消费电子、泛半导体、新能源、生物医疗等重点领域，可为客户提供全品类、各波段、不同模式的光纤激光、固体激光、超快激光等产品，激光精密焊接、脆性材料精密加工、半导体模组检测及标刻、被动元器件、FPC/PCB打孔等专用设备技术解决方案，为先进制造提供动力之源。



Registered in 2006, Shenzhen JPT Opto-electronics Co., Ltd. is a National High-tech Enterprise. The company focuses on the R&D, production, sales, and technical services of lasers, intelligent equipments and optical devices. Based on laser technologies, JPT integrates leading technologies such as optics and measurement, motion control and machine vision, to create value for the customers.

JPT highly values intellectual property and has applied for more than 600 patents & software copyrights. The company is being led by the excellent consultants, management, R&D and sales team, where the key team members consist of several Ph.Ds and Masters from global famous universities and research institutes. JPT is equipped with advanced production equipment and a full range of R&D equipment.

As the first manufacturer of MOPA fiber lasers in China, JPT adheres to the positioning of "laser +", to develop core laser technologies and focus on the laser core modules. Surrounding the key fields of consumer electronics, pan-semiconductors, new energy and bio-medical, JPT provides customers with diverse series of fiber lasers, solid lasers and ultra-fast lasers of various wavelength and modes. JPT provides thorough laser solutions, including precision welding, precision cutting and drilling, inspection and marking of semiconductor modules, passive components, FPC/PCB drilling and etc.

2006 年成立
Registered in 2006

600+ 余件专利及著作权
More than 600 patents & software copyrights.

行业地位

INDUSTRY STATUS

激光技术领导者

The leading manufacturer of laser technology



MOPA脉冲光纤激光器
全球领先

Global leading manufacturer of
MOPA pulsed fiber laser



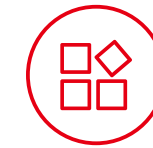
工业激光器
品类最全

The most complete variety
of industry lasers



激光精密切割、焊接技术
全球领先

Leading laser technology of
precision cutting and welding

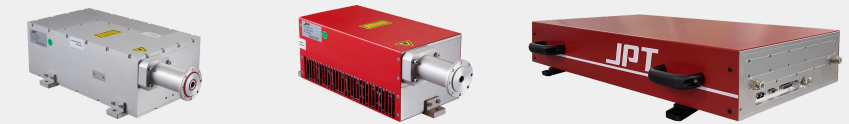


产品介绍

PRODUCT PRESENTATION



固体激光器
DPSS Laser



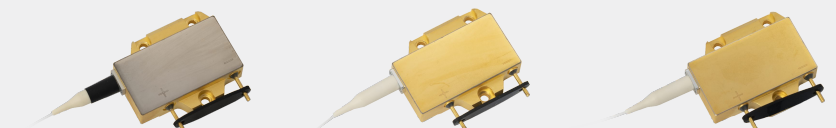
脉冲光纤激光器
MOPA Fiber Laser



连续光纤激光器
CW Fiber Laser



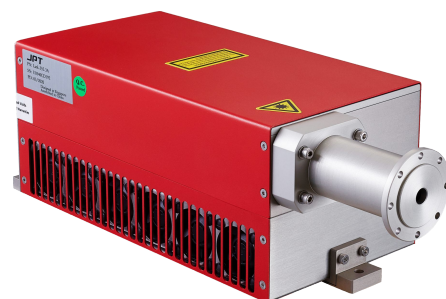
半导体激光器
Semiconduct Laser



LARK 355-3/5

应用优势/ Application Advantages

- 风冷结构，智能调速
Air-cooled structure, precise temperature control
- 体积更小，重量更轻，外观更美
More compact size, lighter weight and more favorable appearance
- 抗电磁干扰能力强，热学管理效率高，友好的GUI互动界面
Strong anti-electromagnetic interference ability, high thermal management efficiency, and accurate GUI interactive interface
- 安装便捷，免维护运行
Easy for installation and maintenance-free



