

## 1550nm 高功率光纤耦合激光器

### 1550nm High Power Fiber Coupled Laser

#### 1. 描述 (Description):

本激光器采用DFB种子激光器，配合高功率增益光路模块实现单波长高功率激光输出。专业设计的驱动与温控电路控制保证激光器安全稳定工作，光谱和功率长期保持稳定。适合科研用户的实验室使用。

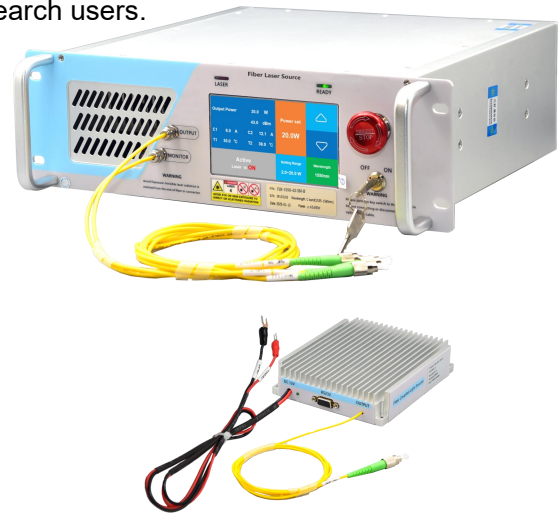
This laser employs a DFB seed laser, combined with a high-power gain optical path module to achieve single-wavelength high-power laser output. The professionally designed drive and temperature control circuit ensures safe and stable operation of the laser, maintaining consistent spectral and power performance. Suitable for use in laboratory settings by research users.

#### 2. 特性 (Features):

- 1~20W多种功率1~20W range;
- 单模/保偏光纤输出SM/PM Fiber;
- 高稳定性High stability.

#### 3. 应用 (Applications):

- 光纤通信Optical fiber communication;
- 光纤传感Optical fiber sensor;
- 光纤激光Fiber laser.

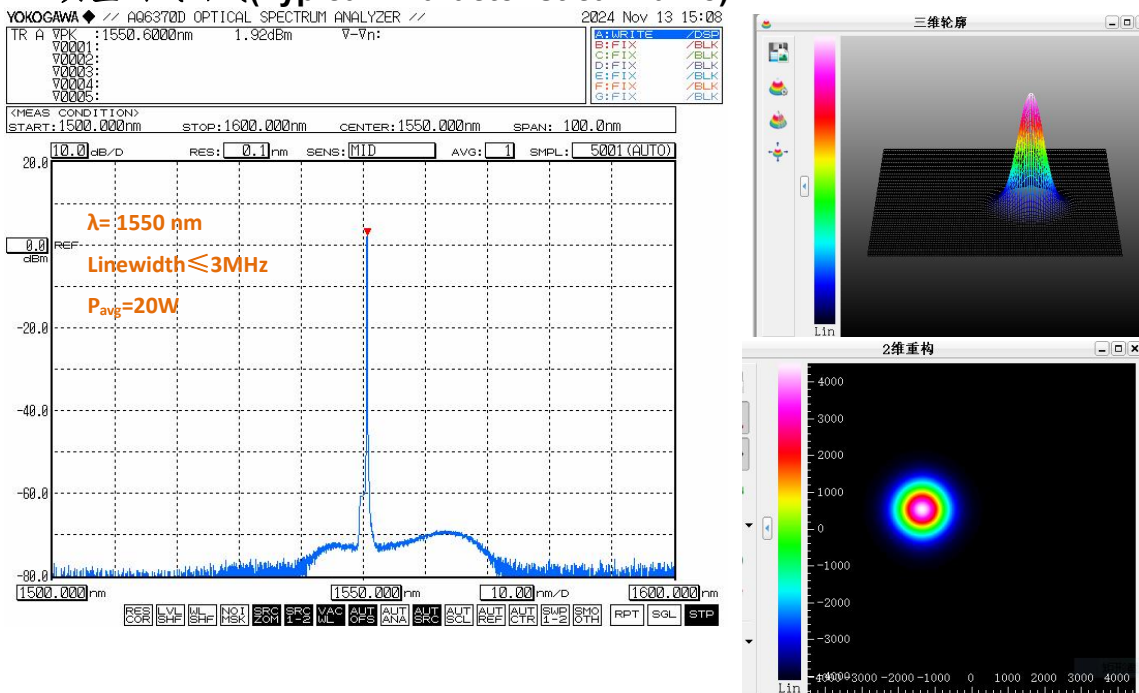


#### 4. 光电特性 (Electro-Optical Characteristics):

参数 Parameters	单位 Unit	参数 Values						备注 Notes
波长范围 Wavelength range	nm	1550						
波长精度 Wavelength accuracy	nm	±0.5						
光谱线宽 Spectral linewidth	nm	≤0.1						
边模抑制比 SMSR	dB	≥50						
工作模式 Operating mode	dB	连续光 CW						
输出功率 Output power	dB	30	33	37	40	41	43	1~20W
功率调节范围 Power regulation		10%~100%						
光功率稳定性 Power instability	dB	≤±0.02(15min.); ≤±0.05(8hrs)						≤±0.5%; ≤±1.2%
偏振态 Polarization state	-	随机 Random			线偏振 Linear polarization			
偏振消光比 PER	dB	-			≥23			
尾纤和接头类型 Pigtail fiber	-	SMF-28			PM1550			FC/APC
通信接口 Communication interface	-	Touch screen/DB9 Female(RS232)						Benchtop
		DB9 Female(RS232)						Module

供电 Power supply	-	AC 100~240V, <150W	Benchtop
		DC 12V, <60W	Module
尺寸 Dimensions	mm	30~33dBm: 255(W)×322(D)×115(H)	B2
		37~43dBm: 376(W)×340(D)×112(H)	B3
		30~33dBm: 150(W)×125(D)×21.5(H)	M21
		30~33dBm: 150(W)×125(D)×31.5(H)	M31
		37~40dBm: 139(W)×235(D)×70(H)	M70
工作温度 Operating temperature	°C	-5 ~ +55	
工作湿度 Operating humidity	°C	0~70%	

5. 典型测试曲线(Typical Characteristical Curve):



6. 订购信息(information):

光纤激光器 Fiber Laser	工作波长 Wavelength	输出功率 Output Power	光纤类型 Fiber type	尺寸 Dimension
HFL	-XXXX	-XX	XX	-X
	1550: 1550nm 1535~1565nm	30: 30dBm 33: 33dBm 37: 37dBm 40: 40dBm 41: 41dBm 43: 43dBm	SM: SMF-28e PM: PM1550	M21: Module M31: Module M70: Module B: Benchtop