

Stable Light Source Module



Stable light source plays an irreplaceable role in all optical testing and researching area. In order to satisfy different application scenario needs, Dimension developed 4 kinds of stable light sources: DFB laser source, FP laser source, SLED broadband light source, and ultra-narrow linewidth laser source.

- 1CH, 2CH, or 4CH output available, each channel could be independently controlled. Wavelength and power can be customized.
- Support USB / Ethernet / button controlling.
- Modular design, high precision, high reliability interface with patent. Flexible disassembled SC/FC connector, convenient for post-maintenance.

DFB laser source

Main Features

- High stability, 24-hour power stability is less than $\pm 0.005\text{dB}$
- High precision TEC temperature controlling module
- Output power up to 20 mW
- Support internal modulation

Applications

- CWDM channel testing
- Optical network monitoring
- IL/RL testing
- Optical passive device, active device testing
- Instrument performance testing

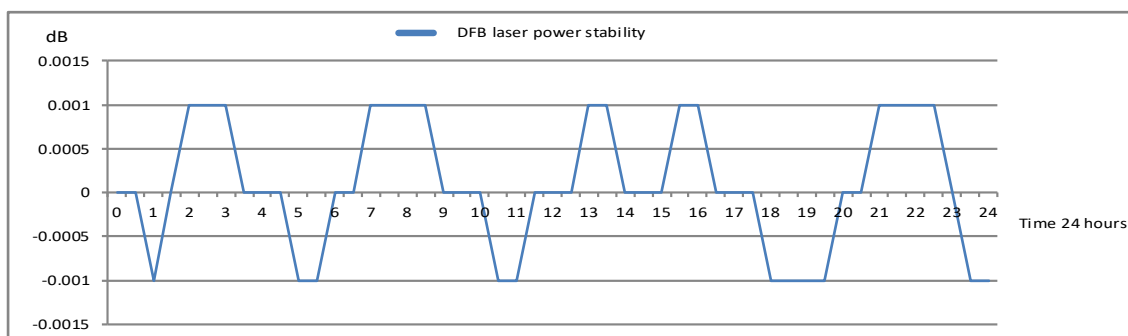
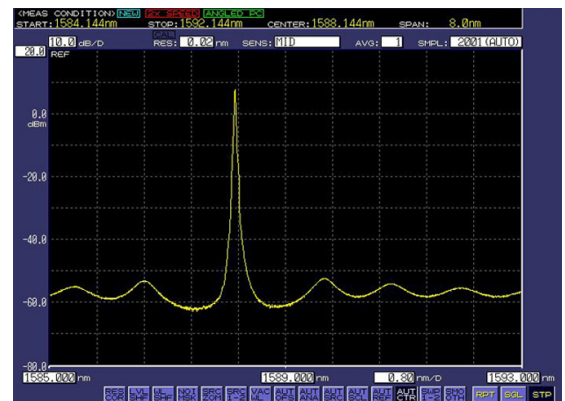


Chart1-1 Parameters of DFB Stable Laser Source [1] [2] [3] [4]

Model	DFB Stable Laser Source
Channel	1,2,4CH available
Fiber Type	SM 9/125;Panda PMF
Wavelength	1270、1290、1310、1330、1350、1370、1390、1410、1430、1450、1470、1490、1510、1530、1550、1570、1590、1625、1650
Wavelength accuracy	±5nm
Connector	high precision, high reliability interface, SC/FC flexible switching
Power stability 15mins	±0.002dB
Power stability 8H	±0.005dB
Power stability 24H	±0.005dB
Output power	1mW、10mW、20mW available
SMSR	>50dB
Polarization extinction ratio (PER)	>20dB
Modulation	internal modulation HZ(270、1K、2K)
Warming up time	20 minutes (if the storage temperature is different from the service temperature, the preheating time is 60 minutes)
Recalibration period	2years
Working temperature	10°C ~ 40°C
Storage temperature	-40°C ~ 70°C
Size	Machine: 359mm*274mm*115mm; Module: 285mm*133mm*36mm
Input power	AC 90~260V 50Hz

SLED broadband light source

Main Features

- Wide spectral range (3dB spectral width 90nm) [5]
- High output power (10mW) [5]
- Excellent power stability

Applications

- Coarse wavelength division multiplexing (CWDM) network testing
- Passive optical network (PON) component manufacturing and testing
- Fiber sensing and spectral analysis.

Application Eg

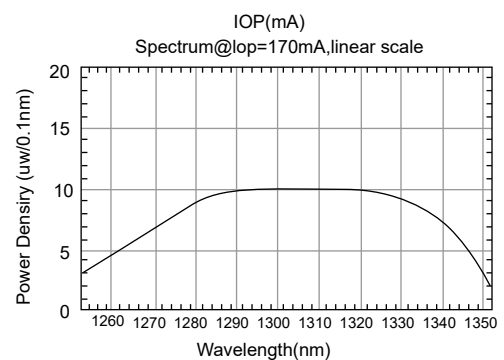
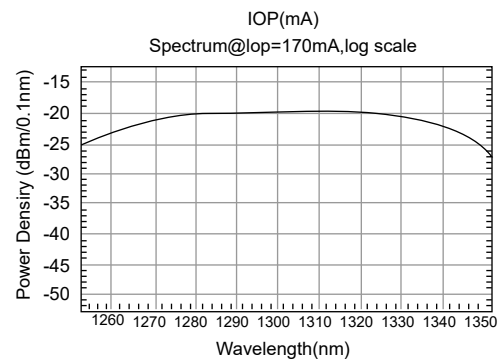