规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter	
系列型号 Product Model	Lark-355-3A	Lark-355-5A
中心波长 Central Emission Wavelength	355 nm	
平均功率 Average Power	>3W@40kHz	>5W@50kHz
脉冲宽度 Pulse Duration	<18ns@40kHz	<18ns@50kHz
频率范围 Pulse Repetition Rate Range	20kHz-150kHz	
空间模式 Spatial Mode	TEM ₀₀	
光束质量 (M) Beam Quality	M ² ≤ 1.2	
光斑圆度 Beam Circularity	>90%	
光束发散角 Beam Full Divergence Angle	<2mrad	
光斑直径 (1/e ²) Beam Diameter	0.45 ± 0.15mm	0.5 ± 0.15mm
偏振度 Polarization Ratio	>100:1	
偏振方向 Polarization Orientation	水平/Horizontal	
平均功率稳定性 Average Power Stability	RMS ≤ 3%@24hr	RMS ≤ 5%@24hr
脉冲稳定性 Pulse to Pulse Energy Stability	RMS ≤ 3%@40kHz	RMS ≤ 3%@50kHz
工作温度 Operating Temp	0°C~40°C	
存储温度 Storage Temp	-15°C~50°C	
冷却方式 Cooling Method	风冷/Air-cooling	
配电需求 Supply Voltage	DC12V	
平均功耗 Average Power Consumption	<180W	<200W
三维尺寸 (WxDxH) Three-Dimensions	144.4mm*313.5mm*126mm	144.6mm*348.5*126.2mm
重量 Weight	机器净重 ≈ 6.2kg	机器净重 ≈ 6.5kg

SEAL 355-3/5

应用优势/ Application Advantages

- 光电一体化，抗干扰，一键启动
Photoelectric Integration, Anti-interference, One-button Start
- 全密封结构，防尘，防潮
Fully sealed structure, dust-proof, moisture-proof
- 引入腔内自净化，寿命更长
Intracavity self-purification with longer lifetime
- 体积小，紧凑型激光器，节约安装空间
Compact size, saving installation space



规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter			
系列型号 Product Model	Seal-355-3E	Seal-355-5E	Seal-355-3SE	Seal-355-5SE
中心波长 Central Emission Wavelength	355nm			
平均功率 Average Power	>3W@30kHz	>5W@40kHz	>3W@30kHz	>5W@40kHz
脉冲宽度 Pulse Duration	<18ns@30kHz	<18ns@40kHz	<18ns@30kHz	<18ns@40kHz
频率范围 Pulse Repetition Rate Range	20kHz-150kHz			
空间模式 Spatial Mode	TEM ₀₀			
光束质量 (M) Beam Quality	M ² ≤ 1.2			
光斑圆度 Beam Circularity	>90%			
光束发散角 Beam Full Divergence Angle	≤ 2mrad			
光斑直径 (1/e ²) Beam Diameter	0.55 ± 0.15mm			
偏振度 Polarization Ratio	>100:1			
偏振方向 Polarization Orientation	水平/Horizontal			
平均功率稳定性 Average Power Stability	RMS ≤ 3%@24hr			
脉冲稳定性 Pulse to Pulse Energy Stability	RMS ≤ 3%@30kHz	RMS ≤ 3%@40kHz	RMS ≤ 3%@30kHz	RMS ≤ 3%@40kHz
工作温度 Operating Temp	0°C~40°C			
存储温度 Storage Temp	-15°C~50°C			
冷却方式 Cooling Method	水冷/Water-cooling			
配电需求 Supply Voltage	DC12V			
平均功耗 Average Power Consumption	<180W			
三维尺寸 (WxDxH) Three-Dimensions	120mm*263mm*107mm		120mm*263mm*106.5mm	
重量 Weight	机器净重 ≈ 6.0kg		机器净重 ≈ 4.8kg	

SEAL 355-10/15/20/30

产品描述/ Product Description

Seal-355-20S紫外固体激光器采用一体化结构设计，将光路及外部驱动电路合为一体，使得该产品具有极强的抗干扰能力。光路、电路均采用全密封结构，无惧高温高湿的工作环境。



Seal-355-20S UV DPSSL adopts an integrated structure design. Combining the optical unit with external driving circuit, which makes that the product has a strong anti-interference capability. The optical unit and circuit are fully sealed. It is fully capable of working in high temperature and humidity environment.

