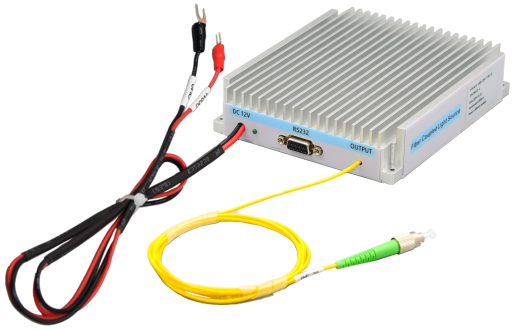
1064nm 多模光纤高功率泵浦光源

1064nm Multimode Fiber High-Power Pump Source

1. 描述(Description):

1064nm 高功率激光光源基于高性能半导体激光芯片，105/125um 光纤耦合输出。专业设计的恒流驱动电路保证激光器安全稳定工作。适合应用于医学研究、光纤激光器泵浦和其他生产测试当中。可以提供台式或模块式封装，提供上位机监控软件。

The 1064nm high-power laser source is based on a high-performance semiconductor laser chip, with 105/125um fiber-coupled output, designed constant-current driving circuit ensures safe and stable operation of the laser. suitable for applications in fiber laser pumping, biomediciner and so on.



2. 特性(Features):

- 高输出功率 High output power;
- 高稳定性 High stability;
- 模块或台式封装 Module or desktop packaging.

3. 应用(Applications):

- 光纤激光器泵浦 Fiber laser pumping;
- 生物医学 Biomedicine;
- 材料激光处理 Material laser processing.

4. 光电特性:

参数 Parameters	单位 Unit	最小值 Min.	典型值 Typ.	最大值 Max.	备注 Notes
工作波长 Operating wavelength	nm	1054	1064	1074	
输出功率 Output power	W	8	9		
		20	25		
		45	50		
工作模式 Operating mode	-	CW			
光功率稳定性 Power instability	dB	≤±0.02(15min.); ≤±0.05(8hrs)			≤±0.5%; ≤±1.2%
光纤类型 Fiber type	-	105/125			0. 22NA
光纤连接头 Fiber connector	-	FC/PC or SMA			
通信接口 Communication interface	-	DB9 Female(RS232)			
封装尺寸 Demension	mm	125(L)×150(W)×31(H)			Module
		195(W)×220(D)×120(H)			Benchtop
供电电源 Power supply	VDC	12V/15A			Module
	VAC	100-240VAC			Benchtop

工作温度 Operating temp.	℃	+15 ~ +50	
存储温度 Storage temperature	℃	-30 ~ +70	

5. 订购信息(Ordering information):

Fiber Laser	Wavelength	Output power	Fiber type	Connector	Package
BFL	**-XXXX**	**-XX**	**XX**	**-XX**	**-X**
	1064: 1064nm Other	08: 8W 20: 20W 45: 45W	M1: 105/125um M2: 200/220um Other	FU: FC/UPC SMA: SMA905 Other	M: Module B: Benchtop

6. 使用注意事项(Precautions for use):

- 长期使用过程中，需要注意光源的散热，将光源固定在散热片上，加上风扇冷却热量。
  During long-term use, attention should be paid to the heat dissipation of the laser source. The laser source should be fixed on the heat sink and cooled by fan.
- 带有光纤连接头的光源，在使用之前，一定要确保光纤连接头端面的干净，避免光纤插芯烧坏，这不属于免费质保的范围。
  Before using laser source with fiber connector, **necessary to ensure** that the end face of the fiber optic connector is clean to avoid burning out the fiber optic plug, which is not covered by the free warranty.
- 确保在工作区域内的每个人佩戴适当的激光防护眼镜，阻挡产生的激光辐射。必须要让操作人员熟悉激光的相关危险以及激光的安全防护措施。
  Ensure that everyone in the area is wearing appropriate laser safety eyewear to protect against the radiation generated by the laser. It is assumed that the operator is familiar with the dangers involved in laser operation and laser safety practices.
- 当激光器在工作中时候，器件可能会发散出数瓦的光辐射。这个会对眼睛造成永久伤害，同时也有潜在可能使其照射的易燃物燃烧。
  When the device is in use, the device can emit many watts of optical radiation. This presents both an eye safety hazard and a potential heat source to ignite combustibles.
- 在激光出射方向上安装一个合适的挡板，以便吸收激光辐射。确认激光输出，对准指定目标或者挡板。
  Install an adequate beam stop to capture optical radiation from the fiber end. Ensure that the output is directed at an appropriate beam stop or the intended target.
- 注意控制激光的漫散射，并佩戴合适的激光防护眼镜。
  Control scattered light and wear appropriate protective eyewear.
- 激光器在恒流源模式下工作，遵循逐渐的从 0 到指定的数值调节电流的原则。当关闭激光二极管时，逆向操作，也就是将电流缓慢的调到 0。
  Always ramp the current applied to the device from zero to the desired level. Reverse this procedure when turning the diode off.
- 激光器在超出说明书所规定的工作功率和温度条件下工作，会加快激光器的老化并且会对激光器造成损伤。
  Operation at powers and temperatures above specification will accelerate device aging and can destroy the device.