Chart1-2 Parameters of SLED Broadband Light Source [1] [2] [3] [4]

Model	SLED Broadband Light Source
Center wavelength	750、840、880、1020、1050、1280、1310、1410、1490、1550、1610、1640
-3dB spectrum width (Typ.) ^[5]	90nm
Output power (Typ.) ^[5]	10mW
Power stability ^[5]	±0.05dB/8H (Typical)
Working Mode	CW
Fiber Type	SM 9/125;Panda PMF
Connector	high precision, high reliability interface, SC/FC flexible switching
Warming up time	20 minutes (if the storage temperature is different from the service temperature, the preheating time is 60 minutes)
Recalibration period	2years
Working temperature	10°C ~ 40°C
Storage temperature	-40°C ~ 70°C
Size	Machine: 359mm*274mm*115mm; Module: 285mm*133mm*36mm
Input power	AC 90~260V 50Hz

FP laser source

Main Features

- Output power higher than 5 mW
- Support internal modulation

Applications

- Fiber product testing and verification
- Optical component manufacturing and testing

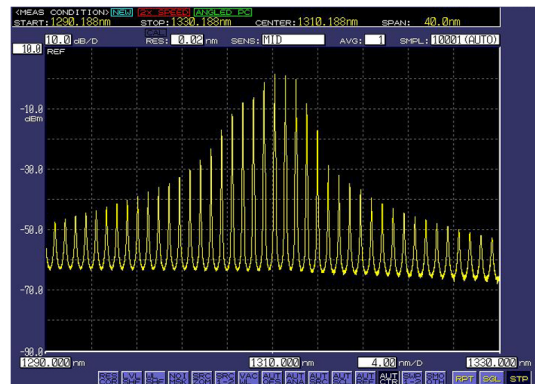


Chart1-3 Parameters of FP Laser Source [1] [2] [3] [4]

Model	FP Laser Source
Channel	1,2,4CH available
Fiber Type	9/125;50/125;62.5/125 available
Wavelength (TEC)	850、980、1060
Wavelength	1310、1490、1550
Wavelength accuracy	±5nm
Connector	high precision, high reliability interface, SC/FC flexible switching
Power stability 15mins	±0.005dB
Power stability 8H	±0.02dB
Power stability 24H	±0.04dB
Output power	>5mW
Modulation	internal modulation HZ(270、1K、2K)
Warming up time	20 minutes (if the storage temperature is different from the service temperature, the preheating time is 60 minutes)
Recalibration period	2years
Working temperature	10°C ~ 40°C
Storage temperature	-40°C ~ 70°C
Size	Machine: 359mmX274mmX115mm; Module: 285mmX133mmX36mm
Input power	AC 90~260V 50Hz

Ultra-narrow linewidth laser source

Main Features

- Ultra-narrow spectral linewidth
- High output power
- High reliability and stability

Applications

- Fiber bragg grating sensing
- Coherent fiber communication
- Nonlinear research
- Leak detection and monitoring

Ordering Information

SLS #

Fiber Type		Laser Source Type		Output Power		Laser Number		Output CH Number		Connector Type		Wavelength list ^[6]
1	SM 9/125um	1	FP laser source	1	1mW	1	1PCS	1	1CH	FA	FC/APC	For detailed wavelength information, please see the parameters of each Laser Source
5	MM 50/125um	2	DFB laser source	2	5mW	2	2PCS	2	2CH	FP	FC/PC	
6	MM 62.5/125um	3	SLED broadband light source	3	10mW	4	4PCS	4	4CH	X	Customized	
8	SM 9/125um PM	4	Ultra-narrow linewidth laser source	4	20mW							
		9	Customized	9	Customized							

Eg: SLS12344-FA#1310/1490/1550/1625

SM 9/125,Stable laser source DFB,10mW,4 Laser source 4 CH output, FC/APC, wavelength 1310/1490/1550/1625nm

Remarks:

- [1] Above specifications are under temperature 23 °C ± 1 °C
- [2] Center wavelength is the default value displayed on screen.
- [3] Ambient temperature change is less than ±1°C
- [4] 20 minutes for preheating if stored at the same temperature before.
- [5] Measured wavelength is 1310/1550nm, and the spectral width and output power of SLED light source are related to the central wavelength.
- [6] The list of wavelengths can be customized, and the number of output channels should correspond to the number of wavelengths in principle. Take 4-CHs output as an example. If you need 4-CHs 1310, the list of wavelengths is 1310*4.If need 2-CHs 1310,2-CHs 1550 then the list of wavelengths is 1310*2/1550*2;if need four different wavelengths, such as 1270/1290/1310/1330, the list of wavelengths will be written as 1270/1290/1310/1330, corresponding to 1/2/3/4 channels in turn.

Related Products



Optical power meter module



Optical attenuator module



Optical switch module



EasyGet Wifi

Dimension Technology Co.,Ltd

Tel: +86 755-26480850

Email: sales@dimension-tech.com

Web: www.dimension-tech.com