应用优势/ Application Advantages

- 光电一体化，抗干扰，一键启动
Photoelectric integration, Anti-interference, One-button start
- 腔内空气自净化系统
Air self-purification system
- 全密封结构，无惧高温、高湿环境
Fully sealed structure, without fear of high temperature, high humidity environment
- 体积紧凑，节约安装空间
Compact size, saving installation space

产品应用/ Applications

- 脆性材料钻孔
Brittle materials drilling
- 3D包装制造
3D Package manufacturing
- 晶片划片
Wafer scribing
- 柔性材料切割
Flex materials cutting
- IC封装修剪
IC Package trimming
- 太阳能电池划片
Solar cell scribing

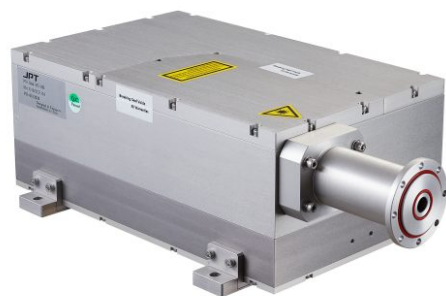
规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter			
系列型号 Product Model	Seal-355-10S	Seal-355-15S	Seal-355-20S	Seal-355-30S
中心波长 Central Emission Wavelength	355 nm			
平均功率 Average Power	>10W@60kHz	>15W@60kHz	>20W@110kHz	>30W@110kHz
脉冲宽度 Pulse Duration	<15ns@60kHz		<18ns@110kHz	<20ns@110kHz
频率范围 Pulse Repetition Rate Range	40kHz-300kHz			
空间模式 Spatial Mode	TEM ₀₀			
光束质量 (M) Beam Quality	M ² ≤ 1.2			
光斑圆度 Beam Circularity	>90%		≥90%	
光束发散角 Beam Full Divergence Angle	≤2mrad		≤2.5mrad	<2.5mrad
光斑直径 (1/e ²) Beam Diameter	0.45±0.15mm		0.8±0.15mm	
偏振度 Polarization Ratio	>100:1			
偏振方向 Polarization Orientation	水平/Horizontal			
平均功率稳定性 Average Power Stability	RMS ≤ 3%@24hr		RMS < 5%@24hr	
脉冲稳定性 Pulse to Pulse Energy Stability	RMS ≤ 3%@80kHz		RMS < 5%@110kHz	
工作温度 Operating Temp	0°C~40°C			
存储温度 Storage Temp	-15°C~50°C			
冷却方式 Cooling Method	水冷/Water-cooling			
配电需求 Supply Voltage	DC 36V			
平均功耗 Average Power Consumption	<250W		<400W	<600W
三维尺寸 (WxDxH) Three-Dimensions	180mm*302mm*114mm	180mm*337mm*114mm	205mm*400mm*124mm	205mm*400mm*124mm
重量 Weight	机器净重 ≈ 8.8kg	机器净重 ≈ 9.8kg	≈ 15kg	

SEAL 532

应用优势/ Application Advantages

- 光电一体化，抗干扰，一键启动
Photoelectric Integration, Anti-interference, One-button Start
- 全密封结构，防尘，防潮
Fully sealed structure, dust-proof, moisture-proof
- 引入腔内自净化，寿命更长
Intracavity self-purification with longer lifetime
- 体积小，紧凑型激光器，节约安装空间
Compact size, saving installation space



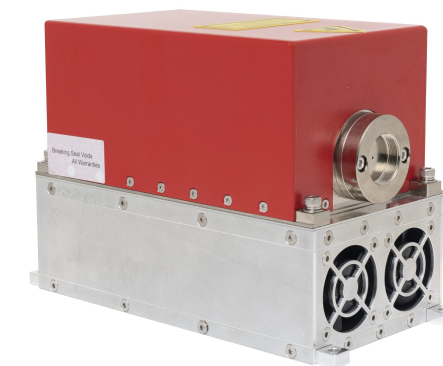
规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter			
系列型号Product Model	Seal-532-7	Seal-532-10	Seal-532-20S	Seal-532-30S
中心波长Central Emission Wavelength	532 nm			
平均功率Average Power	>7W@50kHz	>10W@50kHz	>20W@80kHz	>30W@80kHz
脉冲宽度Pulse Duration	<18ns@50kHz		<18ns@80kHz	
频率范围Pulse Repetition Rate Range	20kHz-200kHz		40kHz-300kHz	
空间模式Spatial Mode	TEM ₀₀			
光束质量(M)Beam Quality	M ² ≤1.2			
光斑圆度Beam Circularity	>90%			
光束发散角Beam Full Divergence Angle	≤3.0mrad		≤2mrad	
光斑直径(1/e ²)Beam Diameter	0.6±0.15mm		0.7~±0.15mm	
偏振度Polarization Ratio	>100:1			
偏振方向Polarization Orientation	垂直/Vertical		水平/Horizontal	
平均功率稳定性Average Power Stability	RMS≤3%@24hr			
脉冲稳定性Pulse to Pulse Energy Stability	RMS≤3%@40kHz		RMS≤3%@80kHz	
工作温度Operating Temp	0°C~40°C		10°C~35°C	
存储温度Storage Temp	-15°C~50°C			
冷却方式Cooling Method	水冷/Water-cooling			
配电需求Supply Voltage	DC 12V		DC36V	
平均功耗Average Power Consumption	<200W		350W	450W
三维尺寸(WxDxH)Three-Dimensions	180mm*302mm*114mm		180mm*337mm*114mm	
重量Weight	机器净重≈8.7kg		≈13.2kg	

