

L 波段 ASE 宽带光源

L-band ASE Broadband Light Source

1. 描述 (Description):

光纤 ASE 宽带光源属于非相干光源，是半导体激光泵浦掺铒石英光纤产生的自发辐射，同时引入光谱平坦化技术实现宽带平坦光谱。光源波长覆盖 L 波段，光谱平坦度优于 2.5dB，通过单模光纤或保偏光纤输出，适合于光纤传感等应用。

This ASE broadband light source belongs to incoherent light source, which is the spontaneous emission generated by semiconductor laser pumped erbium-doped quartz fiber. Spectral flattening technology achieves broadband flat spectra. and wavelength covers the L-band, and the spectral flatness <2.5dB, achieved through SM Fiber or PM fiber output, suitable for fiber opticsensing application.

2. 特性 (Features):

- 光谱平坦 Spectral flatness;
- 功率可调 Adjustable output power.
- 高稳定度输出功率 High stability output power.

3. 应用 (Applications):

- 光纤传感 Fiber sensing;
- 医学成像 Medical imaging;
- 生产测试 Fiber optic device testing.



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

参数 Parameters	单位 Unit	参数 Values					备注 Notes
光谱范围 Spectral range	nm	1567~1603					
输出光功率 Output power	mW	10	20	50	100	200	
功率谱密度 Power spectral density	dBm/nm	≥-6	≥-3	≥1	≥4	≥7	
功率调节范围 Power regulation range	-	10%~100%					Optional
光谱平坦度 Spectral flatness	dB	≤2.5(Typ.), ≤3(Max.)					
输出端隔离度 Output isolation	dB	≥35					
光功率稳定性 Power instability	dB	≤±0.02(15min.); ≤±0.05(8hrs)					≤±0.5%; ≤±1.2%
偏振消光比 PER	dB	≤0.2		≥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 110~240V, <30W					Benchtop
		DC 5V, <15W					Module

尺寸 Dimensions	mm	255(W)×285(D)×115(H)	Benchtop
		150(W)×125(D)×20(H)	Module
		70(W)×90(D)×15(H)	Module
工作温度 Operating temperature	℃	-5 ~ +55	
工作湿度 Operating humidity	℃	0~70%	

5. 典型光谱曲线(Typical Spectral Curve):



6. 订购信息 (information):

宽带光源 ASE	光谱范围 Spectral range	输出功率 Output power	输出尾纤 Pigtail fiber	(功率可调) Power adjustable	尺寸 Dimension
	L: L-band	10: 10mW 20: 20mW 50: 50mW 1H: 100mW 2H: 200mW	SM: SMF-28 PM: PM1550	(*T: with)	M15: Module M20: Module B: Benchtop