

20-100W 调Q脉冲光纤激光器

20-100W Q-SWITCHED PULSED FIBER LASERS



产品特点 Characteristic

高稳定性激光输出
Highly Stable Laser Output

高单脉冲能量
High Single-pulse Energy

高打标效率
High Marking Efficiency

短脉冲建立时间
Short Pulse Setup Time

高可靠性
High Reliability

免维护运行
Maintenance-free Operation

典型应用 Application

材料加工
Material Processing

清洗
Cleaning

金属薄片切割和打孔
Metal Film Cutting&piercing

硅加工
Silicon Processing

打标
Marking

精密焊接
Precision Welding

微加工
Micro-Processing

划线
Metal Drawing

电阻调阻
Resistance Adjustment

深雕
Deep Carving

毛化
Texturing

ITO膜刻蚀
ITO Film Etching

锐科激光推出的20-100W调Q脉冲光纤激光器系列是锐科激光研制的工业级打标及微加工激光器。该系列脉冲激光器具有高峰值功率、高单脉冲能量、光斑直径大小可选的特点，能广泛应用于非金属材料，具有高反特性的金、银、铜、铝，非高反材料不锈钢等材料的打标、精密加工、图文雕刻等领域。其在打标应用工艺，相比传统激光器成本更低廉，性能更稳定。

20-100W调Q系列脉冲光纤激光器所有核心器件由锐科激光自主研发，产品可靠性高，其良好的兼容性受到了市场广泛认可，产品品质达到国际先进水平。

The 20-100W Q-Switched Pulse Fiber Laser Series developed by Raycus is the industrial marking and micromachining laser. This series pulse laser has high peak power, high single-pulse energy and optional spot diameter and can be widely applied in the fields, such as marking, precision processing, graphic engraving of non-metal, gold, silver, copper and aluminum with altitude stress resistance, stainless materials without altitude stress resistance. Its marking process features lower cost and more stable performance compared with traditional laser.

All components of the 20-100W Q-switched pulse fiber lasers are developed by Raycus independently, with high product reliability. And its good compatibility has well recognized by the market and its quality has reached the international advanced level.

相关参数 Specifications

型号 Model	RFL-P20QE	RFL-P20QS	RFL-P30QS	RFL-P30Q	RFL-P50QB	RFL-P100Q
光学特性 Optical Properties						
平均输出功率(W) Average Output Power	20	20	30	30	50	100
中心波长(nm) Central Wavelength(nm)	1064					
重复频率范围(kHz) Repetition Frequency Range (kHz)	30-60	30-60	40-60	30-60	50-100	20-200
输出功率稳定度 Output Power Stability	<3%					<5%
输出特性 Output Characteristics						
输出光斑直径(mm) Output Beam Diameter(mm)	7±1					6.5±1
M ²	<1.5		<1.6			
偏振态 Polarization State	随机Random					
脉冲宽度(ns) Pulse Width (ns)	110-140	110-140	130-150	110-130	120-150	50-110
最大单脉冲能量(mJ) Max.Single Pulse Energy (mJ)	0.67		0.75	1		
输出光纤长度(m) Delivery Cable Length (m)	3(可定制Customizable)					
电控特性 Electrical Characteristics						
输入电源(VDC) Power Supply (VDC)	24					
功率调节范围(%) Power Range (%)	10~100					0~100
功率消耗(W) Power Consumption (W)	170	170	200	240	340	450
其他特性 Other Characteristics						
尺寸(mm)(宽*高*深) Dimensions(mm)(width*height*depth)	260×340 ×120	215×290×95		260×340×120		360×390 ×123
冷却方式 Cooling	风冷 Air-cooled					
工作温度(°C) Operating Temperature (°C)	0-40					