Sparrow 355/532

应用优势/ Application Advantages

- 风冷结构，智能调速
Air-cooled structure, precise temperature control
- 体积更小，重量更轻，外观更美
More compact size, lighter weight and more favorable appearance
- 抗电磁干扰能力强，热学管理效率高，友好的GUI互动界面
Strong anti-electromagnetic interference ability, high thermal management efficiency, and accurate GUI interactive interface
- 安装便捷，免维护运行
Easy for installation and maintenance-free



规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter		
激光器类型Laser Type	1W 风冷一体紫外固体激光器	2W 风冷紫外激光器	2W 风冷一体绿固体激光器
系列型号Product Model	Sparrow-355-800	Sparrow-355-2	Sparrow-532-2
中心波长Central Emission Wavelength	355nm	355nm	532nm
平均功率Average Power	>800mW@50kHz	>2W@30kHz	>2W@80kHz
脉冲宽度Pulse Duration	<15ns@50kHz	<15ns@30kHz	<15ns@80kHz
频率范围Pulse Repetition Rate Range	30kHz-150kHz	20kHz-150kHz	30kHz-150kHz
空间模式Spatial Mode	TEM ₀₀		
光束质量(M)Beam Quality	M ² ≤1.3	M ² ≤1.2	M ² ≤1.3
光斑圆度Beam Circularity	>85%	>90%	>85%
光束发散角Beam Full Divergence Angle	<2.5mrad	≤2mrad	<3.0mrad
光斑直径(1/e ²)Beam Diameter	0.45±0.15mm		
扩束Beam Expander	外置	10X	外置
偏振度Polarization Ratio	>100:1		
偏振方向Polarization Orientation	水平/Horizontal	水平/Horizontal	垂直/Horizontal
平均功率稳定性Average Power Stability	RMS≤5%@24hr	RMS≤3%@24hr	RMS≤5%@24hr
脉冲稳定性Pulse to Pulse Energy Stability	RMS≤5%@40kHz	RMS≤3%@30kHz	RMS≤5%@80kHz
工作温湿度Operating Temp.&RH	0°C~35°C; <80%	0°C~40°C; <80%	0°C~35°C; <80%
存储温湿度Storage Temp.&RH	-15°C~50°C; <90%		
冷却方式Cooling Method	风冷/Air-cooling		
配电需求Supply Voltage	DC12V		
平均功耗Average Power Consumption	<75W	<120W	<75W
三维尺寸(WxDxH)Three-Dimensions	92.0mm*194.0mm*132.0mm	114mm*200.5mm*139mm	92.0mm*194.0mm*132.0mm
重量Weight	机器净重≈2.6kg	≈4.32kg	机器净重≈2.6kg

PS UV/GR

产品描述/ Product Description

JPT-PS系列皮秒激光器基于目前领先的工业用皮秒激光器放大方案，采用紧凑的双层腔体结构和简洁可靠的电控设计，适应全天候工业级生产要求以及前沿科学表征测试需要。JPT-PS系列目前提供红外与紫外输出版本，脉宽达到6ps。JPT-PS皮秒系列激光器具备脉冲开关（Pulse on Demand）与脉冲串功能（Burst Mode），可以实现单脉冲到1MHz频率输出。



JPT-PS picosecond laser series are based on the novel amplification approach with the compact dual-layer cavity and smart opto-electronic design. It adapts to the demanding industrial manufacturing environments and emerging scientific characterizations. Presently infrared and ultraviolet version are available for customs with a minimum pulse duration around 6 ps. JPT picosecond lasers possess the POD and Burst Mode functions with the tunable repetition rate from single shot to 1MHz.

产品特点/ Product Features

- 中心波长: 1064 nm (532 nm / 355 nm)
Central Wavelength: 1064 nm (532 nm / 355 nm)
- 脉冲宽度: 6~10 ps
Pulse Width: 6~10 ps
- 光束质量: $M^2 < 1.3$
Beam Quality: $M^2 < 1.3$
- 平均功率: 30W(@1064nm) / 10W (@ 355 nm)
Average Power: 30W(@1064nm)/10W (@ 355 nm)
- 重复频率: 单脉冲到1MHz可调
Repetition Rate: Single Shot to 1MHz
- 选单功能: 支持脉冲串，位置同步输出等模式
Pulse Picking Mode: Burst Mode, Position Synchronized Output (PSO)

规格指标/ Specification

参数单元 Parameter Unit	单位 Unit	参数 Parameter		
系列型号Product Model		JPT-PS-UV-5	JPT-PS-UV-10	JPT-PS-GR-40
中心波长Central Emission Wavelength	nm	355	355	532
重复频率Repetition Rate		单脉冲~2MHz		
平均功率Average Power	W	≥5	≥10	≥40
最大单脉冲能量Single Pulse Energy	μJ	12.5	25	80
脉冲宽度Pulse Duration		<10 ps		
功率稳定性Power Stability		<2%@8hrs		
脉冲稳定性Pulse to Pulse Stability		<3%		
光束质量(M)Beam Quality		≤1.3		
偏振方向Polarization Orientation		水平	水平	垂直
输出偏振度Linear Polarization Ratio		>100:1		
光斑圆度Beam Circularity		>90%		
远场发散角（全角）Divergence（Full Angle）		<2mrad		
光斑大小（激光输出口光斑） Beam Diameter at Output	mm	1.5±0.5（可定制）		
电源输入Power Configuration	V	DC-24V	DC 24V	DC 36V
能量损耗Power Consumption	W	<600	<600	<1000
冷却方式Cooling Method		闭式循环水冷却		
工作条件Operating Condition		温度15~35℃ 湿度<65%（不结露）		
推荐水冷工作温度 Recommend Water Cooling Temperature	℃	21		
热稳定时间Starting Time（Warm）	min	<10		
冷稳定时间Starting Time（Cool）	min	<30		
储存温度Storage Temperature	℃	-10~40		
重量Weight	kg	55	55	60
尺寸(WxDxH)Dimensions	mm	416×732×140	416×732×140	415×736×149.5

PS IR

规格指标/ Specification

参数单元 Parameter Unit	参数 Parameter			
系列型号 Product Model		JPT-PS-IR-20	JPT-PS-IR-30	JPT-PS-IR-80
中心波长 Central Emission Wavelength	nm	1064		
重复频率 Repetition Rate		单脉冲 ~ 2MHz		
平均功率 (@1064nm) Average Power	W	≥20	≥30	≥80
最大单脉冲能量 (@1064nm) Single Pulse Energy	μJ	50	75	160
脉冲宽度 Pulse Duration		<10 ps		
功率稳定性 Power Stability		<2% @ 8hrs		
脉冲稳定性 Pulse to Pulse Stability		<2%	<2%	<3%
光束质量 (M ²) Beam Quality		M ² ≤ 1.3		
偏振方向 Polarization Orientation		水平		
输出偏振度 Linear Polarization Ratio		>100:1		
光斑圆度 Beam Circularity		>90%		
远场发散角 (全角) Divergence (Full Angle)	mm	<2mrad		
光斑大小 (激光输出口光斑) Beam Diameter at Output	mm	1.5 ± 0.5 (可定制)		
电源输入 Power Configuration	W	DC 24V	DC 24V	DC 36V
能量损耗 Power Consumption		<600	<600	<1000
冷却方式 Cooling Method		闭式循环水冷却		
推荐水冷工作温度 Recommend Water Cooling Temperature	°C	21		
热稳定时间 Starting Time (Warm)	min	<10		
冷稳定时间 Starting Time (Cool)	min	<30		
储存温度 Storage Temperature	°C	-10~40		
重量 Weight	kg	55	55	60
尺寸 (WxDxH) Dimensions	mm	416 × 732 × 140		415 × 736 × 149.5



产品展示图

产品应用/ Applications



玛瑙雕刻
Agate Marking



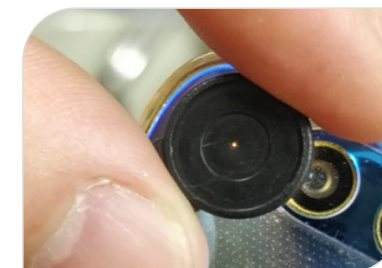
玻璃标刻
Glass Marking



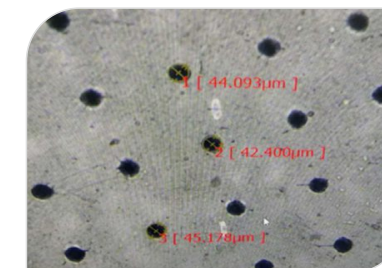
包装袋标刻
Packaging Marking



玻璃切割
Glass Cutting



塑料钻孔
Plastic Drilling



薄膜钻孔
Film Drilling



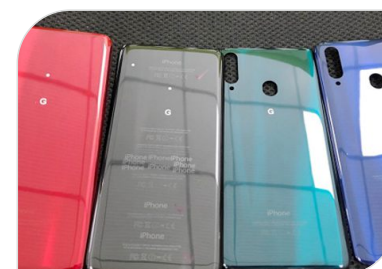
覆盖膜切割
Cover Film Cutting



陶瓷深雕
Ceramic Deep Engraving



陶瓷深雕
Ceramic Deep Engraving



手机壳标刻
Mobile Phone Case Marking



SLA光固化
SLA Light Curing



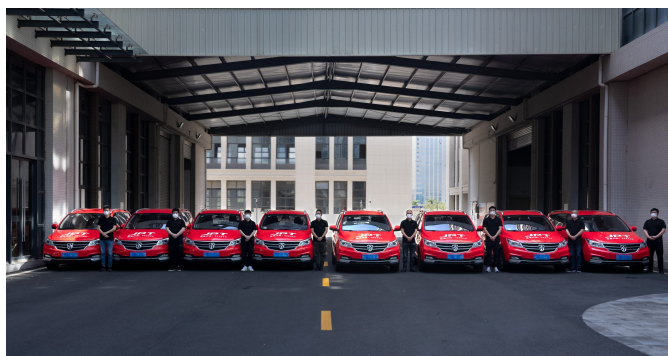
塑料标刻
Plastic Marking

激光维修中心 Laser Repair Center

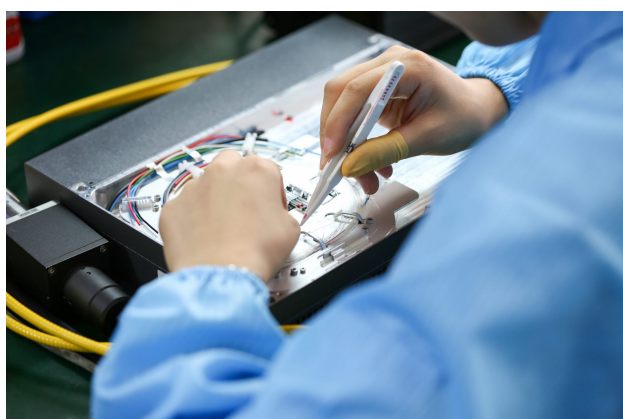
激光服务中心拥有全国最先进的激光器检测维修设备与专业的技术人员。我们将围绕时间满意、过程满意、结果满意的三个标准，为您提供超预期值的高端服务体验，全面为您保驾护航！您可以通过售后服务人员、400-880-1002电话、微信小程序等多渠道联系我们。我们将7X24在线，迅速解决您的使用问题！

JPT laser service center with the advanced instruments and equipment and most professional engineer team. Follow the standards: Time Satisfaction, Process Satisfaction, Result Satisfaction, offer customer the best of best service support, fully ensure the best experience to use JPT products. Service Engineer, 400 Hotline, Wechat App and others all can reach us easily, service be 7*24hrs online to solve your problem at first time.

售后 Service Team



维修 Maintenance



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企业使命 MISSION

推动智造进步，共创美好未来

Advancing Intelligent Manufacturing for a Common Bright Future.



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以激光核心技术驱动，持续为客户创造价值

Drive with Core Technologies of Laser, Continuously Create Value for Customers.



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诚信创新、心怀梦想、追求卓越、协同共赢

Innovate with Integrity, Dream Big, Pursue Excellence, Collaborate to Succeed